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**Who is studying religion? An analysis of religious variables in
psychology dissertations, 1983-1987**

Arveson, Kathleen Ruth, Ph.D.

Loyola College in Maryland, 1993

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Who is Studying Religion?
An Analysis of Religious Variables in Psychology
Dissertations, 1983-1987

Kathleen R. Arveson

A Dissertation Submitted to the
Department of Pastoral Counseling
of
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in Partial Fulfillment of the
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Doctor of Philosophy

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ABSTRACT

Historically, psychology has either ignored or minimized the importance of the role of religion in people's lives. This study analyzes the ways in which religion was studied in 212 psychology dissertations written between 1983 and 1987 that used religion as the primary independent variable. These 212 "core" dissertations generated nine variables. Interviews with 50 of the dissertation authors about their graduate experience and research practices generated five more variables. Fewer than 5% of all U.S. dissertations written during this period contained any religious variable, while fewer than 2% investigated religion as a primary independent variable. Chi-square analysis showed religion to have a significant positive impact on well-being. This finding was true regardless of how religion was studied (quantitatively or qualitatively) or where religion was studied (at religious or secular schools). Religion had a positive impact 57% of the time, and a negative impact only 9% of the time. The majority of the core dissertations studied religion in a multidimensional way; therefore, results were mixed 34% of the time. Sixty percent of U.S. doctoral psychology programs did not produce any dissertations with a religious variable, and 80% of the programs did not produce a single core dissertation. Therefore, in spite of its documented positive impact on well being, religion is understudied. Dissertation authors who wrote qualitative dissertations (studies which were phenomenological or theoretical)

reported significantly more enjoyment in the writing process than those who wrote quantitative dissertations (studies with statistical analysis). Eighty percent of the graduates have published no more than one article in the five to nine years since graduation. Over half have published nothing at all. The few who have published are as likely to write on religious as secular themes in later research. Over half were employed in private clinical practice. If the study of religion is to gain higher recognition among psychologists, those interested in understanding the complex relationship between the spiritual and the psychological need to be more committed to research and publication. The journals, on the other hand, may wish to re-examine their preference for the more statistically oriented articles and consider including more phenomenologically oriented articles that may shed light on the very personal nature of religion in human life.

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CHAPTER I

Introduction

Psychologists interested in the integration of psychology and religion began writing as early as the mid-19th century. These and others at the turn of the 20th century were primarily concerned with mental and spiritual healing. After the 1920s they incorporated insights and techniques from the psychotherapeutic literature and personality theories. At the present time, Vande Kemp (1985) counts 37 institutions and 17 journals that deal with the integration of psychology and religion.

Although the psychology of religion has a long history, Strommen (1984) points out that, as a variable in understanding human behavior, religious faith has been almost wholly ignored by psychologists during the last fifty years. The emphases on logical positivism among philosophers and behaviorism among psychologists have led to the practice of ignoring any variable that cannot be measured, such as faith. Strommen (1971) surveyed doctoral dissertations in the social sciences from 1942 to 1968 and found that approximately 2% of empirical studies included religion as a variable. Sociology literature contained 5%, social psychology 3%, and

psychology only .5%. These values were constant over the years studied.

One difficulty with researching the effects of religion is that those effects occur largely in the realms of inner experience and motivation. Benson (1984) observes that scientism repudiates the authority of religion because scientism does not know what to do with inner experiences. Another problem that Clark (1958) discusses is the many diverse and inconsistent experiences that pass for religious behavior. As William James illustrated in Varieties of Religious Experience (1902), there are individuals affected by an "acute fever" for whom religion has changed and charged their whole lives; then there are those for whom religion has become a dull habit, whose lives cannot be distinguished from those of nonbelievers. While both may be practicing religious behavior, the first describe their religion as having transformed and changed their very personalities. For the second group, religion has merely touched the surface, creating only an empty conventional behavior such as church attendance.

Such diversity of religious experience and expression creates problems for the psychologist of religion. The field has never enjoyed fully respectable academic status because it belongs partly to religion and partly to psychology -- often falling in between. The psychologist as scientist has difficulty applying scientific methods to the complexity of religious experience. As a result, the psychologist hesitates to study religious experience, leaving the task to the theologian. However, as Clark

(1958) points out, the religious scholar often lacks the scientific objectivity necessary to study religious psychology. In addition, Clark reports that, historically, religious movements have been hospitable to scholars wishing to study them only when assured that the results would be favorable.

Sevensky (1984) is concerned that the inadequate characterizations of religion and misunderstandings of levels of religious involvement may lead to clinical and academic bias against religious beliefs. He observes that both the psychiatrist and the theologian are faced with the problem of convincing others of the value of what they do. Therefore, any attempt to integrate the two arouses even greater suspicion. Yet, in spite of philosophical differences and methodological difficulties, religion has been a topic of psychological study throughout the twentieth century.

This study first describes and analyzes the ways religion has been conceptualized and measured. Then, we examine the abstracts of all United States psychology dissertations written between 1983 and 1987 that study religion as an independent variable. These will be referred to as "core dissertations." Finally, we interview a sample of 50 graduates as to their occupational and research practices. We seek answers to the following questions:

1. What various methodologies are being used to measure religion as an independent variable?
2. What are the outcomes of the studies that employ religion as an independent variable to predict some aspect of well-being (dependent

variable)?

3. What, if any, is the relationship between methodology and outcome? For example, is there a negative correlation between religion and well-being if religion is measured only in terms of beliefs but not behavior?

4. What are the special characteristics of the psychology graduate programs that generate religious research?

5. What content areas of religion are being studied? Since most researchers agree that religion is best studied multidimensionally, which dimensions or areas are being investigated and which are not?

6. Do the students who completed their dissertations on a religious topic continue to do religiously-related research?

These questions guided the generation of the 14 variables (9 from the abstracts and 5 from the interviews) and 5 hypotheses that are discussed in chapter three (Methodology). In summary, this study first analyzes dissertations according to their methodology, outcome, and the relationship between methodology and outcome. Secondly, we investigate the characteristics of the psychology graduate programs that generate religious research. Thirdly, we calculate the frequency of research on religion at the doctoral level in general. Lastly, a poll of graduates sheds light on research and occupational trends. The primary hypothesis being tested is that students who study religion with phenomenological and theoretical methods will report more satisfaction in writing their dissertations, and

will be more likely to pursue further research in religion than those using quantitative methods.

Our analysis of dissertations yields information about how religion is currently being researched. In addition, by offering a more systematic understanding of how religion is being conceptualized, studied, and measured, this analysis will help future workers focus more readily on areas that have been overlooked or need strengthening.

The next chapter of this dissertation, the review of the literature, examines the historical roots of the field of psychology and how religion has been viewed at various times. Next follows a discussion of how psychologists variously define religion. A section describing the various methodologies developed for or applied to religious research follows. A discussion of some of the systematic reviews published in social science journals provides a global understanding of the current treatment of religion in psychological literature.

This dissertation is concerned not only with the historical and current status of religion and psychology. We also briefly discuss two of the factors which influence the psychologist-in-training throughout his or her educational process: the treatment of religion in psychology textbooks and the religious orientation of psychologists in general. The review of literature will conclude with suggestions for future integration and collaboration between religion and psychology.

CHAPTER II

Review of the Literature

Historical Perspectives

A history of the psychology of religion can be approached in many ways. How psychologists have struggled with the "mind-body" problem, the existence of the "soul," and the question of "free will" are possible themes. This paper will trace the various methods of study which psychologists of religion have used throughout the last 100 years.

The Psychology of Religion Prior to the 20th Century

Both psychology and the academic study of religion have roots in philosophy as evidenced by the writings of people such as Jeremiah, Buddha, Socrates, Plato, Plotinus, Augustine, Comte, and Darwin. Clark (1958) comments:

To select a date or an event with which the history of the psychology of religion began would be as artificial as dating the beginning of history. The Bible is full of psychological comments on religion. Further, no century,

country, or culture that has become self-conscious about religion is without its psychologists who have something to say, more or less systematically, about this fascinating subject (p.6).

The modern psychological study of religion began in America in 1882 when G. Stanley Hall, the recipient of the first Ph.D. in psychology and founder and president of Clark University, wrote an article published in the Princeton Review, "The Moral and Religious Training of Children." He later wrote Adolescence (1904), which described the religious development of young people. Under Hall's administration, Clark University became a most productive center for the serious study of religion. He began the Journal of Religious Psychology which was published between 1904 and 1915.

In 1909 Hall invited Freud and Jung to lecture at Clark. This experience influenced their interest in the origins of religious phenomena. Pattison (1978) mentions other early scholars who made contributions, including William James, H. H. Daniels, James Leuba, George Albert Coe, Emile Durkheim, Max Weber, Bronislaw Malinowski, and Edwin Diller Starbuck. These pioneers in the field were primarily concerned with conversion, revival phenomena, normal religious growth, and religion in adolescence. According to Sexton (1986), their work at the turn of the century firmly established the importance of the scientific study of religious phenomena. Flakoll (1977) comments:

The psychology of religion became particularly significant in America about the turn of the century because the spirit of the times continued to facilitate the spontaneous expression of religious feelings. The more traditional and formal religious observances of Europe could hardly compare with some of the bizarre kinds of religious phenomena generated in early American history (p.78).

In 1899 Edwin Starbuck published the first book on the relationship of religion and psychology, The Psychology of Religion. Starbuck was a student of William James at Harvard before James began writing about religious experience. Starbuck then transferred to Clark University and continued his study under Hall. Starbuck did much to popularize the questionnaire method and stirred up interest among American students as well as international researchers. Beit-Hallahmi (1977) describes Starbuck's intentions of reconciling science and religion. Starbuck remained a fellow at Clark University with James Leuba through the 1890s.

James Leuba studied under G. Stanley Hall, graduated from Clark University in 1895, and became head of the psychology department at Bryn Mawr college. He published extensively in the Psychological Bulletin. Leuba approached his research from a "naturalistic" point of view and published the first empirical study of conversion, "A Study of Religious Phenomena," in 1896. His later research compared the sources and methods of magic and religion.

The Empirical Study of Religion 1900-1930

Before 1920, the impact of Freud, Adler, and Jung had not been felt in the mental health community in the United States. According to Malony (1977), during the last 20 years of the 19th century and the first quarter of this one, American psychologists were pioneers and leaders in the psychology of religion movement. Two journals, the American Journal of Psychology (begun in the 1890s) and The Psychological Bulletin (started 1904) published most of the articles.

The most influential of the early pioneers of the psychology of religion was William James. He published The Varieties of Religious Experience as a written version of the 1901-1902 Gifford lectures. The book is primarily a collection of recorded cases of religious belief and behavior. Although James was a highly respected psychologist, he considered the spiritual aspect of the individual to be essential and unique from other, more transient states of consciousness. The spiritual was "rather the entire collection of my psychic functions taken concretely" (p.48). James argued that God was real because he created "real effects." He even warned psychologists not to study religion, theology, and philosophy without first becoming aware of their own presuppositions or "overbeliefs" which reflect their theological preferences. Pruyser (1968) describes James's method as being nonexperimental but fact-finding and descriptive. He relied heavily on biographical material, questionnaires, and

simple correlations such as incidence of conversion, frequency of prayer, loyalty to beliefs, etc. with other personality traits. Hiltner (1947)

describes the contributions of James's book:

First, he created enthusiasm for and interest in the subject, a matter of no small importance. Second, he used empirical material, but put it in a framework which made it clear that psychology was not sufficient by itself. Third, he gave impetus to a new vantage point for evaluating religious beliefs not so much in terms of their truth as in terms of their operational significance in human life; i.e., whether they were "healthy" or not. Fourth, he turned attention to more contemporary empirical methods in studying religion, to observable phenomena, and not merely to document accounts of primitivity. Fifth, to some extent he applied his study even to those types of religious functions that were fashionable, and not merely to those which were of the recent past. Sixth, he helped greatly to overcome the distrust of psychological study of religion as such by demonstrating that his own study had not made him lose interest in religion in a personal sense (p.29).

One of the compelling reasons why most psychologists heeded James's advice to avoid religion was because it was believed to be difficult

to study experimentally. George Albert Coe was one of the first experimental psychologists to remedy the situation. In 1900, he wrote The Spiritual Life, which linked religious reaction to temperament. He was one of the first advocates of using empirical methods. Coe constructed questions which could yield facts as well as data on the personality of the subject. His methods share similarities with the projective and personality tests used today. He followed up his questionnaires with interviews that both cross-examined and gained new facts. He made use of independent observers to get objective feedback. Coe also experimented with hypnosis to investigate the relationship between conversion and suggestibility.

Other researchers at the beginning of the century included James Pratt, Edward Ames, and George Stratton. Pratt wrote about the nature of belief in his The Religious Consciousness (1920). Ames focused primarily on anthropological and sociological theories of the origin, growth, and significance of religion. Stratton studied the conflicting forces in religious experience.

Although Hall, Starbuck, Leuba, and Coe reflected a concern for obtaining empirical data, Flakoll (1977) reports that much of the literature of the psychology of religion of the day reflects the psychoanalytic approach. He states that "...the psychoanalytic approach tended to lead the psychological study of religion away from its already weak and empirical moorings and the behavioristic or gestalt views of psychology were unable to anchor the young discipline in solid objective data" (p.80).

Another writer, Rudolph Otto, left empiricism altogether. In his 1928 work, Idea of the Holy, he takes a phenomenological approach to the "wholly other." His approach reflected the spirit of the times in an attempt to de-empiricize the study of religion. While the century began with a strong empirical foundation, the second decade became caught up with the problems of origins, definitions, and systematization. There was a waning of empirical study and a move toward apologetic and applied study. Later researchers neglected to develop more sophisticated methods of research. Flakoll (1977) summarized twenty types of research methods which were applied to the psychology of religion during this time:

1. *Questionnaire*. The researcher compiles a list of queries designed to accumulate comparative data on a specific topic. The primary developer of the questionnaire was Francis Galton. G. Stanley Hall used the method in his 1904 study on conversion among adolescents. Starbuck (1899), Leuba (1921), and Clark (1929) also used questionnaires extensively. Pratt utilized the questionnaire in a 1920 study on belief in God. James, though suspicious at first, found the method effective. The major drawbacks of the questionnaire method are the difficulty in forming good questions and the reluctance of subjects both to fill them out and to be honest in their responses. Flakoll (1977) noted a variety of questionnaire formats in use: multiple, true-false, crossout, completion, and verbal association.

2. *Interview*. Starbuck (1899), Coe (1900), and Leuba (1921) in researching their doctoral dissertations, all relied on interviewing their

subjects. This approach gave them first-hand knowledge of their subjects' experience. When used together with the questionnaire, the interview allowed them to further explore questions and issues in face-to-face conversations.

3. *Biographical*. This method includes using autobiographies and anecdotes as data. Starbuck (1899) and James (1902) used the biographical method extensively. The Varieties of Religious Experience is filled with such anecdotal material, which is dramatic but may be unreliable.

4. *Content Analysis*. Here verbal content is broken into its component parts. For example, Albert Coe (1900) examined 1100 hymns to assist in clarifying temperamental factors of religious experience. The method provides an objective, systematic, and quantitative description of experience.

5. *Recreative*. With the aid of anthropology, social psychology, and genetic psychology, this method attempts to reconstruct early humankind's religious beliefs, attitudes, and behaviors. Ames (1910), Stratton (1911), and Leuba (1925) utilized this method. Its drawback is the difficulty in verifying and understanding primitive origins.

6. *Diary*. Oskar Kupky (1928) believed that diaries, as well as letters and poems, contain more spontaneous expressions of religious experience than the more stereotyped answers reflected on questionnaires.

7. *Documentary*. Researchers analyze the sacred literature and scriptures of the religion being studied. A critical investigation can

compare similar and dissimilar elements of various religions on various scales. William James believed that while diaries provided excellent access to a subject's inner life, theological treatises were the best source for articulated religious thoughts. Stratton (1911, 1923) studied conflict and anger by this method.

8. *Psycho-Historical*. This method goes beyond psychology by placing a particular religion within its anthropological and historical context. Pratt (1910) employed it extensively.

9. *Introspection*. Introspection involves the study of living individuals' reactions to religious phenomena, rather than literature or documents. Some researchers believe introspection ("intuitive God-consciousness") to be the key to the investigative method.

10. *Observation*. Unobtrusive personal observation, if conducted without prejudice and bias, can provide first-hand knowledge of various forms of religious behavior, especially group behavior such as revivals, ceremonies, or rituals. Many early researchers favored "participant observation" in which the researcher was a part of the activity.

11. *Order of Merit*. May (1915) studied religious values. He asked seminary students to rank various life situations in order of their religious and moral merit in hopes of bringing clarity to phrases such as the "values of life."

12. *Scales*. Coe (1900) and Thurston and Chave (1928) created scales which measure attitudes toward the church. Later, Funk (1958)

created six religious attitude scales. Many scales have been developed since then.

13. *Tests.* Heavy emphasis among psychologists on paper and pencil tests began in the 1920s with Watson's (1927) Experimentation and Measurement in Religious Education, which describes nearly 50 available tests and procedures for collecting data.

14. *Statistics.* Galton (1872) used statistics in an attempt to prove the efficacy of prayer. Starbuck (1899) and Leuba (1921) transformed quantitative data into charts and graphs. Statistical tests are essential in modern research to quantify the degree of reliability of data.

15. *Experimental.* Coe (1900) is known as the pioneer of applying the experimental method to the psychology of religion for his use of hypnosis to determine the suggestibility of various personality types. It was not a frequently used methodology then or now. In a later study, Klausner (1964) reviewed the empirical literature of the psychology of religion between 1950 and 1960. He found that only 2% of 130 studies used laboratory experimental methods.

16. *Personal Documents.* In The Use of Personal Documents in Psychological Science, Allport (1951) reported that "...it is apparently impossible to take even the first steps in the psychology of religion without a sympathetic regard for subjective documentary records" (p.38). Personal documents include many of the methods already described such as questionnaires, autobiographies, interviews, and diaries. Allport felt that

these "introspective protocols" anchored the discipline in human experience.

17. *Clinical*: These include the psychoanalytic case studies of religion made popular by Freud and Jung. Pruyser (1968) commented on the methodological significance of such studies:

They are basically studies of motivation for religion, and the person's set of beliefs and practices are approached from the point of view of wish fulfillment, drive control, primary- and secondary-process thinking, object relations, the genesis of conscience and the ego ideal, and the economics of individual and aggressive urges (p.6).

The last three methods which came into use during the second half of the century are listed below.

18. *Survey*. Allport, Gillespie and Young (1948), and Ross (1950) popularized the survey method. This enabled the psychologist to study problems which cannot be experimentally controlled. Researchers wishing to secure and study large groups frequently use the survey method.

19. *Projective Techniques*. Flakoll (1977) discussed a Q-Sort study of how concepts of God compare with concepts of mother and father. Lowe (1955) developed the Religious Projection Test, similar in structure to the TAT.

20. *Timed Cross-Examination*. Strunk (1957) amended the traditional paper-and-pencil test with a device which measures the

quickness of response to test stimuli. When studying religious values and attitudes, this method records conscious, voluntary reactions as well as reactions that are subconscious or automatic.

The Decline

The work of the early researchers, especially Edwin Starbuck, William James, G. Stanley Hall, James Pratt, George Coe, and James Leuba, firmly established the importance of studying religious phenomena. Starbuck (1899) optimistically stated that "...science has conquered one field after another, until it is now entering the most complex, the most inaccessible, and, of all, the most sacred domain -- that of religion" (p.1). Perhaps unique to this period was a commitment to scientific objectivity as well as a profound respect for the role of religion in the lives of individuals and society. Later, however, as Sexton (1986) and others observed, the study of religion declined under the influence of anti-metaphysical philosophies of positivism and scientism.

Beit-Hallahmi (1977) saw evidence for this decline in the disappearance of the annual reviews of psychology of religion that had been appearing since 1904 in the Psychological Bulletin. No such reviews of the "psychology of belief" were published between 1928 and 1933. Henry (1938) found that out of 154 colleges surveyed only 24 offered courses in the psychology of religion. Beit-Hallahmi (1977) observed, "Thus, a little over three decades after its birth, the psychology of religion

was dead" (p. 21). Douglas (1966) offered six reasons for this decline:

1. The psychology of religion failed to separate itself from the philosophy of religion and from religious institutions.
2. In their desperation to be "scientific," psychologists of religion placed too much emphasis on discrete facts without integrating them into a comprehensive theory.
3. Data collection methods and explanations were often uncritical and incompetent.
4. The character of the public world view changed from religious to behavioristic and positivistic.
5. The study of religion became a source of conflict for both the researcher and subject because of their own personal investments in religion.
6. As the developing fields of social science strove to become more empirical, researchers tended to avoid "subjective" phenomena.

Strunk (1957) agreed with the above analysis, blaming the decline on theological interference, psychoanalytic approaches, and behavioristic reductionism.

While the first two decades of the century therefore opened the door to the scientific study of religious phenomena, the consensus soon began to form that observable behavior is the only domain of the social scientist. The interest in behaviorism, pioneered by James Watson, paralleled the rise of logical positivism in philosophy from 1920 to 1945. During this era,

psychology developed as an experimental and empirical science.

According to this view, since the mental (the psyche or soul) could not be measured, it could not be defined or studied and was therefore considered scientifically irrelevant. Strommen (1984) remarks that during this time psychology demanded of religion a direct literalism that was not required of science itself. This shift in philosophy led to the decline of the scientific study of religion. It was also at this time that Freudian psychiatry took hold in America.

The Impact of Psychoanalysis on the Study of Religion, 1930-1945

The three theorists that stand out as shaping the course of modern psychology--Freud, Adler, and Jung--were at the height of their influence during this period. Ansbacher and Ansbacher (1956) have termed them the "first triumvirate" of depth psychology. Hinsie and Campbell (1970) define depth psychology as "the psychology relating to the realm of the unconscious, in contradistinction to the psychology of the conscious part of the mind. In psychoanalysis (Freud), depth-psychology may be represented by the id and superego; in analytical psychology (Jung) by the collective unconscious." (p.204).

Freud authored six major works which illuminate his position on religion: Totem and Taboo (1913), Group Psychology and the Analysis of the Ego (1921), The Ego and the Id (1923), The Future of an Illusion (1927), Civilization and Its Discontents (1929), and Moses and Monotheism

(1939). Some of the themes developed in these works were the similarities found between obsessive acts and religious practices or rituals in totemism, the Oedipus complex, and incestuous repressions. He believed religion sprang from the need to defend oneself against the crushing supremacy of nature and described religious beliefs as illusions and wish fulfillments. Such beliefs are residue from the primitive past that have no place in adult rationality. Conceiving the notion of God as an "enormously exalted father," Freud (1930) wrote: "The whole thing is so patently infantile, so foreign to reality, that to anyone with a friendly attitude to humanity it is painful to think that the great majority of mortals will never be able to rise above this view of life" (p.21).

When Alfred Adler split from Freud's teachings in 1911, he formed his own group, the Society for Free Psychoanalytic Research, which later developed the Adlerian theory known as *individual psychology*. Unlike Freud, Adler did not dismiss religion as a negative and destructive force in the lives of individuals and society, but instead saw its potential for good in shaping a positive *social interest*. He saw religion as pointing the way toward brotherly love, proper parental behavior, cooperation between the sexes, and a general desire to strive for the common good.

Carl Jung wrote extensively about psychology, psychiatry, medicine, the history of religion, theology and cultural anthropology. In Psychology and Religion (1938), he went further than Adler in arguing that religion was one of the earliest and most universal activities of the human mind. He

felt it was therefore essential that any kind of psychology which considers the structure of human personality must concede that religion is not only a sociological or historical phenomenon but also of considerable importance to the majority of individuals. Jung differed also from Freud by conceptualizing the unconscious as a religious phenomenon and by viewing both religion and dreams as in some sense external influences on people. Fromm (1950) somewhat ironically summarized the differences between Freud and Jung: "Freud opposes religion in the name of ethics--an attitude which can be termed 'religious.' On the other hand, Jung reduces religion to a psychological phenomenon and at the same time elevates the unconscious to a religious phenomenon" (p.20).

Within academic psychology of the 1920s and 1930s, interest in religious behavior began to be perceived as unscientific--a holdover from the philosophic tradition in psychology. Beit-Hallahmi (1977) judged that the psychoanalytic movement was a mixed blessing. While it created interest in and controversy over religion, it never generated any systematic research programs or penetrated academic departments. He believed that Freud's historical-hypothetical approach and use of anecdotal evidence and case studies did not contribute to the acceptance of religion as a topic in American academic psychology and it even added to the state of stagnation.

Other developments, such as the rise of social psychology, won the interest of students. Objective methods of attitude measurement attracted

researchers in social and political behavior. Beit-Hallahmi (1977) observed that social psychology did not incorporate religion. In addition, the clergy often perceived the serious systematic study of religion as a threat to religious institutions. Beit-Hallahmi (1977) saw the work of Pratt, Coe, Ames, and Johnson as contributing to the decline and stagnation of the psychology of religion. Because they were theologians first and psychologists second, their friendliness to religion kept them from pursuing rigorous scientific study. He suggested that pastoral counseling is the natural successor to the psychology of religion movement at the turn of the century. Beit-Hallahmi concluded that a "...lack of nonreligious, nonphilosophical theoretical bias doomed the movement from its inception and caused its early death" (p.21).

To summarize the status of the psychology of religion at the middle of the 20th century, it might be helpful to examine the competing theoretical and methodological constructions of the two greatest influences that shaped psychology at that time: William James and Sigmund Freud. According to Capps (1977), followers of each were interested in explaining different aspects of religion. Freudian tradition was interested in exploring *origins*, both for the individual and for humankind. Psychoanalytic debate centered on whether the individual's "sensation of eternity" has a more primordial origin than the Oedipus complex. According to Freud in his 1929 Civilization and Its Discontents, this sensation of eternity is the "energy source of all churches and religious systems" (p.12).

James, on the other hand, was not interested in religion as such, but in the religious as a property of other objects. In his writings there is a blurring of the religious and nonreligious. For James, there is no single elementary religious emotion or behavior, but a common storehouse of emotions upon which religious objects draw. Therefore, as Capps (1977) points out, the individual's personal religious *experience* is primordial; everything else is secondary. The object of investigation, therefore, is not origins or communal expression, but the personal, solitary expression of religious experience. Capps (1977) sees their differing perspectives as complementary: "As Freud concerns himself with the origins of religion, and James recognizes the solitary experience as its *sine qua non*, it does not require a major departure for either perspective to incorporate into its theoretical construct the conceptual framework of the other" (p.39). For example, James focused some attention on adolescent conversion. Prior to adolescence he saw religiosity as being determined by one's social milieu. With adolescence, religion becomes personal; it becomes the source of authentic religious motivation within the life of an individual.

According to Capps (1977), one of the main differences between the two theorists is their application of the idiographic methodology to the psychology of religion. Gathering idiographic material is the first step toward making generalizations since it examines concrete objects in their situational context and complexities. Capps (1977) saw James's research as firmly established in the idiographic mode. His generalizations were

modest extrapolations from scores of concrete cases. He even uses autobiographical data in his discussion of the "sick soul" as "the worst kind of melancholy." Capps (1977) concludes:

In short, James' psychology of religion exemplifies the researcher's investment in a focal object of research. The difference between this philosophy of research and most psychological research which emphasizes the neutrality of the researcher is quite apparent (p. 42).

Although Freud used the idiographic mode quite extensively in his reporting of case studies, he demonstrated a reluctance to follow the same procedure in the psychology of religion. He never published a full-fledged case study that focused on the dynamics of religion in the life of an individual. Pruyser (1977) observed that Freud studied motivations for religion and approached beliefs and practices "...from the point of view of wish fulfillment, drive control, primary- and secondary-process thinking, object relations, the genesis of conscience and the ego ideal, and the economics of libidinal and aggressive urges" (p.58). Religion, therefore was viewed as a symptom--of people quite literally using their God. Personal documents such as James used had to be approached analytically, related to other pursuits, values, and needs, and not taken at face value. Freud spoke in global terms of "believers" or "the faithful." As stated above, his interest was in tracing the psychodynamic origins of religion, not the origins of belief in God or the dynamics of faith.

Capps (1977) understood the meaning of religion to lie within

religion itself. Since religion is woven into every area of life, nothing can be ruled out as being devoid of religious meaning. The assumption underlying Freud's and James's research is that religion is not unidimensional but multidimensional. Therefore, the psychology of religion cannot be limited to origins or solitary experiences. We are limited by our research methodology, not by theoretical constructions:

The philosophical assumptions undergirding research in the psychology of religion point toward a broadly constructed empiricism commensurate with the multidimensionality of the object of research. On the other hand, the psychologist of religion prefers the idiographic mode ... the necessary limitations placed on the discipline are therefore determined by the idiographic mode, not by the object of investigation (p.48).

