



21695970



This is to certify that the

thesis entitled

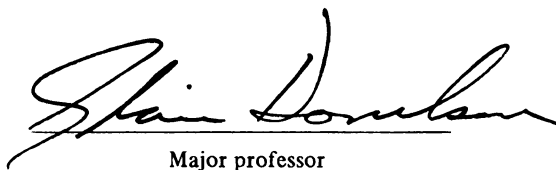
RELIGIOSITY AND ITS FRUITS: DIFFERENCES IN  
TRAIT ANXIETY AND EXPERIENCES OF HASSLES

presented by

Marita D. Bernardo

has been accepted towards fulfillment  
of the requirements for

M.A. degree in Psychology

  
Major professor

Date July 14, 1988



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

JUN 20 2007  
151

RELIGIOSITY AND ITS FRUITS: DIFFERENCES IN  
TRAIT ANXIETY AND EXPERIENCES OF HASSLES

By

Marita D. Bernardo

A THESIS

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

MASTER OF ARTS

Department of Psychology

1988



5354687

ABSTRACT

RELIGIOSITY AND ITS FRUITS: DIFFERENCES IN  
TRAIT ANXIETY AND EXPERIENCES OF HASSLES

By

Marita D. Bernardo

This study investigated the relationship between religiosity, trait anxiety and experiences of hassles. One hundred sixty-three college students answered a set of questionnaires including Ellison's Spiritual Well-Being Scale (with the subscales Religious Well-Being and Existential Well-Being), and Spiritual Maturity Index, the trait anxiety subscale of Spielberger's State-Trait Anxiety Inventory, and Kanner, et al.'s Hassles Scale. Correlational analysis showed that religious well-being and spiritual maturity are inversely related to trait anxiety, and to the frequency and intensity of reported hassles. Partial correlational analysis showed that religious well-being and spiritual maturity were directly related to intensity, but not to frequency of hassles. Religion's existential function was evident in the correspondence between high religiosity scores and high Existential Well-Being scores. It was this existential aspect of religiosity that was directly related to trait anxiety. Also included in this study are descriptive analyses of religious behaviors, social sources of support, and gender differences in reported hassles.

To all those living their religion, bearing good fruit.

## ACKNOWLEDGMENTS

I would like to thank the members of my committee, for their graciousness and support, for being very giving of their time, and most of all, for helping make this project an enjoyable endeavor. I appreciate their individual contributions:

Dr. Ralph Levine, whose suggestions and comments on statistical analyses helped make the numbers come alive.

Dr. Ellen Strommen, whose detailed comments and questions on an earlier draft made me rethink and clarify conceptual issues.

Dr. Elaine Donelson, for her patience in reading revisions of revisions. Her thoroughness has improved each one. I thank her also for her generosity with her time and resources. And I thank her especially for giving me the freedom to make this project my own.

I would like to thank a friend, Merlinda Ingco, for sharing her computer, and especially her computer skills.

I thank the Department of Psychology for providing much needed financial support.

And lastly, I express my gratitude to the following churches and organizations who graciously opened their doors to this researcher: His House East Fellowship, People's Church, River Terrace Christian Reformed Church, University Baptist, University Reformed Church, University Seventh-day Adventist Church, and University United Methodist Church.

# TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vii
LIST OF FIGURES . . . . .	ix
INTRODUCTION . . . . .	1
Correlates of Life Stress . . . . .	1
Definition of Religiosity . . . . .	3
Religiosity and its Correlates: Review of the Literature	4
Purpose of the Study . . . . .	11
Description of Instruments . . . . .	12
Summary of Hypotheses . . . . .	16
METHODOLOGY . . . . .	18
Research Participants . . . . .	18
Materials . . . . .	19
Procedure . . . . .	20
RESULTS . . . . .	24
Analyses of Hypotheses . . . . .	24
Hypothesis 1 . . . . .	24
Hypothesis 2 . . . . .	26
Hypothesis 3a . . . . .	30
Hypothesis 3b . . . . .	37
Hypothesis 4 . . . . .	37
Hypothesis 5 . . . . .	39
Hypothesis 6 . . . . .	39
Other Findings . . . . .	43
Religious Behaviors . . . . .	44
Value of Single-Item Measures of Religiosity . . .	46
Comparing Data of Participants from Subject Pool and	
Religious Groups . . . . .	48
Role of Existential Well-being in the Religiosity-	
Trait-anxiety Relationship . . . . .	59
Sources of Support and Their Rankings . . . . .	60
Hassles Most Frequently Mentioned . . . . .	60

	Page
DISCUSSION . . . . .	69
Gender Differences . . . . .	69
Trait-anxiety, Religiosity, and Hassles . . . . .	71
Religiosity and Religious Behaviors . . . . .	77
Comparison of Participants from Subject Pool and from Religious Groups . . . . .	79
CONCLUSIONS . . . . .	81
APPENDICES . . . . .	85
Appendix A: Spiritual Well-Being Scale . . . . .	85
Appendix B: Spiritual Maturity Index . . . . .	87
Appendix C: Hassles Scale . . . . .	89
Appendix D: Additional Questions to the Hassles Scale . . . . .	93
Appendix E: Reference for State-Trait Anxiety Index . . . . .	96
Appendix F: Demographic and Religious Activity Questionnaire . . . . .	97
Appendix G: Permission to use RWB and SMI . . . . .	99
Appendix H: Letter to heads of churches and religious organizations . . . . .	100
Appendix I: Cover letter . . . . .	101
Appendix J: Instructions . . . . .	102
Appendix K: Consent Form . . . . .	103
Appendix L: Feedback Sheet . . . . .	104
BIBLIOGRAPHY . . . . .	105

# LIST OF TABLES

TABLE		Page
1	Class level of research participants . . . . .	18
2	Reliability coefficients for RWB, SMI, EWB, STAI, Hassles Scale. . . . .	20
3	t-test of mean scores of males and females on the variables: Age, Hassles Frequency, Hassles Intensity, RWB, SMI, STAI .	25
4	Zero-order correlations between sex, age, STAI, Hassles Frequency . . . . .	26
5	Zero-order correlations between sex, age, STAI, Hassles Frequency, Hassles Intensity, STAI, EWB . . . . .	27
6	Partial correlations between religiosity, anxiety and stress variables . . . . .	28
7	Zero-order correlations between RWB, SMI, Responsibility over Occurrence, Responsibility over Outcome, Control over Occurrence, Control over Outcome . . . . .	32
8	Comparison of $r^2$ and $\eta^2$ between the religiosity measures, RWB and SMI, and Responsibility over Occurrence, Responsibility over Outcome, Control over Occurrence, and Control over Outcome . . . . .	33
9	RWB mean scores according to no vs. moderate vs. strong Responsibility over Occurrence, Responsibility over Outcome, Control over Occurrence, Control over Outcome . . . . .	34
10	SMI mean scores according to no vs. moderate vs. strong Responsibility over Occurrence, Responsibility over Outcome, Control over Occurrence, Control over Outcome . . . . .	34
11	Analysis of pair-wise contrasts in RWB and SMI scores of participants reporting no vs. moderate vs. strong Responsibility over Occurrences of hassles . . . . .	36
12	Zero-order correlations between STAI and "Responsibility over Occurrence", "Responsibility over Outcome", "Control over Occurrence", "Control over Outcome" . . . . .	37

TABLE		Page
13	t-test of mean RWB and SMI scores between subjects reporting help-seeking vs. no help-seeking behavior . . .	38
14	t-tests of mean RWB and SMI scores between subjects who perceived positive outcomes and those who did not perceive positive outcomes from negative events . . . . .	40
15	Church affiliation . . . . .	44
16	Frequency of church attendance while in college . . . . .	45
17	Self-ratings of religiosity . . . . .	45
18	Responses to "How important is God in your life?" . . .	46
19	Zero-order correlations between frequency of church attendance, church membership, self-religiosity, importance of God, renewed faith, RWB, SMI . . . . .	47
20	t-test analysis of mean scores of participants from subject pool and religious groups on: RWB, SMI, EWB, Hassles Intensity, Hassles Frequency, STAI . . . . .	49
21	Correlations between RWB, SMI, Hassles Frequency, Hassles Intensity, STAI, EWB (Subject Pool, N=110) . . . . .	51
22	Correlations between RWB, SMI, Hassles Frequency, Hassles Intensity, STAI, EWB (Religious Groups, N=53) . . . . .	52
23	Variability of RWB and SMI scores of subject-pool and religious group participants . . . . .	58
24	Partial rrelations between RWB, SMI, EWB, STAI . . . . .	59
25	Responses to "Which source(s) did you approach for help/ advice/support?" . . . . .	61
26	Responses to "Which source(s) contributed to the outcome of these events? (If more than one, please rank according to most important) . . . . .	62
27	Top ten hassles reported by participants and percentage of subjects reporting occurrence of each . . . . .	64
28	Top 10 hassles reported by men, and percentage of subjects reporting occurrence of each . . . . .	65
29	Top 10 hassles reported by women, and percentage of subjects reporting occurrence of each . . . . .	66
30	Means and standard deviations of Hassles Frequency and Hassles Intensity Scores of Kanner's subjects, by age, and of the current study's college sample . . . . .	67

# LIST OF FIGURES

FIGURE		Page
1	Distribution of RWB with EWB scores (Total Sample) . . .	41
2	Distribution of SMI with EWB scores (Total Sample) . . .	42
3	Distribution of RWB with EWB scores (Subject Pool only) .	53
4	Distribution of SMI with EWB scores (Subject Pool only) .	54
5	Distribution of RWB with EWB scores (Participants from religious groups only). . . . .	55
6	Distribution of SMI with EWB scores (Participants from religious groups only). . . . .	56



## INTRODUCTION

Early in the history of psychology, the psychology of religion was alive and thriving. One of its major contributors, William James (1902) emphasized that religion can be known by the "fruits" rather than the "roots" of religious experience.

This study attempted to examine some possible "fruits" of the religious experience. A personality factor, anxiety, and experiences of "hassles" are two factors that this researcher hypothesized to be related to religiosity.

The relationship between religiosity, anxiety, and experiences of hassles was of particular interest because of their contributions to psychological well-being. Existing literature have much to say about each.

### Correlates of Life Stress

High degrees of life stress may adversely affect the physiological and psychological functioning of an individual. For example, Lustman, Sowa and O'Hara (1984) have shown that highly stressed college students reported significantly greater levels of anxiety, depression and somatic discomfort. Other studies have related symptoms of psychological disorders with high life stress. Chattopadhyay and Das (1983) showed that neurotics compared to normals had higher stress scores. Some disorders have been directly attributed to experience of stressful life events (Cooke & Hole, 1983). Eckenrode (1984) suggested that

major life events may influence psychological health status by altering patterns of daily living.

Physical health seems to be affected as well by stress. Life event stress was found to be related to physical illness (Duckitt & Broll, 1982). Lustman, Sowa and O'Hara (1984) found that highly stressed college students reported greater somatic discomfort. These effects may be due to the influence of stress on neurochemical, hormonal, and immunological functioning (Sklar & Anisman, 1981).

Most of the studies mentioned above defined stress according to the experience of significant life events. It was not life events by themselves, but the perception of them as either positive or negative, that was related to stress (Sarason, Johnson & Siegel, 1978). Life events perceived as negative were found to be related to psychological disorders (Nelson & Cohen, 1983), symptoms and physician visits (Byrne, 1983; McFarlane, Norman & Streiner, 1983), and reports of distress (Zautra & Reich, 1983). Positive events on the other hand were associated with increases in psychological well-being (McFarlane, Norman & Streiner, 1983; Zautra & Reich, 1983).

Kanner, Coyne, Schaefer & Lazarus (1980) proposed that daily "hassles" are a better indicator of stress than are major life events. They defined hassles as the "irritating frustrating distressing demands that to some degree characterize everyday transactions with the environment." These "microstressors" acting cumulatively, and in the absence of compensatory positive experience, can be potent sources of stress (McLean, 1976). A person's ineffective coping with these minor stressors contribute to their negative impact on physical and mental health.

People differentially perceive certain experiences as "hassles." Trait anxiety has an effect on this perception. Spielberger (1983) defined trait anxiety as "relatively stable individual differences in anxiety-proneness, i.e. to differences between people in the tendency to perceive stressful situations as dangerous or threatening . . ." (p.1). Given this definition, then one would predict that a person high in trait anxiety would perceive stressful events more severely than those low in anxiety. Payne's (1983) study supported this relationship.

#### Definition of Religiosity

Religiosity, i.e., the importance of religion to an individual, may affect both anxiety and perception of hassles. Batson and Ventis (1982) defined religion as "whatever we as individuals do to come to grips personally with the questions that confront us because we are aware that we and others like us are alive and that we will die" (p.7). Religion then functions to provide answers to existential questions brought about by this awareness, such as who we are, and what are the meaning and purpose of our lives. The primary function of religion then is to provide answers to life.

James (1902) defined religion as the "feelings, acts and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine" (p.42). Although James's definition is more limited than Batson's and Ventis's in that it assumes belief in a god, or god-like figure, the definition to be made for this study also will emphasize a belief in a divine. Scholars may argue that religion is not equivalent, nor limited, to a belief in God. Batson's and Ventis's definition indeed indicates that there are other ways of understanding one's

existence other than through a belief in a deity. But it must also be true that a culture that has a personal awareness of a God of creation, whose norms have been shaped across generations either directly, or indirectly, by a belief in God, would very likely search for, and hopefully find answers to existential questions in this belief. In this culture, "religion" and "belief in God" are so closely linked that it would serve no useful purpose to make a distinction for people in this culture. It may not be "scholarly", but to most people, religion and belief in God are one and the same. With this premise in mind, I used in part James's definition to suit the predominantly Judeo-Christian beliefs of the participants in the study. Central to these beliefs is the belief in a personal God.

Therefore for the purposes of this study, religiosity is the extent to which one's perception of the self, and life itself, are affected by the individual's perceived relationship with a deity. A person high in religiosity would therefore behave and interpret experience according to what his or her relationship with God dictates. Because of this close relationship between a person's religiosity and how one feels and acts, logically a relationship between religiosity and psychological functioning must exist.

#### Religiosity and its Correlates: Review of the Literature

Argyle and Beit-Hallahmi (1975) proposed possible relationships between religiosity and mental health.:

1. religion contributes to psychopathology,
2. religion contributes to well-being, and
3. religion is used by disturbed people for help with their problems.

Various conceptions and empirical investigations support each of these possible relationships. Freud (1933) described the "neurosis" of religion, originating from the helplessness of children and "surviving into maturity of the wishes and needs of childhood" (p. 147). Ellis (1980) proposed turning away from religion as the solution to emotional problems.

Several empirical studies supported a general relationship between religion and psychopathology. Martin's and Nichols's (1962) summary of nearly a dozen studies of the 1950's showed religious believers as being emotionally distressed, conforming, rigid, prejudiced, unintelligent, and defensive. Rokeach (1960) described believers, compared to nonbelievers, as more tense, anxious, and symptomatic. Graff and Ladd (1971) described the less religious as being more self-accepting, more spontaneous, more inner-directed and less dependent than subjects with a high level of religiosity. Fehr and Heintzelman (1977) found a positive relationship between religious orthodoxy and authoritarianism.

Batson and Ventis (1982) surveyed 67 studies relating amount of religious involvement with different concepts of mental health. They found a negative relationship between religious involvement and three mental health concepts: personal competence and control, self-acceptance and actualization, and open-mindedness and flexibility.

However, there is also support for the second possible relationship, that religiosity contributes to well-being. Carl Jung asserted that among his thousands of patients in the second half of life (i.e. over 35 years), "there has not been one whose problem in the last resort was not that of finding a religious outlook in life" (1933, p.229).

Among the religiously committed, James (1902) has described a "new state of assurance", an "assurance of safety and a temper of peace, and in relation to others, a preponderance of loving affections." This new state of assurance allows the individual to deal more positively and effectively with a wider range of experiences and people.

Empirical studies supporting such a philosophical position are not lacking. The same review mentioned above (Batson & Ventis, 1982) found a positive relationship between religious involvement and absence of psychological illness. Stark (1971) found a negative relationship between religious involvement and mental illness, neurotic distrust, and psychic inadequacy.