The Psychology of Religion: 1945 to 1970

While the psychological study of religion began its decline around 1930, Gorsuch (1988) reported its rebirth beginning around 1950. In 1959, the Religious Research Association began the Review of Religious Research, which publishes primarily empirical research. In 1961, the Society for the Scientific Study of Religion began publishing the Journal for the Scientific Study of Religion, which adheres to the same scholarly standards as the APA journals.

From 1950-1960, 130 articles on empirical studies in the psychology

and sociology of religion were published in the United States (Klausner, 1964). Thirty percent of these articles were written by psychologists, and over 50% by sociologists. Neil Warren (1977) estimated that between 1960 and 1970, 150-175 empirical studies in the psychology and sociology of religion were published. Again, 30% were written by psychologists; the majority were by sociologists. Only 2% of the articles in both studies were experimental; the majority were correlational. Warren (1977) noted that during the period between 1950 and 1970 the psychology of religion was dominated by correlational research and, therefore, failed to move forward with vigor and continuity. A more thorough summary of systematic reviews of the literature will be reported later.

Pattison (1978) saw the 1945-1965 time-frame as marking the beginning of true collaboration between psychology and religion. In 1950 Gordon Allport published The Individual and His Religion. In his writings and research, Allport examined the connections between personal beliefs, attitudes toward others, and the mystery of being. He concluded that religion inspires both the best and worst of human behavior. This led to his conceptualization of intrinsic and extrinsic expressions of religious beliefs, an approach which concerns itself with the different ways religion is experienced and lived.

Allport's model helped psychologists gain an understanding of the complex ways that religion interacts with prejudice. In the 1940s and 1950s it was generally reported that religion was positively correlated with

prejudice. Further research, however did not show such a direct relationship. Holtzman (1956) showed that nonfrequent church attendance was associated with prejudice and frequent attendance was less associated with prejudice than nonattendance. Later, Allport and Ross (1967) reported that the “extrinsically motivated” person could be conceived as a *user* of religion while the “intrinsically motivated” person *lives* his religion. They found the extrinsically motivated person to be significantly more prejudiced than the intrinsically motivated individual. Warren (1977) concluded that the correspondence between religion and prejudice has become, perhaps, “... the most fully understood relationship in the entire field” (p.94).

Prior to the 1960’s, many empiricists attempted to conceptualize religion along one dimension such as behavior (e.g., church attendance) or orthodoxy of belief. Allport led the way toward a more multidimensional consideration of religion, where behaviors and beliefs emerge from a more sophisticated factor analysis. A number of researchers formulated their own lists of heterogeneous items that, when administered to large samples, were grouped according to their own similarities. For example, Glock (1962) formulated five independent dimensions: ideological, ritualistic, experimental, intellectual, and consequential. A more differentiated picture of religious phenomena began to emerge. Glock's and others' concepts will be elaborated in chapter three (Methodology).

While the scientism of the beginning of the century was still strong

among behaviorists, and the psychoanalytic perspective continued to thrive, a new humanistic movement began to grow. The humanists rejected the reductionistic materialism of both scientism and psychoanalysis by asserting that some expressions of religion are valid and contribute to psychological health (Gartner, 1981). It is important to note, however, that although the humanistic tradition is sympathetic to individualized expressions of religious beliefs, it remains hostile to traditional, established forms of religion, such as Judaism and Christianity (Vitz, 1977).

The Current Situation

The psychological study of religion is enjoying a renewed vitality after decades of being ignored or maligned by most personality theorists and psychologists. Vande Kemp (1985) listed 37 institutions and 17 journals that are primarily concerned with the integration of psychology and religion. Paloutzian (1986) observed other indications of interest in the psychology of religion over the last twenty years: more time devoted to the topic at professional meetings, the publication of five major books by standard textbook publishers, and an increase in articles on the subject in the Journal of Personality and Social Psychology as well as in the American Psychologist.

Vande Kemp (1985), Paloutzian (1986), and Malony (1986) also see the American Psychological Association's (APA's) creation of Division 36 (Psychologists Interested in Religious Issues) in 1975 as evidence that the

field of psychology is taking religion seriously as a potentially positive agent of change and adjustment. Neuman (1986) believes that Division 36 was created because the APA wished to acknowledge that individuals and organizations cannot be value-free or neutral and to encourage pluralism (i.e., the simultaneous support of more than one value system).

After tracing the decline and rise of interest in the psychology of religion, Gorsuch (1988) proposed four hypotheses for its "phoenix-like" development:

1. *The Scholarly Distance Theory.* This theory explains why people in the social sciences report themselves to be less religious than those in physical and natural sciences. Beit-Hallahmi (1977) described it in this way: teaching students to study people objectively tends to produce in those students a lack of personal commitment and lack of interest in religion. (This theory does not, however, account for the field's rebirth.)

2. *Personal Relevance Hypothesis.* If indeed psychologists find religion irrelevant to their own lives, they may be inclined to assume that religion is irrelevant to other people's lives as well. Also, psychology may attract nonreligious individuals who wish to help others and would not choose theological studies or the ministry. Gorsuch (1988) observed, however, that research into the psychology of religion has continued to develop from the 1960s to the present, even though mainline religious groups have suffered a major decline during that time.

3. *Backlash Hypothesis.* This theory focuses on the changing

attitudes of religious people toward psychology. In the 1930s, they saw psychology as encroaching on their domain. In the 1960s and beyond, however, religious people became psychologists themselves, causing religious leadership to conclude that the threat from psychology was not as great as they had thought. Gorsuch (1988) remarks, "This resurgence of acceptance led to establishment of such groups as the Catholic organization that was a precursor of Division 36 of the APA and to the founding of the Graduate School of Psychology at Fuller Theological Seminary" (p. 204).

4. *Coming of Age Hypothesis.* Gorsuch (1988) noted that the field of cognitive psychology experienced a similar decline and rebirth at approximately the same time as the psychology of religion. Both endeavors resembled philosophy, which, in the 1930s, was the discipline psychology was leaving behind. Between the World Wars and for a time after, psychology established itself as a science, shifting from a study of the mind and spirit to a study of behavior. Gorsuch (1988) observed that by the 1960s a generation of psychologists had been trained after psychology was a well-established discipline. They did not feel the same necessity to eliminate topics that overlapped philosophy. Therefore, the consideration of the activities of the mind, including religion, was now permissible.

Bergin (1980) also concluded that the primary theoretical framework among psychologists is swinging away from the naturalism and scientism of the first half of the century. During this long period of indifference to religion, psychology appeared to many as the alternative

source of answers for basic human questions. The current rise in cults and coercive practices, as well as thoughtful attempts to restore a spiritual perspective to life, suggests that, together, psychology and religion could better address these questions. Paloutzian (1986) argued that, when religious motivations are examined, topics relevant to social and personality psychology are also raised. These questions include:

Why and how do people respond to social pressure? What is the relation between attitude, personality and behavior?

What are the nature and limits of persuasion? Where does social influence end and personal choice begin? How do people form and sustain beliefs and how do they guide morally relevant behavior, prosocial and antisocial? (p. 64).

There remain others, such as Ellis (1980) and Robb (1986), who agree that psychology has been generally ignorant about religion but feel nothing would be gained by acknowledging “supernatural” experiences. They believe psychology should remain within the logical-empirical framework.

Malony (1986), however, suggests two reasons why the psychological study of religion is important. One is the practical need to understand the role religious or spiritual issues have in mental illness and in the counseling process. Malony (1986) observes that:

Since religion plays a part in so many people's lives, it is not unreasonable to think that it could play a part in the mental illness itself, the personality structure underlying

the illness, and finally in the ability of the person to get well. Of course, the part that religion plays could be positive or negative (p. 53).

The other reason Malony (1986) gives for the importance of such a study is the need to recognize the impact the psychologist's own religious perspective has on his or her research. Malony (1986) believes that there may be a tendency on the part of the nonreligious researcher to ask the wrong questions and a tendency on the part of the religious researcher to be too subjective.

The following sections summarize how religion has been variously defined, conceptualized, and measured, and addresses Malony's (1986) assertion that the results of research on religion may indeed be influenced by poor methodology or bias.

DEFINITIONS OF RELIGION

How a phenomenon is defined has implications for how it is conceptualized, the degree of importance placed on it, and how it is measured. Hence, before discussing the methodologies employed in the psychology of religion, it is essential to review the ways in which religion has been defined.

The terms *psyche* and *soul* are often used synonymously. Spinks

(1985) describes the soul as an entity whose activities are in some measure observable as mental and emotional phenomena. He cites Jung as defining the psyche as the raw material of religion. The Book of Psalms, important in both Jewish and Christian worship, mentions the soul not just in reference to prayer, but also in reference to emotions, dreams, and nightmares. Greek versions of the Bible use the word *psyche* for the Hebrew *soul*, and Latin versions use the word *anima*. Spinks (1985) concludes that, in the Judeo-Christian tradition, ..."man is viewed as a unity, an ensouled body rather than an embodied soul" (p.61). Therefore, psychology and religion occupy the same field of inquiry, even if they come up with different conclusions.

Vande Kemp (1985) points out that the main root of the term *religion* is the Latin term *ligare*, from which the words, *ligament* and *ligature* derive. Thus, *re-ligion* means literally a reconnection, reunion or reconciliation. Using this concept, the psychological study of religion can be seen as connecting the external self with the internal, the temporal with the transcendent.

Because the psychology of religion is abstract or all-inclusive, as well as vast and multifaceted, it is difficult to define exhaustively and its boundaries are imprecise. Berkowitz and Johnson (1967) base their work on the assumptions that religion is a universal phenomenon and that religion performs similar functions in enough cultures to make comparisons meaningful. Spinks (1985) identifies issues which all religions

attempt to address: (a) the universality of human needs (spiritual and physical), (b) the impulse toward unity and completeness, and (c) the awareness of external powers that operate in the world. Spinks suggests that the objects of psychology are not restricted to the body and the psyche. Once it begins to deal with the will, psychology becomes elevated to ultimate concerns. When psychology deals with religion, therefore, it cannot be confined to the externals, (behavior, customs, traditions, and rites of particular groups), but necessarily aspires to understand the individual's inner experience, including beliefs and feelings. He cautioned that meanings and implications in one area may seem opposed to those in other areas.

Batson (1986) observed that the psychology of religion has been defined and approached in at least three different ways:

1. Psychology by religion--the practice of therapeutic psychology by religious professionals;
2. Religion (theology) by psychology--whereby psychological theorists make statements about the essence of human nature;
3. Psychology of religion--the scientific study of individuals' religious beliefs and behaviors.

It is not the interest of psychology, Batson notes, to determine whether or not the content and doctrine of various religious beliefs are true, valid, or reasonable. This is the domain of the theologian. The psychologist of religion is interested in the third category--how such beliefs

are manifested and expressed.

Pruyser (1977) cautioned, however, that a psychology of religion without some consideration of theology is a narrow undertaking. Although the existence of God cannot be asserted or denied by psychology, Pruyser (1977) warns that a deliberately agnostic attitude on the part of the scientist cannot do full justice to the nature of the relationship with God in believing subjects any more than a humorless psychologist can write about humor. He concludes that the psychologist must study God for the sake of studying individuals if religion, in whatever form, is so central in the life of the believer. Wieman (1970) questioned whether the way we gain knowledge of God is the same as for other aspects of reality. He argued that if knowledge of God (or the way God is perceived by individuals) is outside the field of scientific knowledge, then it will be considered unreal by the scientific community.

Related to Spinks's (1985) understanding is Becker's (1971) definition of religion as a set of human behaviors in which the concerns of man are related to God as the Holy Creator, the Divine Will, or the Ultimate Ground of Being. Similarly, Tillich (1957) conceptualized faith as the state of "ultimate concern," as having concerns which go beyond everyday survival needs. He reminded us, however, that spiritual concerns also have cognitive, aesthetic, social, and political manifestations.

As Tillich (1957) pointed out, the content of religion matters greatly for the life of the believer, but it does not matter for the formal definition

of faith. Any definition of religion is likely to be satisfactory only to its author. Many, particularly those from Jewish, Christian, or Islamic traditions, feel that a suitable definition of religion must involve God or a supernatural being. However, other religions with long traditions such as Buddhism, Taoism, and Confucianism do not have a concept of God. Fromm (1950) observed that we have no word to denote religion as a general human phenomenon in such a way that some association with a specific type of religion does not creep in and color the concept. Fromm proposed a definition for religion which attempts to be as inclusive as possible, while still retaining its distinctiveness. For the purpose of this study, the definition of religion he proposed will be employed: "Any system of thought and action shared by a group which gives the individual a frame of orientation and an object of devotion" (Fromm 1950, p. 21).

Functional and Nominal Definitions of Religion

Given such a broad and generic definition, how can psychologists make sense of the sometimes conflicting research results found in the psychology of religion literature? For the research psychologist, how an individual's religion or religiousness is defined will determine how it is measured. Conversely, the methods used to measure a concept are operational definitions of the concept being studied.

Tisdale (1980) observed that while the early researchers (James, Leuba, Starbuck, and Coe) had their own definitions of religion, they all

insisted that when carrying out empirical research one must ultimately depend on the subjects themselves to tell the investigators when their behaviors have religious significance. They found no adequate external criteria for identifying individual religious behavior. The need to rely on verbal self-reports is not likely to change. Tisdale (1980) explained that "...the problem here seems ultimately to lie in the intensely personal nature of much religious experience and often highly private meanings it has to those who profess it" (p. 4).

Brown also (1986) observed, "...despite the simple agreement that religion *can* be studied, differences among psychologists about what it entails could be as great as those among the religious people they study" (p.13). He suggested that psychologists who study religion must look beyond the doctrines and beliefs and study instead the ways that beliefs and supporting doctrines are held and reinforced. Because of the diversity of religions and the variety of ways such beliefs are manifested, the majority of those who study the impact of religion have found that "functional" definitions are often more useful than "nominal" definitions.

Functional definitions measure the external effects and manifestations of religious experiences (affiliation, church attendance, etc.), as well as some inner qualities such as belief statements. Spilka, Hood, and Gorsuch (1985) stated that even what is commonly considered to be an inner experience "... is anchored in something external and independent of us--the being or deity in whom resides absolute truth" (p.5).

Functional definitions, of course, can never completely describe the religious life of an individual, but they can differentiate between personal and institutional expressions of religiosity. Spilka, Hood, and Gorsuch (1985) proposed two ways that functional definitions can be employed for different purposes. The first is a typology which classifies an individual as belonging to one group or another (intrinsic vs. extrinsic, literal vs. mythological, etc.). The second is trait formations which describe religious propensities or attitudes of individuals. Most commonly, questionnaires provide the necessary data for formulating functional definitions. We will discuss the advantages and disadvantages of questionnaires under Measurement Issues and Techniques.

Berger (1974) disagreed with the heavy use of functional definitions, which he described as a "quasi-scientific legitimization of the avoidance of transcendence" (p. 125). He argued that we need to understand religion "from within," taking into account the intentions of those who adhere to certain beliefs. While he agreed that functional definitions have their place as describing what religion *does*, they are too broad, by dealing with lifestyle, as well as too narrow, by ignoring the supernatural. Differences among religions are therefore flattened.

However, Machalek (1977) contended that the dilemma Berger (1974) raised is more apparent than real. Operational or functional definitions are useful when researchers investigate the similarities between different religions. New information that does not fit the previous

definition simply stimulates a revision of the definition. On the other hand, a researcher can propose a nominal definition before any observations are made. The problem here is that anything can be viewed as religious-- depending on the researcher's frame of reference. There is the danger, therefore, that a "...tentatively adopted nominal definition would be assigned permanent status as a real definition before adequate empirical investigation has been conducted" (Machalek 1977, p. 396). Machalek therefore believed that it is preferable that investigators make such implicit nominal definitions explicit by formally stating them. He also felt that there is little to be gained by advancing definitions for all purposes. Definitions should be evaluated in terms of their usefulness regarding the task at hand, thereby minimizing political or personal preferences.

In conclusion, most social scientists agree that a single definition of religion which is appropriate for all people at all times is too broad and general to be useful for investigative purposes. Instead, by employing functional definitions, religion is defined as narrowly or broadly as the researcher desires. It enables the effects of religion to be documented by observing the effects it has on individual lives based on what people say they believe, and by using reports concerning inner experience and how people live their lives. The various methodologies used to study and measure religion present other difficulties that will now be considered.

ORGANIZING PRINCIPLES

As the above discussion shows, psychologists of religion have disagreed about how to measure and interpret religious variables. But the investigator cannot simply define religion or religiosity arbitrarily. We need a more objective and generic definition.

As Batson (1986) noted, it is not in the purview of psychology to determine whether the various religious doctrines are true, valid, or reasonable. This is the domain of the theologian. The psychologist of religion is interested in *how* such doctrines are manifested and expressed.

Fromm's general definition of religion is "any system of thought and action shared by a group which gives the individual a frame of orientation and an object of devotion" (Fromm, 1950, p. 21). We choose to accept this definition here as a starting point.

After discussing seven motives psychologists may have for studying religion, Pruyser (1977) concluded that one researcher can have several aims and motives all at once. There are, therefore, ample opportunities for mixed motives to operate in studying the psychology of religion.

Orlo Strunk, Jr., (1957) proposed a definition for the psychology of religion:

that branch of general psychology which attempts to understand, control, and predict human behavior--both propiate and peripheral--which is perceived as being

religious by the individual and which is susceptible to one or more of the methods of psychological science (p.110).

The above definition has within it the phenomenological approach and the cognitive emphasis, as well as an idiographic emphasis and motivational assertions. Strunk (1957) clarifies "propriate" behavior as being personal, warm, and important to the individual as opposed to behavior which is impersonal, cold, and relatively unimportant.

Pruyser (1977) explains that one reason the psychology of religion is so difficult to define is because there may be nearly as many psychologies of religion as there are theories and domains of psychology.

The Multidimensional Nature of Religion

Whether religion is one or many variables is one of the first questions with which psychologists of religion grappled. Religiosity is considered a unidimensional variable when it can be assessed by means of a single item. In our culture a frequently-used measure of this is the simple denominational label such as Protestant, Catholic, or Jewish. Depending on the nature of the study, researchers may find a single variable to be just as valid and much more cost-effective to prepare, administer, and analyze than more discriminating variables based on denominational views.

While the search for a unifying definition applicable across all religions and cultures is a challenging quest, most research is oriented

toward breaking religion into component parts and looking at its multivariate aspects. Larson, Pattison, Blazer, Omran, and Kaplan (1986), for example, considered univariate measures to be "static" and ineffective because they ignore the diversity of religious expression which exists within denominational categories. Their findings indicate that researchers are currently utilizing more "dynamic" measures of religious commitment by asking questions about beliefs, practices or attitudes.

William James, Rudolph Otto, and Gordon Allport all contributed to exploring the variety of orientations and approaches to faith. Prior to the 1950s, a useful designation was "institutionalized" versus "interiorized" types of religion. In 1959, this distinction evolved into the popular "extrinsic" versus "intrinsic" concept developed by Allport, stressing the differences in personality styles and motivational characteristics. The intrinsic/extrinsic (I/E) distinction has contributed much to the study of religion, stimulating both fruitful empirical data collection and theoretical analysis.

Allport began work on the I/E concept in The Individual and His Religion (1950). Later, in The Nature of Prejudice (1954), he discussed "two kinds of religion" that are related to ethnic prejudice. He uses the terms "interiorized" and "institutionalized" but offered no formal definitions. Hunt and King (1971) traced the history of the concept from when it was undifferentiated or fixed solely on prejudice to a more general, universal concept.

According to Donahue (1985), the Religious Orientation Scale (ROS) developed by Allport and Ross in 1967 has had a great impact on the psychological study of religion. It was one of the first instruments that was able to differentiate between these two broad religious perspectives of faith. Allport and Ross (1967) see the extrinsic perspective as "...strictly utilitarian: useful for the self in granting safety, social standing, solace and endorsement for one's chosen way of life." (p.455). On the other hand, intrinsic religion "...regards faith as a supreme value in its own right. It is oriented toward a unification of being, takes seriously the commandment of brotherhood, and strives to transcend all self-centered needs...A religious sentiment of this sort floods the whole life with motivation and meaning" (p. 455). Allport and Ross (1967) summarized: "...the extrinsically motivated person *uses* his religion, whereas the intrinsically motivated *lives* his religion" (p. 434).

Allport and Ross (1967) soon discovered that the ROS was not measuring two types of people as they had originally intended. Instead, they found that while all religious people have characteristics of both perspectives, most people are inclined toward one type or the other. However, they discovered two other types: the "indiscriminately pro-religious" who agreed with both the intrinsic and extrinsic scales and the "indiscriminately anti-religious" who agreed with neither.

This investigation of religious motivation helped to unravel the psychological and religious correlates of prejudice, intolerance, and

ethnocentrism. Over the years, Allport's basic insights have been expanded to include a belief-disbelief continuum and general pro-religious and anti-religious attitudes. Furthermore, following Allport's death in 1967, these concepts have become more sharply defined and better operationalized. Batson (Darley and Batson, 1973) developed the Religious Life Inventory (RLI) with three subscales: the *external* scale, which measures the importance of others, such as church associates, parents, etc., in one's religious development; the *internal* scale, which measures one's need for religion; and the *interactional* or quest (Q) scale, which was an alternative to Allport's Intrinsic (I) scale. Donahue (1985) points out, however, that the Q scale consistently failed to correlate with any measure of religiousness and could more appropriately be considered an agnostic scale since it did not identify with any particular tradition, but constantly raised "why's" about social structure and life.

Although Allport attempted to describe the I/E orientation as poles on a continuum, Hunt and King (1971) found an "expanding bundle of component variables," (p. 144) concluding that the I/E is not one relatively simple continuum but eleven categories or continua: reflective versus uncritical, differentiated versus undifferentiated, personal versus institutional, universal versus parochial (exclusionist), unselfish versus selfish, relevance for all life versus compartmentalization, salience versus not fully accepting creed, ultimate versus instrumental (utilitarian), associational versus communal, humility versus dogmatism, and regularity

of church attendance versus peripheral attendance. Most respondents fell into one of the five underlined continua.

Feagin (1964) contributed further evidence that the I/E orientation is not a simple bipolar variable. He found separate I and E factors composed of six items each. Allport and Ross (1967) also found that I and E used separately were better predictors of prejudice than a combined scale.

Hood (1970) has observed that the most frequently used device for measuring religious orientation is the Likert type scale. He believed such a practice oversimplifies operational methods of interesting conceptual systems. What is needed, he contended, is an *operational* measure of religious experience, and not merely respondents' answers as to whether or not they have had religious experiences. This would involve presenting a subject with an array of reports of independently defined religious experiences and asking if they have had similar experiences.

To test this method, Hood (1970) utilized several of the experiential accounts described by James in Varieties of Religious Experience (1902) as "the feelings, acts and experience of individual men in their solitude so far as they apprehend themselves to stand in relation to whatever they may consider divine" (p.42). Hood's (1970) own instrument, the Religious Experience Episodes Measure (REEM), was designed to determine the relationship between religious orientation and report of religious experiences.

Allport and Ross (1967) claimed that intrinsically motivated persons

receive special "experiential meanings" from their religion. Maslow (1964) argued that conventionally religious persons are less likely to have religious or transcendent experiences than other persons.

Hood (1970) used a sample of 46 university students who identified themselves as Christians. They were presented with accounts of 15 religious experiences as reported by James. They were instructed to rate each experience on a five-point scale from 1 (no experience like this) to 5 (almost identical). They performed the same task two weeks later and demonstrated high test-retest reliability (.93). In follow-up interviews, the students said they believed the test was a valid measure.

Hood (1970) found considerable support for the hypothesis that intrinsically religious people report having more religious experiences than extrinsically oriented people, as defined by the ROS. He found correlations of .51 for intrinsics to report religious experiences versus .06 for extrinsics. He did, however, find difficulty in distinguishing between intrinsically oriented and indiscriminately proreligious subjects. Indiscriminately proreligious subjects agreed with the REEM because they were religious in tone and but not necessarily because of personal experiences. Also, he noted that a person could be indiscriminately antireligious and have what could be defined as religious experiences but not identify them as such.

Allen and Spilka (1967) made a related distinction when proposing a "consensual" versus "committed" orientation. Their model focused greater

attention on cultural values and experiences that help to shape cognitive orientation and personal belief systems. Roof (1979) stated that "...the distinction is helpful to researchers, drawing attention to the cultural underpinnings of belief systems and shedding light on the numerous personality, value and cognitive traits that contribute to the formulation and maintenance of such systems" (p.20).

As Spilka, Hood, and Gorsuch (1985) pointed out, people are drawn to and embrace religion for a variety of reasons and express spirituality and religious concerns in many different ways, such as through personal faith, denominational affiliation, and even through basic societal values. Spilka, Hood, and Gorsuch (1985) suggested, however, that within the multiple expressions of religiosity, there could be a more universal, single factor.

Yinger (1977) and Wright and D'Antonio (1980) attempted to determine the most basic substructures of religion. Yinger (1977) focused his attention on basic, universal substructures of concern which give rise to religious expression. He therefore took a functional approach--asking how beliefs and practices enable people to cope with life's dilemmas. His question was not how religious a person is, but how is a person religious. Yinger (1977) and Berger (1967) take the position that religious belief systems are shaped partly through the experiences of suffering, injustice, and meaninglessness. Yinger (1970) sought to design measures which get at "...awareness of, and interest in the continuing recurrent permanent

problems of human existence" (p. 33).

In order to understand nondoctrinal, cross-cultural expressions of persistent concerns, Yinger (1977) carried out research on college students in five countries (Australia, New Zealand, Japan, Korea, and Thailand). He asked the students the open-ended question, "What do you consider the one most fundamental or important issue for the human race; that is what do you see as the basic and permanent question for mankind, the question of which all others are only parts?" (p.73). Yinger's (1977) results indicate that 92% of the students' answers centered around themes of dealing with meaninglessness, suffering, or injustice. Yinger concluded that humanity's efforts to deal with these problems comprise a group of "nondoctrinal" religious beliefs which are universal to human societies.

Wright and D'Antonio (1980) duplicated Yinger's (1977) study with University of Connecticut students. Answers to the same open-ended question yielded what appeared to be very different responses. They found that even after putting "meaningless, injustice, and suffering" together in a single category, only 20% of the students rated it as their main concern, while "learning to love, understand and care for others" accounted for 36% of the responses. However, when the data from Yinger's (1977) study were examined, it was discovered that they did not distinguish love as a separate category, and responses focusing on peace and concern for others were grouped together with those focusing on meaninglessness and injustice.

After reconciling these differences, Wright and D'Antonio (1980)

concluded that Yinger's (1977) open-ended question about students' greatest felt need for humanity did not necessarily measure religion. They therefore posed another question to the University of Connecticut students:

Religion means many things to many people. Regardless of your own religious background (or absence of it) how would *you* interpret or translate the actual meaning of religion?

In other words, if it could be encapsulated, transformed into a belief or attitude and acted out in everyday life,

what would it be and how would you describe it? (p. 295)

Thirty-five per cent of the sample responded that "belief and/or faith in God, Christ or Supreme being" was the most important item, while the second highest response was "love/understanding/caring for others" (21%).

Therefore, Wright and D'Antonio (1980) demonstrated that the question raised by Yinger (1977) was not necessarily getting at a universal religious essence. Their data suggest a "...vertical-horizontal intersect of religious beliefs, which raises a significant question regarding the search for a 'substructure' of religion" (p. 297). Roof (1979) found that the results attained by Yinger (1977) all correlated to Judeo-Christian religious items as opposed to more privatized, universal experiences. Roof (1979) concluded that there is empirical evidence for a privatized, "invisible," multidimensional religion. He suggested that more research is necessary outside the student population to establish these subdimensional structures.

One issue suggested by Yinger (1977) is that measures of religiosity

must encompass both institutionalized and noninstitutionalized beliefs and must see religious commitment as personal-subjective as well as social-collective. Lenski (1961) found it useful to distinguish between associational and communal types of religious group involvement. Associational involvement consists of the individual's participation in institutional or congregational activities. Communal involvement consists primarily of group activities of family and friends who share a common religious and cultural heritage. In addition to the associational versus communal dimension, which measures group involvement, Lenski (1961) proposed the doctrinal orthodoxy versus devotionism dimension, which measures religious motivation. He discovered a weak relationship between the two dimensions and concluded that they were separate and independent. The same year, Fukuyama (1961) proposed a cognitive (knowledge), cultic (ritual), creedal (belief), and devotional (experience) model for assessing religiosity.

In 1970 Verbit also developed a multidimensional system. His work is frequently cited as a useful and comprehensive way to measure religion. He listed six dimensions each with a content, frequency, intensity and centrality in the life of the believer:

1. Ritual--the private or public ceremonial behavior;
2. Doctrine--affirmation about the relationship of the individual to the culture;
3. Emotion--presence of feelings (awe, love, fear, etc.);

4. Knowledge--intellectual familiarity with sacred writings, principles;
5. Ethics-- rules and guidance for interpersonal behavior, i.e., right, wrong, good, bad;
6. Community--the community of the faithful-- psychological, social or physical.

Using this model, researchers could identify significant as well as subtle differences between individuals of the same religious group. Where religiosity was previously measured as mere denominational affiliation, subjects could now indicate the degree of importance they placed on various rituals, doctrines, and other practices of their group, as well as report what feelings were associated with such beliefs and practices. Studies that ignore such diversity within groups risk misinterpreting the impact religion has on many people's lives.

Many of the studies that propose various dimensions of religiosity are similar to an earlier study by Glock and Stark (1965). They identified five core dimensions: ideological, ritualistic, experiential, intellectual, and consequential. These dimensions enable the researcher to isolate internal components of core dimensions and explore patterns and interrelations among them. Glock and Stark (1965) identified two relational measures similar to Lenski's--communal involvement and congregational friendships. They also identified a belief dimension, comprising particularism and ethicalism. Particularism is the extent to which people believe that theirs is

the true faith. Ethicalism measures the extent to which doing good and loving one's neighbor is favored over orthodoxy and supernaturalism. Capps (1977) noted that the personal or experiential dimension is no more important than the others, but it "animates" the whole and serves an integrative function.

Paul Tillich and others have proposed other multidimensional descriptions of human nature, which include the mechanical, chemical, biological (interaction with the environment), psychological (mental activity) and spiritual (meaning, purpose, values, transcendent meanings), and historical or social. Sevensky (1984) advised that these dimensions are not meant to be categories or levels of importance, but dynamic organizing principles. Although each individual possesses a diversity of characteristics, there yet remains a sense of unity and interrelatedness. Capps (1977) agreed with this approach when he recommends searching for the overall pattern of religion in spite of the multiplicity and diffusiveness that is often presented to the observer. The various dimensions of the system can be brought into focus, giving meaning to an otherwise undifferentiated collection of experiences, sensations, thoughts, attitudes, activities, etc. Advocates for not using simple categories or single traits emphasize the need for a multivariate *set* of scores to define the individual's position within a particular dimension.

Gorsuch (1980) explained that a person's religiosity is, therefore, not defined by a single number but by the intersection of positions on

numerous scales. Such numbers offer the possibility of mathematical manipulation and can be translated into verbal, qualitative descriptions if desired. He argued that any attempt to establish a single definition of the religiously committed person would assume that there is only one kind of religious commitment. Gorsuch (1980) believed that the tendency for a psychologist prematurely to define the religiously committed person stems from a misconception of the scientific process. One does not draw up a tight definition at the start of a research program and then make it operational in research. The tight definition can only be drawn up after the research is virtually completed. A thorough psychology or sociology of religion must be able to point to those causative influences that lead to the development of a particular score on each dimension, as well as explaining why the dimensions are empirically distinct. Therefore, the theory develops as data are collected and analyzed in repetitive stages. A definition or theory becomes more stable over time, but never perfect. As Gorsuch (1980) pointed out: "...no matter what the quality of the theory's definition of the religiously committed person, the definition is only as good as its measurement" (p. 16).

The idea of multidimensionality in researching religion has quickly gained acceptance. For instance, King and Hunt (1975) developed a questionnaire that measures 13 dimensions: creedal assent, devotionism, church attendance, organizational activity, financial support, orientation to growth and striving, salience (behavior), salience (cognition), the active

regulars, religious despair, intolerance of ambiguity, purpose in life (positive), purpose in life (negative). While most other research relies on student data, King and Hunt (1969, 1972, 1975) researched populations of Methodists, Disciples, Lutherans, and Presbyterians in the Dallas-Fort Worth area and hoped to achieve an inside view of mainline Protestantism. From a sample of 1,356 subjects, they identified ten factors, the first six of which are similar to Glock's (1962) and Lenski's (1961):

1. Creedal Assent--similar to Glock's ideological and Lenski's doctrinal orthodoxy; looks at the broad spectrum of beliefs versus literal-fundamentalism
2. Devotionalism--similar to Glock's experiential and Lenski's devotionalism; concerned with personal prayer and communication to God
3. Church Attendance--related to Glock's ritualistic and Lenski's associational factors
4. Organizational Activity--measures Sunday school or educational activities.
5. Financial Support
6. Religious Knowledge--similar to Glock's intellectual orientation toward religion versus behavior
7. Growth and Striving Orientation--involves feeling a need to learn, change, and grow
8. Extrinsic Orientation--an instrumental, selfish attitude
9. Salience: Behavior--relevance of religion for certain out- of-

church personal activities

10. Salience: Cognition--salience of religion for thoughts and feelings.

As mentioned, their findings bear resemblance to other research. They found relationships among the scales of belief, attitude, and participation to be the strongest. In addition, they found that measures of belief and experience are more strongly related to intolerance of ambiguity than are those of participation. King and Hunt therefore were able to identify theoretically meaningful core dimensions. They identified two subsets along the lines of previous religious research. One pertained to the personal-meaning aspect, the other to social-belonging. King and Hunt (1975) empirically identified these clusters and explored their relationship to other factors such as tolerance, cognitive simplicity, intrinsic-extrinsic orientation, as well as to numerous social background characteristics.

King and Hunt (1972) cautioned readers not to overgeneralize their results. They identified six primary limitations to their study. First, their research was culture-bound since they look only at mainline Protestant Christianity. Second, subjects were all voluntary, not a random sample of any population. Third, using questionnaire data raised problems of reliability and validity. Fourth, the correlation methods they employed were not inductive statistics in that they are not testing an hypothesis. Fifth, the dimensions which they identified were not "things" but constructs. Sixth, the scores were simple, additive, and unweighted.

Looking at the conceptualizing issue from another angle, Gorsuch (1984) suggested that there may be a general, single religious dimension which can then be subdivided into further dimensions. For instance, he suggested that the I/E commitment dimension could be subdivided into creedal assent, church attendance, growth and striving.

Clayton and Gladden (1974) agreed that the multidimensional concept of religion has become a "sacred sociological artifact." They carried out two surveys (1967 and 1970) using an instrument designed by Faulkner and DeJong (1966) consisting of five Guttman-type scales which were created to operationalize Glock and Stark's (1965) multidimensional concept of religion which is discussed above.

Clayton and Gladden (1974) questioned whether or not these dimensions were as separate and distinct as originally proposed. They found in both studies that the ideological commitment factor accounted for most of the variance, 78% in the 1967 study and 83% in the 1970 study. They concluded that "...religiosity is primarily a commitment to an ideology and the other so-called dimensions are merely expressions of the strength of that core commitment" (p. 142). Their results force the question of the centrality of belief and the extent to which other expressions of religion flow from it.

Clayton and Gladden (1974) therefore concluded that the task of the researcher is not to create new dimensions but to devise scales which measure different belief systems. Many of the multidimensional systems

reviewed above are most appropriate when applied to religions with a long tradition and set doctrines. Clayton and Gladden (1974) argued that we need scales which can better measure the ideological commitment of those who do not align themselves with the dominant religion of the society.

King and Hunt (1975) found greater support for multidimensionality from their study of church members than did Faulkner and DeJong (1966), Clayton and Gladden (1974), and others. According to Roof (1979), King and Hunt's work informs future researchers as to what factors have a bearing on the number of dimensions, such as choice of population and usefulness of the dimensional structure. Their work is important in resolving many basic questions about multidimensionality.

In conclusion, although most researchers agree that religion should be studied as a multidimensional variable, there is not a consensus on what the organizing principles ought to be. The above discussion has intended to show some of the historical development of the multidimensional concept, beginning with Allport's I/E distinction. Allen and Spilka (1967) modified this concept with their consensual-committed distinction. Glock and Stark (1965), Verbit (1970), and King and Hunt (1975) discarded the concept of a continuum with two poles in favor of proposing several distinct dimensions which could be used to measure differences within a particular religious community. Yinger (1977) and Wright and D'Antonio (1980) took another approach by attempting to isolate a basic, universal, nondoctrinal religious substructure.

We will now turn from how religion has been conceptualized to an examination of the various methodologies which have been employed in studying religion.

Measurement Issues and Techniques

The debate today no longer centers around unidimensionality versus multidimensionality, but rather around the conditions under which a particular analytic approach is appropriate. One of the measurement problems which multidimensional scales attempt to resolve is validity. Does the instrument measure what it proposes to measure? Do most people interpret an item in the same way? According to Gorsuch and McFarland (1972), multiple-item scales are not as affected by idiosyncratic interpretations as single-item scales. Idiosyncratic responses tend to average out across the items. Specifically, they demonstrated that single items are probably better at measuring intrinsic religious commitment while multiple items are better at tapping traditional, orthodox beliefs. Both predict ethical attitudes equally well.

To test this hypothesis further, Gorsuch and McFarland (1972) developed a questionnaire that included four, single-item scales of religiousness and a multiple-item (20) Christology scale, as well as two other multiple-item scales, and administered them to 85 students at two universities. Their primary finding was that, if one is interested in measuring general religiosity, the only difference between multiple-item

and single-item instruments is *cost*. However, the multiple- and single-item scales both relate to other domains at about the same level. Therefore, using single-item scales may be advisable when measuring, for example, religious attendance or rating the importance of religion. They recommend using several single-item indicators as opposed to one multiple-item scale if only about half a dozen items on religiosity can be included in one study. Roof (1979) concluded by saying, "...decisions about measurement cannot be made in the abstract but must take into consideration such factors as the differing approaches to religion, the relative validity of alternative measures and the research costs" (p.39).

While old debates about multidimensionality have subsided, researchers have come to recognize the many diverse forms and approaches to religious commitment. Roof (1979) articulated three questions which demand the attention of religious researchers:

1. What are the current approaches to conceptualizing and measuring religious commitment?
2. What criteria have evolved for assessing the approaches and findings?
3. What future directions for research seem promising?

How one interprets experiences about the forces which govern people's lives depends on the assumptions one has about ultimate reality. These assumptions may or may not be consistent with conventional religion. Wuthnow (1979) suggested four types of presuppositions about

governing forces: theism, individualism, social science, and mysticism. He argues that there has been a shift away from theism toward social-scientific and mystical meaning systems.

McCready and Greeley (1976) asked another question: how do people respond to the presence of good and evil in the world? They propose five basic responses: religious optimism, secular optimism, hopefulness, pessimism, and diffusion. Their research indicated that among Americans: one-fourth are pessimists, one-fifth are religious optimists, one-fifth are hopeful, fewer than one-fifth are secular optimists and fewer than one-fifth are diffused. They believed that attempting to conceptualize and measure the sacred worlds in which people live facilitates the investigation of the larger question of religious reality construction itself, which conventional religious measures usually ignore. This type of research aids in capturing the meaning systems of those not oriented to ecclesiastical beliefs and values. They argued that the "religious dimensions" systems described in the previous section are often proposed without concern for the theoretical meanings, interrelations, or any indication for which dimensions are of central or peripheral significance. They often lack a good analytic scheme which makes empirical data difficult to interpret. McCready and Greeley (1976), and Roof (1979) all felt that the criteria for assessing religion should focus more on religious commitment, structure, and evaluation issues:

As a strategy for research, there is probably more to be

gained from developing theoretical models utilizing the basic or core dimensions that are generalizable across populations than from endless efforts at uncovering new, or even refining old dimensions (Roof, 1979, p.41).

McCready and Greeley (1976) further suggested that researchers select dimensions on the basis of how well they help in understanding the role of religion in social and cultural contexts or in clarifying the relationships between religion and personality.

While there have been some major breakthroughs in understanding the interrelationship between psychology and religion, we are struck by the methodological limits to such research. Warren (1977) identified five methodological problems which need further attention if the field is to progress:

1. Paucity of experimental studies. Because experimental designs are often impossible to carry through, there is much resistance to this method.

2. Problems of sampling. Many researchers rely heavily on volunteers or college students; however, it has been documented that people often become more religious after college. Studies based on careful random samples are seldom reported. Since there are so few experimental studies, random assignment to groups is even rarer. This aspect of methodology can be greatly strengthened.

3. Problem of controlling extraneous variables. Few articles discuss

this problem. The goal of an experimental study is to maintain equivalence, except for the independent variable between the groups being studied, so that the effect of that variable can be explored. The use of random samples would go a long way to alleviate this problem.

4. Over-enthusiastic generalization of findings. Sometimes results found at a church-related school are generalized to all college students and from there to all Americans. Results true for some are not true for all.

5. Need for programmatic research. Warren (1977) suggested that when colleagues at a given school or discipline collaborate on topics of mutual interest, the possibilities for extensive data collection, mutual intellectual stimulation, and concentrated gains are enhanced.

Programmatic research also attracts student interest.

Another measurement problem Roof (1979) pointed out is that people respond in different ways to questions designed to measure the same religious dimension. Verbit (1970) identified four distinct aspects of religiosity that are often lumped together: content, frequency, intensity, and centrality. Content is concerned with the substantive characteristics of a religion. Frequency measures amount of involvement. Intensity involves determination or consistency of involvement. Centrality questions the importance attributed to acts, beliefs, or feelings within a religious system.

Roof (1979) believed that factor analysis is most useful in extracting factors from data in the exploratory stages of analysis. One can examine the factors that are sensitive to the population being studied and determine

the number and composition of the items to be included. The difficulty lies in making comparisons from one research study to another.

If, therefore, factor analysis has its limitations, what other options are there? Clark, in 1958, explained that the psychology of religion is a science to the extent that it uses the scientific method. He cautioned that investigators cannot exclude intuition and subjectivism at the time when general psychology is pulling away from strict behaviorism. Clark (1958) reminded us that psychology not only acknowledges subjectivism but is also "...hard at work devising scientific methods of studying the subjective consciousness of even the individual case...the psychologist of religion must explore man's inner consciousness and never slacken in his search for scientific means of doing so" (p. 29). As we evaluate the various measuring techniques, we must be aware that religion is both an inner and outer experience. Some methods will be better adapted to the study of religious experience, and others to expression.

While Flakoll (1977) outlined 20 methods of religious research popular at the turn of the century, Paloutzian (1983) has grouped modern methodological approaches into two general categories (the idiographic and nomothetic) and six techniques which we will briefly discuss.

The Idiographic Approach

Researchers using an idiographic approach are interested in learning about the influence of religion on one person's experience. They study one

individual in depth, by investigating behavior and personal documents (such as letters and diaries), and then construct a psychological profile. This approach of uniqueness. Its advantage is that one person is thoroughly understood. Secondly, an idiographic approach may yield hypotheses and research questions that lead to the construction of new theories of religion. Of course the disadvantage of this approach is that insights may not be easily generalized.

As mentioned in the discussion regarding personal documents, the perennial question of whether knowledge is best derived from the study of single individuals or from groups persists. Although the preference in most psychological research is to sample large groups, Malony (1977) claimed that the data collected from one person can be considered as valid and reliable as that obtained from groups of people. The Journal of Applied Behavioral Analysis was devoted entirely to the study of single cases. James and Freud based much of their work and conclusions on the detailed examination of individuals. Other major theories were constructed using this method. Idiographic researchers of the 19th century included Ebbinghaus, who performed memory tests on himself, and Bryan and Harters, who collected data on the learning curve plateau using one telegraph key operator. Most of Piaget's theorizing about cognitive development was based on observation of his own children--one at a time. Behaviorism began with Watson and Rayner's study of conditioned fear in an individual named Albert, while Mary Cover Jones observed

deconditioning of fear in another boy, Peter. Later, Stewart (1967) studied religion in adolescents through the use of clinical interviews over several years. He reported that he understood the commonality in their experience primarily from intensive study of them as individuals rather than as a group.

Allport (1950) believed that group research of personality traits is convenient for the researcher but tells us very little about the essence of individuals. He argued that real meaning is to be found idiographically, as it exists in the inner organization of the single person. Individual differences are the essence of reality rather than accidents to be averaged out. He concluded that it was futile to make the prediction of human behavior a goal of psychology. Malony (1977) stated, "Understanding, defined as intuitive attempts to appreciate the life space of another, is possible *after the fact* --never before the fact. Man is always free and can only be understood, not explained. Thus, the proper objects of study are individuals, rather than groups" (p. 354-355). Cattell (1965) also measured many traits within one individual over a number of situations. Through this research, he developed the P- and R-techniques. The R-technique is the more traditional approach where a number of people are measured on a set of given traits and their scores are correlated. The implication is that people are quite alike and do not change. Using the P-technique, the researcher measures a set of traits in one individual over a time period of, say 100 days. The individual's scores are related to each

other. The implication here is that uniqueness and change are givens.

Sidman (1960) found fault with researchers who dismiss data that do not fit a theory. He argues that *these* data should take precedence over the theory and that theories will be meaningless if they are based only on groups.

The perspective that all data are equally valid relates to the domain of religious psychology, and allows us to view religion as delineated by each person. Pruyser (1968) believes that all religious beliefs and acts are defined personally and that therefore, N=1 methodology is the essence of the psychology of religion. Sidman (1960) noted that in carrying out research, dependent and independent measures can be reversed. Dependent variables are best measured in frequency, intensity and duration. A project could compare individuals who differed initially on content of belief or on previous group or family religious experience. The same project could measure the seeking of group or family support or the appreciation of certain religious beliefs within a given situation.

In summary, idiographic research is primarily concerned with understanding differences in the behavior of a single individual over several situations or at different times. These differences can be a function of forces which are situational or within the person. Responses can be understood, therefore, as a function of either or both.

The Nomothetic Approach

In contrast to the idiographic approach, researchers using a

nomothetic approach are interested in the psychological aspects of religion as it affects the general population. Such an approach typically utilizes a large sample size and yields conclusions that can be generalized to the "average person". Issues such as the average age of conversion or frequency of church attendance may be studied nomothetically. The advantage of the nomothetic approach is that its generalized conclusions can facilitate the generation of new theories. Its weakness is that nothing can be stated about a particular person and exceptions can always be found for the mythical "average person."

Current Issues in Methodology

Paloutzian (1983) summarizes the six primary research techniques in wide use today with respect to religion as follows:

1. *Phenomenological self-report*. The phenomenological technique is preferred for understanding the "perceptual field" of an individual at a given moment. This technique utilizes introspection, or as Paloutzian (1983) put it, "...looking inside our minds and reporting what we see" (p. 59). The phenomenological interview can fully describe the meaning of religion from an individual's perspective and is especially useful for answering idiographic kinds of questions.

2. *Content analysis*. This technique prescribes a set of procedures for scoring verbal material depending on the content being investigated. "Blind" judges, unaware of the hypothesis under investigation, will score

interview material and verbal responses for type and amount of religious content.

3. *Questionnaires and surveys.* A survey refers to the procedure for sampling subjects. The questionnaire is the instrument itself. One advantage to this technique is that data can be collected from many subjects at the same time. A disadvantage is that overt behavior is not measured. Rather, subjects answer structured questions about their opinions, judgments, and guesses about how they may behave under various circumstances. Many religious scales are available dealing with fundamentalism, orthodoxy, dogmatism, purpose in life, intrinsic-extrinsic orientation, mysticism, etc.

4. *Naturalistic studies.* Rather than artificially constructing situations to test hypotheses, naturalistic studies use the laboratory of real life to study actual, overt, and direct behavior. This can be done through "field observation" where there is no interference from the researcher, who may, for instance, count the number of times people speak in church. Another naturalistic technique is "participant observation" where the investigator, taking care to be inconspicuous, is actually involved in the religious group being studied.

5. *Studying deviant groups.* This technique has many of the same advantages and disadvantages as the idiographic approach. It allows the researcher to know one group in detail, but is severely restricted in its generalizability. Paloutzian (1983) pointed out that Freud studied neurotic

patients and overgeneralized his findings to all people. Similarly, Albert Ellis concluded on the basis of patient populations that religion is bad for mental health.

6. *Experiments.* The most precise research design is the experiment. The investigator manipulates one variable, the independent variable, to see whether changes in that variable bring about changes in the consequence or dependent variable. Few religious studies utilize this method because of the difficulty and ethics involved in manipulating religious variables. Paloutzian (1983) commented:

Though we want to treat some aspect of religiosity as an independent variable, we usually cannot manipulate that variable ourselves. For example, I am interested in the effects of conversion; but it is impossible to randomly assign people to the condition of being converts or nonconverts (nor would it be ethical to do so if it were possible). Therefore, we must rely primarily on nonexperimental or quasi-experimental research designs (p. 63).

Fishbein and Ajzen (1974) used five different methods for measuring religion and found the correlations among them all fairly high. They felt that people have extensive practice in classifying themselves religiously. Scott (1965) found the questionnaire measurement of religion to have the highest internal consistency and the highest stability coefficient

of all measurement devices. Questionnaires may not be adequate to tap more basic motivational levels. Gorsuch (1984) warned of the danger of studying the measurement of religion rather than religion itself. In making a decision about technique, Clark (1958) advised:

Not only must the instruments be proved through use, but also there must be added to them judgment, insight, sympathy, sensitivity and all those other nameless and subtle characteristics that go to make up intuition ... we will not get very far in our study of religion if we do not make use of the scientific instruments available to us; on the other hand, we will merely stultify our conclusions if we do not know when to abandon methodology and scientific rigor in order to go beyond them. (p. 50).

The Phenomenological Approach

A popular methodology of psychologists who wish to investigate the inner and outer world of individuals and groups is the phenomenological approach. This approach to the psychology of religion, according to Oates (1973, p. 33), has four basic goals:

1. To consider the unity of both consciousness and unconsciousness without overemphasis on either;
2. To consider the value systems--for better or for worse--of individuals and groups without disparagement or denial of the reality of

people's value systems;

3. To consider the ways and means of changing persons' value systems without destroying them with threat and intimidation;

4. To provide a theologically applicable system of concepts which can be creatively used in the practical efforts of professionally trained ministers and religious workers.

Quantitative Approaches

It was only after Clark's work in the 1950s that research on religion using quantitative data and methods multiplied to a significant degree.

Wuthnow (1979) detailed six contributions of the 1950s and 1960s:

1. Studies demonstrated that meaningful information on religious beliefs and practices could be gathered and quantified in an analyzable form. Refined concepts and measurements were developed.

2. A descriptive profile of religion in America detailed denomination, social class, race, age, and other demographics.

3. Religious commitment was correlated with other attitudes and activities such as political orientation, prejudice, morality, values, child-rearing habits, personal life style, etc.

4. Empirical tests for theories of the psychology of religion were developed.

5. Quantitative comparisons of cross-cultural differences in religion

were made.

6. The period witnessed the development of several journals and professional societies concerned with promoting the systematic investigation of religious phenomena.

Wuthnow (1979) summarized by saying that the period from 1960 to the present represents a continuation and expansion of the above trends. Churches are now less defensive toward psychology and more active in their sponsorship of empirical research that assesses the beliefs and practices of their members. Research in the 1960s was primarily concerned with institutionalized expressions of religion such as religious preference, church attendance, doctrinal orthodoxy, and biblical knowledge. The 1970s were more responsive to broader conceptualizations of religion such as ultimate concerns, meaning and purpose, and private, non-institutionalized expressions of religion. This shift came about when extensive surveys revealed that many people, by conventional definitions, were without religious commitment. New concepts and terminology such as invisible religion, civil religion, and sacred canopies were established along with alternative conceptualizations of religious commitment. Other research during this time has included the replication and refining of earlier studies, especially those which correlate religion with social class, prejudice, age, social status, etc. More sophisticated statistical procedures, a greater data base, greater precision in drawing inferences and the ability to analyze more complex systems of

variables make such research more fruitful than ever.

Therefore, according to Wuthnow (1979), there is a trend toward a more extensive application of quantitative methods to comparative and historical studies of religion. A wealth of demographic data is available in such survey data banks as the Human Relations Area Files, collected in Europe, Canada, Japan, and parts of the Third World. Foreign data are valuable for determining the general applicability of theories about sources and consequences of religious commitment. It is now also possible to apply modern quantitative methods to historical data. Wuthnow reports that data from the U.S. census collected from 1906 to 1913, which include religious affiliation questions, are available in computerized form.

Wuthnow (1979) suggested seven lines of further inquiry and investigation for the contemporary study of the psychology of religion:

1. Replication and empirical refinement. There is a great need to re-examine the findings of previous research in light of the more sophisticated analytic techniques available. Many large-scale data sets that contain religious items are now available for secondary analysis. Wuthnow commented, "It is ironic that we have often explored the more esoteric varieties of religion--or its surrogates--while neglecting some of the more obvious features of religion about which there are considerable data available for analysis" (p.9). Painstaking work is needed in order to pin down the basic correlates of traditional religious commitment.

2. Careful contextual specification of the relationship between

religion and other variables. Wuthnow believes that past theories have been overly dependent on individual religiosity, which traditionally emphasizes cognitive and emotive factors with little attention paid to the context in which these factors may or may not be operative. For example, a study by Jenson and Erikson (1979) demonstrated that the relationship between religious commitment and delinquency differs with denomination and town size. Also studies using college students produce different results than those using the general population. Race and geography play significant roles too.

3. Expansion of the concept of religious commitment to include little-explored correlates. Some topics have been explored extensively in relation to religious commitment--prejudice, political conservatism, sexual morality, achievement values, etc. Wuthnow (1979) suggested that other equally relevant topics have been ignored or underdeveloped such as divorce, migration, change in social status, drug use, alcoholism, happiness, quality of life, altruism, moral reasoning, sex roles, and attitudes toward foreign policy. He points out that while family and church values are often closely related, little research has been done that relates changing family structures to religious factors.

4. Formulation of alternative conceptions of religion and exploration of alternative varieties of religious expression. While traditional religion may remain central, research in alternative religious expressions needs expanding. These include religious experience,

meditation, participation in new religious movements, mysticism, and syncretistic conceptions of meaning and purpose.

5. Focus on moral and ethical dimensions of religious consciousness. Even within traditional religion, investigation of daily, mundane behavior is more necessary than investigation of degree of agreement with formal doctrines. Wuthnow (1979) commented:

Research on the practical norms and ethical criteria that translate religious beliefs into everyday behavior would appear to provide an important counterweight to the current interest that has been focused heavily on ultimate concerns and broad (almost metaphysical) systems of meaning or belief (p. 11).

6. Research on religious organizations. This research seeks answers to questions concerning the relationship of religious commitment to organizational factors. Again, most research has focused on individual beliefs and activities. Currently, sociologists are interested in network analysis and study the interaction among members of religious groups. Another approach would be to collect organizational data such as size, authority structure, worship styles, and formal beliefs for quantitative analysis.

7. Application of quantitative techniques to comparative and historical data. As mentioned previously, much data collected from the past are now available for study. Wuthnow (1979) stressed the importance

of this for research:

Many of our most important theories--such as those having to do with secularization, church-sect development, religious evolution, institutional differentiation, or civil religion--imply evidence of social change and require large-scale comparisons to be made among different societies. If knowledge about the macroscopic dimensions of religion is to progress, we must pursue comparative and historical research (p. 12).

In summarizing the past twenty-five years of religious research, Strommen (1971) considered the bulk of it as being "sporadic, exploratory, fortuitous and unsystematic." Few studies are built on previous research which would yield systematic results. Batson (1986) argued that to gain respect, the psychology of religion needs to contribute more in the way of theoretical analysis, research methods, and scientific values. Up until now, the psychology of religion has borrowed its theories from psychology. Batson (1986) contended that the field needs its own indigenous theories if old theories do not fit its plans and needs. Additionally, the psychology of religion has relied heavily on the questionnaire and self-report inventories which Batson (1986) found particularly misleading. These instruments may determine not what people actually believe, but what they think they *should* believe. Batson (1986) felt that "We need to use methods that allow us clearly to distinguish between the way people present themselves, the

way they honestly believe themselves to be and the way they actually are" (p. 8). To counteract this tendency, Batson (1986) recommended the use of more experimental and quasi-experimental research. Batson (1986) concluded that "Most often, one gets respect not by seeking it but by getting on with the job and doing the job better" (p.11). Bergin (1983) agreed that becoming more specific concerning concepts and measurement will yield clearer and more positive results.

Many feel that too much emphasis has been placed on the use of questionnaires to develop religiosity scales. However, Spilka, Hood, and Gorsuch (1985) argued that the questionnaires which have been developed are usually high in psychometric quality. They discourage others from developing new instruments unless it can be proven that they are measuring a unique concept that is different from any previous scale.