Martin's (1984) study showed that religious involvement appeared to be effective as a deterrent to suicide. Participation in organized church activity decreased as psychological impairment increased (Lindenthal, Myers, Pepper & Stern, 1970). Two studies comparing religious versus nonreligious college students found that among males, the religious were significantly less depressed (Brown & Lowe, 1951), less schizophrenic and less psychopathically deviant (Mayo, Puryear & Richek, 1969) than the nonreligious.

And lastly, Lindenthal, et al.'s (1970) study supported the third possible relationship, that religion may be used by disturbed people for help with their problems. They found that as psychological impairment increased, subjects were more likely to turn to prayer.

These contradictory findings seem to stem from the differences in the psychological and religious measures used. Bergin (1983) has criticized how some designs already show a bias in the way they define religious phenomenon such that they "axiomatically preempt the possibility

of healthy religion." For example, in cases where measures of mental health include openmindedness and flexibility, one can see how strict adherence to one's faith as a religious measure can then negatively correlate with mental health.

Baker and Gorsuch (1982) and Baton and Ventis (1982) criticized simplistic definitions of religiosity that may result in an inaccurate measure of the concept. Church attendance, for example, has been used as a measure of religiosity. By itself, it is a poor measure. It is no assurance of anything religious. One's role as a religious person transcends mere participation in organized religious activity. As will be shown later, one basic conceptualization of spiritual maturity is the absence of the need for institutional structure to express one's faith.

A bias appears in studies using church attendance. Among four studies using attendance as a measure of religiosity, only one had a favorable implication: there was a positive correlation between "religious commitment" and junior and senior high school G.P.A. (Koubek, 1984). Two found a positive relationship between religiosity and psychological illness: fearfulness and anxiety (Wilson & Miller, 1968), and hysteria scale of the MMPI (Brown & Lowe, 1951). And although one study attributed decrease in church attendance to psychological impairment, this did not imply decrease in religiosity because more personal religious behaviors, such as praying, increased (Lindenthal et al., 1970).

Attendance alone may be misused as a measure of religiosity. For example, there are cultures where church attendance is deeply embedded within the sociocultural context. While we may expect the religious to be regular church attenders, the converse is not necessarily true. Among all church-goers, there may be a vast range of levels of

religiosity.

Subjects in religiosity studies have been categorized as believers versus nonbelievers, religious versus nonreligious. And yet religiosity is not an all-or-none concept. It is not a matter of whether one is or is not religious. Rather, it involves both a quantitative aspect, the "degree", and also a qualitative aspect, the form or kind of religiosity.

This researcher finds religiosity a very important factor that may affect how one reacts to stress. Religion undeniably constitutes some part of a person's identity since it has an existential function. In this study's definition, a relationship with a deity may affect how one interprets and acts out experience. Again, it is a matter of degree. In one extreme, a person may feel that there is no God, and behaves accordingly. In the other extreme, there is the person who lives around a central figure of a divine. One would expect therefore that such a belief would affect not only who we are, but "how" we are.

One such interesting relationship is that of anxiety and religion. Several studies have linked anxiety for the religious compared to the non-religious (Argyle & Beit-Hallahmi, 1975; Dittes, 1969; Rokeach, 1960; Wilson & Millera, 1968). On the other hand, other studies showed lowered anxiety for the religious (Entner, 1977; Tansey, 1976). Again, the problem of simplistic definitions of religiosity comes to mind. Oftentimes, several aspects of religiosity have been ignored. Aspects like firmness in beliefs, but differentiated from dogmatism, and the kind of religious orientation a person has, are very important factors related to religiosity.

The latter has been found to be an important distinction that





must be made when defining religiosity. Allport (1958) described two different orientations that vary according to function and centrality of religion in an individual's life. He classified religion into extrinsic and intrinsic orientations.

The extrinsically-oriented individual is one who:

" . . . uses religion for [his/her] own end . . . The embraced creed is lightly held or else selectively shaped to fit more primary needs . . . The extrinsic type turns to God, but without turning away from self. The person does not serve his religion; it is subordinated to serve him."

On the other hand, the intrinsically-motivated

" . . . find their central motive in religion. However strong their other needs, they are perceived as having less significance than their need to live in faithfulness to their religious commitment. They endeavor to internalize religious values and to follow them fully." (Allport & Ross, 1967)

One may be able to see such a difference in the practice of prayer. An intrinsically-oriented person will view prayer as an intrinsically worthwhile act. Thus, this individual prays consistently and continuously as a means of maintaining a close relationship with his or her God.

Prayer for an extrinsically-oriented person may instead function as a "self-serving technique for manipulating some practical result . . . In essence, God is treated as a cosmic Santa Claus" (Myers, 1978).

When investigators made such distinctions, then it became clearer why various studies have previously presented contradicting results. It was the intrinsic orientation that was positively related to mental health. Baker and Gorsuch (1982) and Sturgeon and Hamley (1979) found extrinsic religiousness to be positively correlated with trait anxiety. The inverse was true of intrinsic religiousness.

Batson's and Ventis's (1982) review of 36 studies that distinguished between intrinsic and extrinsic religious orientations likewise showed similar trends. There were positive correlations between intrinsic religiosity and freedom from worry and guilt, and personal competence and control. These two mental health measures were negatively related to extrinsic religiosity.

Gorsuch and Smith (1983) have found that the religious people were the "optimists" in their study. They found that religious individuals feel themselves more in control and able to achieve their desired outcomes by effort with the help of God. By combining personal initiative and divine responsibility, they saw good outcomes as more likely to occur than did the less religious people. Kahoe (1974) found intrinsic religious orientation to be positively related to internal locus of control, responsibility, and intrinsic motivation.

If a function of religion is providing answers to existential questions, religion may free an individual from worry. Knowing that God has a design for one's life may give a person direction and move one to increased personal initiative and effort. And this, accompanied by the knowledge that one is on a powerful deity's side and that God is on one's side, may be empowering.

One relationship, however, appeared paradoxical, that a belief in a deity that controls one's life actually fosters a sense of personal control. Meadow and Kahoe (1984) postulated that perhaps the "faith that God orders one's life may foster internal locus of control by helping one feel free from the effects of general external factors."

### Purpose of the Study

This brief review shows that there are relationships between religiosity, anxiety, and stress. It is the purpose of this study to investigate how these factors are related to one another. Religiosity and anxiety have been found to be correlated. Likewise, anxiety and life stress were found to be correlated. Could a relationship between religiosity and life stress be inferred? Do religiosity and anxiety have independent effects on the experience of hassles?

This study is primarily interested in the college population. The college years offers many experiences which a student may find quite stressful. Competition, a system of evaluations, living away from home for the first time, high costs of education are some potential stressors for the college student.

The religious experience may also change in college. Perhaps it is in college, where a child less directly influenced by parents may choose, for example, the kind of church or religious doctrines most personally suitable. It may also be in college where a person might experience a turning away from religion. Feldman (1969) and Ford (1960) have found that college students were less likely to endorse religious beliefs than are people of the same age who have not gone to college, although the students' attitudes after they have graduated and entered the "adult world" tend to become more orthodox and conservative.

Also pervasive in the literature, as seen in Batson's and Ventis's review (1982), is the finding that women are more involved in religion than men. Would this finding hold among these groups of college students?

In the current study, religiosity was measured in terms of religious well-being and spiritual maturity. Religious well-being is

considered the "vertical" dimension of the more general concept of spiritual well-being (Moberg, 1971). Spiritual well-being was defined by the National Interfaith Coalition on Aging (1975) as " . . . the affirmation of life in a relationship with God, self, community and environment that nurtures and celebrates wholeness." Religious well-being therefore is an individual's sense of well-being in relation to God.

The "horizontal" dimension of spiritual well-being refers to existential well-being, i.e. well-being derived from a sense of life purpose and satisfaction, with no reference to anything specifically theistically religious.

Although these two dimensions are distinct from each other, an overlap is possible. A person, for example, whose life is focused on a relationship with his or her God would find life purpose and satisfaction in this relationship. In this case, religious well-being and existential well-being would be strongly related.

#### Description of Instruments

The two subscales of the Spiritual Well-Being Scale (Ellison, 1983) were used (Appendix A). The Religious Well-Being (RWB) subscale was used as one measure of the independent variable, religiosity. This measure was not tied down to specific religious systems or denominations. It was intended, however, to be used for religions which conceive of a god in personal terms. The Existential Well-Being (EWB) subscale was used as a measure of a dependent variable, life satisfaction and sense of life purpose.

Both subscales have high reliability and validity (Ellison, 1983). According to the normative data, test-retest reliabilities for RWB and EWB respectively were  $r=.96$  and  $r=.86$ . Coefficient alphas were .87

and .78. In Ellison's sample, the RWB subscale highly correlated with Allport's intrinsic religious orientation ( $r=.79$ ,  $p$  less than .001). EWB had a high correlation with a Purpose in Life instrument ( $r=.68$ ,  $p$  less than .001).

Another instrument used as a measure of religiosity was Ellison and Paloutzian's Spiritual Maturity Index (SMI, Appendix B). This instrument was originally constructed for the use of Christian respondents (Ellison, 1983). The items were revised for this study such that all references to Christ or Christianity have been removed or altered to fit no particular belief systems. Still, as in the Spiritual Well-Being scale, it can only be used for religions with a concept of a personal god. The items retained represented seven basic conceptualizations of spiritual maturity out of Ellison's original 18:

1. does not need institutional structure nor social support  
(agreement) to maintain faith and practice,
2. religious beliefs/practices are a spontaneous and consistent  
part of everyday life,
3. not narrow-minded/dogmatic but has firm beliefs,
4. has definite purpose and goals for life that are spiritually  
focused,
5. has a close relationship with God/identity- service of God,
6. able to accept "negatives" of life as part of God's plan, and
7. perceives movement toward spiritual maturity.

Kanner, et al.'s (1980) Hassles Scale was used to measure life stress (Appendix C). This scale consisted of a list of 117 hassles generated using the areas of work, health, family, friends, the environment, practical considerations and chance occurrences as guidelines.

Each item was rated according to frequency of occurrence and severity. Three summary scores for each Hassles Scale were originally generated: frequency, cumulated severity, and intensity. The frequency score was the simple count of the number of items checked. Scores could range from 0-117. Intensity was the index of how strongly or intensely the average hassle was experienced:

Intensity = sum of severity rating/frequency, with each item checked as a hassle rated on a 1-3 severity scale (1=somewhat severe, 2=moderately severe, 3=extremely severe).

Cumulated severity was the sum of the severity rating for all hassles checked. Since this highly correlated with frequency, and was therefore redundant, Kanner, et al. recommended that this summary score not be used. Therefore, for this study, two measures of stress were used: Hassles Frequency (HSFreq) and Hassles Intensity (HSInt).

The Hassles Scale was used as a measure of stress rather than a life events scale. Kanner, et al. (1980) found hassles to be a more powerful predictor of mental illness than life events. They did a regression analysis of the contribution of these two factors to stress (as measured by the Hopkins Symptom Checklist). They found that not only were hassles a more powerful predictor of symptoms, but that life events did not add significantly to the first order correlation. This suggested that whatever variance in stress that was due to life events was already accounted for by effects of hassles. When the order was reversed and life events was used as the first predictor, they found that hassles still added significantly as the second step of the regression, and in most cases still accounted for more variance than life events. Monroe (1983) likewise gave support to this. He found that total

frequency of hassles was highly correlated with psychological symptoms.

Additional questions were added to the Hassles Scale (Appendix D). These questions dealt with assigning responsibility to and feeling of control over the hassles. Presence of support and possible later attitudes toward the events were also investigated. These questions were added to test the hypothesis that high religiosity is related to increased sense of responsibility and control over events, to relate later attitudes toward the hassles with one concept of spiritual maturity (i.e. of being able to accept "negatives" as part of God's plan), and to see if social support systems are inherent within religious contexts.

It is hypothesized that assuming responsibility and having the feeling of control over events would be positively related to religiosity and negatively related to anxiety. Highly religious people, confident of the personal help from their God would be more willing to be responsible for, and more likely to control their own lives. This sense of personal control combined with the help of a deity should lessen anxiety.

Sources of support were also investigated to see if they varied with differences in religiosity. Would there be differences in amount or availability, and sources of support? A highly religious person hypothesized to be low in anxiety and stress may be so because of a social support system inherent in certain religious groups.

And lastly, attitudes about hassles were assessed. For the hassles, or negative events, would individuals possibly see something positive about them? It is hypothesized that those high in religiosity would be more likely to see positive outcomes from initially negative events. They may see the negative events as all part of their God's "great plan."



The anxiety measure used was Spielberger, et al.'s (1983) State-Trait Anxiety Inventory (STAI, Appendix E). Only the "trait anxiety" subscale was used. Trait anxiety referred to

"relatively stable individual differences in anxiety proneness, i.e. to differences between people in the tendency to perceive stressful situations as dangerous or threatening and to respond to such situations with elevations in the intensity of their state anxiety reactions." (Spielberger, et al., 1983)

The state anxiety subscale was not used since it measures fluctuating reactions taking place at a given time.

### Summary of Hypotheses

In summary, the study primarily investigated probable relationships between religiosity, life stress and anxiety.

The following hypotheses were made:

1. There are gender differences in religiosity, with females scoring higher on the religiosity measures.
2. There is an inverse relationship between religiosity and
  - a. anxiety, and b. life stress. Individuals scoring high in the religiosity measures will have lower anxiety scores, less frequent occurrence of hassles and/or less severe ratings of experienced hassles.
3. In terms of perceived control over and responsibility for life events, it is hypothesized that
  - a. individuals high in religiosity will be more likely to assume responsibility and control over life events,
  - b. increased sense of control and responsibility is associated with lower trait anxiety

4. In dealing with hassles, help-seeking behavior in terms of number and sources of support may vary with varying religiosity. While variations in help-seeking behaviors are predicted to exist, directions of variations will be explored and no specific predictions are made.
5. Outcome perceptions of severely experienced hassles will be more positive for those high in religiosity. That is, highly religious people would be more likely to perceive positive outcomes from negative events.
6. There is a positive relationship between existential well-being and high religiosity.

## METHODOLOGY

### Research Participants

Participants included 163 college students. One hundred and ten, 58 women and 52 men, were undergraduates enrolled in introductory Psychology courses. With the consent of the University Committee for Research Involving Human Subjects, they were recruited from the Michigan State University human subject pool. Fifty-three participants, 29 women and 24 men, were recruited from churches and religious organizations around the MSU campus.

The total sample was composed of 87 women and 76 men. Mean age was 19.92 years. Table 1 shows composition according to class level.

Table 1

### Class level of research participants

Class level	Absolute frequency	Percentage
Freshman	72	44.2
Sophomore	40	24.5
Junior	29	17.8
Senior	10	6.1
Graduate	12	7.4
TOTAL	163	100.0

The participants recruited from the subject pool were students in Introductory Psychology courses. And while these students were more likely of lower class levels, there is always a wide variety with regard to majors in these types of courses. Thus it is safe to assume that this set of participants was not radically different from the average MSU undergraduate.

The participants recruited from the religious groups may not be representative of the college population. Based on studies on decreased religious behaviors by college students, this group is different by virtue of their relatively more active involvement in religion. The purpose of their inclusion was to obtain a subset of students who are potentially higher in religiosity than the average student. Their being "nonrepresentative" of the college population was a deliberate attempt to assure that the sample had a broad range on religiosity scores.

### Materials

A total of 6 instruments were administered to each subject: the Spiritual Well-Being Scale (Appendix A), Spiritual Maturity Index (Appendix B), Hassles Scale (Appendix C) with additional questions (Appendix D), Trait anxiety subscale of the State-Trait Anxiety Inventory (Appendix E), and a questionnaire measuring demographic data and religious activity (Appendix F). Two questions in the demographic questionnaire were taken from Embree (1977): "How important is God in your life?" and "Check the one statement that best describes you (as a religious or non religious person).

The Spiritual Maturity Index and Spiritual Well-Being Scale were used with permission from Dr. Craig Ellison (Appendix G). The Hassles Scale was published in the Journal of Behavioral Medicine (Kanner, et

al., 1980). The State-Trait Anxiety Inventory was used with permission from Consulting Psychologists Press; commercial forms were purchased.

Reliability coefficients for the instruments used are listed in Table 2.

Table 2

Reliability coefficients for RWB, SMI, EWB, STAI, Hassles Scale

Instrument	Coefficient alpha
RWB (Religious Well-Being Subscale)	.96
SMI (Spiritual Maturity Index)	.86
EWB (Existential Well-Being Subscale)	.90
STAI (trait-anxiety subscale)	.89
Hassles Scale (composite of the two scores: Hassles Frequency, Hassles Intensity)	.34

Procedure

Letters were sent to heads of organizations and churches on or around the MSU campus to obtain permission to recruit subjects (Appendix H). Because of their sheer number, and also to control for vast differences between radically different religious groups, only Christian and Christian-related groups were approached. Recruitment of subjects from these groups was necessary to ensure an adequate representation of people higher in religiosity than expected of Introductory Psychology students. For those organizational heads who gave consent, arrangements were made as to the method of distribution of materials most agreeable to the organizations. A packet containing

a cover letter (Appendix I), instructions (Appendix J), a consent form (Appendix K), feedback sheet (Appendix L), instruments, a self-addressed stamped envelope, and postcard were distributed in three ways:

1. Packets were delivered to the heads of the groups to be distributed. Designated representatives, such as youth pastors, were requested to read the cover letter and instructions to their college-student group members by way of introduction.
2. The researcher was invited to talk to the youth groups and personally request voluntary participation. Packets were given to those who volunteered.
3. Heads of religious groups gave the researcher a list of college students who are members of their group; packets were mailed to randomly selected subjects.

A total of 175 packets were distributed in these three ways. Fifty-three, or 30.3% were returned.

For these participants, typed instructions (Appendix J) accompanied the questionnaires. They were requested to return the completed packets two weeks after receipt.

For all participants the order of presentation of the instruments were counterbalanced. The STAI, Hassles Scale with additional questions, SWB, and SMI were presented in different orders. The demographic and religious activity questionnaire, however, was always presented last. This was done to ensure that subjects' responses to the items on affiliation, church involvement and self-perception of religiosity would not affect how they respond to the other instruments.

With participants recruited from the subject pool, group sessions

were held. Each session consisted of approximately 20 subjects with approximately equal numbers of males and females. The following instructions were given verbally to the subject pool participants:

"This study investigates experiences of individuals with daily hassles, or with minor irritating events, and how they deal with these hassles. Your participation involves answering a set of questionnaires. It will take you approximately 30-45 minutes to answer all the questionnaires."

Subjects were given consent forms to read and sign before proceeding with the session. Before handing out the questionnaires, additional instructions were given:

"Please answer the questionnaires given to you. Each is accompanied by instructions. Read those carefully before you begin each one. Please respond honestly. Your responses should honestly describe you and/or your experiences.

Do not put your name on any of the questionnaires. If you would like to know the results of the study, write your name and mailing address on the card accompanying the questionnaires. You may hand them to me after you are finished, or mail them at a later date. Your name on the card cannot possibly be matched with the questionnaires you answer, and your responses will remain anonymous."

A written equivalent was in the cover letter to the religious group participants (Appendix I). Written instructions were given to the religious group participants with basically the same kind of information as was verbally given to the subject pool participants, except for additional instructions on returning the packets to the researcher (Appendix J).

Written feedback describing general concepts and purpose of the experiment was given to the participants in two ways: 1. subject pool participants were given a feedback sheet upon completion of the questionnaires, and 2. a feedback sheet was included in the packet given to religious group participants. It was the last item in the packet.

Ideally, there should have been no methodological differences between the two groups. A larger sample from the subject pool alone may have eliminated the need for recruiting from religious groups. However, since recruitment from religious groups was done to ensure higher religiosity scores, one has to note methodological differences between these two groups. These differences between the subject pool and religious group participants respectively include: 1. group testing versus individual testing, 2. less time to give responses, and 3. participation for course credit versus purely voluntary participation.

Within the religious groups themselves, there were differences in recruitment and packet distribution procedures. It was originally intended that a mailing list be obtained from the religious groups so that recruitment could be done randomly through the mail, away from the religious group environment. However, only one out of the seven groups who agreed to participate allowed such a procedure. The researcher was therefore literally at the mercy of the various religious organizations, each one having a different policy about research participation. Hence as stated above, three different methods were employed to recruit participants from the religious groups and to distribute questionnaire packets to them.



## RESULTS

### Analyses of Hypotheses

Hypothesis 1: There are gender differences in religiosity, with females scoring higher on the religiosity measures.

There were no significant correlations found between gender and religiosity. The only significant correlations found indicative of gender differences were those between sex and the variables age, STAI, and Hassles Frequency ( $r=.257$ ,  $p=.001$ ;  $r=-.181$ ,  $p=.02$ ;  $r=-.218$ ,  $p=.005$  respectively). The women were younger, had higher scores on the STAI, and reported more hassles than the men.

Table 3 shows t-tests comparing means of women and men on the variables age, Hassles Frequency, Hassles Intensity, Religious Well-Being, Spiritual Maturity, and Trait Anxiety.

Age appeared to be a confounding variable. It was found to have significant correlations with both STAI and Hassles Frequency. Table 4 shows zero-order correlations between the variables sex, age, STAI, and Hassles Frequency.

The higher scores in trait anxiety, and reports of more hassles by women may be due to their age rather than gender. To investigate this possibility, partial correlations were computed with age partialled out. Partial  $r$ s showed that the correlation between sex and STAI was no longer significant ( $r= -.120$ ,  $p=.15$ ). The correlation between sex and Hassles Frequency went down but remained significant ( $r= -.190$ ,  $p=.02$ ). Thus, higher trait anxiety scores are associated with younger participants

Table 3

t-test of mean scores of males and females on the variables: Age, Hassles  
Frequency, Hassles Intensity, RWB, SMI, STAI

Variable	Sex	Mean	Standard deviation	Standard error	df	t
Age	F	19.13	2.12	.22	160	-3.36**
	M	20.88	4.30	.50		
Hassles Frequency	F	28.84	14.43	1.53	161	2.83**
	M	22.66	13.16	1.53		
Hassles Intensity	F	1.78	.70	.07	161	.43
	M	1.72	.99	.11		
RWB	F	4.72	1.12	.12	157	1.45
	M	4.45	1.26	.15		
SMI	F	4.09	.79	.09	150	.37
	M	4.04	.85	.10		
STAI	F	2.00	.41	.04	156	2.30*
	M	1.85	.44	.05		

\* p less than .05

\*\* p less than .01

Table 4

Zero-order correlations between sex, age, STAI, Hassles Frequency

	Sex	Age	STAI	Hassles Frequency
Sex	1.000	.257	-.181	-.218
p=		.001**	.023*	.005**
Age		1.000	-.126	-.024
			.115	.769
STAI			1.000	.455
				.001**
Hassles Frequency				1.000

\* p less than .05

\*\* p less than .01

rather than being a woman, while more reported hassles was associated with being a woman.

Because of the insignificant correlations between sex and most of the variables, and a low correlation with hassles frequency, the rest of the analyses will not differentiate between the sexes.

Hypothesis 2: There is an inverse relationship between religiosity and a. trait anxiety, and b. life stress, as measured by frequency and intensity of reported hassles. Individuals scoring high in the religiosity measures will report lower anxiety scores, less frequent occurrence of hassles, and less severe ratings of experienced hassles.

Zero-order correlations between RWB, SMI, HSFreq, HSInt, STAI, EWB supported the hypothesis. Table 5 shows zero-order correlations between these six variables.

Table 5

Zero-order correlations between RWB, SMI, Hassles Frequency (HSFreq),  
Hassles Intensity (HSInt), STAI, EWB

	RWB	SMI	HSFreq	HSInt	STAI	EWB
RWB	1.000	.851	-.206	-.221	-.190	.434
p=		.001**	.009**	.005**	.018*	.001**
SMI		1.000	-.201	-.221	-.269	.426
p=			.013*	.006**	.001**	.001**
HSFreq			1.000	.203	.455	-.304
p=				.009**	.001**	.001**
HSInt				1.000	.137	-.091
p=					.087	.256
EWB						1.000

\* p less than .05

\*\* p less than .01

Correlations show that both religiosity measures, RWB and SMI, were negatively correlated with Hassles Frequency, Hassles Intensity, and STAI. Thus, the higher the scores on RWB and SMI, the lower the frequency of reported hassles, the less intense the reported experiences of hassles, and the lower the STAI scores.

However, it was also evident in the intercorrelations that there is more to the hypothesized relationships than stated above. STAI and Hassles Frequency were moderately and significantly correlated. Further analysis was done to see if the significant relationship between the religiosity measures, RWB and SMI, with Hassles Frequency was a real indication of their relationship, or an artifact of STAI's significant relationship with both. Partial correlations were calculated to determine

which of the variables, trait anxiety (STAI) or religiosity (RWB and SMI), had a significant relationship with Hassles Frequency, independent of each others' effects. Correlations between religiosity (RWB, SMI) and Hassles Frequency were calculated, with effects of anxiety (STAI) partialled out. Likewise, correlations between STAI and Hassles Frequency were calculated, with effects of RWB and SMI partialled out. Table 6 shows these partial correlations compared to zero-order correlations.

Table 6

Partial correlations between religiosity, anxiety and stress variables

Pairs of variables	Zero-order r	p	Partial r	p	Variable partialled out
SMI: HSFreq	-.201	.013*	-.1106	.188	STAI
RWB: HSFreq	-.206	.009**	-.146	.082	STAI
SMI: HSInt	-.221	.006**	-.211	.011*	STAI
RWB: HSInt	-.221	.005**	-.216	.009**	STAI
STAI: HSFreq	.455	.001**	.448	.001**	RWB, SMI
STAI: HSInt	.137	.087	.067	.423	RWB, SMI

\* p less than .05

\*\* p less than .01

These partial correlations show that while, as predicted, hassles frequency was significantly correlated with the religiosity variables, when effects of trait anxiety were partialled out, the partial correlations were not significant ( $r = -.1106$ ,  $p = .188$  [RWB];  $r = -.146$ ,  $p = .082$  [SMI]).

Thus partial correlation analysis showed that hassles frequency was directly related to trait anxiety. Subjects who scored higher on the

trait anxiety measure were more likely to report more frequent occurrences of hassles, regardless of religiosity scores. The number of reported hassles was not directly related to religiosity scores, and any significant relationships found were most likely due to the confounding effects of trait anxiety.

The religiosity measures on the other hand, were significantly related to hassles intensity. In this case, the hypothesized relationship between these variables remained significant even when considering effects of trait anxiety. It was observed that STAI was not significantly correlated with Hassles Intensity ( $r = .137$ ,  $p = .087$ ) and thus would have very little effect on the relationship between religiosity and hassles intensity. Partial correlations were calculated to verify this observation. Correlations between RWB, SMI and Hassles Intensity were calculated, with effects of STAI partialled out. Likewise, correlations between STAI and Hassles Intensity were calculated with effects of RWB and SMI partialled out. Results are tabulated in Table 6.

Partial correlation analysis supported the above observations. Although there was a low, nonsignificant correlation between STAI and Hassles Intensity to begin with, when effects of the religiosity variables were partialled out, the correlation dropped close to 0.0 ( $r = .067$ ,  $p = .423$ ). On the other hand, hassles intensity correlated significantly with the religiosity variables ( $r[\text{RWB}] = -.221$ ,  $p = .013$ ;  $r[\text{SMI}] = -.221$ ,  $p = .005$ ). Even when the effects of trait anxiety were partialled out, the partial correlations were significant ( $r[\text{RWB}] = -.211$ ,  $p = .011$ ;  $r[\text{SMI}] = -.216$ ,  $p = .009$ ).

These partial correlations indicate that hassles intensity was directly related to religiosity. That is, subjects who scored higher in

the religiosity measures were more likely to report lower severity of experienced hassles.

To summarize the results of the analyses of hypothesis 2, it was found that:

1. As predicted, there was a significant inverse relationship between religiosity and trait anxiety,
2. There was also a significant inverse relationship between religiosity and hassles intensity, and
3. There was a positive direct relationship between trait anxiety and hassles frequency. The relationship found between religiosity and hassles frequency was due to the significant relationship between trait anxiety and these two variables.

Hypothesis 3a: In terms of perceived control over and responsibility for life events, it was hypothesized that individuals high in religiosity will be more likely to assume responsibility for and control over life events.

A correlational analysis of the religiosity variables (RWB, SMI), responsibility variables (responsibility over occurrence and responsibility over outcome of hassles), and the control variables (control over occurrence and control over outcome of hassles) showed no significant correlations between the above variables. The "responsibility" and "control" variables were measured according to responses to single-item questions asking, "How much control do you feel you had over these events' occurrences?", "How much control do you feel you had over the outcome of these events?". "How responsible do you feel over the occurrence of these events?", and "How responsible do you feel over the outcome of these events?" Forced-choice responses were available, and

participants were asked to check one of the choices, "no", "moderate", or "strong" control or responsibility. These questions were answered based on three hassles that they rated as extremely severe. Only the first hassle mentioned was considered for analysis. Table 7 shows zero-order correlations between the religiosity measures and responses to the control/responsibility questions.

Based on this analysis, the hypothesis that individuals high in religiosity will be more likely to assume responsibility and control over life events was not supported. There were no significant correlations between RWB and SMI, and feelings of control and responsibility over occurrences and outcomes of hassles.

However, investigation of the raw data hinted at a non-linear relationship between these variables. Eta squares were calculated to determine if a non-linear relationship exists between these variables that was not evident in zero-order correlations. Table 8 shows  $r$  squares and eta squares between the religiosity measures, RWB and SMI, and the variables "Responsibility over Occurrence", "Responsibility over Outcome", "Control over Occurrence", and "Control over Outcome".

Eta squares show that there is a significant non-linear relationship between religiosity and feeling responsible over occurrences of hassles. None of the other eta squares were significant. To investigate the above relationships further, one-way analyses of variance in RWB and SMI scores of participants who reported "no", versus "moderate", versus "strong" control and responsibility over occurrences and outcomes of hassles were also done. Tables 9 and 10 show these analyses.

For the significant religiosity-responsibility over occurrences relationship, contrasts were done between pairs (i.e. "no" versus



Table 7

Zero-order correlations between RWB, SMI, Responsibility over Occurrence (RespOcc), Responsibility over Outcome (RespOut), Control over Occurrence (ContOcc), Control over Outcome (ContOut)

	RWB	SMI	RespOcc	RespOut	ContOcc	ContOut
RWB	1.000	.851	-.067	-.054	-.099	-.035
p=		.001**	.431	.527	.240	.680
SMI		1.000	-.069	-.060	-.111	-.110
p=			.426	.487	.195	.202
RespOcc			1.000	-.670	.602	.423
p=				.001**	.001**	.001**
RespOut				1.000	.485	.611
p=					.001**	.001**
ContOcc					1.000	.473
p=						.001**
ContOut						1.000

\* p less than .05

\*\* p less than .01

Table 8

Comparison of  $r^2$  and  $\eta^2$  between the religiosity measures, RWB and SMI, and Responsibility over Occurrence (RespOcc), Responsibility over Outcome (RespOut), Control over Occurrence (ContOcc), and Control over Outcome (ContOut)

Variable Pairs	$r^2$	p	$\eta^2$	p
RWB - RespOcc	.004	.431	.067	.009**
SMI - RespOcc	.005	.426	.068	.005**
RWB - RespOut	.004	.527	.067	.058
SMI - RespOut	.004	.487	.027	.166
RWB - ContOcc	.041	.240	.0003	.977
SMI - ContOcc	.012	.195	.020	.268
RWB - ContOut	.001	.680	.015	.358
SMI - ContOut	.012	.202	.034	.105

\* p less than .05

\*\* p less than .01

Table 9

RWB mean scores according to no vs. moderate vs. strong Responsibility  
over Occurrence, Responsibility over Outcome, Control over Occurrence,  
Control over Outcome

	Mean RWB Scores			
	RespOcc	RespOut	ContOcc	ContOut
No	4.39	4.37	4.52	4.48
Moderate	4.92	4.82	4.56	4.67
Strong	4.19	4.30	4.53	4.30
F ratio	4.89	2.92	0.02	1.03
F probability	.009**	.058	.977	.358

Table 10

SMI mean scores according to no vs. moderate vs. strong Responsibility  
over Occurrence, Responsibility over Outcome, Control over Occurrence,  
Control over Outcome

	Mean SMI Scores			
	RespOcc	RespOut	ContOcc	ContOut
No	3.90	3.94	3.98	4.03
Moderate	4.29	4.16	4.11	4.11
Strong	3.78	3.87	3.81	3.74
F ratio	5.45	1.82	1.33	2.29
F probability	.005**	.167	.268	.105

\* p less than .05

\*\* p less than .01

"moderate", "moderate versus strong", "no versus strong"). Participants who assumed moderate responsibility over occurrences of hassles had significantly higher mean RWB and SMI scores than those participants who reported either strong or no responsibility. There was no significant difference between the RWB and SMI scores of those who reported "no" and "strong" responsibility over occurrences of hassles. Table 11 shows analysis of contrasts between the three groups ("no" versus "moderate" versus "strong" responsibility over occurrences of hassles) in RWB and SMI scores.