Benson (1984) made some suggestions concerning the future of research in the psychology of religion. Like Berger (1974), he believed that more emphasis should be placed on understanding the role of the individual's inner experience of God. He argued that scientism sought to repudiate the reality of the religious experience because it could not be easily quantified. He agreed with Spilka, Hood, and Gorsuch (1985) that the case study and the questionnaire are the best tools to understand the inner experience. He asserted that the case study is more of an art than a science and that it reveals important information not otherwise attainable. Such studies and surveys provide accurate information about how an

individual experiences God. To argue that such instruments are misleading because they cannot determine if an experience is objectively "true" misses the point. What is important to psychology is the respondent's subjective experience of God. With this in mind, Pruyser (1968) proposes two questions to ponder: "...1) How do people process the illusionistic images and propositions of religion that their culture, denomination, or faith group hands down to them? and 2) Can a typology of such processing be developed that honors both the integrity and capability of psychology and the intricacy of religion?" (p. 181).

This section has examined methods by which religion can be researched. The next section surveys systematic reviews of religion in the social science literature for an overview of the problems researchers most commonly face.

SYSTEMATIC REVIEWS OF STUDIES OF RELIGION

Over the past twenty years, several researchers have taken on the task of reviewing the social science literature to investigate how frequently religion is researched as well as the research methods employed. Buehler, Hesser, and Weigert (1973) researched the sociology of religion in four leading sociology journals, beginning in 1890 and ending in 1969. They also surveyed the Journal for the Scientific Study of Religion. However,

since all the articles in that journal deal with religion, its totals were not included with the others. Using the cumulative index of each journal, they selected articles which, according to their titles, dealt with religious themes. Out of 9,485 articles surveyed, they identified 477, or 5%, that studied at least one religious variable. The significant finding was that over the decades studied this percentage remained the same, with only a slight increase (to 6%) in the 1960s.

The instrument most frequently used was the questionnaire. Buehler, Hesser, and Weigert (1973) recommended that future investigators use more experimental as well as more sophisticated statistical procedures. Only 27% of the articles were quantitative studies, with the majority being survey (24%) or nonquantitative empirical (21%). The vast majority of the quantitative studies were published in the 1960s (the last decade the article surveyed). In analyzing the subject matter of the articles studied, Buehler, Hesser, and Weigert (1973) concluded that most articles focus on some aspects of religious life while ignoring others. Most frequently, the major focus is the psychological impact of religion as opposed to more social structural issues such as transmission of values, revolution, violence, war, treatment of women, minorities, and the environment. They also recommended that more longitudinal and more cross-cultural research be performed.

Capps, Ransohoff, and Rambo (1976) reviewed the literature of the psychology of religion from 1950 to 1974. They examined 858 books and

1,869 articles having religious variables and examined publication trends within five-year increments. Their approach differs from the Buehler et al. (1973) study because they analyzed publication trends within a much shorter time period.

Capps et al. (1976) developed their own multidimensional system based on their examination of the various trends and research interests. They proposed that studies could be grouped according to six general categories:

1. Mythical--myths, legends, folklore
2. Ritual--ritualistic and cultic practices
3. Experiential--personal religious experiences
4. Dispositional--religious beliefs, attitudes and values
5. Social--religious organizations and groups
6. Directional--how religion promotes personal growth.

Capps et al. (1976) discovered that the "directional" literature accounted for 30% of the research, while the "dispositional" accounted for 23%. The directional category, which includes concepts of the self, personal growth, mental health, and therapy accounted for the largest number of items. This finding is consistent with Buehler's et al. (1973) conclusion that most research focuses on the psychological impact of religion rather than on its social implications.

Unlike Buehler et al. (1973), they found no trend toward quantitative studies except in areas which easily lend themselves to

quantitative analysis such as belief and attitude. While Capps et al. (1976) did an extensive analysis of the way religion has been studied in the psychological literature, they did not indicate the proportion of articles in the literature which deal with religion.

In a similar study, Larson, Pattison, Blazer, Omran, and Kaplan (1986) systematically analyzed the research on religious variables in four major psychiatric journals from 1978 to 1982. After reviewing a total of 3,777 articles, they selected 2,348 that contained quantitative data. Within this sample, they found only 59 (2.5%) articles that included a quantified religious variable. Of these, only three (less than 1%) included religion as a major emphasis of the study. They found that the majority of these articles did not employ a control group and focused on the pathological and neurotic uses of religion among psychiatric populations. Larson et al. (1986) further found that most studies (63%) used a single, weak denotative variable such as denomination to measure religiosity. Only one study used a previously scaled, multidimensional religiosity questionnaire. Descriptive statistics were used 55% of the time. Larson et al. (1986) report that, among the 59 articles that employed a religious variable, the "less robust" descriptive statistics were more often used ($p < .001$). They also found that most researchers viewed religion as an independent variable associated with a disease outcome and ignored the benefits of religion.

Craigie, Liu, Larson, and Lyons (1988) made a systematic analysis of religious variables in the Journal of Family Practice from 1978 to 1986.

They, too, found a small percentage of articles dealing with religion. Of the 1,086 articles the authors reviewed, 603 (55.5%) measured a quantified variable, and 21 (1.9%) measured a religious variable. They calculated that out of the 603 articles that measured a quantified variable, only 3.5% dealt with a religious variable. In those articles, religion was defined as denominational affiliation, rather than on dynamic measures; religiosity was measured by various types of religious commitment, attitudes, beliefs, and practices.

In another review, Larson, Gartner, and Vachar-Mayberry (1990) compared the empirical research found in four leading pastoral counseling journals with systematic reviews found in psychiatric and geriatrics literature. As with the other reviews, they found that in general, the methodological quality of articles in pastoral counseling journals was poor. Out of 1,045 articles investigated, only 5% were empirical, a figure smaller than for the other two types of journals. The empirical pastoral counseling studies were found to be inferior in internal and external validity as well as in conceptual clarity. The study concludes that "...pastoral counseling has thus far failed to develop adequately as a behavioral science" (p. 2).

It is the view of Larson et al. (1986) that other behavioral sciences have developed much more sophisticated conceptual and methodological approaches to the scientific study of religion. However, our systematic reviews of the sociology of religion, the psychology of religion, and

pastoral counseling all indicate that the theory and methodology of the scientific study of religion is the weakest aspect of the articles and books reviewed. Demerath and Roof (1976) commented:

The sociology of religion has been consistently victimized in the past by sloppy methods ranging from inadequate sampling to weak analytic techniques. Better procedures and data sources currently available should have incremental effects on improving the quality of research in the field (p.30).

Gartner, Larson, Allen, and Gartner (1991) were concerned with how the chosen methodology can affect the outcome of the study. They cited an article by Bergin (1983) in which it was reported that approximately one-third of the studies reported a negative relationship between religion and psychopathology, one-third reported a neutral relationship, and one-third a positive relationship. After reviewing over 200 such studies, the reviewers drew the following conclusions:

1. Most studies that find a positive relationship between religion, psychopathology and mental health use "soft" variables, such as paper-and-pencil personality inventories that attempt to measure a theoretical construct like self-actualization. These tests have limited validity. In some, such as the Personal Orientation Inventory (POI), Gartner (1981) found items where points are subtracted if the subject answers favorably toward religion. Most of the studies which have found a positive relationship

between religion and mental health use “hard”, behavioral, observable variables such as suicide or divorce. Such measures lack the ambiguity of the soft measures.

2. Low levels of religiosity are often associated with disorders of low impulse control (e.g., drug use), while high levels of religiosity are more often associated with disorders of overcontrol of impulses (e.g., dogmatism).

3. Making distinctions in religiosity, such as intrinsic-extrinsic, helps explain some of the inconsistent findings. They found, for instance, that those who scored high on intrinsic measures of religion also scored positively on measures of mental health, while extrinsic religiosity was more often associated with poorer levels of mental health.

Before leaving this section to discuss the role of religion in psychology textbooks, note that Bareta, Larson, Zorc, and Lyons (1990) have discovered that computerized searches of psychiatry literature using MEDLARS and other systems located only 59% of all published articles. They suggest that if resources allow, researchers should combine systematic searches with computerized searches.

At this point we have investigated the place of religion in the history of psychology, as well as the conceptual and methodological issues with which the psychology of religion is concerned. The next two sections concern the place of religion in psychology textbooks and the religious

orientation of psychologists. They discuss two important influences on the psychology student as he/she travels through the academic process.

TEXTBOOKS AND EDUCATION

If the conscientious psychologist desires to have basic theological knowledge, such education will have to occur outside the classroom. Lovinger (1984) observed that, with the exception of pastoral counseling, the training for psychiatry, psychology, social work, psychiatric nursing, educational psychology, and special education tends to discourage or undermine a religious orientation. Students who declare their intent to combine their psychological training with religious understanding are a distinct minority and often face discrimination when applying for graduate admissions (Gartner, 1986). Gartner (1985b) suggested that the socialization process of becoming a psychotherapist involves accepting a prejudice against religion. When nonreligious people self-select such training programs, they are left unprepared, conceptually and practically, to deal with religious issues which might arise in their lives or in the lives of their clients. They are therefore likely to accept the naturalistic philosophy of the field with little question (Neuman, 1986).

Also, within academic settings, Pruyser (1977) observed that considerable debate arises over who should teach psychology of religion courses. Some courses are taught in psychology departments by psychologists, while others are taught in departments of religion by faculty who may or may not be psychologists. He commented that the choice may be decided by the fortuitous availability of a faculty member with an interest in the subject, but not necessarily mastery of it.

Bias against religion has also been documented in introductory textbooks in psychology. Vande Kemp (1989) pointed out that the first investigation of religion in psychology textbooks was published by Gordon Allport in 1948. After asserting that authors have "...virtually banished from their pages the essential problems of the will, conscience, reasoning, as well as the still more comprehensive topics of self, subjective values and the individual's world view " (p. 80), Allport (1948) classified textbooks into six categories based on their treatment of religion: the silent treatment, hostility, factuality, utility, semi-systematic approaches, and psychologism. Allport (1948) concluded by saying that textbook authors ...often take on the tone of anti-religious partisanship. In the very act of avoiding value-choices the author creates the impression that day-to-day opportunism (adjustment) is the sum-total of man's mental life (p. 106). They slip into an "unintentional hedonism"

which is easily absorbed by the student. They have also thrown out the concept of self, the agent of striving which is essential to any religious outlook. And they overlook the "mythopoeic" striving itself, the "poetry, myth, and religion which aim at a "Sympathy of the Whole." (p. 108).

Spilka and Goldsmith (1981) compared textbooks published in the 1970s to those published in the 1950s. They found that in the 1970s religion was treated more objectively and neutrally than in the 1950s when the majority of religious citations were placed in a negative context. However, even though there are now fewer negative connotations, there is a significant decline in the number of religious citations. Ruble (1985) reviewed introductory textbooks from 1975 to 1985 and found a similar scarcity. There was no substantial reference to religious topics in any text. Either the authors were unaware of the renewed interest in the psychology of religion or they felt it was unimportant. Spilka and Goldsmith (1981) concluded, "Texts which avoid this realm neglect, we feel, an unscientific bias and the substitution of apparent detachment for objectivity. Greater recognition may be the only real alternative for a psychology that regards itself as scientific, objective and comprehensive" (p. 180). Ruble (1985) made the observation that publishers of introductory psychology textbooks are careful to avoid taking stands on controversial and potentially divisive subjects such as sex, politics, and religion, which could lead to the rejection of their books.

Kirkpatrick and Spilka (1989) suggested that even though there is a renewed interest in religion, this interest is not currently integrated into the mainstream of psychology. Ruble's (1985) work documents the lack of attention paid to religion not only in introductory texts but in more advanced, specialized texts as well. Because of the renewed interest, Lehr and Spilka (1989) expected to find increases in religious material in the most recent textbooks. Indeed, they found that nearly 85% of the books published in the 1980s contained at least one reference to religion. This reflects more than a three-fold increase from the previous decade.

Paradoxically, they found that the increase in citations was accompanied by a decrease in the mean length of religion-relevant passages--from about 730 words per citation in the 1970s to 231 words per citation in the 1980s. Kirkpatrick and Spilka (1989) commented, "It thus appears while authors in the 1980s are more likely to mention religion at least once, they have less to say about the topic than did authors of the preceding decades" (p.4).

While this is one explanation, Kirkpatrick and Spilka (1989) decided to perform a reanalysis of the data to determine alternative trends. They deleted multiple editions of texts as well as those whose religious citations were a great deal more than the mean (outliers). Their reanalysis showed far less interdecade variation than previously suggested. The mean number of citations per text (of those with at least one citation) was about two per decade. Although the mean number of words per citation showed a decline in the 1980s, the reanalysis showed very little variation. When Kirkpatrick

and Spilka (1989) examined the median number of words, they found an increase. However, their conclusion was consistent with previous studies: "To the extent that differences exist, they point to a decline in discussion of religion in more recent texts" (p. 5).

Although the vast majority of 1980s texts mention religion at least once, fewer than 20% of them contain more than two references. The median number of words per religious citation is less than 80--about ten lines. The total number of words per text is under 200. Of these citations, only 20% mention research while 80% are strictly discussions.

Kirkpatrick and Spilka (1989) commented that "Overwhelmingly, religion was used for illustrative discussion of some psychological phenomenon (e.g. cognitive dissonance, conformity, consciousness, coping behavior) rather than as a research topic in its own right" (p. 6). Freud is not once mentioned in the context of religion. The vast majority of references are pre-1970, many from the 19th and early 20th centuries.

Kirkpatrick and Spilka (1989) reported that many writers argue that introductory textbooks are a poor place to look for religious references. These books are designed to outline broadly the diversity of basic psychological processes such as perception, learning, cognition, etc. One might, therefore, expect more interest to be paid to religion in more advanced, specialized books in certain domains of psychology. However, Spilka, Amaro, Wright, and Davis (1981) found that one-fourth of social psychology, one-third of personality psychology, and well over half of

child development texts contain no mention of religion. Instead, in contrast to the 1970s introductory texts, where fewer than 30% mention religion, these results are fairly high. All 14 of the abnormal texts they investigated contain some reference to religion.

Spilka, Amaro, Wright, and Davis (1981) pointed out, however, that of the social, developmental, and personality texts, the vast majority cite references over 20 years old and none cites a single article published in the Journal for the Scientific Study of Religion or Review of Religious Research. The abnormal psychology textbooks examined the historical role of the church and religion as it defined and treated mental disorders along with discussions of witches and witchcraft. There was virtually no reference to empirical research on religion and mental health.

Kirkpatrick and Spilka (1989) stated that the responsibility for the sparsity of religion within psychology textbooks can be shared by at least three sources: the authors of the texts and the fields of academic psychology and contemporary psychology of religion. We will discuss each in turn.

1. *Authors.* Hunsburger (1979) contended that most current work in the field of psychology of religion is published in specialized journals rather than in the mainstream. Authors may not look beyond these more influential mainstream journals. Indeed, they may be aware of the research in the specialized journals but decide it is not appropriate for introductory textbooks because it is not integrated into the mainstream. Authors may

also wish to avoid controversial, value-laden topics.

2. *Academic Psychology.* Again, researchers may shy away from or simply not consider studying religion because they are not aware of previous work on the topic. Many researchers avoid studying religion for the same reasons textbook authors do. As the next section (on the religious affiliation of mental health professionals) will detail, academic psychologists tend to be much less religious than the general public. Therefore, considerable stigma and misconceptions attach to the study of religion. Another reason not to study religion is that it does not lend itself to laboratory experiments, which dominate contemporary research psychology. Therefore, psychologists may choose areas more easily investigated by acceptable methods. Kirkpatrick and Spilka (1989) pointed out that in recent years, self-report and nonexperimental methodologies have become increasingly acceptable in social psychology.

3. *Contemporary Psychology of Religion.* Kirkpatrick and Spilka (1989) felt that the ultimate responsibility for the lack of attention religion receives in the research literature lies with those who wish to promote it. In the Annual Review of Religion, Gorsuch (1988) discussed the rebirth of attention to the psychology of religion. However, his reference list contains only three papers published in mainstream psychology journals in the 1980s. His makes four. Kirkpatrick and Spilka (1989) are convinced that if studies of religion were to appear in mainstream journals with greater frequency, textbooks would ultimately reflect the trend. They

reminded the reader that, to be publishable, an article must connect with other theoretical frameworks and/or empirical research in the psychology literature as well as meet high methodological standards.

When we consider the blind spot psychology still seems to have toward religion in academic life, it comes as little surprise that students receive little encouragement to include religion as a variable in their doctoral dissertations. Strommen (1971) surveyed doctoral dissertations in the social sciences between 1942 and 1968. Only 2% of empirical studies included religion as a variable. Of these studies, 5% were in sociology, 3% were in social psychology and 1/2 of 1% were in psychology. He found this proportion to be constant over the years of the study. One of the objectives for this present study, therefore will be to assess whether or not the figures Strommen reported hold true today.

The treatment of religion in textbooks is one way that doctoral students may be influenced as they decide whether or not to study religion. Another factor may be the religious orientation of the academic community and of the community of psychologists outside the academic setting.

RELIGIOUS AFFILIATION OF MENTAL HEALTH PROFESSIONALS

Perhaps one reason religion has been such a late-developing area of research is because mental health professionals are less religious than the

U. S. population as a whole. Gallup (1985) reported that more than 90% of the population of the United States believe in God. More than 40% attend weekly services. Strommen (1984) reported that 86% of those people who believe in God state that their faith is important to them. On the other hand, Ragan, Malony, and Beit-Hallahmi (1980) found that only 50% of psychologists believe in God. They also discovered that those psychologists who consider religious phenomena as part of their professional activities are more religious than those psychologists who do not. This finding is interesting because they noted that in other fields of science where religion is studied, the researchers are generally less likely to be religious. Ragan et al.(1980) gave a reason for this tendency, stating that, "Approaching religion from the perspective of scientific and scholarly values was viewed as incompatible with an approach based on personal commitment" (p.209). Ragan et al. found that those psychologists who study religion sometimes hold theological degrees or at one time aspired to the ministry.

In addition to being less religious than the general population, Ragan et al.(1980) discovered that psychologists are less religious than others in the *academic* environment. They found that 23% of academicians deny the existence of God as compared to 34% of psychologists. Only 2% of the general population actually deny the existence of God. However, they report that 43% of psychologists clearly affirm a transcendent deity and 47% report at least infrequent church attendance, while 9% hold leadership

positions in their congregations. Among psychologists, 51% are Protestant, 19% are Jewish, and 15% are Catholic. This compares to 69% Protestant, 3% Jewish, and 24.5% Catholic for the general population. Marx and Spray (1969) found that the majority of psychiatrists and psychologists come from homes which held theistic beliefs which they later rejected. Although religious identification is less frequent among psychologists than in the general population as well as in academic circles, Ragan et al. (1980) conclude that "...the assumption that rejection of the supernatural is a professional standard for psychologists is unsupported" (p. 213).

In 1990, Bergin and Jensen surveyed the religious preferences of 414 mental health professionals (including marriage and family therapists, clinical social workers, psychiatrists and clinical psychologists) and compared them to a general population sample of 29,216. They found that 84% of the general population agreed with the statement, "I try to live by my religious beliefs." However, only 77% of mental health professionals agreed with this statement. Only 65% of the clinical psychologists agreed, compared with 85% of marriage and family therapists, 83% of clinical social workers, and 74% of of psychiatrists.

Bergin (1991) called the difference of importance placed on religion by therapists and the general population as the "religiosity gap" (p. 396). Bergin (1991) reported that 72% of the American population agrees with the statement, "my whole approach to life is based on my religion." Only

of clinical psychologists agreed with this statement. Bergin (1991) argued, "purely secular psychotherapy may be alien to these people's way of thinking, and they may prefer approaches that are more sympathetic to spiritual values" (p. 396).

If the values shared by many clinicians are not theistic, then what are they? Lovinger (1984), and Neumann (1986) concluded that most identify themselves as favoring a nontheistic (naturalistic) humanism. In addition, many see religious tradition, with its emphasis on nonmaterial entities and on nonrational sources of data such as belief and faith, as incompatible with the sciences and humanities. One result of this outlook is the tendency to teach students a scientific world-view, a humanistic orientation and a liberal political outlook (Lovinger, 1984). Therefore, although this may create the impression of objectivity, it is no less subjective than any other position. Bergin (1991) suggested that there may be a blend of humanistic philosophy and spirituality many therapists can agree with which he calls "spiritual humanism." Bergin (1991) argued that this spiritual humanistic position needs clarification and expression within clinical practice.

Just as there are many types of religious beliefs, there are many ways in which one can be nonreligious. Lovinger (1984) distinguished three types of nonreligion: (1) nonaffiliated, (2) anti-affiliated and (3) formerly-affiliated. The nonaffiliated person is indifferent to religion, and his/her family background is similarly nonaffiliated. Religious service attendance is infrequent and sporadic. Anti-affiliated persons are fairly

hostile to all forms of religion. Their sentiment is best summarized by Ellis (1974), who stated that "...personality disturbance is little more than another name for religiosity, intolerance, dogmatism, magical thinking and anti-scientism" (p. 197). The background of the anti-affiliated person is also antireligious. The formerly-affiliated person has a desire to escape or be free of imposed controls and may have had hurtful experiences associated with religious institutions.

Gorsuch (1988) summarized his discussion of the history of the psychology of religion by stating that psychologists generally bring strong pro-or anti-religious convictions with them to their investigations and interpretations. While guarding against personal distortions is necessary for any science, Gorsuch (1988) felt it is particularly necessary for the psychology of religion. Collins (1986) observed another difficulty in achieving objectivity towards religion when those who have high regard for religion define "neutrality" as "antireligious." The psychology of religion, therefore, provides an example of the difficulty of achieving a complete objectivity in science.

EMPLOYMENT AND RESEARCH TRENDS AMONG PSYCHOLOGISTS

The discussion about textbooks and religious characteristics of psychologists has focused on various factors which may influence the psychologist-in-training. In chapter three (Hypothesis 5) the post-graduate research rates and employment activities of a sample of 50 dissertation authors are analyzed. How does their choice of employment setting compare to psychologists in general?

According to Pion (1991), doctoral psychologists were employed in the following career fields during the years 1983, 1985, and 1987, (the years which span our study):

	1983		1985		1987	
	N	%	N	%	N	%
Academic Settings	20,328	(43.6)	22,624	(43.4)	23,122	(41.0)
Self-Employed	9,455	(20.3)	12,009	(23.0)	14,272	(25.3)
Hospitals/Clinics	6,042	(13.0)	6,379	(12.2)	7,155	(12.7)
Government	3,339	(7.6)	2,965	(5.7)	3,585	(6.4)
Business/Industry	3,565	(7.6)	3,521	(6.7)	3,109	(4.5)
Non-profit Orgs.	1,773	(3.8)	2,080	(4.0)	2,501	(4.4)
Other/not specified	2,143	(4.6)	2,600	(5.0)	2,634	(4.7)
Total, all sectors	46,645		52,182		56,378	

Pion's data show that self-employed psychologists show an increase of 5%, while those employed in business and industry have shown a decrease of 3.1%. Psychologists employed in academic settings show a similar decrease of employment (2.6%).

The American Psychological Association in 1988 published a report indicating the vocational areas of psychologists with five to nine years of experience:

Industry:	4,986	(36%)
Self-Employed:	4,123	(30%)
4-year college/university:	4,330	(32%)
Hospital/Clinic	1,797	(13%)
Elementary/secondary school:	816	(6%)
Non-Profit Organizations:	489	(4%)
State or Local Government:	563	(4%)
Federal Government:	363	(3%)
2-year college	286	(2%)
Military/Comm. Corps:	35	(< 1%)
Number of Cases Reported:	13,668	(130%)

Since the total adds up to more than 100%, it is assumed that individuals indicated more than one source of employment. In 1977, 87% of all doctoral psychologists were employed full time and 6% were working part time. Ten years later, these percentages had shifted to 83%

and 11% respectively. Pion (1991) suggested that psychologists are working part-time by choice, not because they cannot find full-time work. Women are more likely to be employed part-time than are men. The percentage of psychologists who are women has grown from 24% in 1977 to 32% in 1987.

These percentages vary dramatically from the early 1970s. According to Pion (1991) the majority (58%) of doctoral psychologists were faculty members in college and university psychology departments. Another 33% were employed in hospitals, clinics, schools, human service agencies, and other nonacademic sectors, and only 7% were independent practitioners.

Pion (1991) reported that the percentage of scientists working in colleges and universities had declined from 42% in 1968 to 24% by 1986. Industry has now emerged as the largest employer of scientific personnel (55%). She believes that these trends present considerable opportunities for psychologists. For example, psychologists are being called on to assess and treat major problems plaguing society (e.g., drug abuse, alcoholism, family violence, AIDS). In addition, "...given psychology's contributions in such areas as survey design, measurement, organizational functioning, and social experimentation, the discipline should have been among the first of the social sciences to profit from these developments" (Pion , p. 230).

Summarizing the trends in psychology, Pion reported:

Looking at the actual numbers involved in various

efforts, it is clear that psychology's participation in various functions has changed somewhat since the early 1980s. Not surprisingly, given the major growth in doctoral production in the practice specialties, the number of new doctorate recipients involved in direct services delivery has grown. There also has been an increase in the number reporting involvement in other types of activities: although it is difficult to interpret this change, it may signal such new functions as computer software development, consultation, and program evaluation. In contrast, the number involved in teaching and research has declined. This is partly due to the decline in academic positions previously discussed. However, it also may reflect changes in job responsibilities (e.g., clinical and counseling psychologists may have work schedules that may heavily focus on direct services) or a waning in the interest of new doctorate recipients in being actively involved in research activities (p. 241).

Pion's data therefore suggest that work setting has a great influence in determining whether a psychologist will pursue research. We consider employment needs here because later in this study we report a poll of graduates regarding their involvement in research.

A Comparison With Employment Trends of Clergy

The relationship between psychology and religion has been explored historically and academically, and now vocationally. According to the Statistical Abstract of the United States (1990), in 1988 there were 348,000 clergy employed, contrasted with 196,000 psychologists. Therefore, there were almost twice as many clergy as psychologists in 1988. In contrast, according to the Historical Statistics of the United States, (1975) in 1940 there were 141,000 clergy employed. The source did not list "psychologist" as a professional title probably because psychologists were few in number. The only source found was the APA Membership Directory, which listed 2,739 members in 1940. This figure may not accurately represent the total number of psychologists. For example, the 1988 APA Membership Directory lists 66,996 members, a number far short of the actual number of psychologists. Given the above numbers, however, in 1940 there were over fifty-one times as many clergy as psychologists:

<u>Total Employed</u>	<u>1940</u>	<u>1988</u>
Clergy	141,000	348,000
Psychologists	2,739 (est.)	196,000

Another way to interpret these numbers is that between 1940 and 1988 there was an increase of approximately 250% in members of the

clergy and 7,150% increase in psychologists. As psychology is moving out of academic settings and providing direct services for societal problems, it is encroaching more and more on the traditional territory of organized religion (with the exception of theological matters). As many clergy become more open to psychological training, and psychologists are becoming more open to and tolerant of spiritual issues, will clergy and psychologists begin to work together or will they see their roles as increasingly diverging?

A major difference between the two occupational fields is that psychology emphasizes scientific research and the ministry does not. Although academic programs in pastoral counseling emphasize research, VandeCreek (1988) pointed out that:

Most of the existing empirical literature in pastoral care and counseling is contained in graduate degree dissertations. Only a few current books and journal articles are empirical. The rest consist of observations, opinions, subjective impressions and theory-building discussions. Ministers practicing pastoral care and counseling have not produced an active empirical research tradition (p. 1).

VandeCreek (1988) gave several reasons for this lack of research among the clergy. First of all, many of the employment settings for chaplains and pastoral counselors do not support research. These settings

may include hospitals, clinics and other nonprofit centers that provide direct services and have limited research funds. Second, clergy are not trained in rigorous scientific research. Vandecreek observed that early on in academic training students interested in the humanities choose a very different course of study from students in the sciences. Not only do students in the humanities gradually leave the sciences behind, but they also develop a different way of thinking. Vandecreek argued that "... doing research requires you to move back toward the perspectives of the sciences and mathematics" (p.9). In addition to a lack of training in research, Vandecreek mentioned two other factors that may keep those in pastoral care away from research. The first is that research is often considered dull and uninteresting. He pointed out that "...critical thinking typically is not the pastor's primary strength. Rather, pastors are caring, intuitive, supportive persons who emphasize the need for faith and hope rather than skepticism and critical thinking" (p. 10).

It is apparent that most clergy are similar to clinical psychologists in that they have opted for a profession of direct service as opposed to the more scientific demands of the academic life.