These findings only partially supported the hypothesis. There were no significant relationships between the religiosity measures and "responsibility over outcome", "control over occurrence", and "control over outcome". The only significant relationships were those between "responsibility over occurrence" and SMI and RWB. Analysis showed a non-linear relationship. Consistent with the hypothesis, those who felt moderate responsibility had higher religiosity scores than those who felt no responsibility. However, contradicting the prediction, those who felt moderate responsibility also had higher religiosity scores than those who felt strong responsibility.

There was a marginally nonsignificant trend toward higher RWB scores among those who indicated moderate responsibility over outcome. There were also slight, nonsignificant trends toward higher SMI scores among those who reported moderate responsibility over outcome, control over occurrence, and control over outcome.

Table 11

Analysis of pair-wise contrasts in RWB and SMI scores of participants  
reporting no vs. moderate vs. strong Responsibility over Occurrences of  
hassles

Responsibility over Occurrence (contrasts)	RWB score	N	t	df	t prob.
"No" versus "Moderate"	4.39 4.92	44 51	-2.17	137	.032*
"Moderate" versus "Strong"	4.92 4.19	51 45	3.00	137	.003**
"No" versus "Strong"	4.39 4.19	44 45	.79	137	.429
Responsibility over Occurrence (Contrasts)	SMI score	N	t	df	t prob.
"No" versus "Moderate"	3.90 4.29	43 46	-2.35	132	.020*
"Moderate" versus "Strong"	4.29 3.78	46 46	3.17	132	.002**
"No" versus "Strong"	3.90 3.78	43	.76	132	.447

\* p less than .05

\*\* p less than .01

Hypothesis 3b: Increased sense of responsibility and control over the occurrence and outcome of events is related to lower trait anxiety.

There were no significant differences between levels of responsibility and control and STAI scores. Investigation of the data showed no clear trends as to the direction of scores. Table 12 shows zero-order correlations between STAI and "responsibility over occurrence", "responsibility over outcome", "control over occurrence", "control over outcome."

Table 12

Zero-order correlations between STAI and "Responsibility over Occurrence", "Responsibility over Outcome", "Control over Occurrence", "Control over Outcome"

	STAI	
	r	p
Responsibility over Occurrence	-.084	.323
Responsibility over Outcome	.055	.519
Control over Occurrence	-.042	.623
Control over Outcome	-.112	.188

Results do not support the hypothesis that people who have a greater sense of responsibility and control have lower trait anxiety.

Hypothesis 4: In dealing with hassles, help-seeking behavior may vary with varying religiosity.

While searching for variations in help-seeking behavior was of interest, no predictions were made as to how these variations might occur. One area of exploration was the relationship between

religiosity scores and seeking versus not seeking help from others for hassles that were rated most severe. Help-seeking behavior was measured in terms of a "Yes-No" response to the question, "Did you ask for help/advice/support from others?" This referred to the first hassle (out of 3 mentioned) that participants rated as very severe.

A t-test was done to compare mean RWB and SMI scores between subjects who reported seeking help from others and those who reported they did not seek help. Table 13 shows this analysis.

Table 13

t-test of mean RWB and SMI scores between subjects reporting help-seeking vs. no help-seeking behavior

Pooled variance estimate							
Help-seeking	@n	Mean	standard deviation	standard error	t-value	df	2-tailed prob.
<hr/>							
		<u>RWB</u>					
No	36	3.81	1.22	.20	-4.24	138	.000**
Yes	104	4.76	1.13	.11			
<hr/>							
		<u>SMI</u>					
No	35	3.62	.67	.11	-3.35	133	.001**
Yes	100	4.14	.81	.11			

@ total n does not equal 163 because of missing values

\* p less than .05

\*\* p less than .01

Of those who had complete data on the RWB, SMI, and questionnaire, only a small number of subjects reported not seeking help from anyone about hassles they experienced. The t-test analysis above shows that subjects who sought help, advice, or support from others scores significantly higher on the religiosity measures, RWB and SMI.

Hypothesis 5: Outcome perceptions of severely experienced hassles will be more positive for those high in religiosity, i.e. highly religious people would be more likely to perceive positive outcomes from negative events.

A t-test analysis compared RWB and SMI mean scores between participants who answered positively to the question "Did something positive come out of these events? (or do you feel something positive will result from these negative events?)" and those who answered negatively. There were no significant differences. Those who perceived positive outcomes did not have higher religiosity scores (RWB and SMI) than those who did not perceive positive outcomes. Table 14 shows mean RWB and SMI scores and t-values of the participants who answered positively and negatively to the above question.

Hypothesis 6: There is a positive relationship between existential well-being and high religiosity.

Zero-order correlations supported the hypothesis ( $r[\text{RWB-EWB}] = .426$ ,  $p = .001$ ;  $r[\text{SMI-EWB}] = .455$ ,  $p = .001$ ). Those who scored high on the religiosity measures were also more likely to score high on existential well-being.

An investigation of the scatterplots show that this is an incomplete picture (see Figures 1 and 2). The distribution of scores show the presence of several outliers at the low end of the range of religiosity



Table 14

t-tests of mean RWB and SMI scores between subjects who perceived positive outcomes and those who did not perceive positive outcomes from negative events

Did something positive come out of these events?	@n	Mean	standard deviation	standard error	t-value	df	t prob.
<hr/>							
		<u>RWB</u>					
Yes	77	4.53	1.23	.14	.34	137	.738
No	62	4.46	1.22	.16			
<hr/>							
		<u>SMI</u>					
Yes	74	4.04	.84	.10	.89	132	.373
No	60	3.91	.74	.10			

@ total n does not equal 163 because of missing values

Figure 1

Distribution of RWB with EWB scores (Total Sample)

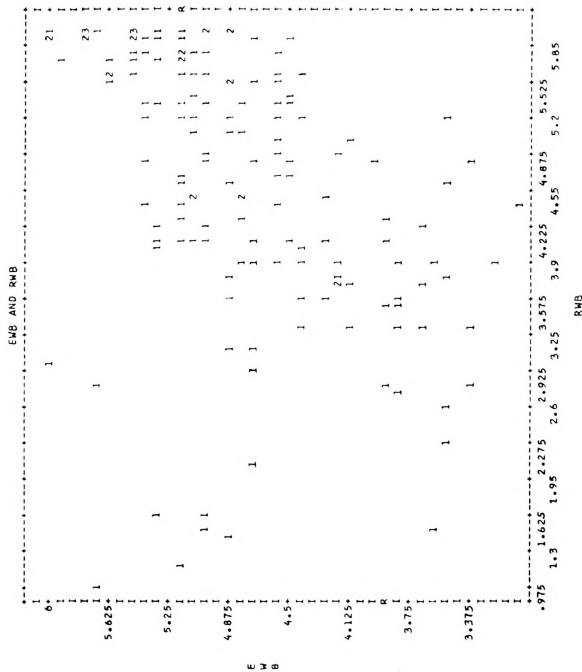


Figure 1

Figure 2

Distribution of SMI with EWB scores (Total Sample)



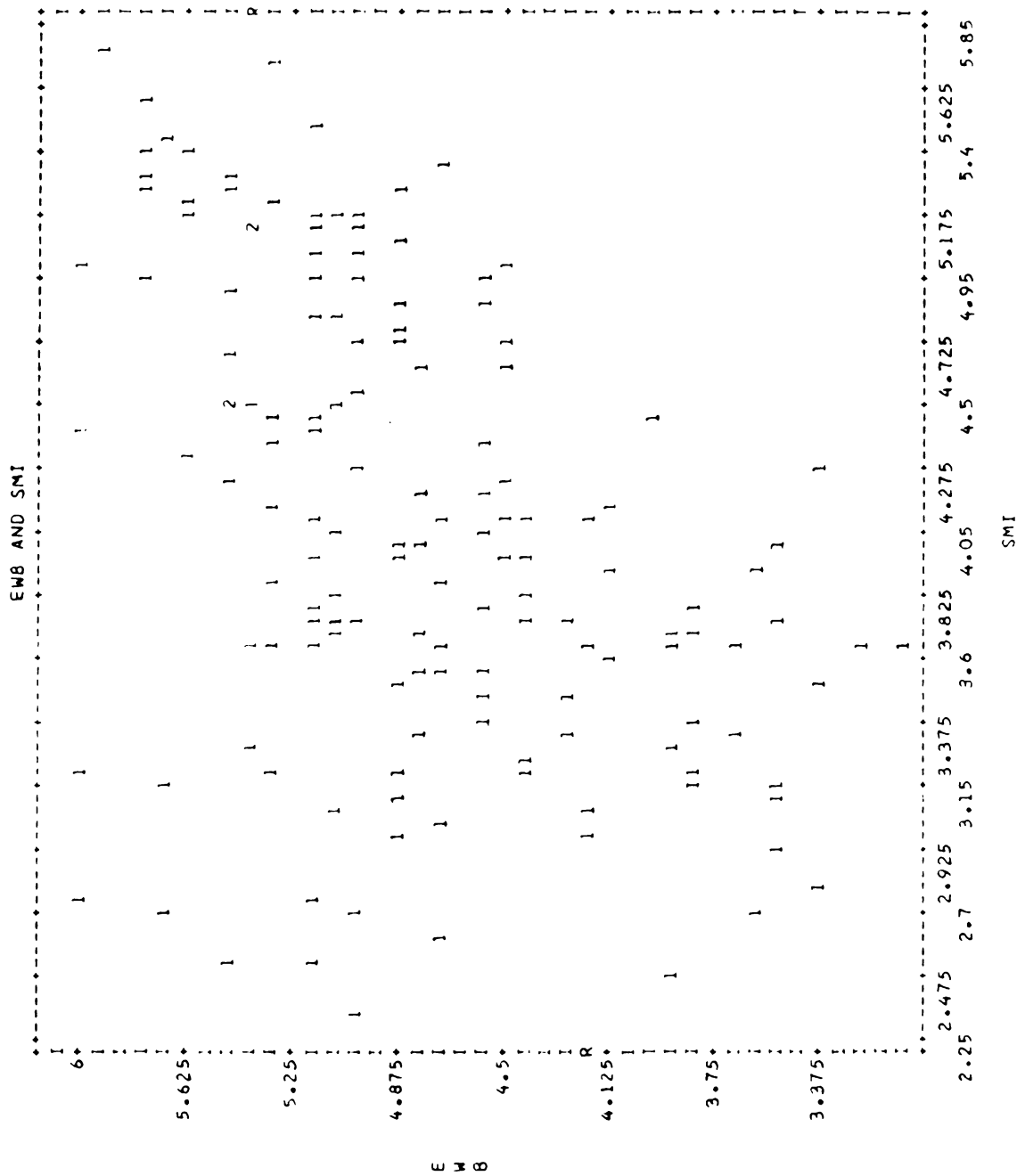


Figure 2

scores. The outliers indicate that these participants who scored low in the religiosity measures nevertheless had high existential well-being scores. This means that for these people, their sense of life purpose and satisfaction may be derived from something other than religion.

Barring these outliers, a very clear picture emerges. High religious well-being and spiritual maturity were related to high existential well-being. And decreasing religiosity scores were accompanied by a corresponding decrease in existential well-being.

Post-hoc analyses revealed an interesting relationship between existential well-being, religiosity, and trait anxiety. This will be discussed in the next section.

### Other Findings

In the process of testing the hypotheses, several observations were made from the available data that were thought to be important and interesting to warrant further investigation. This section includes post-hoc analyses of data which the researcher believes brings out important issues that were not covered by the hypotheses. The following topics were included in this section:

1. Description of religious behaviors reported by participants,
2. Value of single-item measures of religiosity,
3. Comparison of data of participants from subject pool and religious groups,
4. Role of existential well-being in religiosity-trait anxiety relationship,
5. Sources of support and their rankings, and
6. Description of hassles most frequently mentioned.

### Religious Behaviors

A large proportion of the participants indicated membership in a church (88.3%): seventy five (46.0%) Protestants, 62 (38.0%) Catholics, 7 (4.3%) non-Christian religions. Table 15 shows distribution of participants according to religious affiliation.

Table 15

#### Church affiliation

Affiliation	Absolute frequency	Percentage
Catholic	62	38.0
Protestant	75	46.0
Other (Non-Christian)	7	4.3
None (agnostic or atheist)	4	2.5
No response	15	9.2
Total	163	100.0

However, in terms of church attendance while in college, they were relatively inactive. Only 37.5% go to church on a relatively regular basis, i.e. at least once every two week; 48.5% do not go to church. Table 16 shows frequency of church attendance of participants while in college.

There was also inactivity in attendance at special church meetings. 57.1% never attend special meetings, 16.0% attend occasionally, and only 19.6% attend special meetings on a regular basis.

If religiosity were to be based on church attendance, then the majority of this sample would be judged to be low in religiosity. The



Table 16

Frequency of church attendance while in college

Frequency of attendance	Absolute frequency	Percentage
More than once a week	21	12.9
Once a week	27	16.6
Once every two weeks	13	8.0
Once a month	7	4.3
Less than once a month	16	9.8
Do not attend	79	48.5
Total	163	100.0

subjects' perceptions of themselves as being "religious" indicate otherwise. 49.7% of the participants perceived themselves as being religious, while only 19.6% thought of themselves as not religious. Table 17 shows participants' self-ratings of religiosity.

Table 17

Self-ratings of religiosity

Religiosity rating	Absolute frequency	Percentage
Very religious	24	14.7
More religious than most	57	35.0
As religious as next person	48	29.4
Not very religious	17	10.4
Not religious	15	9.2
Total	161	98.8%

Participants were likely to rate highly the importance of God in their lives. Table 18 lists responses to the question, "How important is God in your life?"

Table 18

Responses to "How important is God in your life?"

Importance of God	Absolute frequency	Percentage
God is the center of my life	51	31.3
I think I would do certain things that I now don't do because of my belief in God	69	42.3
I think I believe in God, but he doesn't affect my life much	33	20.2
I don't believe in God	7	4.3

Only 4.3% indicated that they do not believe in God, and 20.2% said that God doesn't affect their life much. 73.6% indicated the importance of God in their lives.

Mean scores on the religiosity measures RWB and SMI also indicated that the participants perceived themselves relatively high in religiosity (RWB = 4.60, s.d. = 1.21; SMI = 4.08, s.d. = .80). Possible scores on these measures range from a low of 1 to a high of 6, higher scores mean higher religious well-being and spiritual maturity.

Value of Single-Item Measures of Religiosity

A correlational analysis was done between the religiosity instruments, RWB and SMI, and some of the questionnaire items inquiring about frequency of church attendance, church membership, self-rating of

religiosity, importance of God, and having "renewed" faith. Table 19 shows correlations between these variables. All of these variables dealing with some aspect of religiosity were significantly correlated with one another.

Table 19

Zero-order correlations between frequency of church attendance, church membership, self-religiosity, importance of God, renewed faith, RWB, SMI

	Church attendance	Church membership	Self- religiosity	Importance of God	Renewed faith	RWB	SMI
Church attendance, p=	1.000	.181 .021*	.557 .001**	.601 .001**	.214 .006**	.576 .001**	.694 .001**
Church membership, p=		1.000	.238 .002**	.402 .001**	.434 .001**	.386 .001**	.381 .001**
Self-religiosity p=			1.000	.672 .001**	.222 .005**	.724 .001**	.706 .001**
Importance of God p=				1.000	.374 .001**	.840 .001**	.803 .001**
Renewed faith p=					1.000	.319 .001**	.406 .001**
RWB p=						1.000	.851 .001**
SMI p=							1.000

\* p less than .05

\*\* p less than .01

It is worth noting the moderate significant correlations between church attendance and the religiosity measures ( $r[\text{attendance-RWB}] = .576$ ,  $p = .001$ ;  $r[\text{attendance-SMI}] = .694$ ,  $p = .001$ ), and especially the very high correlations between the items on self-religiosity and importance of God, and the religiosity measures ( $r[\text{self-religiosity -RWB}] = .724$ ,  $p = .001$ ;  $r[\text{self-religiosity -SMI}] = .796$ ,  $p = .001$ ;  $r[\text{God's importance-RWB}] = .840$ ,  $p = .001$ ;  $r[\text{God's importance-SMI}] = .803$ ,  $p = .001$ ).

#### Comparing Data of Participants from Subject Pool and Religious Groups

Subjects were recruited from two different sources: MSU Psychology Subject Pool, and religious groups around campus. These subjects differed in two important ways: 1. there were several methodological differences in recruitment, administration, giving of instructions, etc., and 2. motivation was more extrinsic to subject pool participants, they participated for course credit. Participation of subjects from religious groups was purely voluntary.

There may be differences in responses due either to the methodological differences mentioned above, or perhaps due to personality differences between participants from the two groups. Two issues were further analyzed: 1. differences between the two groups in mean scores in the religiosity measures (RWB and SMI), trait anxiety (STAI), and the hassles measures (Hassles Frequency and Hassles Intensity), and 2. comparison of the relationships between variables as they exist for the separate groups, and in comparison to the pooled data.

Table 20 shows mean scores of the two groups in RWB, SMI, Hassles Frequency, Hassles Intensity, and STAI. Results of t-tests are also shown in this table.

Table 20

t-test analysis of mean scores of participants from subject pool and religious groups on: RWB, SMI, EWB, Hassles Intensity, Hassles Frequency, STAI

Variable	Group@	N	Mean	Standard deviation	Standard error	t value	df	2-tailed prob.
RWB	1	107	4.15	1.15	.11	-8.13	157	.000**
	2	52	5.52	.57	.08			
SMI	1	103	3.67	.62	.06	-11.92	150	.000**
	2	49	4.89	.52	.07			
EWB	1	107	4.64	.66	.06	-4.63	157	.000**
	2	52	5.13	.56	.08			
Hassles Frequency	1	110	27.1	14.30	1.30	1.38	161	.168
	2	53	23.8	13.8	1.90			
Hassles Intensity	1	110	1.86	.98	.09	2.28	161	.024*
	2	53	1.54	.37	.05			
STAI	1	105	2.01	.46	.04	3.24	156	.000**
	2	53	1.78	.32	.04			

\* p less than .05

\*\* p less than .01

@ Group 1: Participants from Subject Pool  
Group 2: Participants from Religious Groups

Results show that there are significant differences in all the scores of the two groups, these scores favored the participants from the religious groups. They had higher RWB and SMI scores, indicating higher religiosity. They reported lower frequency and less severe experiences of hassles, indicating lower stress. They had lower STAI scores, reflecting less trait anxiety. And they also had higher EWB scores, showing a higher sense of life purpose and satisfaction.

Correlations between the religiosity, hassles, trait anxiety, and existential well-being measures were done separately for the two groups. Tables 21 and 22 show correlational analyses for the subject pool- and religious group participants respectively, on the variables: RWB, SMI, Hassles Frequency, Hassles Intensity, STAI, and EWB.

Consistent across both subsamples are the relationships between trait anxiety and hassles frequency, and existential well-being and the religiosity measures, SMI and RWB. That is, the higher trait anxiety, the higher the frequency of reported hassles. Positive correlations were also found between EWB, and RWB and SMI. An investigation of the scatterplots show that the relationship appeared weaker for the subject pool group because of the presence of outliers in the low end of the religiosity measures (see Figures 3 and 4). There were several subjects who scores low on RWB and SMI who scored high on EWB. If one were to discard these outliers, a clear positive relationship is more evident. Within the religious group, there were no such outliers (see Figures 5 and 6).

These two sets of data also had interesting differences. For the subject pool participants, only slight trends were evident in the negative correlations between the religiosity measures and the hassles

Table 21

Correlations between RWB, SMI, Hassles Frequency, Hassles Intensity,  
STAI, EWB (Subject Pool, N=110)

	RWB	SMI	Hassles Frequency	Hassles Intensity	STAI	EWB
RWB	1.000	.806	-.143	-.157	-.038	.252
p=		.000**	.07	.053	.352	.005**
SMI		1.000	-.120	-.134	-.073	.164
p=			.114	.089	.236	.050*
Hassles Frequency, p=			1.000	.176 .033*	.378 .000**	-.217 .012*
Hassles Intensity, p=				1.000	.030 .382	.018 .426
STAI p=						-.538 .000**
EWB						1.000

\* p less than .05

\*\* p less than .01

Table 22

Correlations between RWB, SMI, Hassles Frequency, Hassles Intensity,  
STAI, EWB (Religious groups, N=53)

	RWB	SMI	Hassles Frequency	Hassles Intensity	STAI	EWB
RWB	1.000	.743	-.329	.023	-.289	.641
p=		.000**	.009**	.435	.019*	.000**
SMI		1.000	-.301	-.224	-.484	.652
p=			.018*	.061	.000**	.000**
Hassles Frequency, p=			1.000	.315	.658	-.457
				.011*	.000**	.000**
Hassles Intensity, p=				1.000	.543	-.372
					.000**	.003**
STAI					1.000	-.666
p=						.000**
EWB						1.000

\* p less than .05

\*\* p less than .01



Figure 3

Distribution of RWB with EWB scores (Subject Pool only)

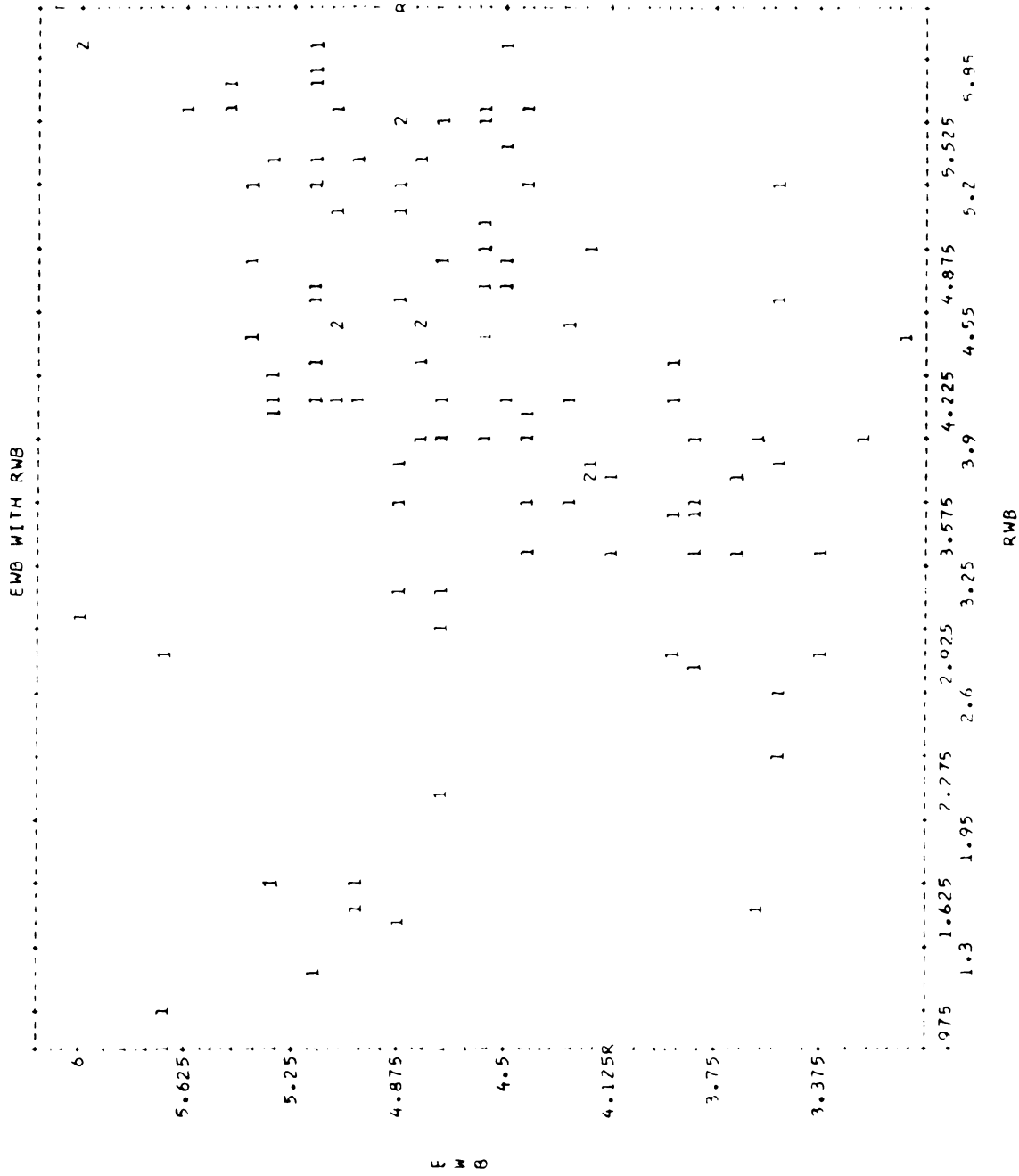


Figure 3

Figure 4

Distribution of SMI with EWB scores (Subject Pool Only)

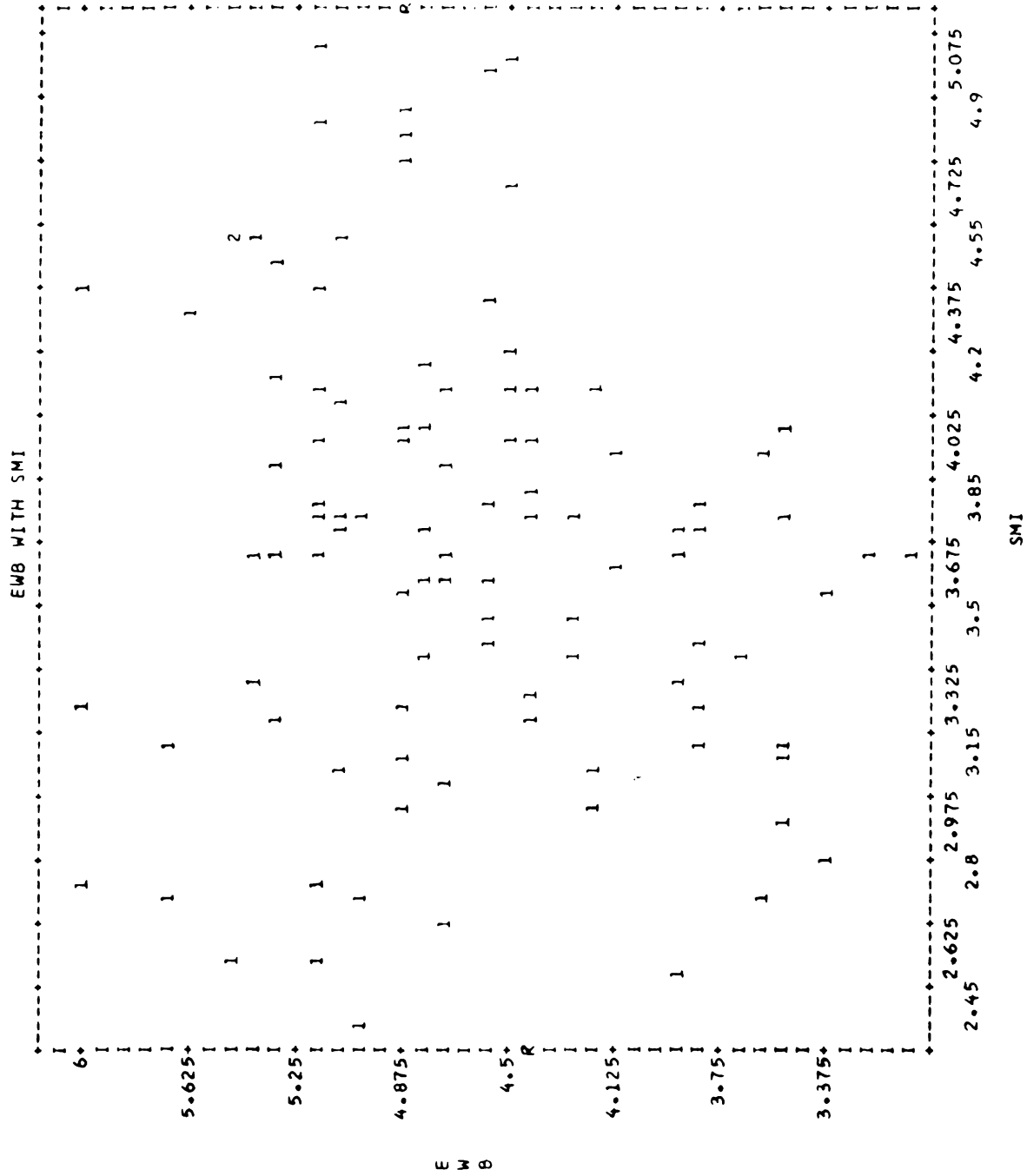


Figure 4

Figure 5

Distribution of RWB with EWB scores (Participants  
from religious groups only)



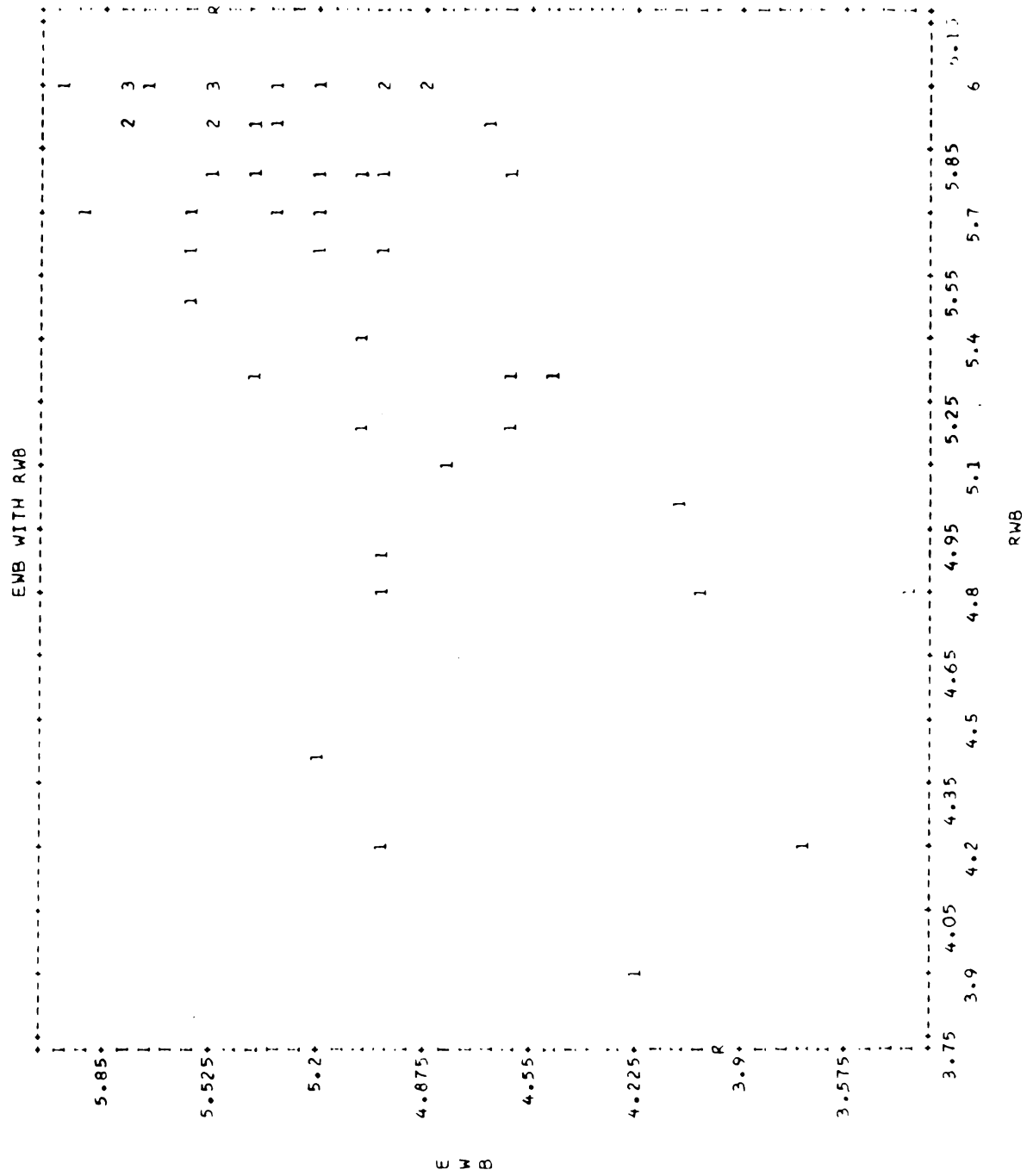


Figure 6

Distribution of SMI with EWB scores (Participants  
from religious groups only)