Research Trends

Does the discipline of writing a doctoral dissertation encourage further research after graduation? Porter, Chubin, Rossini, Boeckmann, and Connolly (1982) suggest that the standard by which academic scientists

are evaluated is their research output, yet many psychologists choose nonacademic and non-research-oriented occupations. Porter et al. (1982) studied a random sample of scientists who had received their doctorates from 1969 and 1970. The six scientific disciplines represented were physics, biochemistry, zoology, electrical engineering, psychology and sociology. When questioned about the importance of research in their careers, 81% in biochemistry considered research important compared to 71% in physics, 62% in zoology, 58% in electrical engineering, 48% in psychology and 41% in sociology. This indicates that in general, psychologists and sociologists are less interested in pursuing research-oriented careers. Only 50% of the psychologists sampled considered a teaching career important, compared to a mean average of 57%.

What are the publication trends following graduation? Porter et al. (1982) found that, for all six disciplines, "...on average, one publication per individual was derived directly from the dissertation, and almost one per individual resulted from continuation of the dissertation research" (p. 477). However, they also found that 44% did not publish anything at all. In addition, differences surfaced within disciplines. A majority of those in biochemistry, zoology and physics published research derived directly from the dissertation, with only a minority doing so from psychology, sociology, and electrical engineering. The authors suggested that, because of the amount of publications generated, the dissertations serve significant scientific purposes.

Porter et al. (1982) found that, for the sample as a whole, there was approximately one publication per year per person over the course of a decade. However, only about 40% of the sample published anything in a given year. They concluded that 22% of the sample accounted for 82% of the publications. By investigating the publishing trends of a sample of 102 psychology Ph.D. recipients from 1970-1977, Porter et al. found 0.81 publications per person (p/p) from predissertation research, 0.42 p/p derived directly from the dissertation, 0.52 p/p as continuation of dissertation work, and 4.00 p/p from post-Ph.D. work unrelated to dissertation. The mean number of publications per person was 6.15, and the median was 2.60. Pion (1991) approached the question somewhat differently. She asked over 5,000 new doctorates (1981 and 1986) who were employed in full-time positions where they spent their time. In 1981 she found that, 60% were involved with research, 64% with human services, 18% in other areas of applied psychology, 61% in educational activities, 53% in administration, and 26% in other activities.

Therefore, a wide degree of commitment to research among psychologists is apparent. Comparing the trends to other scientific disciplines, Porter et al. found that while the natural sciences and engineering showed a small upward trend in p/p over the years studied, psychology and sociology showed a small downward trend. This can partly be explained by the number of psychologists who choose a nonacademic career over an academic one.

Porter et al. (1982) found that one of the best predictors of commitment to future research was a satisfactory graduate training experience and research-oriented postdoctoral placement:

A close relationship with the dissertation supervisor seemed to contribute to the decision to take a postdoctoral fellowship, to continuation of the dissertation research, and to the likelihood of assistance in obtaining the first postdoctoral job. It was also related to a "good" dissertation experience--that is, one favorable judged by the respondent, in which the dissertation topic was chosen for scientific importance and the dissertation itself was evaluated on this criterion, with publications resulting (p. 479).

Given the fact that psychologists are less likely to publish and seek research oriented-careers than the majority of scientists, what can be expected from those who are publishing their dissertations with religious variables? As VandeCreek (1988) suggested, those with an interest in religion may be less "scientific" than other psychologists. Are those Ph.D. recipients more likely to choose occupations outside academic life, for instance, in nonprofit settings where research may not be funded? Given the lack of attention religion receives in textbooks and journals, will those Ph.D.s find outlets willing to publish research on religious topics? Finally, in light of the emphasis of a positive graduate experience as a predictor of

future involvement in research, do those who explore some facet of psychology and religion have a generally positive or negative academic experience? These questions will be pursued in the following chapters.

IS COLLABORATION POSSIBLE?

This review of the literature has attempted to put the perceived conflict between religion and psychology in its historical and theoretical context, as well as discuss its impact on research and practice. What is the current state of affairs between the two? Is psychological research expanding to include religion? Is religion being viewed as a potentially positive force in the lives of individuals, or is it still considered primarily pathological? Are those interested in the scientific study of religion engaging in more rigorous and careful research that can be accepted into the psychological literature? Many feel that the time is right for the increased acceptance of research concerning the psychology of religion. According to Bergin (1988), the mechanistic and naturalistic conceptual foundations of psychology have failed to provide an adequate and comprehensive account of human nature. Both the recent humanistic approach, which is oriented toward health and growth as opposed to pathology, and the cognitive approach, which is more directive, open the doors for spiritual values that go beyond previous concepts in personality

theory.

Bergin (1988) did not recommend doing away with previous theories, but rather completing them with a "spiritual keystone." Such an orientation would attempt to formulate universal laws behind values and morals. Bergin (1988) stated that cultural relativism does not imply ethical relativism and believes that "human growth may be regulated in part by moral principles comparable in exactness with physical or biological laws" (p. 25). Already we can identify values that the majority of psychologists, regardless of their theoretical orientation, endorse. These include self-control of impulses and addictions and other nonadaptive habits, autonomy, responsibility, perception and expression of feelings, coping strategies, physical health and fitness, work satisfaction, self-awareness, interpersonal skills, marriage, family and community involvement, developing a mature value system, and responsible and fulfilling sexuality (Bergin, 1988).

O'Malley, Gearhart, and Becker (1984) cautioned, however, that the focus on values is a less-esteemed aspect of the counseling process for most mental health professionals than for religious counselors. In a survey of mental health professionals and clergy, they found that behaviorists, humanists, and Protestant ministers were more optimistic about the prospect of cooperation between religion and mental health than were the psychodynamic, orthodox, and fundamentalist counselors.

In describing the various forms a collaboration between the two fields may take, Quakenbos, Privette, and Bonnel (1986) listed four

positions psychologists currently take toward a spiritual orientation:

1. *Orthodox*--exemplified by O. Hobart Mowrer. Such psychologists come from Orthodox Jewish, some Protestant, Roman Catholic, and Eastern Orthodox religious traditions. They resist change. They attribute mental problems to guilt resulting from sin (self-defeating acts) and emphasize personal responsibility and action, not insight. They call on clergy as primary help-givers.

2. *Atheistic*--exemplified by Albert Ellis. These psychologists consider that the concept of sin is the cause of most neurotic disturbance. They feel it is irrational for people to believe in God. They dispute all values, religious or not, when held with authoritarian confidence.

3. *Neutralist*--represented by Carl Rogers and other humanistic psychologists. They believe that all people possess self-actualizing tendencies. They do not take sides on religious disputes but focus on clients' values and how best to actualize them.

4. *Moderate*--represented by Thomas Oden. In this position, the therapist is free to disclose a religious orientation, but does not espouse it.

Quakenbos, Privette, and Bonnel (1986) claimed that all positions, even the Rational Emotive Therapy described by Ellis, offer the possibility of convergence between religion and psychology. Vande Kemp (1985) agreed, stating that the connection between psychotherapy and religion has always been evident, at least to a minority of psychotherapists and religious professionals. Just as there are many psychologies, there are also many

theologies. Therefore, disagreements among both psychologists and theologians are likely to persist for a long time. Dodgen and McMinn (1986) suggested that the most useful response from all sides is a critical evaluation and a search for the truth in whatever form it takes.

Gartner (1985b) considered the increased interest in the literature about religion as evidence that psychology is "coming of age" and is more open and objective in its treatment of religion. It is timely, therefore, for the psychology of religion to take seriously its task of developing into a credible orientation. Collins (1986) listed three current challenges facing the psychology of religion:

1. The defense of religion as a *legitimate* area for study. Collins (1986) believes religion plays a very significant role in human behavior, values, inner experiences, relationships, social groups, motivation, perception, and defenses.
2. The defense of religion as a *respectable* area of study. A well-written, clearly documented, factually-based body of research will be required. Collins (1986) reported that scholarly and scientific contributions are increasing, but research lags behind.
3. The defense of religion as a *practical* area of study. We need more counselors trained with a "dual competence" in psychology and theology; counselors who know what to do with clients' religious questions. To accomplish this goal, Collins recommended that the psychology of religion become an accepted and respected academic discipline.

Such integration will take place, when it is understood and affirmed that "though science and theology are claimants of the same world they need not be competitive centers but two disciplines which are complementary. Two attitudes of one world, two modes of apprehending it, two ways of accounting for it" (Strommen, 1984, p. 160).

CHAPTER III

Methodology

STATEMENT OF THE PROBLEM

This study examined six questions concerning research on religion in psychology dissertations from American higher educational institutions, during the five-year time period 1983-1987. The six questions were as follows:

1. What various methodologies are being used to measure religion as an independent variable?
2. What are the outcomes of the studies that employ religion as an independent variable to predict some aspect of well-being (dependent variable)?
3. What, if any, is the relationship between methodology and outcome? For example, is there a negative correlation between religion and well-being if religion is measured only in terms of beliefs but not behavior?
4. What are the special characteristics of the psychology graduate programs that generate religious research?

5. What content areas of religion are being studied? Since most researchers agree that religion is best studied multidimensionally, which dimensions or areas are being investigated and which are not?

6. Do the students who completed their dissertations on a religious topic continue to do religiously-related research?

These six questions were answered in four subdivisions. Part I (questions 1 through 3) asked about the methodology and outcome of dissertations that contain religious descriptors. Religious descriptors are words that denote religious affiliation, behavior, or concepts. The method for choosing the descriptors is defined under "Subjects" later in this section. The term "religiousness" was defined by how the religious descriptors were used by the dissertation authors. Therefore, in one abstract, the term may denote the subjects' religious affiliations, in another their attitudes, or in another their behaviors.

Part II (question 4) examined the characteristics of psychology graduate programs where dissertations with religious variables were being written. Programs were scored according to their religious origin and orientation.

Part III (question 5) categorized the religious content area that the dissertations studied, using King and Hunt's (1972) dimensions: creedal assent, devotionism, congregational involvement, religious knowledge, and orientation toward religion. For Part IV (question 6), we polled a sample of dissertation authors about their doctorate experience as well as

their current occupation and research practices. We hoped to learn whether the nature of their graduate experience predicted whether they were committed to (and actually engaged in) ongoing research during their career.

SAMPLE

The sample consisted primarily of 212 abstracts. These abstracts were obtained in the following manner:

Dissertation Abstracts (UMI) lists a total of 14,949 psychology dissertations completed in the United States during the five year period 1983 through 1987. Approximately 3,000 were completed each year. A computer search narrowed the pool for our purposes to the 625 abstracts that included one or more religious descriptors. We identified religious descriptors by selecting words from the Psychological Index Thesaurus (Walker, 1991) denoting some form of religious affiliation (type of religion, denomination, or clergy status), behavior (prayer, church attendance), or concept (spirit, spiritual, soul). Terms such as "belief," "meditation," or "values" were omitted since they cannot be considered specifically religious. Appendix A lists the descriptors.

This pool of 625 abstracts was further reduced by identifying and eliminating studies where religion was not an independent or predictor

variable (e.g., subjects may be church members or seminarians, yet there is no measurement of religiousness as such). The 413 studies, termed *incidental studies* (See Appendix B), were eliminated at this point, leaving us with a pool of 212 core dissertations.

PROCEDURE AND DEFINITION OF VARIABLES

After the initial selection of 212 abstracts, we gathered information from each abstract in order to answer the questions outlined above.

To the first five questions (Parts I, II and III), we sought answers from all 212 core abstracts. The process generated a total of 9 variables. Six of the variables addressed Part I, i.e., the extent to which religiousness is studied as an independent variable and the methodologies and outcomes of the dissertations which study religion. Two of the variables addressed Part II, i.e., the characteristics of institutions where religion is being studied. The ninth variable addressed Part III, i.e., which content areas of religion are most frequently studied and which are less frequently studied?

To answer the sixth question (Part IV), 50 dissertation authors were polled and asked questions about their current occupational and research pursuits as well as their evaluation of their graduate experience. This sixth question, which was analyzed in four parts, generated 5 additional variables.

PART I: SIX VARIABLES MEASURING THE ABSTRACTS'
METHODOLOGY AND OUTCOME

Variable 1: Type of Study. Each of the 212 core religious abstracts was sorted into one of four types of measurement. Two types were quantitative, classified as quantitative-lean and quantitative-rich; and two were qualitative, classified as phenomenological or theoretical. The component parts of these four types will now be defined.

Studies were considered *quantitative* if the researcher had statistically measured religiousness as a predictor or an independent variable. This may involve between-group measurement where there exists a control group or within-group measurement in a one-group design.

Quantitative-lean studies provided relatively little in the way of experimental manipulation of the religious variable and its statistical analysis. More specifically, studies were considered lean when (a) there was no measure of variation in religiousness as a predictor or independent variable; (b) there was only one measure of religiousness (that is, they were univariate with respect to measuring the predictor variable); (c) subjects' scores on that measure were treated as discrete (e.g., religious versus secular) rather than continuous; and (d) only one domain of religiousness was measured (e.g., religious affiliation was measured but not religious behavior or vice versa). Lean studies did not have control groups

to measure between-group variation in religiousness. Similarly, lean studies did not measure within-group variation in religiousness.

Quantitative-rich studies had multiple measures of religiousness, where the measures generated continuous rather than discrete scores, and the measures tapped at least two domains, such as attitudes as well as behaviors. Rich studies often had control groups to measure between-group variation in religiousness. In contrast to the lean studies, rich studies measured within-group variation in religiousness.

The remaining types of studies were the two types of *qualitative* studies. Like the quantitative studies, religion remained a predictor variable. However, among the qualitative studies there was no statistical manipulation of the data. We split qualitative studies into two types: phenomenological and theoretical.

In phenomenological studies the researcher used a sample of human subjects to examine some aspect of religion, but employed no statistical analysis of the results. Case studies, interviews, and biographical and autobiographical investigations were classified as phenomenological.

Studies were considered theoretical when no human subjects were used. Consistent with the other categories, theoretical studies selected some aspect of religion as a predictor variable. As the name implies, these studies typically involved the development of a theory, argument, or plan of action.

Variables 2 Through 6: Methodological Characteristics of the

Abstract. The three questions in Part I (which had to do with the methods used in studying religion) generated variables 2-6. Variables 2, 3 and 4 apply only to the quantitative studies.

Variable 2: Univariate Versus Multivariate. Was religiousness measured using only one independent variable or more than one?

Variable 3: Discrete Versus Continuous. This variable identified which studies sorted their subjects' answers into discrete categories (e.g., yes or no; Catholic, Protestant or Jewish; etc.) and which set up continuous categories which allowed for greater variation among individuals.

Variable 4: One Domain Versus Multiple Domains. This variable identified which studies measured religiousness by a single characteristic (usually beliefs) and which measured more than one such characteristic (i.e., attitudes and behavior).

Note that a study could be multivariate (i.e. have multiple independent variables measuring religion), but examine only one domain. (Such would be the case where a subject was given more than one survey on religious beliefs. Therefore only beliefs were measured, and there was no measure of behavior or attitudes). However, if more than one domain was measured (attitudes and beliefs), the dissertation has multivariate measures of religion. Thus, a dissertation that measures multiple domains is by definition, multivariate.

Whereas variables 2 through 4 measured only the quantitative studies, the following variables (5 through 9) applied to all 212 core

abstracts (both quantitative and qualitative).

Variable 5: Well-Being. Is some aspect of well-being a dependent variable?

Three categories were identified: (a) those studies that did not include a measure of well-being as a dependent variable; (b) those that included a measure of well-being but did not statistically examine its relationship to religion (these tended to be the qualitative studies); and (c) those studies that examined the statistical relationship of religion as a predictor variable and well-being as the criterion variable (all of these studies were labeled quantitative).

Variable 6 : Impact of Religion. For those studies where well-being was a dependent variable, what was the impact of religion? That is, did religion seem to have a generally (a) positive, (b) negative, or, (c) neutral impact on some aspect of well-being of the subjects studied?

PART II: TWO VARIABLES MEASURING INSTITUTIONAL CHARACTERISTICS OF THE AUTHOR'S UNIVERSITY

Part II of "statement of the problem" was concerned with the characteristics of institutions which are hospitable to the psychological study of religion (i.e., question four above). This question generated two variables (7 and 8) for all 212 core studies.

Variable 7: Name of Institution.

Variable 8: Religious Orientation. "Religious orientation" of the institution: i.e., does the institution claim a religious or secular origin or orientation? An institution with a "religious origin" was founded for the purpose of religious education, but currently admits students regardless of religious commitment. An institution with a "religious orientation" requires a religious commitment for admission as well as from its faculty, and includes some religious content in classroom teaching. This is a nominal variable with three levels: (a) non religious in origin and orientation, (b) religious in origin but not in orientation, and (c) religious in both origin and orientation.

Variables 1, 5, 6, 7, and 8, included in Parts I and II, were measured for all 212 core studies. Similarly, all of these studies were scored for one additional variable: Part III, religious content areas.

PART III: ONE VARIABLE MEASURING RELIGIOUS CONTENT AREAS

The 212 core studies were defined as ones in which the researcher studied the "religiousness" of the subjects as a major predictor or independent variable. How does one measure or define religiousness? According to Glock (1962), Allport and Ross (1967) and King and Hunt (1972) religiousness is a multi-dimensional variable.

Variable 9: Religious Content Areas. Variable 9, therefore, asked with which of five areas was the dissertation primarily concerned: (1) creedal assent (ideological, doctrinal); (2) devotionalism (personal prayer, relationship to God, personal religious experience); (3) congregational involvement (church attendance, organizational activities, financial support); (4) religious knowledge (intellectual understanding); or (5) orientation toward religion (involving growth and striving, intrinsic/extrinsic orientation).

SAMPLE ANALYSIS OF AN ABSTRACT

To clarify the meaning and origin of each of these variables, it may be helpful to illustrate how the variables were scored. Below is a verbatim copy from Dissertation Abstracts of a fairly representative abstract with a discussion of how it was assessed on the above 9 variables:

Author: Olsen, David Calvin

Title: A Psychological Investigation of the Charismatic Movement

School: Drew University (0064)

Degree: Ph.D. Date: 1983 pp.: 187

Abstract: This research investigated (1) correlations between being Charismatic and mental health, (2) the effect of small groups within

the Charismatic movement, and (3) the psychoanalytic paradigm for interpreting the Charismatic movement.

Subjects were taken from both mainline denominational and Charismatic churches. Of three hundred and ten surveys distributed, one hundred and fifty-four were completed.

The test consisted of a three page questionnaire composed by the researcher, containing questions related to religion and personal background information. The second section was comprised of the anxiety, hostility, depression, repression measures of the MMPI, and the self-acceptance measure of the CPI.

Subjects were divided into four groups: (1) Charismatics meeting in small groups, (2) Charismatics not meeting in small groups, (3) non-Charismatics meeting in small groups, and (4) non-Charismatics not meeting in small groups.

Nine hypotheses were tested as a way of responding to the original three questions this research was designed to answer. These hypotheses tested for differences between Charismatics and non-Charismatics on both expressed (questionnaire) and measured (MMPI, CPI) mental health items, as well as on the perceived importance of religion.

In addition, the LSD test, used as an a posteriori study, revealed that while Charismatics who meet in small groups are different from non-Charismatics who meet in small groups on

theological items, they are essentially the same on mental health items.

First, the findings of this research suggest there appears to be no correlation between being Charismatic and greater mental health. Second, no small group interaction effects were found in the expected directions. However, non-Charismatics meeting in small groups were found to be similar on mental health variables to Charismatics meeting in small groups. Thus both small group people and Charismatics had more disturbed personal histories, and scored higher on the anxiety and hostility measure of the MMPI. Third, some limited support for the psychoanalytic paradigm was found in this research. However, this research could better be interpreted by using Erickson's concept of religion as ideology, enhanced by insights from the cognitive school of psychology. It appears that those who come from more disturbed personal backgrounds can use religion as an ideology to organize both emotion and behavior, as well as to provide meaning for life. This in turn suggests implications for pastoral care.

This abstract was scored as follows:

Variable 1: Type of Study. This abstract was considered "quantitative-rich" since there were multiple measures of religiousness (questionnaire, group affiliation), and two domains were tapped (belief,

small-group attendance). There were between-group measures (Charismatics, non-Charismatics) as well as within-group measures (small-group, non-small-group) for both Charismatics and non-Charismatics.

Variable 2: Univariate Versus Multivariate. This study looked at religion multivariately through a questionnaire assessing beliefs as well as denominational affiliation.

Variable 3: Discrete Versus Continuous. Since subjects were sorted according to group affiliation (Charismatics versus non-Charismatics; small group versus not small group), it was determined that religion was studied as a discrete variable. The questionnaire may have scored answers about theology in a continuous fashion; however subjects were defined and sorted by discrete groups.

Variable 4: Domain. This abstract measured two domains: beliefs and behavior. The dissertation is, therefore, classed as multiple domains.

Variable 5: Well-Being. An aspect of well-being is statistically measured. The author states in the first line that he is investigating "correlations between being Charismatic and mental health." Statistical measures were applied by comparing the four groups on the MMPI, CPI and religious measures.

Variable 6: Impact of Religion. Regardless of the outcome, this study would be evaluated as having mixed results with respect to impact. This is because one religious group (Charismatics) is being compared to another religious group (Christians in mainline denominations). Although

in this case neither group scored significantly differently on the MMPI or CPI, no conclusions could be made concerning religion as such--only about Charismatics. To conclude that *religion* is having a positive or negative impact, one would have to compare Charismatics to a secular group. The author makes the suggestion in the last sentence that people from troubled backgrounds can use religion to organize their emotions and behavior as well as provide meaning for their lives. However, he could have instead concluded that religion appeals primarily to people from troubled backgrounds. (This last remark is the author's own interpretation).

Variable 7: Name of Institution. Drew University.

Variable 8: Religious Orientation of Institution. According to Lovejoy's College Guide (Straughn and Lovejoy, 1989), Drew is a private school founded by the United Methodist Church, yet does not restrict admission on the basis of creed. Therefore, this school is religious in origin but not orientation.

Variable 9: Religious Content Areas. We concluded that two areas were considered in this abstract: creedal assent (ideological, doctrinal), and congregational involvement.

PART IV: ONGOING COMMITMENT TO RELIGIOUS RESEARCH

It is difficult to inspire in graduate students a love of research. More specifically, we were concerned with the dissertation author's commitment to continuing with religious research. Porter, Chubin, Rossini, Boeckmann and Connolly (1982) report that doctoral graduates in the sciences typically produce one publication derived from their dissertation and one more resulting from continuation of dissertation research. After that point, i.e. over the rest of their professional career, the rate of publication drops sharply. Specifically they found that the mean number of publications per person is 6.15 and the median is 2.60. Furthermore, VandeCreek (1988) observes that clergy with a keen interest in theology often have a correspondingly low interest in empirical research.

Variables 1 through 9 involved an investigation of the 212 abstracts. In contrast, in Part IV the unit of analysis is not the abstract, but rather the *author*.

We interviewed 50 of the 212 core authors to ask about their graduate school experience and to determine the extent of their post-graduate research--particularly religious research. Twenty-six of these 50 authors did quantitative studies (quantitative-lean and quantitative-rich) and twenty-four of the 50 did qualitative studies (phenomenological or theoretical). Subjects were selected in a stratified random order so as to maximize the number of years since graduation. The random sample was

stratified to obtain equal numbers of the four types of studies, (1) quantitative lean, (2) quantitative rich, (3) qualitative phenomenological and (4) qualitative theoretical. After separating the abstracts into the four types, each type was sorted by year and then alphabetically by author within each year. It was hoped that we would have 12 lean, 13 rich, 13 phenomenological and 12 theoretical dissertations. (Such a distribution would result in 25 quantitative and 25 qualitative studies).

An attempt was made to obtain a phone number for all 212 core authors. Subjects were looked up in the directories of the American Psychological Association, American Association for Counseling and Development and the American Pastoral Counseling Association. For six of the authors who were not in the directories, a current phone number was obtained from their alumni association or school registrar. Other schools requested a written letter to be sent to the alumni/ae. This was done in four more cases. However, because of difficulties in tracing authors, we were able to obtain phone numbers for only 59% (that is 125) of the 212 authors.

From this pool of 125 phone numbers, we called 76 authors in order to obtain our sample of 50 interviews. That is, 26 of the authors did not return repeated messages which were left with a secretary or answering machine.

Fifty authors who agreed to participate were finally interviewed. This represents a 66% response rate. The final subject pool consisted of

twenty-six authors of quantitative studies (14 lean and 12 rich), and twenty-four authors of qualitative studies (12 phenomenological and 12 theoretical). Since the dissertations were sorted by year beginning with 1983, the highest number of studies was from 1983 (18) followed by 1984 (11), 1985 (9), 1986 (6), and 1987 (6).

Our sample is therefore only partially representative of the entire pool of authors. It includes only those whose phone number is relatively accessible to the professional community (59%) and those who chose to be interviewed (66%). The distribution satisfied our desire to survey those who had been graduated the longest in order to gain a more thorough understanding of postgraduate rates of research.

We asked each of the graduates questions concerning their present occupation as well as past and current research projects and publications. The data from some of these questions is summarized briefly under "additional findings of the interview" in chapter four. A list of the questions appears in Appendix C. These questions generated 5 variables (10 through 14).

Variable 10: Enjoyment in Writing Dissertation. Authors were asked, "Was doing your dissertation enjoyable?" The responses were: (a) very unenjoyable (b) unenjoyable, (c) neutral, (d) enjoyable or (e) very enjoyable. Explain.

Variable 11: Contribution of Study. Authors were asked, "do you believe that the findings of your dissertation contributed to psychology's

understanding of religion?" The responses were: (a) strongly disagree, (b) disagree, (c) neutral, (d) agree, (e) strongly agree. Explain.

Variable 12: Rate of Publication. Authors were asked to report the number of publications they have had since graduation (a continuous variable).

Variable 13: Religious Publications. Authors were asked to report the number of religiously-oriented publications they have had since graduation (a continuous variable).

Variable 14: Secular Publications. Authors were asked to report the number of secular publications they have had since graduation (a continuous variable).

HYPOTHESES

We have defined the concerns guiding this research and the set of 14 variables generated by these concerns. The study has used these variables to focus primarily on 5 hypotheses. These 5 hypotheses were the purpose of this study.

Hypothesis 1: Percentage of Religious Studies. In more than 2%, but fewer than 5% of the psychology dissertations written between the years 1983 and 1987 a religious variable plays *some* role. However, fewer than 2% of the dissertations written during this time use religion as a *predictor*

or *independent* variable.

These percentages are based on values obtained by other reviews of religious research (see chapter two, "systematic reviews"). However, most systematic studies on the use of religious variables in research have not distinguished whether religion was being used as an incidental, implicit or explicit variable. When the studies using religion as an incidental variable are subtracted, the percentage of research which actually studies religion drops considerably.

Hypothesis 2: Well-Being. It is hypothesized that overall, religion will be seen as a contributor to well-being. Religion will have a greater contribution to well-being in studies rated as quantitative-rich; that is, (a) where there are multiple measures of religiousness, (b) the measures generate continuous rather than discrete scores, and (c) they treat both attitude and behavior.

Gartner, Larson, Allen and Gartner (1991) and others have suggested that many of the contradictory outcomes of reports concerning the effect of religion on well-being can be explained by differences in the way religion is measured.

Hypothesis 3: Institutional Characteristics. Studies from religious institutions will produce more results demonstrating positive effects of religion than will studies from secular institutions.

This hypothesis will test whether an author's affiliation with a religious institution (one with a religious origin and orientation) affects the

outcome of the author's study.

Hypothesis 4: Religious Content Areas. The first five *dimensions* of religion as proposed by King and Hunt (1972) will be studied in equal proportion.

King and Hunt (1972) identified six dimensions of religion: creedal assent, devotionism, congregational involvement, religious knowledge, orientation toward religion, and salience. For this study, the sixth dimension, salience, has been deleted because it includes non-religiously-related information. Dimensions will be referred to as "content areas." Since we have found no literature which describes the frequency of research on the various content areas, this hypothesis is stated in the form of an exploratory question.

Hypothesis 5: Postgraduate Commitment to Research. Alumni/ae who wrote qualitative, rather than quantitative dissertations will report (a) more enjoyment in writing their dissertations, (b) a stronger belief in their dissertations' contribution, (c) lower productivity in subsequent research, and (d) a continued study of religious (rather than secular) phenomena.

The research requirement for most Ph.D. programs demands quantitative work. However, many researchers believe that the psychological study of religion can be investigated more richly through phenomenological and other qualitative methods. We take the assumption that religion can best be studied using phenomenological methodologies, and we hypothesize that those who study religion in this way will report

higher satisfaction either in the process or outcome of the research. We further hypothesize that more quantitative researchers than phenomenologists and theorists will continue research beyond graduation. However, due to their satisfying experience, qualitative researchers are more likely to continue to carry out religious research than other topics of research.