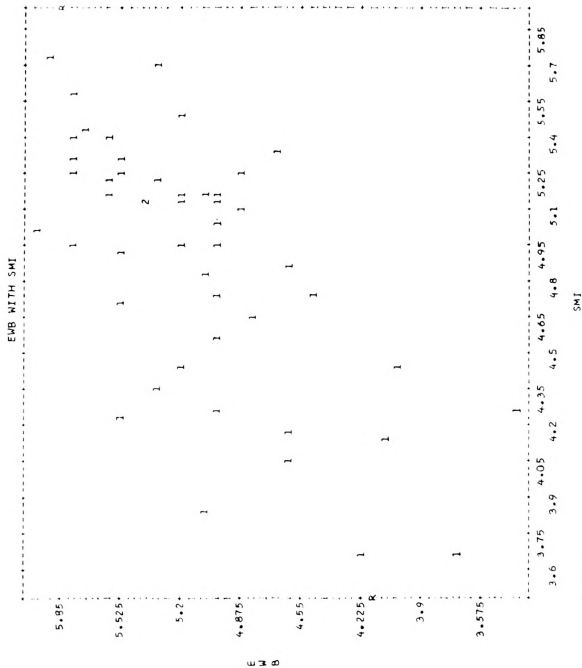


Figure 6

measures. These correlations were not statistically significant. Also for this group, trait anxiety was not correlated with the religiosity measures. Thus, for the subject pool group, there were no significant relationships found between the religiosity measures, and the hassles and trait anxiety measures.

On the other hand, correlations between the religiosity measures, hassles frequency and trait anxiety were larger and were all significant for the participants from the religious groups. For the religious group respondents, religiosity scores were negatively correlated with hassles frequency and trait anxiety, i.e. the higher the religiosity scores, the less the frequency of reported hassles, and the lower trait anxiety. The larger effect is especially important when considering that there is less variability in religiosity scores within the religious group sample. Table 23 shows variability of RWB and SMI scores of subject pool- and religious group subsamples.

In neither group was a significant relationship found between the religiosity measures and hassles intensity. But a significant difference was found when the two groups were combined. Investigations of the raw data shows that there is very little variability in hassles intensity scores, a larger sample is needed in order for such small differences to be detectable. This may explain why the combined groups showed a statistically significant relationship between hassles intensity and the religiosity measures, while a breaking down into subgroups with smaller Ns did not.

Table 23

Variability of RWB and SMI scores of subject-pool and religious group participants

---

		Subject Pool	Religious Groups
RWB	mean	4.15	5.53
	standard deviation	1.15	.57
	range	4.90	2.10
	minimum	1.00	3.90
	maximum	5.90	6.00
SMI	mean	3.68	4.89
	standard deviation	.62	.52
	range	2.70	2.09
	minimum	2.35	3.65
	maximum	5.04	5.74

---

Role of Existential Well-being in the Religiosity-Trait-anxiety Relationship

Hypothesis 6 was supported in that a significant positive correlation was found between existential well-being (EWB), and the religiosity measures, RWB and SMI. However, referring to Table 4, there is also a significant correlation between EWB and trait anxiety, and between trait anxiety and RWB and SMI. To unravel possible independent relationships, partial correlations were calculated. Table 24 shows partial correlations between EWB, STAI, RWB, and SMI.

Table 24

Partial correlations between RWB, SMI, EWB, STAI

Variable Pairs	Variable partialled out	r	p	partial r	p
EWB - STAI	RWB, SMI	-.599	.001**	-.580	.001**
RWB - STAI	EWB	-.190	.018*	.105	.098
SMI - STAI	EWB	-.269	.001**	-.023	.391
EWB - RWB	STAI	.434	.001**	.415	.001**
EWB - SMI	STAI	.426	.001**	.347	.001**

\* p less than .05

\*\* p less than .01

Partial correlations show that there is a significant correlation between EWB and RWB/SMI, even when trait-anxiety was partialled out. The relationship between religiosity and trait anxiety appears to be due to the effects of existential well-being. A person who has existential well-being, i.e. has a good sense of life purpose and satisfaction, is more likely to be less anxious. Because religion does provide such an

existential function, then it may be that particular aspect that is responsible for lessening anxiety. Having a purpose in life serves to lower anxiety. And for the "highly religious", this life purpose is found in their religion.

#### Sources of Support and Their Rankings

Among those who reported seeking help about the experienced hassles, the following external sources (according to frequency) were mentioned: "friend" was the most frequently mentioned source (79), followed by "God" (57), "family" (53), "church" (14) and "other" (8). Table 25 shows responses of participants to the question "Which source(s) did you approach for help/advice/support?".

When asked which of these sources affected the outcome of the hassles, 61 mentioned "friend", 49 "family", 41 "God", and 16 mentioned "church" and "other". Total Ns do not equal 163 since subjects were allowed to mention more than one source. Table 26 shows responses of participants to the question "Which source(s) contributed to the outcome of these events?", and the average rankings of the different sources.

When asked to rank the importance of the sources who contributed to the outcome of hassles, the following rankings were given where 1 is "most important": "Other" (1.19), "God" (1.34, "family" (1.47), "friend" (1.48), "church" (1.94). A girlfriend/boyfriend was most frequently specified in the category "other".

#### Hassles Most Frequently Mentioned

The events most frequently mentioned as hassles were very similar across genders. A noticeable difference was that women reported more events as hassling than men (mean frequency for women=28.84, s.d.=14.43; mean frequency for men= 22.66, s.d.=13.16;  $t=2.83$ ,  $p$  less than .01).

Table 25

Response to "Which source(s) did you approach for help/advice/support?"

---

Source	Absolute Frequency	Percentage
Family	53	32.5
Friend	79	48.5
Church	14	8.6
God	57	35.0
Other	8	4.9
	<hr/>	<hr/>
TOTAL	213*	129.5**

---

\* total is greater than 163 because participants were allowed to name more than one source

\*\* total is greater than 100 because frequencies are not mutually exclusive

Table 26

Responses to "Which source(s) contributed to the outcome of these events? (if more than one, please rank according to most important)"

---

Source	Absolute Frequency	Percentage	Rank
Family	49	30.06	1.47
Friend	61	37.42	1.48
Church	16	9.82	1.94
God	41	25.15	1.34
Other	16	9.82	1.19
<hr/>			
TOTAL	183*	112.27**	

---

\* total is greater than 163 because participants were allowed to name more than one source

\*\* total is greater than 100 because frequencies are not mutually exclusive

Tables 27 to 29 list the top 10 hassles reported by all participants, and by the men and women respectively.

As expected most of the hassles mentioned seemd to be concerns brought about by life events particular to this age group, especially by college experience. The most frequently mentioned hassle was "troubling thoughts about the future," indicative of a major concern by young people going through a major life transition. It is after all in college where one makes decisions about future careers.

The other hassles reflect the very busy life of the college student, a concern for physical appearance, and concerns about meeting social and achievement expectations.

Aside from the specific hassles mentioned which may be more common to the college experience, a comparison of the mean frequency and intensity of hassles with Kanner, et al.'s normative data imply that the college experience may be especially stressful. Table 30 shows mean scores of this study's participants in Hassles Frequency and Hassles Intensity, and the scores of older age groups as reported by Kanner, et al. (1980).

Kanner, et al. did not report normative data for younger adults, or for college students. But compared to the scores of middle-aged to elderly adults, the college students in this study reported more hassles, and they also reported higher intensity reactions to the hassles.

There were also interesting differences between the women and the men. "Concerns about weight" and "physical appearance" were slightly higher in the list of top 10 hassles among the women than the men. Evidently, concerns about appearance are higher in priority for the women. However these two concerns were also mentioned as 2 of the top 10



Table 27

Top ten hassles reported by participants and percentage of subjects reporting occurrence of each

---

Hassles	%
Troubling thoughts about your future	81.6
Misplacing or losing things	74.2
Not getting enough sleep	70.6
Too many things to do	61.3
Not enough time to do the things you need to do	53.4
Physical appearance	53.4
Not getting enough rest	53.4
Concerns about weight	52.8
Social obligations	52.1
Concerns about meeting high standards	51.5

---

Table 28

Top 10 hassles reported by men, and percentage of subjects reporting occurrence of each

---

Hassles	%
Troubling thoughts about your future	77.0
Misplacing or losing things	68.9
Not getting enough sleep	63.5
Not getting enough rest	50.0
Social obligations	48.6
Not enough time to do the things you need to do	48.6
Too many responsibilities	45.9
Physical appearance	44.6
Concerns about weight	41.9
Not enough money for entertainment and recreation	41.9

---

Table 29

Top 10 hassles reported by women, and percentage of subjects reporting occurrence of each

---

Hassles	%
Troubling thoughts about your future	85.4
Misplacing or losing things	78.7
Not getting enough sleep	76.3
Too many things to do	71.9
Concerns about weight	61.8
Physical appearance	60.7
Concerns about meeting high standards	60.7
Not enough time to do the things you need to do	57.3
Not getting enough rest	56.2
Social obligations	55.1
Inability to express yourself	55.1

---

Table 30

Means and standard deviations of Hassles Frequency and Hassles Intensity  
Scores of Kanner's subjects, by age, and of the current study's college  
sample

	N	Hassles Frequency		Hassles Intensity	
<u>Kanner's data*</u>		Mean	s.d.	Mean	s.d.
Age:					
45-49	27	17.3	10.4	1.46	.29
50-54	25	21.1	18.4	1.43	.25
55-59	24	20.8	14.8	1.43	.27
60-64	24	23.5	16.3	1.53	.33
<u>Current data</u>					
college students	163	26.0	14.2	1.76	.84

\* from Kanner, et al. (1980)

hassles experienced by the men. Contrary to popular opinion, men are also evidently concerned about physical appearance.

On the other hand, "not getting enough rest" and "social obligations" were higher in the men's top 10 list than in the women's. The latter is perhaps consistent with the stereotype that "women are more social", and therefore more accepting of social obligations than men.

Other interesting differences are those items found in the women's top 10 list that were not found in the men's, and vice-versa. Two events listed in the women's top 10 that were missing in the men's were "concerns about meeting high standards" and "inability to express yourself." These two items may be achievement-related, as expressions of the fear of failure. On the other hand, these items may also be social concerns related to disappointing significant others and to the desire to communicate well with others.

Two events in the men's top 10 list did not make the women's: "too many responsibilities" and "not enough money for entertainment and recreation." One can make several inferences from these concerns. Both events may be perceived hindrances to men's involvement in recreational activities. Not having enough money for entertainment and recreation may be a hassle to a "dating" group. On the other hand, since the men are on the average older than the women, age may account for the perception of too many responsibilities.

Although not a focus in this study, sex differences in experiences of hassles by the college population can help us understand the uniqueness of the college experience, problems associated with it, and how it can differentially affect women and men.

## DISCUSSION

Results of this study showed interesting relationships between religiosity, anxiety, and stress. Relationships of these variables with other factors of peripheral interest were also investigated. This section discusses these relationships, why they may have occurred, and their specificity to this study's particular sample as well as their probable generalizability.

### Gender Differences

Contrary to popular opinion, and to results of some studies (Batson & Ventis, 1982; Trent & Medsker, 1968), this study did not show gender differences in religiosity. Although there was a trend toward higher religious well-being (RWB) scores among women, this difference was not statistically significant ( $p=.15$ ). Spiritual maturity scores were very similar between men and women.

These results may be due to the nature of the sample. Perhaps in college, gender differences are less evident. Trent and Medsker (1968) conducted a longitudinal study comparing high school graduates who have gone on to college and those who entered the work force. Their data suggest that there were bigger differences in the proportion of working male-female subjects who reported valuing religion more (males=43%, females= 59%) than between male-female college students (males=47%, females=54%).

The only gender differences found were in trait anxiety and frequency of reported hassles. Women scored higher in trait anxiety,

and they also reported more hassles than men.

Spielberger's normative sample did show higher mean trait anxiety scores for women. Although results of this study showed a similar trend, they were confounded by the variable "age". Age also was significantly correlated with trait anxiety. The women were on the average younger than the men. And when the effects of age were partialled out of the correlation between sex and trait anxiety, the correlation was no longer significant. Thus, age and not sex, was directly related to trait anxiety.

The 1.75 year age difference between men and women means a substantial 2-level class difference in college. One can imagine that there would be considerable differences between the experiences of a freshman and that of a junior, for example. The novelty of college, especially a large state university may bring about more anxiety and stress to a lower class level student.

Although trait anxiety supposedly is an enduring personality trait, responses to some items in the STAI could be influenced by present experiences. Consider, for example, items such as "I fell rested", "I feel that difficulties are piling up so that I cannot overcome them", "I feel secure". Response to the item "I feel rested" in particular can be related to several hassles that were most frequently mentioned by the participants: "not getting enough sleep", "too many things to do", "not getting enough rest", "not enough time to do the things you need to do."

The same can be said of hassles frequency. Age correlated with hassles frequency. Younger participants, again presumably of lower class levels, reported more occurrences of hassles than older participants.

It can be hypothesized that perhaps throughout college, the number of events that are potentially stressful do not really significantly decrease. Instead, what may decrease is the number of "perceived" stressful events such that more events are perceived as stressful.

What happens then as a student goes through college? Several factors may account for decreased reports of hassles: maturity, more direction, acquisition of coping skills, "learning the ropes", or a combination of these factors.

Partial correlation analysis shows that the gender differences in hassles frequency is not accounted for by age differences alone. In this case, there is a difference between the women and the men in the number of hassles reported. Women were more likely to report more hassles than men.

Most studies show that girls are more fearful, timid, and anxious than boys (Block, 1976). Hyde (1985) points out however that girls and women are more willing to admit that they have anxieties and fears. The difference between sexes found in studies using self-report measures, such as in this study, may be due instead to this differential willingness to admit to having fears and anxieties.

#### Trait anxiety, Religiosity, and Hassles

It was hypothesized that religiosity would have an inverse relationship with trait anxiety, and with stress as measured by hassles frequency (number of reported hassles) and hassles intensity (averaged severity of experienced hassles). Like the studies relating intrinsic religiosity with lower trait anxiety (BAker & Gorsuch, 1982; Gorsuch & Smith, 1983; Kahoe, 1974; Sturgeon & Hamley, 1979), this study showed a negative relationship between the religiosity measures, religious



well-being and spiritual maturity, and trait anxiety.

The relationship was stronger for trait anxiety and spiritual maturity than for trait anxiety and religious well-being. This may be due to what the two religiosity measures were differentially measuring. The religious well-being scale assesses one's relationship with God, a person's well-being in reference to this relationship. Spiritual maturity measures, in part, a firmness in religious beliefs, and a centrality of these beliefs in one's life. The latter assesses the closeness between the actual "living", acting or doing of an individual, and the individual's religious beliefs. SMI also measures to some extent the way a person deals with experiences as influenced by her or his religious beliefs. All these seem to be more related to trait anxiety which deals with the individual's perception of stressful events and his or her reactions to them.