SUMMARY OF THIS STUDY'S RESEARCH METHODOLOGY

This study sought to determine the extent to which a five-year sample of psychology dissertations included religion as a predictor variable, as well as to determine whether and in what ways religion correlates with well-being. This study also examined how religiousness was measured, the relationship between method and outcome, and the characteristics of institutions where religion was studied and the religious content areas involved. Finally, follow-up interviews of a sample of alumni/ae determined whether there is a relationship between choice of methodology, performance of later research (particularly in religion), and the types of careers graduates have chosen.

More specifically, Parts I and II examined the methodological characteristics of the dissertations as well as the characteristics of the institutions where the dissertations were generated. Part III examined the

religious content of the dissertations. Part IV investigated the characteristics of the researchers: did they have a positive or negative experience while writing the dissertation, and what was their commitment to further religious research several years after graduation? The employment and publication experiences of these graduates were compared to the research and occupational trends of psychologists in general.

Parts I, II, and III generated a set of nine variables using as the unit of analysis the 212 core abstracts. Part IV generated five variables using as the unit of analysis the authors' (N = 50) answers to questions. For variables 1 through 9, seven variables involved some judgment on the investigator's part. Therefore inter-rater reliabilities of the two raters were calculated for the seven variables. A .75 correlation was achieved for each variable. The training process and testing for reliability is discussed in Appendix D. Inter-rater reliability coefficients are presented ahead in Table 1 (chapter four). Chapter four then examines the five major hypotheses of this study.

CHAPTER IV

Results

In chapter three, we discussed the need to achieve a high level (.75 or higher) of inter-rater reliability for the more subjective variables within the core abstracts. These 7 variables were: "type of study (variable 1), "univariate/multivariate" (variable 2), "discrete/continuous" (variable 3), "one domain/multiple domains" (variable 4), "well-being" (variable 5), "impact of religion" (variable 6) and "religious content areas" (variable 9). Achieving inter-rater reliability for these 7 variables involved 18 phi-coefficient calculations. The procedure for achieving inter-rater reliability is discussed in Appendix D.

Table 1 shows that the objective of achieving a phi-coefficient of .75 or greater was met for 17 of the 18 calculations. No coefficient could be computed for "religious knowledge" under Variable 9, because one of the raters did not rate this area as being present in any of the 40 abstracts scored.

Table 1
Inter-Rater Reliability

Variable 1--Type of Study:		
Lean		.81
Rich		.86
Phenomenological		1.00
Theoretical		1.00
Variable 2--Univariate/Multivariate		.86
Variable 3--Discrete/Continuous		.85
Variable 4--One Domain/Multiple Domains		.83
Variable 5--Well-Being:	No well-being measured	.80
	Well-being without statistics	.93
	Well-being with statistics	.87
Variable 6--Impact of Religion:	Positive	.93
	Negative	1.00
	Mixed/neutral	1.00
Variable 9--Religious Content Areas		
Creed		1.00
Devotionalism		1.00
Congregational Involvement		1.00
Religious Knowledge		n/a
Orientation		.84

(See discussion of Hypothesis 5: Religious Content Areas, for a description of the frequency of each of these areas). The lowest coefficient (.81) was in identifying the quantitative-lean studies. The lean/rich distinction involves the greatest amount of subjective judgment, as will be seen in the discussion of Hypothesis 2 under "statistical description of the lean/rich distinction." Of the 18 calculations presented in Table 1, 8 (44%) produced perfect correlations of 1.00. The mean correlation is .92, with a median correlation of .93. The remainder of this chapter will be an analysis of the five hypotheses proposed in chapter three.

HYPOTHESIS I: PERCENTAGE OF RELIGION STUDIES

Hypothesis 1 states that "in more than 2% but fewer than 5% of the psychology dissertations written between the years 1983 and 1987 a religious variable plays *some* role. However, fewer than 2% of the dissertations written during this time use religion as a *predictor* or *independent* variable."

According to Dissertation Abstracts (UMI), there were 14,949 psychology doctoral dissertations written in the United States between 1983 and 1987. The distribution by year is shown in Table 2.

Table 2
Psychology Dissertations by Year

<u>Year</u>	<u>Frequency</u>	<u>Percent</u>
1983	3,077	20.6%
1984	3,205	21.4%
1985	3,050	20.4%
1986	2,886	19.3%
1987	2,731	18.3%
Total:	14,949	100.0%

Table 2 shows that across the five years studied, there was little variation in the number of psychology dissertations. There were 474 more dissertations written in 1984 (the greatest number) than in 1987 (the smallest number). This represents a 3.2% variation between the largest and smallest numbers.

A computer-aided search was made of the 14,949 dissertation abstracts. Using the list of "religious" terms shown in Appendix A, two types of religious dissertations were identified: (1) those in which a religious variable was actually used as an independent variable (the "core" group) and (2) those in which a religious variable appeared in the abstract but was not an independent variable (the "incidental" group). "Religious Dissertations", therefore, were those dissertations containing *any* religious

variable, that is, the sum of the incidental group and the core group. Table 3 presents the number of secular and religious dissertations for each of the years 1983-1987.

Insert Table 3 About Here

Table 3 shows high consistency across the years. There does not appear to be a trend over time. Across the five-year period, there were 625 psychology dissertation abstracts out of 14,949 which contained a religious variable. This represents 4.2% of the total number of psychology dissertations written between 1983 and 1987. Therefore, as hypothesized, more than 2% but fewer than 5% of the dissertation abstracts contained a religious variable.

However, out of this total of 625 "religious" abstracts, only 212, or 1.4% actually used religion explicitly as an independent variable. Therefore, the hypothesis that fewer than 2% of psychology dissertations use religion as an independent variable was also supported. These 212 core abstracts were the focus of Hypotheses 2 through 5.¹

The findings presented in Table 3 are consistent with the

¹Certain abstracts which contained religious terms were considered nonreligious by the raters. These consisted of 61 abstracts which, although containing a designated religious term, were classified by the raters as having nothing to do with religion, even in an incidental way. The vast majority of these studies can be classified into two groups. The first are those that used the term "meditation" in a purely secular way, mostly to study relaxation and anxiety reduction. The second are those that used subjects of Jewish identity in a purely ethnic, non religious way. Even if these 61 studies were included in our religious group, the percentage of religion studies would be 4.60, still less than 5%.

Table 3

Religious and Secular Psychology Dissertations by Year

Dissertation Category	Year					Total
	1983	1984	1985	1986	1987	
(A) Core	1.4% (43)	1.3% (41)	1.1% (33)	1.7% (49)	1.7% (46)	1.4% (212)
(B) Incidental	2.8% (87)	2.5% (81)	3.0% (92)	2.7% (78)	2.7% (75)	2.8% (413)
(C) Total Religious	4.2% (130)	3.8% (122)	4.1% (125)	4.4% (127)	4.4% (121)	4.2% (625)
(D) Secular	95.8% (2,947)	96.2% (3,083)	95.9% (2,925)	95.6% (2,759)	95.6% (2,611)	95.8% (14,324)
(C+D) Total Secular and Religious	100% (3,077)	100% (3,205)	100% (3,050)	100% (2,886)	100% (2,731)	100% (14,949)

systematic reviews of religion in psychological, psychiatric and sociological books and journals. As discussed in chapter two under "systematic reviews," Larson, Pattison, Blazer, Omran, and Kaplan (1986) found that 2.5% out of a total of 2,348 articles in four psychiatric journals between 1978 and 1982 included a quantified religious variable. Larson, et al. (1986) also distinguished between the use of religion as a major or incidental variable in psychiatric journals. They found that fewer than 1% included religion as a major emphasis of the study. Another comparable study by Craigie, Liu, Larson and Lyons (1988) reported a figure of 1.9%. Therefore, we found in the psychological literature a range from 1.4% to 5.1%, depending on how religious variables were defined.

HYPOTHESIS 2: WELL-BEING

Hypothesis 2 states that "overall, religion will be a contributor to well-being. Religion will have a greater contribution to well-being in studies rated quantitative-rich, that is: (a) there are multiple measures of religiousness; (b) the measures generate continuous rather than discrete scores; and (c) they treat both attitude and behavior." Each of the 212 core abstracts was sorted into one of four types of studies: quantitative-lean, quantitative-rich, phenomenological, or theoretical. Not all of the 212 core dissertations reported studying some aspect of well-being. For this reason,

38 of the studies were deleted from the analysis of Hypothesis 2. Table 4 shows the chi-square, goodness of fit analysis of the impact of religion:

Insert Table 4 About Here

Table 4 shows that religion had a significantly positive impact on well-being. This confirms our hypothesis that “overall religion will be a contributor to well-being.” Over half the studies (99 or 57%) showed religion to have a positive impact, while only 16 or 9% showed religion to have a negative impact. The relatively high number of mixed results (34%) is probably due to the high percentage of quantitative-rich studies which will be discussed next (see Table 5). With more complex measures of religion, it is more likely for studies to have results showing neutral or mixed results.

These results differ somewhat from those of other researchers in showing such a large positive impact. For example, Bergin (1983), after reviewing religion studies, reported that 23% found a negative relationship between religion and mental health, 30% found no relationship and 47% revealed a positive relationship.

Table 4**Overall Impact of Religion**

<u>Impact</u>	<u>Observed</u>	<u>Expected</u>
Positive	57% (99)	58
Mixed	34% (59)	58
Negative	9% (16)	58

<u>Chi Square</u>	<u>DF</u>	<u>Significance</u>
59.41	2	< .001

Hypothesis 2 further states that the rich studies will show a significantly higher number of positive outcomes for religion than do lean studies. Before examining this hypothesis directly, we will first discuss the variables that make up the lean/rich distinction. Table 5 shows how the 212 core abstracts were distributed over the four types of studies.

Insert Table 5 About Here

Table 5**Frequency by Type of Study**

<u>Type of Study</u>	<u>Frequency</u>	<u>Percent</u>
Quantitative-Lean	45	21%
Quantitative-Rich	96	45.3%
Phenomenological	44	20.8%
Theoretical	<u>27</u>	<u>12.7%</u>
Total	212	100.0%

Table 5 shows that nearly half the studies were quantitative-rich, with the quantitative-lean and phenomenological studies each comprising about 21% of the studies. The least-used type was the theoretical, at only about 13%. As might have been expected, there were almost twice as many quantitative studies as qualitative (55.5% versus 33.5%).

Statistical Description of the Lean-Rich Distinction

The distinction between the quantitative-lean and quantitative-rich variables is actually a complex distinction involving three component variables: (1) discrete/continuous, (2) univariate/multivariate, and (3) one domain/multiple domains. Table 6 shows the frequency for each of the three component variables. Note that 141, not 212 studies are represented in Table 6. This is because only 141 quantitative studies contained the three component variables.

Table 6
Frequency by Component Variables
of the Lean/Rich Distinction

(N = 141 Quantitative Studies)

<u>Component Variable</u>	<u>Frequency</u>	<u>Percent</u>
(A) Discrete	50	35%
Continuous	91	65%
Total (A)	141	100%
(B) Univariate	45	32%
Multivariate	96	68%
Total (B)	141	100%
(C) One Domain	53	38%
Multiple Domains	88	62%
Total (C)	141	100%

Table 6 demonstrates that the vast majority of authors who studied religion as a predictor variable measured religion as a continuous score

rather than a discrete one (65% versus 35%). In addition, most authors studied religion in more than one way--that is as a multivariate rather than a univariate variable (68% versus 32%) Finally, most authors studied religion in more than one domain (62% versus 38%).

Tables 7 and 8 show how each of these three variables influenced the lean/rich distinction. Table 7 shows the pairwise correlation coefficients between four variables, (a) final categorization as lean/rich, and (b) the three component variables.

Insert Table 7 About Here

Table 7 shows that all of the variables contributed to the lean/rich distinction. As one would expect, all three variables correlate significantly with each other as well as with the raters' subjective categorization as lean/rich. These correlations show that the lean/rich distinction has construct validity. The strongest correlation with the lean/rich distinction was the univariate/multivariate variable (.77) followed by the domain variable (.69) and the discrete/continuous variable (.57). All relationships showed a correlation of .57 or higher.

Table 7
Correlation Coefficients for the Quantitative Type of Study

	<u>Variables</u>			
	Lean/ Rich	Discrete/ Continuous	Univariate/ Multivariate	One Domain/ Multi-Domain
Lean/Rich	1.00			
Discrete/ Continuous	.57**	1.00		
Univariate/ Multivariate	.77**	.51**	1.00	
One Domain/ Multi-Domain	.69**	.43**	.88**	1.00

** = $p < .001$

If we look at the inter-correlations of the three component variables, the highest correlation was between domain and uni/multi-variance (.88). One reason for this high relationship is that if religion is

measured in more than one domain, then, by definition, religion was scored multivariately, since "multivariate" means that religion was measured in more than one way. The correlation was not a perfect one since there can be multiple measures of religion (multivariate), within just one domain. This would occur when, for instance, two measures of religious belief were reported.

The other two relationships were significant, but not as sizable. One explanation for the relatively low (.43) correlation between the domain variable and the discrete/continuous variable is that a study can measure a religious variable in either a discrete or continuous way and still be in one or multiple domains. For instance if religion was measured only by denominational affiliation, it was classified as discrete as well as one domain. But if religion was measured by denomination as well as by "agree/disagree" answers on a belief survey, the abstract was still scored "discrete" but now it is in multiple domains since both affiliation and beliefs were measured.

How does each of these three variables contribute to the lean/rich distinction when used simultaneously? To answer this question, we performed a stepwise multiple regression, using the three variables as predictors. Only two of the predictors (univariate/multivariate, and discrete/ continuous) entered the equation. The results of that analysis are shown in Table 8.

Table 8
Multiple Regression of
Variables Contributing To Type of Study

Step 1. Variable Entered: Univariate/Multivariate

Multiple R	.77
R Square	.59
F = 204.43	Significance F < .0001

Step 2. Variable Entered: Discrete/Continuous

Multiple R	.80
R Square	.64
F = 122.21	Significance F < .01

VARIABLES	<u>Variable</u>	<u>Beta</u>	<u>T</u>	<u>Sig T</u>
IN THE	Univariate/	.65	10.89	<.00
EQUATION	Multivariate			
	Discrete/	.24	4.10	<.001
	Continuous			

VARIABLES	<u>Variable</u>	<u>Beta</u>	<u>T</u>	<u>Sig T</u>
NOT IN THE	Domain	.08	.08	NS
EQUATION				

Table 8 reveals that the univariate/multivariate variable was the largest single predictor entering the equation. Even after this variable was entered, the discrete/continuous variable still added significantly to the prediction and therefore was included as a predictor. However, any predictive value of the domain variable has already been accounted for by the first two variables, and so it was not included in this analysis.

The final regression equation, using the two predictors, yields a multiple regression coefficient of .80, accounting for 64% of the variability.

The following conclusions can be drawn from Tables 7 and 8:

1. The subjective lean-rich rating by the raters correlated strongly as expected with the three objective components: univariate/multivariate, discrete/continuous, and one domain/multi-domain.

2. The inter-correlations between these components and their correlations with the rating of lean/rich were not perfect. In fact, the raters drew on other factors as well in determining whether to label a particular study as lean or rich. That is, the use of the three components was not a linear decision. For instance, a dissertation might be scored both multivariate and continuous and still be considered lean if there were no control or comparison group and if there was only one domain present.

Relationships Between Lean Versus Rich Studies and the Outcomes

Having shown the distribution of the variables which contributed to

the lean/rich distinction, and having shown the interrelationships between these variables, we can go directly to an examination of part two of Hypothesis 2: "religion will be seen as a contributing factor toward positive mental health in studies where religion is rated "quantitative-rich."

Table 9 shows a chi-square analysis of the impact of religion (positive, mixed or negative) by type of study.

Insert Table 9 About Here

Table 9 shows a significant chi-square difference between the four types of studies. Table 9 shows that religion had a positive or mixed impact regardless of type of study. As reported in Table 4, there were only 16 (or 9%) out of a total of 174 studies which showed that religion had a negative outcome. Eight of these studies were quantitative while eight were qualitative. Interestingly, most of the qualitative negative scores are among the phenomenological type of study. Table 9 shows that the outcomes in the qualitative levels revealed relatively few mixed or neutral results. One explanation for this is that the researcher or interviewer of subjects may frequently state clearly his or her interpretation as to the impact of religion. However, with quantitative studies, the data may be more objective. Another possibility is that the qualitative studies were

Table 9
Impact of Religion by Type of Study
(N=174)

	<u>Quantitative</u>		<u>Qualitative</u>		<u>Total</u>
	<u>Lean</u>	<u>Rich</u>	<u>Phenom.</u>	<u>Theoretical</u>	
<u>Impact</u>					
Positive	41%	45%	71%	88%	57%
	(17)	(30)	(29)	(23)	(99)
Mixed	49%	49%	12%	8%	34%
	(20)	(32)	(5)	(2)	(59)
Negative	10%	6%	17%	4%	9%
	(4)	(4)	(7)	(1)	(16)
Column	100%	100%	100%	100%	100%
Totals	(41)	(66)	(41)	(26)	(174)
<u>Chi Square</u>	<u>DF</u>	<u>Significance</u>			
31.24	6	<.01			

perhaps more successful at measuring both religion and outcomes.

Hypothesis 2 states that the rich studies will show a significantly higher number of positive outcomes for religion than do lean studies. Table 10 shows that there was virtually no difference between lean/rich and outcome. However there is a small difference in the hypothesized direction, with the rich studies showing a higher positive outcome.

Insert Table 10 About Here

Table 10 shows that almost the same percentage of lean studies yielded positive results as did rich studies (41% to 45%). Interestingly, both had more mixed or neutral results than either positive or negative results. However, the most important finding is the very low percentage (7%) of negative findings for these quantitative studies. One reason for the lack of statistical significance may be because there were so few studies in the negative category. Hypothesis 2 stated that the rich dissertations would yield more positive results. This was not confirmed. However, is the converse the case? Do lean studies yield more negative results? To test this, the mixed results were eliminated and just the positive and negative studies were compared; there were 55 such studies. The results are presented in Table 11.

Table 10
Impact of Religion on Lean and Rich (Quantitative) Studies
(N=107)

	<u>Type of Study</u>		
	<u>Lean</u>	<u>Rich</u>	<u>Total</u>
<u>Impact</u>			
Positive	41% (17)	45% (30)	44% (47)
Mixed	49% (20)	49% (32)	49% (52)
Negative	10% <u>(4)</u>	6% <u>(4)</u>	7% <u>(8)</u>
Column	100%	100%	100%
Totals	(41)	(66)	(107)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
0.55	2	NS	

Table 11
Comparison of Positive and Negative Results
With the Lean/Rich Distinction

(N=55)

	<u>Methodology</u>		
	<u>Lean</u>	<u>Rich</u>	<u>Total</u>
<u>Impact</u>			
Positive	81% (17)	89% (30)	85% (47)
Negative	19% (4)	11% (4)	15% (8)
Column	100%	100%	100%
Totals	(21)	(34)	(55)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
0.12	1	NS	

Table 11 shows that while a higher percentage of lean studies than rich studies showed religion as having a negative effect, the results did not begin to approach statistical significance. (When the mixed studies were *combined* with either the positive or the negative studies and compared with either the negative or positive studies the results were similar and therefore those tables are not shown here).

Tables 10 and 11 show that the lean/rich distinction did not significantly differentiate between positive, negative and neutral outcomes. However, since there was such a low frequency of negative impacts reported, a significant chi-square difference was difficult to achieve. In fact, the chi-square test may not be the most appropriate test to perform since two out of six cells contained fewer than five subjects. Hypothesis 2, therefore, was not confirmed.

Before leaving the lean/rich discussion, however, one last look will be taken at the components of the lean/rich distinction (a) to see if they act similarly, that is, to reaffirm that we are conceptually correct in viewing them as part of the lean/rich concept, and (b) to consider the possibility that the components predict differently, and that indirectly they may predict outcomes better than the subjective lean/rich prediction. Table 12 shows the percentages of positive, negative and neutral responses for the lean/rich distinction as well as the three component variables.

Table 12

**The Relationship of the Impact of Religion and the
Three Components of the Lean/Rich Distinction**

<u>Components</u>	<u>Impact</u>			<u>Total</u>
	<u>Positive</u>	<u>Mixed</u>	<u>Negative</u>	
(1) One Domain	45%	50%	5%	100%
	(19)	(21)	(2)	(42)
Multi-Domain	43%	48%	9%	100%
	(28)	(31)	(6)	(65)
(2) Discrete	32%	56%	12%	100%
	(14)	(24)	(5)	(43)
Continuous	51%	44%	5%	100%
	(33)	(28)	(3)	(64)
(3) Univariate	46%	49%	5%	100%
	(17)	(18)	(2)	(37)
Multivariate	43%	49%	8%	100%
	(18)	(34)	(6)	(70)

<u>Variable</u>	<u>Chi-Square</u>	<u>Significance</u>
One Domain/Multi-Domain	0.17	NS
Discrete/Continuous	4.54	<.10
Univariate/Multivariate	0.38	NS

Table 12 shows that the three component variables related differently to "impact of religion." Of all the variables contributing to the lean/rich distinction, the discrete/continuous variable was the most predictive of the impact of religion variable. The relationship between the discrete/continuous variable was almost significant and in the predicted direction. As we conceptualized, dissertations with continuous variables yielded more positive (51% versus 32%) and fewer negative (5% versus 12%) results than did the discrete dissertations.

For the domain and univariate/multivariate variables, there was virtually no difference in outcome and the negligible difference that occurred was not in the predicted direction.

In order for the lean/rich distinction to be useful for future research, (a) other component variables need to be found which act differently, and (b) outcome needs to be measured more precisely than "positive," "negative" and "neutral," so that half of the studies are not classified as "neutral," and therefore not viable.

Table 9 *did* show a significant difference between type of study and outcome. However, as we have just discussed, this difference is not to be found in the lean/rich distinction. Since the lean/rich distinction does not predict impact, where is the significance revealed in Table 9 to be found? One possibility is within the broader quantitative/qualitative distinction. Table 13 shows the breakdown between quantitative and qualitative dissertations and the impact of religion.

Table 13
Impact of Religion by Quantitative and Qualitative Studies
(N=174)

	<u>Type of Study</u>		<u>Total</u>
	<u>Quantitative</u>	<u>Qualitative</u>	
<u>Impact</u>			
Positive	44% (47)	78% (52)	57% (99)
Mixed/Neutral	49% (52)	10% (7)	34% (59)
Negative	7% <u>(8)</u>	12% <u>(8)</u>	9% <u>(16)</u>
Column	100%	100%	100%
Totals	(107)	(67)	(174)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
26.80	2	<.0001	

Table 13 shows significance below the .0001 level. Table 13 also shows that the quantitative studies had a much greater percentage of mixed or neutral studies than did the qualitative studies (49% versus 10%).

The conclusion that can be drawn is that the qualitative dissertations were more *positive* in their conclusions concerning the impact of religion than were the quantitative dissertations.

Since the mixed/neutral category was so large and the negative category was so small, the mixed and negative categories were collapsed to create two impact of religion groups: “positive” and “non-positive.” Table 14 shows the breakdown between quantitative and qualitative dissertations and the impact of religion.

Insert Table 14 About Here

Table 14 shows that the qualitative dissertations were much more positive than the quantitative dissertations by almost two to one (78% versus 44%). Furthermore, there were more than twice as many quantitative non-positive dissertations as qualitative dissertations (56% versus 22%).

As we summarized after Table 9, these qualitative studies may have yielded more positive findings because of the bias of the interviewer, or because qualitative methods were better suited to measure religion.

Table 14
Positive and Non-Positive Impact of Religion by Quantitative
and Qualitative Studies

(N=174)

	<u>Type of Study</u>		<u>Total</u>
	<u>Quantitative</u>	<u>Qualitative</u>	
<u>Impact</u>			
Positive	44%	78%	57%
	(47)	(52)	(99)
Non-Positive (mixed/negative)	56%	22%	43%
	<u>(60)</u>	<u>(15)</u>	<u>(75)</u>
Column	100%	100%	100%
Totals	(107)	(67)	(175)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
17.72	1	<.0001	

HYPOTHESIS 3: INSTITUTIONAL CHARACTERISTICS

Hypothesis 3 states that "studies from religious institutions will produce more results demonstrating positive effects of religion than will studies from secular institutions." Schools were considered "secular" if they had no religious origin or current religious orientation. Schools could be religious either by "origin"--that is, they were founded on religious principles but are no longer guided by those principles, or by "origin and orientation"-- these schools continue to admit students and teach according to their founding religious principles.

Appendix E lists the names of the 151 institutions which were included in our study. This list includes both the 82 institutions which generated at least one core dissertation, as well as the 69 institutions which yielded incidental-only dissertations. The frequencies per school of the incidental and core dissertations are also included in Appendix E. Appendix E identifies 10 schools that produced core dissertations which are religious in origin only (indicated by an asterisk [*]) and 9 schools that produced core dissertations which are religious in both origin and orientation (indicated by a double asterisk [**]). (For example, the first entry, University of Akron, a secular university, had one incidental and no core dissertations. Schools were determined to be religious in origin or orientation or both according to Lovejoy's College Guide (Straughn and Lovejoy, 1987).

The top nine “core” institutions--that is, those with more than three core dissertations during the 1983-1987 period are: Fuller Theological Seminary, School of Psychology (24), Biola University, Rosemead Graduate School of Professional Psychology (15), Boston University Graduate School (14), Western Conservative Baptist Seminary (13), United States International University (12), The Union Institute (9), California School of Professional Psychology (CSPP), Los Angeles (5), CSPP, Fresno (4), and CSPP, Berkeley (4). Twelve schools produced three dissertations, 15 produced two and 46 produced only one core dissertation.

The Graduate Study in Psychology and Associated Fields (1988) listed 393 Institutions in the United States which offered the Ph.D. in psychology.²

We found that approximately 60% of Ph.D psychology programs did not produce *any* dissertation during our five-year period that included a religious variable of any kind. Further, approximately 80% of the 393 institutions did not produce any core dissertations during that time. We selected only the 20% of schools (i.e. 82) that produced the 212 core studies and then proceeded to an examination of Hypothesis 3.

Table 15 shows the frequency distribution of the 212 core

²That book, however did not include some seminaries which offer the Ph.D. in psychology, such as Western Conservative Baptist Seminary, New Orleans Baptist Theological Seminary, and The Southern Baptist Theological Seminary. Drew University also was not listed. However, for the purpose of this study, we will use the 393 figure, noting that it is an approximation.

dissertations across the 82 schools, grouped by orientation. Hypothesis 3 asks whether religiously oriented schools are more likely to produce dissertations with positive outcomes than are secular schools.

Insert Table 15 About Here

Table 15 shows that the majority (i.e. 77%) of schools in the core group were secular. In contrast, the "origin only" and "origin and orientation" groups each account for about 10% of the core studies. Also, while the "origin and orientation" schools made up only 11% of the total of the 82 schools, these institutions produced 35% of the core dissertations.

The results of Table 15 also indicate that the "secular" and "origin only" schools showed similar percentages of dissertations. The 63 secular schools in our sample produced 122 core dissertations. This represents about two dissertations per school over the five-year period. For the "origin only" group, there were 15 dissertations for 10 schools. This represents 1.5 dissertations per school over the five-year period. In contrast, the schools which were religious in both origin and orientation had a significantly higher percentage of dissertations. They produced over

Table 15
Religious Orientation of Institution, Frequency and
Percent of Core Dissertations

	N and % of Schools That Produced Core Dissertations (N= 82 Schools)		N and % of Core Dissertations (N= 212 Studies)	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Orientation</u>				
Secular	(63)	77%	(122)	58%
Religious				
Origin Only	(10)	12%	(15)	7%
Religious Origin				
and Orientation	<u>(9)</u>	<u>11%</u>	<u>(75)</u>	<u>35%</u>
Totals	(82)	100%	(212)	100%

8 dissertations per school over the five-year period. That is, the "origin and orientation" schools produced many more religious dissertations per school than the other two categories of schools.

Not all "origin only" schools are alike; this is not a homogeneous category. In fact, there is some difficulty with the definition of the "origin only" category. For example (as seen in Appendix E), some of these universities, such as Harvard have very little association with their religious origins, while others such as Yeshiva and Catholic are quite influenced by theirs. However, since neither school purports to admit students based on religious beliefs or teach a particular religious content, these schools were classified as "origin only." For the rest of the discussion on Hypothesis 3, therefore, the "secular" and "origin only" schools have been combined and labeled as "secular." Only schools with a religious origin and orientation have been labeled "religious." A one-way analysis of variance was performed to determine whether the mean of the religious group was significantly different from the other two groups. Statistical significance was not achieved. This is likely due to the low number of religious schools in our sample. Let us now examine Hypothesis 3 directly.