To the extent that one sees a purpose in even negative events, and that one follows "guidelines to living" that one believes is best for himself or herself, then perhaps these "religious experiences" can have an effect on enduring traits such as trait anxiety. Consider the apparent parallel between items of the two scales: STAI's "I take disappointments so keenly that I can't put them out of my mind" and SMI's "I believe that God has used the most negative or difficult times in my life to draw me closer to Him", or STAI's "I lack self-confidence" and SMI's "I am convinced that the way I believe spiritually is the right way."

Stress, as measured by the Hassles Scale in two dimensions, frequency and intensity, was found to be related to trait anxiety, religious well-being, and spiritual maturity. However, these two

dimensions of stress had different relationships with the religiosity measures and with trait anxiety. There appeared to be a more direct relationship between trait anxiety and the number of hassles reported. While religiosity and hassles frequency were also related, this may be an artifact of their relationship with a common variable, trait anxiety. Partial correlation analysis showed that when effects of trait anxiety was taken out, religiosity and hassles frequency were no longer significantly related. There was a stronger relationship between trait anxiety and hassles frequency. The partial correlation between these variables, with religiosity partialled out, remained significant. Thus there is a direct relationship between trait anxiety and hassles frequency.

Trait anxiety was more likely than religiosity to affect whether or not an event is perceived as stressful. An individual high in trait anxiety would therefore perceive more events as stressful, regardless of severity of the perception.

What is surprising is the nonsignificant correlation between trait anxiety and hassles intensity. Investigation of the raw data indicate a pattern in the responses that may account for this unexpected result. Those who mentioned many hassles would rate a number of hassles as very low in severity. Because intensity was calculated as the "averaged" severity rating, the low severity ratings of a number of items serve to bring down the hassles intensity score. Perhaps one would be able to see significant correlations between trait anxiety and hassles intensity if analysis was limited to the hassles that were most common to most respondents. In this manner, given roughly the same event, one can see differences in perceptions of severity of hassles by

participants of varying trait anxiety.

On the other hand, the religiosity measures, but not trait anxiety, were significantly related to hassles intensity. These results suggest that religiosity does not act directly as a buffer against the experiencing of hassling events. A person high in religiosity does not act directly as a buffer against the experiencing of hassling events. A person high in religiosity does not experience fewer hassles than one low in religiosity. It does affect, however, the perceived severity of these stressors such that the highly religious person is more likely to report a less severe reaction to a stressor.

Why was such a relationship found? Kobasa (1979) described three traits associated with "hardiness": 1) a sense of personal control over external events in one's life, 2) a deep sense of involvement, commitment, and purpose in daily activities, and 3) flexibility in adapting to unexpected changes in one's environment.

This study investigated religiosity's relationship with the first two traits: a sense of personal control as measured by responses to two single-item questions: "How much control do you feel you had over these events' occurrence?" and "How much control do you feel you had over the outcome of these events?", and a deep sense of involvement, commitment, and purpose in daily activities, as measured indirectly by the Existential Well-Being Scale .

Gorsuch and Smith (1983) and Kahoe (1974) indeed found a relationship between religiosity and a sense of personal control. This study did not find significant linear relationships between a sense of control over occurrences and outcomes of hassles, and the religiosity measures. There was a slight and nonsignificant trend between control

and spiritual maturity. Further inspection hinted at a nonlinear relationship. Those who reported moderate control scored higher on spiritual maturity, and it was those who reported strong control who scored lowest.

The only other significant relationships found were those of responsibility over occurrences and outcomes and both religiosity measures, religious well-being and spiritual maturity. As in the above trend, those who reported moderate responsibility scored higher in the religiosity measures, compared to those who reported feeling either no, or strong, responsibility.

From these findings, interesting correlates of religiosity can be speculated. Reports of moderate responsibility by the highly religious may be indicative of a "shared" responsibility for occurrences of negative events. The data on help-seeking also hint at the notion of shared responsibility for outcomes of hassles. Those subjects who reported seeking help scored higher on the religiosity measures. Most frequently mentioned sources of help were "friend", "God", and "family".

When asked to rank these sources as to their relative contributions to outcome, "other" had the highest ranking, followed by "God", "family", and "friend". Only 8 subjects actually mentioned role of a significant "other" (usually specified as a boyfriend/girlfriend). At least for these people, categorizing a boyfriend/girlfriend separately indicates the extreme importance of these people in their lives. This is evident in the very high ranking given to a significant "other". "Friend" and "family" were mentioned more frequently than "God" as having affected outcomes. However, of the 41 people who mentioned "God", 30 ranked God first.

These data also suggest that participants high in religiosity do not put sole responsibility to the divine. God is not seen as the sole cause of negative events, nor are the highly religious completely dependent on God for help. They do feel some responsibility both for occurrences and outcomes of negative events. These results counter a common criticism on what is perceived as the function of religion, i.e. religion as a "crutch". Highly religious people do not helplessly lean on God, they see themselves as actors, or at least co-actors in their own lives, in this case, even in negative events.

Kobasa's second trait, a sense of deep involvement, commitment, and purpose in daily activities may well be related to existential well-being. Existential well-being referred to life satisfaction and a sense of life purpose.

There was a significant correlation between the religiosity measures and existential well-being (EWB). Those high in religiosity had higher EWB scores. Based on this, it appears that spiritual maturity and religious well-being are highly related with a sense of life purpose and satisfaction. Especially significant is the relationship between religious well-being and existential well-being. This implies a degree of overlap between these two variables, such that for the highly religious, a considerable amount of their high sense of life purpose and satisfaction can be accounted for by the well-being derived from their religion, or more specifically, from their relationship with God.

The relationship was less clear for those who did not score highly on the religiosity measures. There was more variability in EWB scores on the low end of both religiosity measures. This implies that for some people, their sense of life satisfaction and life purpose stem

from sources not necessarily religious. On the other hand, there are also those people who score as spiritually mature or poor in religious well-being who also have poor existential well-being.

### Religiosity and Religious Behaviors

Results of this study show that religion plays a significant part in college students' lives. A vast majority indicated affiliation with a "church". Most churches mentioned were Christian, partially reflecting recruitment procedures.

A small minority (4.3%) reported that they do not believe in God. 73.6% admitted to at least some influence of God in their lives. Almost half judged themselves as "religious." Mean scores on the religiosity measures were also high.

Although these numbers seem to indicate a fairly religious college sample, reported attendance at organized church activities such as services and meetings present a contradiction. Almost half do not go to church, and 57.1% never attend special church meetings. These data are consistent with studies showing decreased church attendance and religious participation in college (Feldman, 1977).

This apparent contradiction between church attendance and self-reports of religiosity actually gives more light to the differences in religion's centrality in the participants' lives. While almost 3/4 of the sample reported "some" influence of God in their lives, this does not mean that religion, or God, is central in their lives. For those who seem to value religion more, their religious activity, as measured by frequency of church attendance, also indicates such value.

While I was previously skeptical about the use of "church attendance" as a measure of religiosity, this study's data suggest that

it is a good indicator. It correlates significantly with self-rating of religiosity, with reports of God's importance, and with both religiosity measures, RWB and SMI. For a college sample, church attendance may have a strong correspondence with other measures of religiosity. Going to church may be a more voluntary act, compared to a younger group still influenced by parents, or an older group perhaps responsible for children themselves. Those who maintain attendance in college would probably be more involved in religion than those who choose not to attend.

Not surprisingly, reports of God's importance correlate very highly with religious well-being and spiritual maturity. The religiosity instruments measure, to a large degree, one's relationship with God.

Another interesting finding is the relationship between having a "renewed/rediscovered or newly discovered" religious faith/beliefs and the religiosity measures. Phenomena such as conversion to another faith, or being "born again" are examples of this renewed/discovered beliefs. Having a renewed faith is significantly correlated with church attendance, church membership, self-rating of religiosity, importance of God, RWB and SMI. This is consistent with Hadaway's (1980) description of "switchers" (i.e. individuals who have switched from the denomination in which they were raised) as more "religious." He attributed this difference to the deliberateness and consciousness of the choice made by the switchers.

These findings also point to the potential value of using single-item measures of religiosity. Importance of God, and rating of self-religiosity had very high, significant correlations with the religiosity measures RWB and SMI. This implies that these are measures of the same underlying construct. These findings are consistent with factor

analytic studies of single- and multiple-item measures of religiosity. Embree (1973) and Gorsuch and McFarland (1972) found that "importance of God" and "self-rating of religiosity" loaded significantly on the same factor as multiple measures of religiosity. Moreover, they found that the single-item measures had higher factor loadings than the multiple measures. Gorsuch and McFarland (1972) proposed that single-item religiosity measures are just as useful as multiple measures if one is interested in measuring only the "general" trait of religiosity. It is also useful if there is wide variety in religious commitment among the participants of the study (such as the participants recruited from the subject pool). However, if one is interested in specific facets of religion, and if the participants are relatively homogeneous with regard to religious commitment (as in the participants recruited from religious groups), then multiple-item measures would be more useful because the multiple items are more likely to detect subtler differences in outlook.

#### Comparison of Participants from Subject Pool and from Religious Groups

It should be noted that the significant correlations found between religiosity, anxiety, and hassles were affected greatly by the nature of the subsamples. The relationships between religiosity and both anxiety and hassles were relatively strong only for the participants recruited from the religious organizations. Among those recruited from the subject pool, these relationships were weak at best.

There are two possible explanations for this. One is that there were methodological differences between the two groups and there was therefore confounding of results. Subjects from the religious groups may have formed their own hypotheses that were more consistent with the investigator's own hypotheses. Participants from religious groups had



significantly different scores in the religiosity, hassles, and anxiety measures, and all of these differences were favorable to the people from the religious groups. They had significantly higher religiosity scores, lower trait anxiety scores, they reported fewer and less severe experiences of hassles. Even with such a bias, it is interesting that subjects from the religious groups might make such hypotheses about relationship of religiosity with anxiety and hassles.

Another explanation may be that there do exist real differences between these two groups. Responses may appear biased not because of religious group participants' deliberate attempts to appear "religious". but perhaps because they are more religious. Considering their largely voluntary participation, there may have been a selection process such that those who chose to fill out and send in the quesitonnaires were also those who were more involved with their respective religious groups. These participants presumably invest more of themselves in the religious aspect of their lives, and derive more positive consequences as a result of this involvement.

Stronger relationships between the religiosity measures, and trait anxiety and hassles frequency were apparent with the religious group than with the subject pool participants. This is even more significant considering that there was less variability in religiosity scores within the former group. This implies a strong relationship between these variables since they were statistically significant even when the sample was relatively homogeneous. This finding is hardly surprising assuming that the more important a factor is in one's life, the more likely it is to affect or be related to more aspects of that person's life.

## CONCLUSIONS

The primary purpose of this study was to investigate probable "fruits" of religiosity, in particular, religiosity's relationships with trait anxiety, experiences of hassles, and existential well-being. This investigator believes the study of religiosity to be a very important endeavor because religion undeniably is a big part of many lives. Its influence in society is widespread, affecting government, laws, moral behaviors, observances of holidays, etc., practically every aspect of life. This study proposes that it also affects psychological well-being, including a personality variable, trait anxiety, the way one experiences external events, and the way one views one's existence.

The importance of religion to the study's participants is quite evident in self-reports about self-religiosity and importance of God, and in the high average scores in the Religious Well-Being Scale and Spiritual Maturity Index. The significant correlations found between the latter two measures, RWB and SMI, with trait anxiety, reported frequency and intensity of hassles, and existential well-being, all pointed toward better psychological well-being. The higher the scores on the religiosity measures, the lower the score on the trait anxiety inventory, the fewer the reported hassles, the lower the reported intensity or severity of the experience of the hassles, and the higher the scores on the existential well-being scale.

For this college sample, it is important to note the relationship between religiosity and hassles experiences. Compared to the normative data from older samples, this college sample had higher hassles frequency

and hassles intensity scores. The college experience must be very stressful to these young people such that they reported more events as hassles, and they rated more severely their experiences of these hassles. While religiosity was only indirectly related to frequency of reported hassles, it was directly related to severity ratings. The correlation was low, but statistically significant, indicating some buffering by religiosity on reported severity of the hassles.

It was also interesting that a substantial number of participants referred to God as a source of support ( $n=57$ , or 35% of the sample), and as having contributed to the outcome of an experienced hassle ( $n=41$ , or 25.2% of the sample). There was also the finding that those who reported moderate responsibility scored high in the religiosity measures. These findings show that God is perceived by some as an active deity, personally involved in their lives, but at the same time, they also felt themselves as active in their own life events. Participants who scored high in the religiosity measures did not assign full responsibility to God as to the occurrence and outcome of negative events.

From a study such as this, other related issues may be tested in future investigations. A factor analysis of the religiosity measures may give us a better information about the different dimensions of religiosity.

William James talked about "the varieties of religious experience." What are these varieties? Rather than looking at whether religiosity generally contributes to psychological well-being, one can look at which aspects of religiosity contribute to well-being, and which aspects do not.

The items in the two instruments used here do lend themselves to such an investigation. For example, two items in the SMI appear to differentiate between a positive versus a negative aspect of religious experience, respectively, firmness versus rigidity in beliefs: "Even if people around me opposed to the convictions of my faith, I would still hold fast to them," and "People that don't believe the way I do about spiritual truths are hard-hearted." Agreement to the former statement implies a firmness in beliefs, which is a mature religious orientation. Agreement to the latter implies a rigidity, which is an immature religious orientation.

While this study attempted not to discriminate between religious faiths, because of the apparent predominance of "Christians" in the sample, it may have been worthwhile to have used Ellison's original SMI which deals specifically with the Christian faith. Adherence to the teachings of Jesus Christ may have interesting correlates with how one deals with experiences such as hassles. This is especially true for more homogeneous Christian samples.

Another interesting area of investigation is the developmental aspect of religiosity. Developmental may refer to two different issues: First of all, across the life span, are there changes in religiosity due to experiences which are more common during certain periods of life? How do sociocultural experiences affect development of a religious belief? Cognition must play an important role. How does cognitive development affect spiritual maturity.

Secondly, within an individual, how does religiosity develop? How does one become "spiritually mature?" Are there "stages" of religiosity?

We may be ignoring the development of religiosity because we may be considering religiosity as "unscientific" or "superstition." We may be overlooking the potential value of religion to individuals who live in a culture where a belief in God is deeply ingrained in everyday life, even if the culture tries to separate individual religion from everything else.

When James stated that religion can be known by its fruits, we should perhaps take heed and rechannel our efforts into knowing what it is about religious experience that would bear "good fruit." This study found that the existential aspect of religion is related to lower trait anxiety. It was also found that some people do find life purpose elsewhere, rather than in religion. It should be emphasized however, that life purpose also can be found in religion. For people searching for a life purpose, directing them to a road to religion may be helpful.

This study has shown that religion can bear good fruit, that religious experience can be helpful in facing stressful events, and that it can be related to a sense of life purpose and satisfaction such that at least for some, religion is an important source of well-being.