Table 16 shows the comparisons of "impact of religion" between secular and religious institutions. The total number of dissertations

Insert Table 16 About Here

Table 16
Comparison of Impact of Religion by
Religious Orientation of Institution
(N=174)

	<u>Secular</u>	<u>Religious</u>	<u>Total</u>
<u>Impact</u>			
Positive	50% (56)	70% (43)	57% (99)
Mixed/Neutral	42% (47)	19% (12)	34% (59)
Negative	8% <u>(9)</u>	11% <u>(7)</u>	9% <u>(16)</u>
Column	100%	100%	100%
Totals	(112)	(62)	(174)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
9.10	2	< .01	

analyzed was 174 rather than 212 because 38 of the core dissertations did not measure how religion influenced well being.³

Table 16 shows a chi-square below the .01 level of significance. It appears that Hypothesis 3 is confirmed: religious schools do show a greater percentage of positive studies than do secular schools (70% versus 50%). However, contrary to expectations, the religious schools also show a greater percentage of studies having a negative influence (11% versus 8%). How can this result be explained?

In fact, the significant difference between religious and secular schools was not between positive and negative impact, since the religious schools were higher on both. Rather the difference between religious and secular schools depended on whether the results were positive or non-positive (i.e., a combination of mixed and negative). In Table 17, the mixed/neutral studies were combined with the negative studies.

Insert Table 17 About Here

Table 17 demonstrates that the religious schools produced significantly more positive results than did the secular schools (64% versus

³This same number of studies was used in Hypothesis 2 for the same reason.

50%). Also, religious schools produced significantly fewer studies with non-positive results (31% versus 50%). Therefore, Hypothesis 3 is confirmed. We also found that religious and secular schools produced the same proportion of quantitative and qualitative studies (Table 18).

Table 17

Religious Orientation by Positive/Non-Positive Outcome

(N=174 Dissertations)

Religious Orientation

	<u>Secular</u>	<u>Religious</u>	<u>Total</u>
<u>Impact</u>			
Positive	50%	64%	70%
	(56)	(43)	(99)
Non-Positive	50%	31%	30%
(mixed and negative)	<u>(56)</u>	<u>(19)</u>	<u>(75)</u>
Column	100%	100%	100%
Totals	(112)	(62)	(174)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
5.33	1	<.05	

Table 18
Religious Orientation by Type of Study
(N= 212 Dissertations)

<u>Type of Study</u>	<u>Religious Orientation</u>		
	<u>Secular</u>	<u>Religious</u>	<u>Total</u>
Quantitative	69% (94)	63% (47)	(141)
Qualitative	31% (43)	37% (28)	(71)
Column	100%	100%	
Totals	(137)	(75)	(212)
<u>Chi Square</u>	<u>DF</u>	<u>Significance</u>	
.52	1	NS	

Table 18 shows that the secular and religious schools were essentially identical in their frequencies of quantitative versus qualitative studies. Correlational analysis is a third way to explore the relationship

between the three variables: *outcome* (positive/non-positive), *religious orientation* of the school, and the *quantitative/qualitative* distinction.

Table 19 shows the correlation between these three variables.

Table 19
Correlations for Variables Contributing to
Positive/Non-Positive Outcome

	Quantitative/ Qualitative	Religious Orientation	Positive/ Non-Positive
Quantitative/ Qualitative	1.00		
Religious Orientation	.10*	1.00	
Positive/ Non-Positive	.33**	.19*	1.00

** = $p < .001$

* = $p < .10$

Table 19 confirms what was found through the chi-square analysis in Table 17, namely that dissertations from religious schools tended to have more positive results than those from secular schools. That is, we found a significant correlation (.19) between religious orientation and positive results.

Both the correlational and chi-square analyses showed a strong relationship between quantitative/qualitative and positive outcome. That is, when used as a sole predictor, the quantitative/qualitative distinction accounts for 11% (.33 squared) of the variability in positive/nonpositive outcome.

Next we asked, "Could it be that the highly significant quantitative/qualitative, positive/non-positive correlation can account for (and eliminate) the apparent correlation between religious orientation and positive outcome?" If we control for the quantitative/qualitative distinction by statistically entering it first into a multiple regression, does orientation still yield significant additional information? Table 19 would suggest not since quantitative/qualitative and religious orientation had a small correlation ($r = .10$), i.e., they are relatively independent of each other. This relates to the lack of chi-square significance in Table 18. The significant religious orientation/positive correlation ($r = .19$) corresponds to the chi-square analysis in Table 17.

Thus far, the correlational analysis has paralleled and confirmed the earlier chi-square analyses. However, the data format lends itself to a more

We knew from Table 19 that the quantitative/qualitative distinction would be the first predictor entered, since it had the larger R coefficient of the two variables. What we learn from Table 20 is that even after entering (i.e., controlling for) quantitative/qualitative, the second variable, religious orientation, added significantly to the prediction.

As shown in Table 19, the quantitative/qualitative distinction alone yielded an R of .33 accounting for 11% (.33 squared) of the predicted variance. Orientation alone accounts for 4% (.19 squared) of the variance. When combined together in multiple regression (Table 20), they jointly account for 15% of the variance. This 15% is equal to the sum of what each predicted singly. That is, they each make an independent contribution. If this were not the case, the total would be less than the sum of the parts.

To summarize, Hypothesis 3 (religious schools would show religion as having a more positive effect than secular schools), was confirmed. It was demonstrated that religious schools produced more dissertations with positive results. Positive outcome is a function of both the quantitative/qualitative distinction and, to a smaller degree, of the religious orientation of each school.

It was found that over the five-year period studied, 60% of doctoral psychology programs did not produce any dissertations with a religious variable, and that 80% of the schools did not produce a single core dissertation. Of the schools producing core dissertations, secular schools,

on the average, only produced about 2 dissertations per school while religious schools produced over 8 per school.

HYPOTHESIS 4: THE FIVE CONTENT AREAS

Hypothesis 4 states that the first five dimensions of religion, as proposed by King and Hunt (1972) will be studied in equal proportion. These dimensions, which we have renamed "content areas," are discussed in chapter three (Methodology, Part 3). Since we found no literature which describes the frequency of research of the various content areas, this hypothesis is actually stated in the form of an exploratory question. This question is asked as a way to gain information about the religious content of the core dissertations. The previous three hypotheses dealt with the "how," e.g. methodology and institutional characteristics. Hypothesis 4 deals with the "what", e.g. what religious content is being examined?

Since some of the authors employed more than one content area in their study, the total frequency of pertinent studies, 309, is greater than the 212 core dissertations. Table 21 shows the frequency and percentage of studies for each content area.

Table 21
Frequency of Appearance of Five Religious
Content Areas in Core Dissertations

<u>Dimension</u>	<u>Frequency</u>	<u>Percentage</u>
Creedal Assent	77	24.9%
Devotionalism	74	23.9%
Congregational Involvement	57	18.4%
Religious Knowledge	29	9.4%
Orientation Toward Religion	<u>72</u>	23.3%
Total	309	

Table 21 shows that some content areas were more frequently studied than others (a range of 9.4% to 24.9%). Religious knowledge was the least studied area. This may be because most researchers feel that knowledge, by itself makes the least difference in an individual's life. The other four areas, (i.e., creedal assent, devotionalism and orientation, and to a slightly less degree, congregational involvement), were studied about equally (from 18% to 25% of the time).

To answer the question of whether certain areas of content were

more frequently studied than others, the chi-square test for goodness of fit was performed.

Using this test we confirmed that the content areas were not studied equally. Under the null hypotheses one-fifth of the ratings (i.e., $309/5 = 61.8$) were expected to fall in each category. Instead, the observed frequencies varied significantly from the expected frequencies, as shown in Tables 22 and 23.

Table 22
Observed Frequency Versus Expected Frequency
of the Five Content Areas of Religion

(N = 309)

	<u>Content Area</u>				
	Creedal assent	Devotion- alism	Congregation Involvement	Religious Knowledge	Religious Orient.
<u>Frequencies</u>					
Observed	77	74	57	29	72
Expected	61.8	61.8	61.8	61.8	61.8
(O - E) ²	231.0	148.8	23.0	1075.8	104.0
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>			
25.61	4	<.001			

The highly significant chi-square value found in Table 22 would occur with less than a .001 probability if the null hypothesis were true. The significant chi-square appears to be due primarily to "religious knowledge," which was less studied than any other area. To test this observation, the religious knowledge dimension was eliminated and the remaining four content areas were compared (Table 23).

Table 23
Observed and Expected Frequencies of
Four Content Areas of Religion
(N = 280)

	<u>Content Area</u>			
	Creedal assent	Devotion- alism	Congregation Involvement	Orient.
<u>Frequencies</u>				
Observed	77	74	57	72
Expected	70	70	70	70
(O - E) ²	49	16	169	4
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>		
3.40	3	NS		

Table 23 lists the frequencies of the four remaining content areas, which account for 280 ratings and an expected frequency of 70 for each area. We found an insignificant chi-square (3.4 with $df = 3$). Because "congregational involvement" had the lowest frequency of all content areas in Table 23, a further goodness-of-fit chi-square test was run comparing congregational involvement with creed, devotionism and orientation. The results yielded an insignificant chi-square (3.22). With the exception of religious knowledge, therefore, it can be concluded that the dimensions were studied fairly equally.

Since a dissertation can be rated as studying more than one content area, did some of the areas tend to be paired? That is, is belief correlated with knowledge, or devotionism with religious orientation? Table 24 presents a correlation of the relationships between the five content areas:

Insert Table 24 About Here

Table 24 shows that only congregational involvement and creed are studied together to a significant degree. This would support King and Hunt's (1972) functional descriptions of these five religious content areas (except the small correlation, .23, between congregational involvement and creed) as being separate categories.

Table 24
Correlation Between Five Religious Content Areas
(N = 212)

	Creedal assent	Devotion- alism	Congregation Involvement	Religious Knowledge	Orient.
Creed	1.00	-.04	.23**	.04	-.11
Devotion- alism	-.04	1.00	-.09	.08	-.07
Congregation Involvement	.23**	-.09	1.00	.01	-.14
Religious Knowledge	.04	.08	.01	1.00	-.08
Orientation	-.11	-.07	-.14	-.08	1.00

1-tailed Significance: ** = <.001

HYPOTHESIS 5: POSTGRADUATE COMMITMENT TO RESEARCH

Hypothesis 5 examines whether or not a graduate student's experience in dissertation writing had an influence on postgraduate behavior or attitudes. In particular, did students who wrote qualitative dissertations report more satisfaction or continued interest in religious research than those who wrote quantitative dissertations?

Hypothesis 5 has four parts. We hypothesized that alumni/ae who wrote qualitative rather than quantitative dissertations will report (1) more enjoyment in writing their dissertations; (2) a stronger belief in their dissertation's contribution; (3) lower productivity in subsequent research; but (4) a continued study of religious (rather than secular) phenomena. Results for these parts will be examined in order.

To examine these issues, the current occupational and research practices of 50 authors of core dissertations were examined. Of the 212 core authors (all of whom are listed in Appendix F), a random sample of 50 was selected to be interviewed for Hypothesis 5. Appendix F lists all 212 dissertations in alphabetical order of author's name followed by dissertation title and school attended. The 50 interviewed authors' names are CAPITALIZED.

Enjoyment in Writing Dissertation

The first part of Hypothesis 5 states that those who wrote qualitative dissertations would experience more satisfaction in writing their dissertations than those who wrote quantitative dissertations.

The 50 authors were each asked to rate their level of enjoyment on a five-point scale. The scoring for this scale was: (1) very unenjoyable, (2) unenjoyable, (3) neutral, (4) enjoyable, and (5) very enjoyable. The frequency distribution for all authors is presented in Table 25.

Table 25
Level of Enjoyment in Writing Dissertation

<u>Level of Enjoyment</u>	<u>Frequency</u>	<u>Percent</u>
(1) Very Unenjoyable	0	0%
(2) Unenjoyable	6	12%
(3) Neutral	14	28%
(4) Enjoyable	17	34%
(5) Very Enjoyable	<u>13</u>	<u>26%</u>
Total	50	100%

<u>Mean</u>	<u>Mode</u>	<u>Median</u>	<u>Standard Deviation</u>
3.74	4.00	4.00	.99

Table 25 shows, with a mean of 3.74 and median of 4.00, that when looked at as a whole, the respondents reported having an "enjoyable" experience writing their dissertation. In fact, no one responded that he or she found the experience "very unenjoyable." More reported having an enjoyable or very enjoyable experience combined (30) than responded in the unenjoyable and neutral categories combined (20).

Did level of enjoyment differ when those who wrote quantitative dissertations were compared to those who wrote qualitative dissertations? Table 26 presents the results of a t-test comparing quantitative/qualitative type of study with satisfaction.

Table 26

**Satisfaction in Writing Dissertation by Methodology
Utilizing t-Test Measure**

(N = 50)

	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Quantitative	263	.38	.90	.18
Qualitative	244	.12	.95	.19

<u>t- Value</u>	<u>DF</u>	<u>2 -Tail Probability</u>
- 2.84	48	<.01

Table 26 shows that the mean score for those doing quantitative dissertations was between "neutral" and "enjoyable" (3.38), while those who wrote qualitative dissertations, on the average, scored between "enjoyable" and "very enjoyable" (4.12).

Since authors were asked to rate their experience on a five-point scale there were small numbers for each category. If we simplify our data (and avoid some of the parametric assumptions of the t-test), we can dichotomize satisfaction into two fairly equivalent groups. Based on the data from Table 25, "very enjoyable" and "enjoyable" became one category, while "neutral," "unenjoyable" and "very unenjoyable" became the second. Table 27 shows the results of a chi-square analysis.

Insert Table 27 About Here

These results, similar to those of Table 26, reveal a significant chi-square statistic. Some of the significance was lost (.01 to .05) which indicates that the five-point scale was meaningful. Table 27 supports the hypothesis that the experience of writing the dissertation was more enjoyable for the authors who wrote a qualitative dissertation (79% versus 42%).

One student said that "the process was quite unenjoyable because my

advisor (who developed one of the instruments used in his study) had me redo my proposal nine times. It took much more time than I anticipated." This individual did a *quantitative* study and concluded that "qualitative

Table 27

**Satisfaction in Writing Dissertation by Methodology
Utilizing the Chi-Square Measure**

	<u>Methodology</u>		
	Quantitative	Qualitative	Total
<u>Satisfaction</u>			
Enjoyed	42% (11)	79% (19)	60% (30)
Neutral/ Unenjoyable	58% (15)	21% (5)	40% (20)
Column Total	100% (26)	100% (24)	100% (50)
<u>Chi Square</u>	<u>DF</u>	<u>Significance</u>	
5.61	1	< .05	

research is the only way to study religion." He is now a psychoanalyst doing research by the case-study method. Several others mentioned similar problems with their committees.

Another author who used the phenomenological method said, "it was the most meaningful thing I ever did." One student who also found the process "very enjoyable" said that her theoretical dissertation "pulled together everything I had learned, including my personal therapy, producing much growth." Others called it "a task," "a grueling process," "tedious," and "the hardest work I have ever done." Many reported the high anxiety and pressure involved.

Contribution of Study

The second part of Hypothesis 5 states that "those who wrote qualitative dissertations will believe more in the value of their findings than those who wrote quantitative dissertations." When asked if they believed that their dissertations made a contribution to psychology's understanding of religion, respondents either (1) strongly disagreed, (2) disagreed, (3) were neutral, (4) agreed, or (5) strongly agreed. Table 28 shows the frequency distribution of these responses across the whole sample.

Table 28
Level of Belief in Contribution of Dissertation
(N = 50)

<u>Level of Belief</u>	<u>Frequency</u>	<u>Percent</u>
(1) Strongly Disagree	0	0%
(2) Disagree	4	8%
(3) Neutral	14	28%
(4) Agree	24	48%
(5) Strongly Agree	<u>8</u>	<u>16%</u>
Total	50	100%

<u>Mean</u>	<u>Median</u>	<u>Mode</u>
3.73	4.00	4.00

Table 28 shows with a mean of 3.73 and median of 4.00, that no one "strongly disagreed" that his or her dissertation made a contribution. However, few (8) "strongly agreed" that it did. The majority (38) either "agreed" or were "neutral."

A t-test was performed (Table 29) to determine whether authors who wrote qualitative dissertations believed more in the value of their dissertations than those who wrote quantitative ones.

Table 29
Comparison of Belief in Contribution of Study by the
Quantitative/Qualitative Distinction Utilizing the t-Test
(N = 50)

	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Quantitative	26	3.58	.95	.19
Qualitative	24	3.88	.68	.14

<u>t- Value</u>	<u>DF</u>	<u>2-Tail Probability</u>
-1.27	48	NS

Table 29 shows that those who wrote qualitative dissertations did believe more strongly in their contributions (3.88 versus 3.58); however the results are not statistically significant.

Since there were few responses for each level of the 5-point scale, the responses were grouped into two fairly equivalent groups and tested using chi-square statistics (Table 30). "Strongly agree" and "agree" formed the "made contribution" group while "neutral" and "disagree" formed the "neutral/no contribution" group.

Table 30

**Belief in Contribution of Study by the Quantitative/
Qualitative Distinction Utilizing the Chi-Square Measure**

(N = 50)

	<u>Type of Study</u>		Column
	Quantitative	Qualitative	Total
<u>Value</u>			
Made	58%	71%	64%
Contribution	(15)	(17)	(32)
Neutral/	42%	29%	36%
No Contribution	(11)	(7)	(18)
Column	100%	100%	100%
Total	(26)	(24)	(50)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
.45	1	NS	

The results in Table 30 agree with the t-test in Table 29, showing that those who wrote qualitative dissertations believed their dissertation made more of a contribution than those who wrote quantitative dissertations (71% versus 58%). However, the results were not statistically significant.

Most of the respondents who answered in the "neutral" or "disagree" categories did so because there had been no articles published from their dissertations; therefore, they had no knowledge of its contribution. Some of the authors who believed their research made a contribution felt it did so for limited groups of people, such as clergy. One author said that her work could make more of a contribution if "others were to develop it where I left off." Another said his dissertation made a contribution, "not because of the hypothesized findings but because of some accidental findings which were researched further by later graduate students."

Rate of Publication

The third part of Hypothesis 5 states that "the majority of respondents will either report having no publications or will report no publications beyond a dissertation article." Table 31 presents a frequency table of number of publications per author interviewed presented by dissertation type (quantitative/qualitative):

Table 31
Postgraduate Publication Rates of
Authors of Quantitative and
Qualitative Dissertations

(N = 60 articles)

<u>Type of Study</u>	<u>Number of Publications</u>								<u>Total</u>
	0	1	2	3	5	6	10	13	<u>Authors</u>
Quantitative	15	4	1	3	1	0	1	1	26
Qualitative	18	3	0	1	1	1	0	0	24
Total %	66%	14%	2%	8%	4%	2%	2%	2%	100%
& Frequency	(33)	(7)	(1)	(4)	(2)	(1)	(1)	(1)	(50)

Table 31 shows that part three of Hypothesis 5 is clearly supported with 80% of all graduates surveyed having not published beyond one article. In fact, the majority of the respondents (66%) have not published even one article. Only 17 of the 50 graduates surveyed had published at

least one article since graduation. The majority of respondents indicated that they did not pursue research after graduation. Some commented that their publications were not in established psychology journals but in newsletters from their place of employment or in religious or non-professional journals.

Did the rate of publication for those who wrote quantitative dissertations differ from those who wrote qualitative dissertations? Of the 60 articles written, 43 were written by those who did quantitative dissertations, while only 17 were written by those who did qualitative dissertations. Also, the two who wrote the largest number of articles (10 and 13) were by authors of quantitative dissertations. However, more than half of both groups (58% quantitative and 75% of qualitative) published no articles at all. Table 32 shows the differences in means for each group using the t-test.

Insert Table 32 About Here

Although the mean number of publications was slightly larger for those who wrote quantitative dissertations (1.65 vs. .71), this was not a statistically significant difference. The small differences in means reflect the large number of respondents of both types who wrote no articles at all (N=33). The median for each group is zero. Therefore, it cannot be stated

that those writing quantitative dissertations are publishing at a significantly higher rate than those who wrote qualitative dissertations. Also, when a t-test was run against the quantitative/qualitative distinction using only the 17 students who wrote articles, statistical significance was not achieved.

Table 32
Number of Publications per Author
by Quantitative/Qualitative Distinction
Utilizing the t-Test
(N = 50)

	Number	Mean	Standard Deviation	Standard Error
Quantitative	26	1.65	3.21	.63
Qualitative	24	.71	1.63	.33
<u>t- value</u>	<u>DF</u>	<u>2-tail probability</u>		
1.30	48	NS		

Did the rate of publication increase with number of years since graduation? Table 33 shows number of publications per year of graduation. More than half those surveyed graduated in 1983 and 1984.

Table 33
Rates of Publication by Year Since Graduation

Year	Interviewed	Authors	Total Publications	Mean/Author	Median/Author
1983	18	6	29	4.83	2
1984	11	5	15	3.00	3
1985	9	3	8	2.66	2
1986	6	2	7	3.50	3.5
1987	6	1	1	1.00	1
Total:	50	17	60	3.00	2.0

Table 33 shows that of the 18 students who graduated in 1983, six (or 33%) wrote articles. Of these six, three wrote one article, one wrote three, one wrote 10 and another wrote 13. With such a skewed distribution, it cannot be concluded that they wrote almost five articles apiece. In contrast, of those surveyed who graduated in 1984, five (or 45%) wrote articles. Of these five, one wrote one article, three wrote three and one wrote five. Hence the medians for 1984 through 1987 show a better match to the means.

To sum up the results of the author survey so far, we found that the only relationship that demonstrated statistical significance was the one

between quantitative/qualitative type of study and enjoyment in writing the dissertation. The other three variables: contribution, publication rates or year graduated showed no significant correlations with the other variables. Table 34 demonstrates the relationship between enjoyment, contribution, rate of publication and year.

Table 34

Correlation Between Survey Variables, Parts 1, 2, and 3.

(N = 50)

	Quantitative/ Qualitative	Enjoy ment	Contri- bution	Publica- tions	Year
Qualitative/ Quantitative	1.00				
Enjoyment	.38*	1.00			
Contribution	.18	.21	1.00		
Publications	-.18	.09	.20	1.00	
Year	-.32	-.23	-.02	-.16	1.00

* = Significance = <.01

According to the authors who were surveyed, those who wrote qualitative dissertations reported a significantly higher level of enjoyment than those who wrote a quantitative ones. There were no significant correlations among any of the other relationships. Incidentally, when year was correlated with rate of publication for just the 17 authors, the correlation was not statistically significant.

Postgraduate Religious Publications

Part four of Hypothesis 5 states that "those who did a qualitative dissertation and pursued further research are more likely to continue to study religion than those who did quantitative dissertations." To investigate this last part of Hypothesis 5, the 17 authors who published articles were asked how many of the articles they published were "religious" and how many were "secular" in nature. Table 35 presents the differences between religious and secular publications by quantitative/qualitative distinction.

Insert Table 35 About Here

Table 35 shows that only two authors of quantitative dissertations wrote "secular" articles (13 and 2). On the other hand 9 out of the 11 authors wrote "religious" articles. The mean number of articles by quantitative type of study was 3.90 with a median of 2.

Table 35

**Comparison of Quantitative/Qualitative Dissertation Authors by
Type of Later Publication (Secular/Religious)**

	<u>Quantitative Dissertation</u>		<u>Qualitative Dissertation</u>	
	Secular	Religious	Secular	Religious
<u>Authors</u>			<u>Authors</u>	
(1)	13	0	(1)	5
(2)	0	10	(2)	3
(3)	0	5	(3)	0
(4)	0	3	(4)	0
(5)	0	3	(5)	0
(6)	0	3	(6)	0
(7)	2	0		
(8)	0	1	Total	8
(9)	0	1		9
(10)	0	1		
(11)	0	1		
Total	15	28		

Similarly, only two authors of qualitative dissertations wrote “secular” articles: one wrote five and the other three. Six of the authors wrote “religious” articles. This means that since there are only six authors of qualitative dissertations, two wrote both “secular” and “religious” articles. The mean number of articles by qualitative type of study was 2.83 with a median of 1.50.

Table 35 shows that although authors of quantitative dissertations wrote more “secular” articles than did authors of qualitative dissertations (15 to 8), they also wrote more “religious” articles (28 to 9). Table 36 shows a chi-square comparison of the authors by type of articles they published.

Insert Table 36 About Here

Table 36 confirms the results of earlier tables (31, 32, and 35), i.e. that those who wrote quantitative dissertations published most of the articles (72% versus 28%). However, of the 17 articles published by those who did qualitative dissertations, about half were self-reported as religious and half were secular (53% versus 47%). Of the 43 articles published by those who did quantitative dissertations, 65% were religious while 35% were secular.

Table 36
Chi-Square Analysis of Quantitative/Qualitative
Distinction by Type of Later Publication (Secular/Religious)
(N = 60)

	<u>Quantitative</u> (N = 43 articles by 11 authors)	<u>Qualitative</u> (N = 17 articles by 6 authors)	<u>Column</u> <u>Total</u>
<u>Articles</u>			
	35%	47%	38%
Secular	(15)	(8)	(23)
	65%	53%	62%
Religious	(28)	(9)	(37)
Row	100%	100%	100%
Total	(43)	(17)	(60)
<u>Chi-Square</u>	<u>DF</u>	<u>Significance</u>	
1.30	1	NS	

Therefore, contrary to what was hypothesized, those who wrote quantitative dissertations actually wrote more (yet not significantly) on religious themes than on secular ones, while those who wrote qualitative dissertations were just as likely to write religious as secular articles. A t-test was run on these results. Because there was no significance the table is not presented. However, those who wrote quantitative dissertations wrote, on the average, 1.01 religious and .58 secular articles. Those who wrote qualitative dissertations wrote, on the average, .37 religious and .33 secular articles. These numbers are lower than those presented in Table 41 because the t-test includes all 50 respondents, not just the ones who wrote articles.

Summary of Hypothesis 5

We investigated whether the quantitative/qualitative distinction made a difference in four areas of postgraduate behaviors or attitudes. We found that those who wrote a qualitative dissertation reported a significantly higher level of enjoyment in writing the dissertation than those who wrote quantitative dissertations. There were no significant differences between the groups in believing they made a significant contribution to psychology's understanding of religion.

A large majority (80%) reported either having no publications or having written nothing beyond one article. Neither group was more likely to continue to study religion. These findings differ from the national survey conducted by Porter, Chubin, Rosini, Boekmann and Connolly

(1982) who polled 102 psychology Ph.D. recipients from 1970-1977.

They found the mean number of publications per person was 6.15 and the median was 2.60. Our sample revealed a mean number of only 1.16 per person, with a mean of zero. Based on our small sample it may be tentatively concluded that those who studied religion as a core variable published less frequently than the average graduate.

Additional Findings of the Interviews

Beyond the questions asked in Hypothesis 5, the follow-up interviews produced some additional insights. When asked what kind of work they currently were doing, 32 graduates reported they worked primarily in private practice. Of the remaining 18, two were program directors, six were teaching, six worked in a hospital setting, one was in industry, one was full-time clergy (a rabbi), one was not currently employed (by choice) and one was employed in full-time research. This person was working with his state's Department of Human Services, Organizational Planning office. This position involves doing research about half of the time. He described the research method as being "survey," not "academic." This individual did do a quantitative (rich) dissertation. He is the individual who has published 13 articles. Of the six in teaching, five did qualitative dissertations (one quantitative-lean, two phenomenological and three theoretical). Of these six, four published one article each: two religious articles, two secular. So very few reported

spending a significant amount of their time pursuing research.

In answer to the question, "did your department encourage students who expressed a desire to write a religious dissertation?," 47 (or 94%) said that they either were encouraged or their college was neutral on the subject. Only 3 (6%) received opposition. Of the 50 interviewed, about half (24) were from religiously oriented schools and 26 were from secular schools. The students from the religious schools were either required or encouraged to do research on a religious theme.

Most said they received no opposition in writing on religion because they were able to put together their own committee and purposefully chose faculty members who would be supportive. As one respondent said, "I had a supportive committee; other faculty considered it ridiculous." Many said that although they were not encouraged to write on a religious theme, they were not discouraged. For the three that faced opposition, one had a chairperson opposed to the topic. Two respondents who did phenomenological dissertations had opposition primarily because of the phenomenological methodology. One said he "had to run a pilot study with statistics." The other said, "they were not accepting of religious research. I had to get a chair from another school. I felt very alone. They had a problem with both religion and phenomenology -- my department did not support either. I felt justified from my reading Allport's The Individual and His Religion to study religion as a function of the personality."

Ironically the university where this student felt "so alone" actually

produced several dissertations with religious themes. Another student interviewed from that university--who also did a phenomenological study--reported no opposition at all.

Another question asked of the graduates was, "what do you believe was the relevance of your research training to your present occupation?" Only 4 (8%) said it was neutral. Over half (58%) said it was relevant, while 17 (34%) said it was irrelevant. There was no significant difference between the quantitative and qualitative groups in their opinion on this subject. As we reported earlier, although very few are involved in current research, they said their courses were relevant because they enabled them to read journal articles and keep up with their field. One graduate (a man who is now an ordained rabbi with a private clinical practice) sums up the ambivalent feelings of his colleagues when he says,

I was very interested in the topic, yet my dissertation took a long time to finish because of all the picky stuff the committee wanted. It was an arduous process. I got very turned off to doing research as a result. However, I felt I made a contribution because I broke Jewishness into several groups to look at the differences.

CHAPTER V

Summary and Discussion

SUMMARY

How much emphasis have psychologists placed on the role of religion in people's lives? In the United States during the late 1800's, religion was a primary topic of psychological research. G. Stanley Hall, who was the first recipient of the Ph.D. in psychology and founder and president of Clark University, in 1882 published "The Moral and Religious Training of Children" in the Princeton Review. He later published Adolescence (1904), describing the religious development of young people. Other researchers at the turn of the century include psychologists William James, author of the widely respected Varieties of Religious Experience (1902), James Leuba, George Albert Coe, Edwin Starbuck, sociologists Emile Durkheim, and Max Weber, and anthropologist Bronislaw Malinowski. These scholars performed research and wrote on the topics of conversion, revival phenomena, and normal religious development.

Logical positivism and Freud's psychoanalytic theory emerged in the 1930s, both of which were antagonistic to religion and metaphysics. As

these views became dominant in the United States, religion was either ignored or attacked.

Douglass (1966) offered several reasons why the psychological study of religion declined after the initial partnership between psychology and religion. These reasons primarily have to do with the more rigorous demands put on psychology for data collection and objectivity as well as with the trend toward behaviorism. Therefore, while the first two decades of the century opened the door to the scientific study of religious phenomena, the consensus soon began to form that observable behavior was the only domain of the social scientist. The last half of the 20th century has witnessed a polarization between the two disciplines of psychology and religion.

As psychology became a more scientific discipline, psychologists themselves changed. In 1985 a Gallup poll reported that more than 90% of the population in the United States believed in God, and that 86% reported that their faith was important to them. Ragan, Malony, and Beit-Hallahmi (1980) found that only 50% of psychologists claimed to believe in God. In a later study, Bergin and Jenson (1990) found that 64% of psychologists polled agreed with the statement, "I try to live by my religious beliefs." Since religion is not personally important to a large percentage of psychologists, it is not surprising that religion is not highly represented in psychological research. Bergin (1991) referred to the "religiosity gap" between psychologists and the general public and recommends that

psychologists make more of an effort to connect spiritually with their clients.

However, as early as 1950, Gorsuch (1988) reported there began a small but steady increase in the number of psychological articles dealing with religious phenomena. Others, such as Pattison (1978), saw the 1945-1965 time-frame as marking the beginning of a true collaboration between psychology and religion. One of the most important researchers of religion and psychology during this period was Gordon Allport. His book, The Individual and His Religion (1950), examined the connection between personal beliefs, attitudes toward others, and the mystery of being. Historian of psychology Hendrika Vande Kemp in 1985 listed 37 institutions and 17 journals that are primarily concerned with the integration of psychology and religion. Paloutzian (1986) has observed that over the past 20 years the time devoted to the topic of religion at professional meetings has increased. He has also noted an increase in the publication by standard textbook publishers of major books dealing with psychology and religion as well as an increase in articles about religion in the major psychology journals.

The goal of this dissertation was to understand how religion is currently being studied. Our approach was to analyze nine religious variables from 212 psychology dissertations written between 1983 and 1987 which studied religion as a primary independent variable. We called these "core dissertations." In addition, we performed a follow-up

interview of 50 core dissertation authors which added five variables describing the authors' attitudes, occupations, and research practices. Five main hypotheses were asked of the data.

Hypothesis 1: Percentage of Religion Studies.

In contrast to the optimism expressed by Gorsuch (1988), Pattison (1978) and Paloutzian (1986), who believe the research of religion is gaining respect among psychologists, we did not discover a resurgence of interest in writing dissertations on religion. Instead, as hypothesized, we found that only 4.2% of all psychology dissertations written during this period contained any type of religious variable. This 4.2% represents 625 dissertations out of a total of 14,949 written between 1983 and 1987. These 625 were further analyzed to find which ones studied religion as a "core" variable, that is, those which used some aspect of religion as a predictor or independent variable. These core dissertations made up 212 or just 1.4 % of all psychology dissertations written between 1983 and 1987 (See Table 3).

These percentages are consistent with values found in similar systematic reviews of the literature as reported in chapter two. In one of these reviews, Larson, Pattison, Blazer, Omran, and Kaplan (1986) distinguished between articles that used religion in a major way and those that used religion in an incidental way. Fewer than 1% of the articles they surveyed included religion as a major emphasis of the study.

Hypothesis 2: Well-Being

In addition to investigating the number of dissertations dealing with religion, we analyzed how the studies were conducted. We found that the 212 core dissertations could be divided into two main categories: quantitative (N=141) and qualitative (N=71). Furthermore, each category could be divided into two subtypes: quantitative lean (N=45) and quantitative-rich (N=96), and qualitative phenomenological (N = 44) and qualitative theoretical (N=27). Chapter three (Methodology) defines these types of studies.

As hypothesized, religion had a significantly positive impact across all the types of studies (see Table 4). Of the 174 studies that studied some aspect of well-being, 99 or 57% showed religion as having a positive impact. Only 16 or 9% showed religion to have a negative impact, while 59 or 30% found religion to have a mixed or neutral impact. Most of the studies cited in the systematic review of the literature in chapter two also showed religion as having a primarily positive impact. Our results, however, showed a larger positive impact (57%) than was found by the other authors, such as the 47% of positive studies found by Bergin in 1983. The variables "well-being" and "impact of religion" were measured using inter-rater reliability. Perhaps a larger sample size and a more sophisticated meta-analysis of well-being would lead to different percentages. At any rate, the finding that religion has a positive impact on well-being,

regardless of how it is studied, reinforces the conjecture made earlier that religion is under-studied.

While the lean/rich distinction did not bear fruit (see Table 10), the quantitative/qualitative distinction did. We found that the qualitative studies (phenomenological and theoretical dissertations) produced significantly more positive outcomes than did the quantitative studies (see Table 14).

Hypothesis 3: Institutional Characteristics

The third hypothesis, which investigated the characteristics of the schools where the dissertations were written, was perhaps the most important. We found that fewer than 2% of all dissertations written between 1983 and 1987 treated religion as a core variable. Furthermore, these core dissertations were written at only 82 schools, or just 20% of all psychology doctoral programs. This means that 80% of psychology doctoral programs produced no dissertations about religion in our five-year period. Of these 82 schools, 9 were classified as religious institutions, meaning that students and faculty professed certain religious beliefs and there was some religious ideas were expressed in the classroom. The other 73 were classified as secular. While some of the secular institutions may have had religious origins, they do not admit students or hire faculty on the basis of religious belief.

As we hypothesized, dissertations written from religious schools did produce significantly more dissertations with religion showing a positive

impact than those written from secular schools (see Table 17).

Dissertations from religious schools were significantly more likely than those from secular schools to show positive results (64% versus 50%) as opposed to non-positive (i.e. negative or mixed results (31% versus 50%).

Hypothesis 4: The Five Content Areas

After determining how and where religion was studied, we adapted five of the dimensions proposed by King and Hunt (1972). We discovered that "creedal assent" was the dimension most studied (24.9%), followed by "devotionalism" (23.9%), "orientation toward religion" (23.3%), "congregational involvement" (18.4%) and, lastly, "religious knowledge" (9.4%). As hypothesized, we found that with the exception of religious knowledge, the content areas are studied fairly equally (see Table 23). It was also found that the five content areas are fairly independent of one another and are therefore distinct categories (Table 24).

Hypothesis 5: Postgraduate Commitment to Research

The last hypothesis, regarding the current research and occupational trends of a sample of 50 graduates, led to some interesting findings. As hypothesized, we found that those who wrote qualitative dissertations reported a significantly higher degree of enjoyment than did those who used quantitative methodologies (Tables 26 and 27).

The other parts of Hypothesis 5 were not confirmed primarily because of the low frequency of subsequent publications of the subjects who were interviewed. Out of the 50 graduates polled, only 17 have published

anything in the four to nine years since graduation. Of these 17, seven have published only one article. Porter, Chubin, Rossini, Boekmann and Connolly (1982) found that after polling 102 psychology Ph.D. recipients from 1970-1977, the mean number of publications per person was 6.15 and the median was 2.60. However, Porter et al. (1982) also found that 22% of their sample accounted for 82% of the publications. Our sample revealed a mean number of only 1.16 per person, with a median of zero! Since few dissertation authors have published even a dissertation article, it is not surprising that few responded that they believed their dissertation made a contribution to psychology's understanding of religion. Also, most of our sample is not involved with research. Pion (1991) found by polling 5,000 recent psychology doctoral graduates that 60% were involved with research, 64% with human services, 18% were in other applied psychology, 61% were in educational activities, 53% were in administration, and 26% listed "other" activities. (Individuals could choose multiple categories).

Again, our sample differed from Pion's. Among our 50 interviewed graduates, 32 responded that they were in private practice, two were program directors, six were in teaching, six worked in hospital settings, one was in industry, one was a clergyman and one was not currently employed (by choice). Only 13% of those polled said they did research more than 10% of the time. Most said they spent no time at all in research.

DISCUSSION

Given the fact that fewer than 20% of doctoral programs have produced a core dissertation and that less than 2% of all U. S. psychology dissertations study religion as a core variable, we can conclude that religion is under-studied among psychologists. In order to quantify this conclusion, a future study could compare the percentage of dissertations dealing with religion to the percentage of dissertations studying other issues, such as the effect of psychotherapy on well-being or the effectiveness of drug-rehabilitation programs, to see if religion is more under-studied than other phenomena. This study found neither an increase nor a decrease in the percentage of psychology dissertations which study religion from 1983 to 1987. Another study could extend the dates back to 1980 and forward through 1992 to see if there are any long-range (12-year) trends. A future study could also select a random sample of current dissertations and rank-order the subject of study to gain an understanding of current topics of interest.

Contrary to what was hypothesized, the quantitative-rich studies did not show religion as having a more positive impact than any other type of study. The quantitative-lean/quantitative-rich distinction was original with this study. This distinction helped to differentiate the more simple techniques of measuring religion (lean) from the more complex (rich). However, chi-square analysis and multiple regression showed that the

lean/rich distinction, as currently conceptualized, does not predict outcome of religion. Future researchers may refine the construct by devising other components which will act more independently of one another and measure outcome more effectively.

There could be several reasons why qualitative dissertations produced more positive and fewer mixed/negative outcomes. Future research could investigate whether the personal and spiritual nature of religion lends itself to more phenomenological modes of research. Historically, one reason that psychology lost interest in religion was that religious phenomena were considered difficult to measure and quantify. Is psychology now well enough established that it can begin to let go of reductionistic explanations of human experience? It may be found that many other phenomena (not only religion) could best be studied qualitatively.

Another explanation for why there are fewer mixed results among qualitative studies is that in qualitative research the subject or researcher has more freedom to express personal judgments. Using phenomenological techniques, a researcher, for example, may ask subjects about the effect religious belief has had on dealing with suffering. Subjects may report that without faith life would have lost meaning and that faith was the only thing that got them through their crises. After numerous interviews with similar results, one researcher may conclude that faith is a very valuable trait in getting through a crisis. Another researcher may conclude that faith leads

to denial and keeps people from working through the necessary steps of grief or anger.

Several of the graduates polled who wrote quantitative dissertations reported that they were required to do a statistical analysis, but would have preferred a qualitative approach. Most institutions require dissertation authors to demonstrate quantitative research skills. Few doctoral programs teach students how to do sophisticated phenomenological research. Many authors reported in their interviews that phenomenological research methodologies were not taught in research classes. In designing this study, dissertations were classified as quantitative if *any* statistical tests are used. Therefore, dissertations (such as this one) which employed *both* quantitative and qualitative methodologies were classified quantitative. Perhaps a future study could separate research into three groupings: quantitative, qualitative, and mixed. We may find that a combination-approach, rather than polarizing the two techniques, yields the most fruitful findings for the psychological study of religion as well as for other topics. Perhaps it is time for doctoral programs and psychology as a field to give more exposure to religion and allow a greater freedom in research methodology as long as certain agreed-upon research standards are met.

Appendix E lists the names of the 151 schools that produced dissertations containing any religious variable as well as the 82 schools which produced core dissertations. Future researchers may wish to focus on the schools that are surprisingly absent from that list. For instance,

Georgetown University, while it is classified "secular," was founded by and continues to have close ties to the Catholic Church; yet it reported no core dissertations. Princeton University, founded by the Presbyterian Church, still maintains an active seminary; however, it has not produced any core or incidental dissertations in the period studied. One reason for this may be that these schools may admit very few students per year, while others present on our list admit much higher numbers. For instance, Georgetown University only admitted two doctoral students in psychology in 1988-1989. On the other hand, one of the schools with the greatest number of dissertations, the United States International University, which produced 17 incidental and 12 core studies, admitted 59 students during the same period. Other schools may emphasize experimental, biological, or industrial psychology. Therefore, students interested in religion may not seek admission. Future research may wish to "equalize" the numbers better by determining what percentage of a particular school's dissertations deal with religion. For example, a religious school such as Western Conservative Baptist Seminary, while producing fewer dissertations than United States International University, most likely produces a greater percentage of core religious dissertations.

Future research may take a much closer look at content area. For instance, within "creedal assent," did dissertations primarily study Christianity, Judaism, Islam, or some other religion? Within the "devotionalism" category, are studies primarily interested in prayer and

meditation or does devotionism include Scripture study and journal writing? What are the various instruments which measure "orientation toward religion?" Such investigations would shed more light on the function of religion in peoples' lives and how people are either enriched or hindered by various practices and beliefs.

Based upon our small sample, we tentatively conclude that those people who study religion as a core variable choose private practice more often than other graduates. They also published less frequently than the average psychology graduate. These conclusions could lead to further research which asks whether psychologists who study religion differ from psychologists in general. Are they more "person-centered?" Do they charge lower fees? Are they more represented in marriage and family counseling? Do they get most of their referrals from clergy? Do they have lower divorce rates?

Certainly, if the study of religion is to gain more respect within the psychology discipline, researchers need to take seriously the task of developing it as a legitimate, respectable, and practical area of study (Collins 1986). This means that graduates need to be motivated and encouraged by their faculty and colleagues to publish in the professional journals. The journals, for their part, we hope will begin to re-examine their traditional preference for statistically oriented articles and consider including more phenomenological studies, which may shed more light on the complex nature of religion in human life.

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APPENDIXES

Appendix A**Religious Descriptors**

Agnostic	Meditation
Asceticism	Ministers
Atheism	Missionaries
Bible	Mysticism
Buddhism	Nuns
Catholic	Pastoral Counseling
Catholicism	Prayer
Chaplains	Priests
Christianity	Religion
Clergy	Religiosity
Confession	Religious
Cults	Protestantism
Evangelical	Occultism
Faith Healing	Rabbi
Fundamentalism	Rites
Glossolalia	Rituals
God	Seminarians
Hinduism	Shamanism
Islam	Yoga
Judaism	Zen Buddhism

Appendix B

Incidental Studies

Incidental studies are those studies in which a religious descriptor was used (see Appendix A), but religion was not a primary focus of the study. Although the 413 incidental studies were not used in later research, a brief analysis of them was done. These incidental studies were divided into three levels. The first level contains only 10 items and is called the "reference only" group. In these cases, the author did not provide Dissertation Abstracts with an abstract. The reference contains the author's name, the dissertation title, school, degree earned and completion date, but no abstract.

The second level contains 98 studies that we termed "rich incidentals." In this level, a religious term is included in the title, yet some other variable is the focus of the study. Religion serves as the context for the study. For example, in the study titled, "Authority versus Power; Preference for Control among Selected Church Structures," by Raymond L. Houk (1984), the author studied between-group preferences for hierarchical control, using ministers from a variety of churches as his sample. In another, "Persistence Factors in Vocational Choice (Roman Catholic Sisters)" by Patricia L. Watson (1985), the author was correlating MMPI and SCII scores with the choice to stay in or leave religious orders.

The study uses vocational choice rather than religion as the independent variable.

The “rich incidentals” are qualitatively different from the “lean incidentals,” the third level where religion is a very peripheral variable. This level, where a religious term is included in the abstract, but not the title of the dissertation, contains 305 studies. Religion, therefore, is one of many dependent variables included in the study. This level contains 305 studies. An example is “Adolescents' involvement with alcohol: A cross-sectional study” by Kristen J. Kemp, 1986. Kemp looked at factors that determine adolescent drinking behavior:

The selected variables included self-esteem, tolerance of deviance, independence/achievement value discrepancy, importance of religion, parent modeling of drinking behavior, parent approval of drinking, peer modeling of drinking, family cohesiveness, school performance and general deviant behavior.

Appendix C

Interview Questions

1. Was doing your dissertation enjoyable? (a) very unenjoyable (b) unenjoyable, (c) neutral, (d) enjoyable or (e) very enjoyable. Explain.
2. Do you believe that the findings of your dissertation contributed to psychology's understanding of religion? (a) strongly disagree, (b) disagree, (c) neutral, (d) agree, (e) strongly agree. Explain.
3. Did your department encourage students who expressed a desire to write a religious dissertation? (a) for the most part, yes, (b) for the most part, no.
4. Relevance of research training to present occupation: (a) relevant, (b) irrelevant, (c) neutral.
5. Are you primarily employed in a religiously or nonreligiously oriented career? (a dichotomous variable).
6. Number of publications since graduation (a continuous variable).
7. Number of religiously-oriented publications (a continuous variable).
8. Number of nonreligiously oriented publications (a continuous variable).
9. Percent of time spent in religiously-oriented research over the past two years (4 categories: (a) 0-10%, (b) 11-25%, (c)

26-50%, (d) over 50%).

10. Percent of time spent in nonreligiously-oriented research over the past two years (4 categories: (a) 0-10%, (b) 11-25%, (c) 26-50%. (d) over 50%).

11. Reasons for doing research: does present occupation, (a) require research, (b) encourage, but not require research, (c) discourage time spent on research?

Appendix D
Inter-Rater Reliability

Inter-rater reliability was calculated for each of seven variables which involved some subjective evaluations on our part. Training continued until all seven of these variables met a minimal criterion of a reliability coefficient = .75. These variables were: variable 1 (level of measurement), variable 2 (univariate versus multivariate), variable 3 (discrete versus continuous), variable 4 (domain), variable 5 (well-being), variable 6 (impact of religion), and variable 9 (content area). Inter-rater reliability coefficients are shown in Table 1 (chapter four).

Two persons carried out the inter-rater reliability phase. There were three stages involved in establishing a satisfactory inter-rater reliability. The first was the "training stage." Both raters scored a sample of 40 abstracts according to the descriptions. During this training stage correlations were not made, but discrepancies were discussed, yielding a consensus concerning how each abstract was to be scored.

The second stage was the "testing stage," where both raters repeated the same procedure with 40 additional abstracts. During this stage the "phi coefficient" (Hays 1963, p. 604) was computed for each of the seven variables.

The phi coefficient only applies to a choice between two alternatives.

When a variable had more than two alternatives, such as variable 1 (type of study) which has four types (lean, rich, phenomenological, and theoretical), the following procedure was adopted: for each type (e. g. "lean"), the data were collapsed into two categories (e.g. lean versus all others). The phi coefficient was then computed on this pair to determine how well the two raters agreed. The same process was repeated for each of the four types for variable 1. Coefficients for this stage were computed but not reported.

During the final stage, the raters scored a third set of 40 abstracts. Inter-rater reliability phi coefficients for this stage only are shown in Table 1 (chapter four).

Appendix E
Institution Names, Orientation, and
Frequencies of Dissertations

<u>ID</u>	<u>Institution</u>	<u>Incidental</u>	<u>Core</u>
0003	The University of Akron	1	0
0004	The University of Alabama	1	0
0010	Arizona State University	1	0
0011	University of Arkansas	2	0
0016	Boston College	2	0
0017	Boston University **	15	14
0018	Bowling Green State University	4	2
0022	Brigham Young University	1	0
0025	Bryn Mawr College	1	0
0028	University of California, Berkeley	2	0
0029	University of California, Davis	2	0
0030	University of California, Irvine	1	1
0032	University of California, Riverside	1	0
0036	University of California, Santa Cruz	1	0
0039	California School of Professional Psychology, Berkeley	9	4
0042	Case Western Reserve University	1	0

			261
0043	The Catholic University of America *	2	1
0044	University of Health Sciences/The Chicago Medical School	1	0
0045	University of Cincinnati	5	1
0046	City University of New York	6	3
0047	Claremont Graduate School	1	0
0051	University of Colorado at Boulder	2	0
0053	Colorado State University	2	0
0054	Columbia University	5	0
0055	Columbia University Teachers' College	1	1
0056	The University of Connecticut	2	0
0058	Cornell University	1	0
0061	University of Denver	3	1
0063	University of Detroit	2	0
0064	Drew University *	4	3
0066	Duke University	1	0
0067	Duquesne University *	0	1
0068	California School of Professional Psychology, Los Angeles	9	5
0070	The University of Florida	2	0
0071	The Florida State University	1	1
0072	Fordham University *	3	1

0074	George Peabody College for Teachers of Vanderbilt University	4	262 2
0075	The George Washington University	0	1
0077	University of Georgia	0	2
0080	Graduate Theological Union **	1	3
0084	Harvard University *	4	2
0085	University of Hawaii	0	1
0086	Hofstra University	4	3
0090	University of Illinois at Urbana- Champaign	2	0
0093	Indiana University	1	0
0094	Indiana State University	1	0
0096	The University of Iowa	1	0
0097	Iowa State University	1	2
0099	University of Kansas	1	1
0100	Kansas State University	1	0
0101	Kent State University	1	0
0103	East Texas State University	1	0
0107	The Louisiana State University and Agricultural and Mechanical College	2	1
0112	Loyola University of Chicago *	4	2
0113	University of Maine	2	0
0116	Marquette University *	2	1

			263
0117	University of Maryland, College Park	5	3
0118	University of Massachusetts	4	0
0124	Memphis State University	0	1
0125	University of Miami	1	0
0126	Miami University	0	1
0127	The University of Michigan	9	3
0128	Michigan State University	4	0
0130	University of Minnesota	2	1
0133	University of Missouri--Columbia	5	0
0134	University of Missouri--Kansas City	4	0
0138	The University of Nebraska, Lincoln	2	1
0139	University of Nevada, Reno	1	1
0142	The University of New Mexico	1	0
0144	New Orleans Baptist Theological Seminary **	5	2
0145	New School for Social Research	2	1
0146	New York University	7	3
0147	Georgia State University College of Arts and Sciences	5	1
0150	University of Dallas	2	1
0153	University of North Carolina at Chapel Hill	2	0

			264
0155	North Carolina State University at Raleigh	2	0
0156	The University of North Dakota	2	1
0158	North Texas State University	2	3
0161	University of Northern Colorado	3	1
0162	Northern Illinois University	1	0
0163	Northwestern University	1	2
0166	University of North Dakota	1	0
0167	Ohio University	1	0
0168	Ohio State University	7	1
0171	University of Oregon	2	1
0175	University of Pennsylvania	1	1
0176	Pennsylvania State University	4	0
0178	University of Pittsburgh	3	1
0183	Purdue University	3	0
0190	Rutgers, The State University of New Jersey, New Brunswick	1	0
0192	St. John's University *	5	1
0193	Saint Louis University	1	3
0198	Long Island University, The Brooklyn Center	1	0
0202	University of South Carolina	1	0
0203	University of South Dakota	0	1

			265
0207	The Southern Baptist Theological Seminary	2	0
0208	University of Southern California	3	1
0209	Southern Illinois University at Carbondale	0	1
0211	The University of Southern Mississippi	0	1
0225	Temple University	9	0
0226	The University of Tennessee	3	0
0227	The University of Texas at Austin	0	3
0230	Texas Tech University	3	1
0231	School of Theology at Claremont **	2	1
0239	United States International University	17	12
0240	The University of Utah	0	1
0241	Utah State University	1	0
0242	Vanderbilt University	1	0
0243	The University of Vermont and State Agricultural College	1	0
0247	Virginia Polytechnic Institute and State University	1	0
0250	University of Washington	1	1
0251	Washington State University	1	0
0252	Washington University	1	0
0253	The Wright Institute	5	2
0254	Wayne State University	2	1

			266
0257	Western Michigan University	0	1
0262	The University of Wisconsin--Madison	4	0
0263	The University of Wisconsin--Milwaukee	0	1
0264	University of Wyoming	1	0
0265	Yale University	1	0
0266	Yeshiva University *	4	2
0345	Southwestern Baptist Theological ** Seminary	0	2
0369	Biola University, Rosemead Graduate School of Professional Psychology **	10	15
0371	Fuller Theological Seminary, School of Psychology **	9	24
0379	California School of Professional Psychology, San Diego	3	1
0387	Drake University	0	1
0392	California Institute of Integral Studies	12	3
0393	Lancaster Theological Seminary **	0	1
0441	Texas Southern University	1	0
0443	Andrews University	2	0
0444	California School of Professional Psychology, Fresno	6	4
0473	Florida Institute of Technology	0	1

			267
0483	Pace University	1	0
0492	Western Conservative Baptist Seminary **	12	13
0542	Rutgers University The State University of New Jersey, G. S. A. P. P.	1	2
0557	The Union Institute	23	9
0565	The Fielding Institute	4	2
0621	Pacific Graduate School of Psychology	1	0
0656	State University of New York at Buffalo	4	0
0664	Oklahoma State University	4	0
0761	The University of Texas Health Science Center at Dallas	1	1
0795	Saybrook Institute	6	2
0825	Texas Woman's University	4	3
0829	Nova University School of Professional Psychology	1	0
0830	Adelphi University, The Institute of Advanced Psychological Studies	6	2
0840	Tennessee State University	1	0
0851	Boston University School of Education	1	0
0869	Seaton Hall University, School of Education *	1	1
0960	Antioch University/New England Graduate School	1	0

1024	Georgia State University--College of Education	1	268 0
2383	Virginia Commonwealth University	0	1
Total Dissertations		413	212

Data for Core Institutions Only:

* Religious Origin Only

** Religious Origin and Orientation

Appendix F**Directory of Student Names,****Dissertation Titles and School Codes**

(Names of students interviewed are in CAPITALS).

1. Abels, Doris H., Mind Bondage: A Qualitative Analysis of Cult Conversion Environments, 0017.
2. Acklin, Marvin, W., An Ego Developmental Study of Religious Cognition, 0147.
3. ANDERSON, JEFFREY M., Church and Community: Type and Degree of Involvement as a Function of Person and Setting Variables, 0227.
4. Anhalt, Matilda B., The Relationship Between the Jewish Sabbath and Stress as a Function of Personality Type, 0086.

5. Appel, Sue, Breaking the Cultural Trance (Shamanism), 0557.
6. Armstrong, James P., The Holistic Depth Psychology of Ira Progoff, 0112.
7. ASH, STEPHEN M., Cult Induced Psychopathology: A Critical Review of Presuppositions, Conversion, Clinical Picture and Thought, 0369.
8. Atkinson, Bruce E., Religious Maturity and Psychological Distress Among Older Christian Women, 0371.
9. AUGSBURGER, STANLEY W., The Church as a Change Agent for the Male Homosexual: Etiology, Intervention and Change, 0369.
10. BAKER, MARK W., Anxiety and Values: Anxiety as Caused by the Frustration of a Major Value -- Religion, 0371.
11. Baxter, John D., Divorce Adjustment Among Church of Christ Members: A Survey of Selected Factors Including Perceptions of the Church as a Support System, 0074.

12. BEERY, WILLIAM S., Multi-Occupational Protestant Clergy: A Test of Holland's Theory, 0146.
13. BELGRAVE, JEFFREY D. The Impact of Psychoanalysis on Some Traditional Christian Moral Values, 0046.
14. Bethel, Fereshteh, T., A Psychological Theory of Martyrdom: A Content Analysis of Personal Documents of Baha'i Martyrs of Iran Written Between 1979 and 1982, 0239.
15. BILLINGTON, LIA, Psychotherapy Outcome as a Function of Client-Therapist Values, Relationships and Client Values Change, 0371.
16. Blackmon, Richard A., The Hazards of the Ministry, 0371.
17. Bradford, David T., The Experience of God: Portraits in the Phenomenological Psychopathology of Schizophrenia, 0444.
18. Brittell, Lois E., The Development and Evaluation of Scales Measuring Word Orientation and Spirit Orientation in Christians, 0369.

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