## APPENDIX A

## APPENDIX A

For each of the following statements, circle the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

SA = Strongly Agree  
MA = Moderately Agree  
A = Agree

D = Disagree  
MD = Moderately Disagree  
SD = Strongly Disagree

- |  |    |    |   |   |    |    |
|--|----|----|---|---|----|----|
| 1. I don't find much satisfaction in private prayer with God.                  | SA | MA | A | D | MD | SD |
| 2. I don't know who I am, where I came from, or where I'm going.               | SA | MA | A | D | MD | SD |
| 3. I believe that God loves me and cares about me.                             | SA | MA | A | D | MD | SD |
| 4. I feel that life is a positive experience.                                  | SA | MA | A | D | MD | SD |
| 5. I believe that God is impersonal and not interested in my daily situations. | SA | MA | A | D | MD | SD |
| 6. I feel unsettled about my future.   | SA | MA | A | D | MD | SD |
| 7. I have a personally meaningful relationship with God.                       | SA | MA | A | D | MD | SD |
| 8. I feel very fulfilled and satisfied with life.                              | SA | MA | A | D | MD | SD |
| 9. I don't get much personal strength and support from my God.                 | SA | MA | A | D | MD | SD |
| 10. I feel a sense of well-being about the direction my life is headed in.     | SA | MA | A | D | MD | SD |
| 11. I believe that God is concerned about my problems.                         | SA | MA | A | D | MD | SD |
| 12. I don't enjoy much about life.   | SA | MA | A | D | MD | SD |
| 13. I don't have a personally satisfying relationship with God.                | SA | MA | A | D | MD | SD |
| 14. I feel good about my future.   | SA | MA | A | D | MD | SD |
| 15. My relationship with God helps me not to feel lonely.                      | SA | MA | A | D | MD | SD |
| 16. I feel that life is full of conflict and unhappiness.                      | SA | MA | A | D | MD | SD |

- |   |    |    |   |   |    |    |
|---|----|----|---|---|----|----|
| 17. I feel most fulfilled when I'm in close communion with God. | SA | MA | A | D | MD | SD |
| 18. Life doesn't have much meaning.                             | SA | MA | A | D | MD | SD |
| 19. My relation with God contributes to my sense of well-being. | SA | MA | A | D | MD | SD |
| 20. I believe there is some real purpose for my life.           | SA | MA | A | D | MD | SD |

NOTE: There are two subscales in this instrument:

Religious Well-Being Scale - odd numbered items

Existential Well-Being Scale - even numbered items



## APPENDIX B

## APPENDIX B

Please circle the choice that best indicates the extent of your agreement or disagreement with each of the following statements. Please note that there is no "right" response; your response should honestly describe your personal experience. Do not choose an answer that would make you look "spiritual" if it is not true of yourself. All responses will be confidential.

SA = Strongly Agree	D = Disagree
MA = Moderately Agree	MD = Moderately Disagree
A = Agree	SD = Strongly Disagree

- |  |    |    |   |   |    |    |
|--|----|----|---|---|----|----|
| 1. My faith doesn't primarily depend on the formal church for its vitality.  | SA | MA | A | D | MD | SD |
| 2. The way I do things from day to day is often affected by my relationship with God.  | SA | MA | A | D | MD | SD |
| 3. I seldom find myself thinking about God and spiritual matters during each day.  | SA | MA | A | D | MD | SD |
| 4. Even if people around me opposed to the conviction of my faith, I would still hold fast to them.                                      | SA | MA | A | D | MD | SD |
| 5. The encouragement and example of believers who share my faith is essential for me to keep on living for my faith.                     | SA | MA | A | D | MD | SD |
| 6. I feel like I need to be open to consider new insights and truths about my faith.   | SA | MA | A | D | MD | SD |
| 7. I am convinced that the way I believe spiritually is the right way.   | SA | MA | A | D | MD | SD |
| 8. People that don't believe the way I do about spiritual truths are hard-hearted.   | SA | MA | A | D | MD | SD |
| 9. My faith doesn't seem to give me a definite purpose in my daily life.   | SA | MA | A | D | MD | SD |
| 10. My identity (who I am) is determined more by my personal or professional situation than by my relationship with God.                 | SA | MA | A | D | MD | SD |
| 11. Walking closely with God is the greatest joy in my life.   | SA | MA | A | D | MD | SD |
| 12. When my life is done I feel like only those things that I've done as part of the following of the teachings of my faith will matter. | SA | MA | A | D | MD | SD |

13. I believe that God has mused the most "negative" or difficult times in my life to draw me closer to Him. SA MA A D MD SD
14. I feel like God has let me down in some of the things that have happened to me. SA MA A D MD SD
15. I have chosen to forego various gains when they have detracted me from my spiritual witness or violated spiritual principles. SA MA A D MD SD
16. Giving myself to God regardless of what happens to me is my highest calling in life. SA MA A D MD SD
17. I actively look for opportunities to share my faith with those of other beliefs. SA MA A D MD SD
18. I don't have regular times of deep communion with God in personal (private) prayer. SA MA A D MD SD
19. More than anything else in life I want to know God intimately and to serve Him. SA MA A D MD SD
20. Worship and fellowship with other believers is a significant part of my spiritual life. SA MA A D MD SD
21. It seems like I am experiencing more of God's presence in my daily life than I have previously. SA MA A D MD SD
22. I seem to have less consistent victories over temptation than I used to. SA MA A D MD SD
23. On the whole, my relationship with God is alive and growing. SA MA A D MD SD

## APPENDIX C

PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

89-92,      Appendix C

U·M·I

## APPENDIX C

Hassles are irritants that can range from minor annoyances to fairly major pressures, problems, or difficulties. They can occur few or many times.			
Listed below are a number of ways in which a person can feel hassled. First, circle the hassles that have happened to you in the past month. Then look at the numbers on the right of the items you circled. Indicate by circling a 1, 2, or 3 how SEVERE each of the circled hassles has been for you in the past month. If a hassle did not occur in last month, do NOT circle it.			
HASSLES	SEVERITY	HASSLES	SEVERITY
1. Misplacing or losing things . . . . .	1. somewhat severe 2. moderately severe 3. extremely severe	13. Someone owes you money . . . . .	1. 2 2. 3
2. Troublesome neighbors . . . . .	1. 2 2. 3	14. Financial responsibility for someone who doesn't live with you . . . . .	1. 2 2. 3
3. Social obligations . . . . .	1. 2 2. 3	15. Cutting down on electricity, water, etc. . . . .	1. 2 2. 3
4. Inconsiderate smokers . . . . .	1. 2 2. 3	16. Smoking too much . . . . .	1. 2 2. 3
5. Troubling thoughts about your future . . . . .	1. 2 2. 3	17. Use of alcohol . . . . .	1. 2 2. 3
6. Thoughts about death . . . . .	1. 2 2. 3	18. Personal use of drugs . . . . .	1. 2 2. 3
7. Health of a family member . . . . .	1. 2 2. 3	19. Too many responsibilities . . . . .	1. 2 2. 3
8. Not enough money for clothing . . . . .	1. 2 2. 3	20. Decisions about having children . . . . .	1. 2 2. 3
9. Not enough money for housing . . . . .	1. 2 2. 3	21. Non-family members living in your house . . . . .	1. 2 2. 3
10. Concerns about owing money . . . . .	1. 2 2. 3	22. Care for pet . . . . .	1. 2 2. 3
11. Concerns about getting credit . . . . .	1. 2 2. 3	23. Planning meals . . . . .	1. 2 2. 3
12. Concerns about money for emergencies . . . . .	1. 2 2. 3	24. Concerned about the meaning of life . . . . .	1. 2 2. 3
		25. Trouble relaxing . . . . .	1. 2 2. 3
		26. Trouble making decisions . . . . .	1. 2 2. 3
		27. Problems getting along with fellow workers . . . . .	1. 2 2. 3

HASSLES	SEVERITY			HASSLES	SEVERITY		
	1. Somewhat severe	2. Moderately severe	3. Extremely severe		1. Somewhat severe	2. Moderately severe	3. Extremely severe
28. Customers or clients giving you a hard time . . . . .	1	2	3	48. Physical illness . . . . .	1	2	3
29. Home maintenance (inside) . . . . .	1	2	3	49. Side effects of medication . . . . .	1	2	3
30. Concerns about job security . . . . .	1	2	3	50. Concerns about medical treatment . . . . .	1	2	3
31. Concerns about retirement . . . . .	1	2	3	51. Physical appearance . . . . .	1	2	3
32. Laid-off or out of work . . . . .	1	2	3	52. Fear of rejection . . . . .	1	2	3
33. Don't like current work duties . . . . .	1	2	3	53. Difficulties with getting pregnant . . . . .	1	2	3
34. Don't like fellow workers . . . . .	1	2	3	54. Sexual problems that result from physical problems . . . . .	1	2	3
35. Not enough money for basic necessities . . . . .	1	2	3	55. Sexual problems other than those resulting from physical problems . . . . .	1	2	3
36. Not enough money for food . . . . .	1	2	3	56. Concerns about health in general . . . . .	1	2	3
37. Too many interruptions . . . . .	1	2	3	57. Not seeing enough people . . . . .	1	2	3
38. Unexpected company . . . . .	1	2	3	58. Friends or relatives too far away . . . . .	1	2	3
39. Too much time on hands . . . . .	1	2	3	59. Preparing meals . . . . .	1	2	3
40. Having to wait . . . . .	1	2	3	60. Wasting time . . . . .	1	2	3
41. Concerns about accidents . . . . .	1	2	3	61. Auto maintenance . . . . .	1	2	3
42. Being lonely . . . . .	1	2	3	62. Filling out forms . . . . .	1	2	3
43. Not enough money for health care . . . . .	1	2	3	63. Neighborhood deterioration . . . . .	1	2	3
44. Fear of confrontation . . . . .	1	2	3	64. Financing children's education . . . . .	1	2	3
45. Financial security . . . . .	1	2	3	65. Problem with employees . . . . .	1	2	3
46. Silly practical mistakes . . . . .	1	2	3	66. Problems on job due to being a woman or a man . . . . .	1	2	3
47. Inability to express yourself . . . . .	1	2	3				

HASSLES	SEVERITY			HASSLES	SEVERITY		
	1. Somewhat severe	2. Moderately severe	3. Extremely severe		1. Somewhat severe	2. Moderately severe	3. Extremely severe
67. Declining physical abilities . . . . .	1	2	3	86. Too many meetings . . . . .	1	2	3
68. Being exploited . . . . .	1	2	3	87. Problems with divorce or separation . . . . .	1	2	3
69. Concerns about bodily functions . . . . .	1	2	3	88. Trouble with arithmetic skills. . . . .	1	2	3
70. Rising prices of common goods . . . . .	1	2	3	89. Gossip . . . . .	1	2	3
71. Not getting enough rest . . . . .	1	2	3	90. Legal problems . . . . .	1	2	3
72. Not getting enough sleep . . . . .	1	2	3	91. Concerns about weight . . . . .	1	2	3
73. Problems with aging parents . . . . .	1	2	3	92. Not enough time to do the things you need to do . . . . .	1	2	3
74. Problems with your children . . . . .	1	2	3	93. Television . . . . .	1	2	3
75. Problems with persons younger than yourself . . . . .	1	2	3	94. Not enough personal energy . . . . .	1	2	3
76. Problems with lover . . . . .	1	2	3	95. Concerns about inner conflicts. . . . .	1	2	3
77. Difficulties seeing or hearing . . . . .	1	2	3	96. Feel conflicted over what to do . . . . .	1	2	3
78. Overloaded with family responsibilities . . . . .	1	2	3	97. Regrets over past decisions . . . . .	1	2	3
79. Too many things to do . . . . .	1	2	3	98. Menstrual (period) problems . . . . .	1	2	3
80. Unchallenging work . . . . .	1	2	3	99. The weather . . . . .	1	2	3
81. Concerns about meeting high standards . . . . .	1	2	3	100. Nightmares . . . . .	1	2	3
82. Financial dealings with friends or acquaintances . . . . .	1	2	3	101. Concerns about getting ahead . . . . .	1	2	3
83. Job dissatisfactions . . . . .	1	2	3	102. Hassles from boss or supervisor . . . . .	1	2	3
84. Worries about decisions to change jobs . . . . .	1	2	3	103. Difficulties with friends . . . . .	1	2	3
85. Trouble with reading, writing, or spelling abilities . . . . .	1	2	3	104. Not enough time for family . . . . .	1	2	3



HASSLES	SEVERITY			HAVE WE MISSED ANY OF YOUR HASSLES? IF SO,		
	1. Somewhat severe	2. Moderately severe	3. Extremely severe	WRITE THEM IN BELOW:		
105. Transportation problems . . . . .	1	2	3	118. _____	1	2 3
106. Not enough money for transportation . . . . .	1	2	3	119. _____	1	2 3
107. Not enough money for entertainment and recreation . . . . .	1	2	3	120. _____	1	2 3
108. Shopping . . . . .	1	2	3			
109. Prejudice and discrimination from others . . . . .	1	2	3			
110. Property, investments, or taxes . . . . .	1	2	3			
111. Not enough time for entertainment and recreation . . . . .	1	2	3			
112. Yardwork or outside home maintenance . . . . .	1	2	3			
113. Concerns about news events . . . . .	1	2	3			
114. Noise . . . . .	1	2	3			
115. Crime . . . . .	1	2	3			
116. Traffic . . . . .	1	2	3			
117. Pollution . . . . .	1	2	3			

HAS THERE BEEN A CHANGE IN YOUR LIFE THAT  
AFFECTED HOW YOU ANSWERED THIS SCALE? IF SO,  
TELL US WHAT IT IS:

## APPENDIX D

## APPENDIX D

Choose 3 events that you rated as extremely severe in the preceeding questionnaire. Write them in the blanks below.

1	2	3
_____	_____	_____
_____	_____	_____

For each event check the appropriate answer:

_____	_____	_____	1. How much control do you feel you had over these events' occurrence?
_____	_____	_____	no control
_____	_____	_____	moderate control
_____	_____	_____	strong control
_____	_____	_____	2. How much control do you feel you had over the outcome of these events?
_____	_____	_____	no control
_____	_____	_____	moderate control
_____	_____	_____	strong control
_____	_____	_____	3. Did you ask for help/advice/support from others? (answer yes or no)
_____	_____	_____	4. Which source(s) did you approach for help/advice/support?
_____	_____	_____	none
_____	_____	_____	family
_____	_____	_____	friends
_____	_____	_____	church members
_____	_____	_____	God
_____	_____	_____	Other (please specify):
_____	_____	_____	5. Did you receive help/advice/support from others? (answer yes or no)

1	2	3

6. Which source(s) contributed to the outcome of these events? (if more than one, please rank according to most important, 1-most important)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

none  
family  
friends  
church members  
God  
Other (please specify)

7. How responsible do you feel over the occurrence of these events?

_____	_____
_____	_____
_____	_____

not responsible  
moderately responsible  
strongly responsible

8. How responsible do you feel over the outcome of these events?

_____	_____
_____	_____
_____	_____

not responsible  
moderately responsible  
strongly responsible

9. Did something positive come out of these negative events? (or do you feel something positive will result from these negative events? answer yes or no)

_____
-------



10. If you answered yes to #9, what positive outcomes did (or can) result from these events?

Event #1:

Event #2:

Event #3:

APPENDIX E

## APPENDIX E

The State-Trait Anxiety Inventory cannot be reproduced without written consent from Consulting Psychologists Press. For more information about the instrument, please write:

Consulting Psychologists Press, Inc.  
577 College Ave.  
Palo Alto, CA 94306



APPENDIX F

## APPENDIX F

Sex: \_\_\_\_\_  
 Age: \_\_\_\_\_  
 Major: \_\_\_\_\_

Class level: freshman \_\_\_\_\_  
                   sophomore \_\_\_\_\_  
                   junior \_\_\_\_\_  
                   senior \_\_\_\_\_  
                   graduate level \_\_\_\_\_

1. While a student at college, do you go to church? \_\_\_\_\_
2. If yes, how often? \_\_\_\_\_ less than once per month  
                                   \_\_\_\_\_ once a month  
                                   \_\_\_\_\_ once every two weeks  
                                   \_\_\_\_\_ once a week  
                                   \_\_\_\_\_ more than once a week
3. Are you a member of a church? \_\_\_\_\_
4. What is the name of your church? \_\_\_\_\_
5. What is the basic affiliation of your church? (please check one)  
                                   \_\_\_\_\_ Catholic  
                                   \_\_\_\_\_ Jewish  
                                   \_\_\_\_\_ Buddhist  
                                   \_\_\_\_\_ Muslim  
                                   \_\_\_\_\_ Protestant (please specify): \_\_\_\_\_  
                                   \_\_\_\_\_ Other (please specify) \_\_\_\_\_
6. How would you best describe your church?  
                                   \_\_\_\_\_ evangelical  
                                   \_\_\_\_\_ charismatic  
                                   \_\_\_\_\_ traditional  
                                   \_\_\_\_\_ other (please specify) \_\_\_\_\_
7. Do you attend special meetings at your church? \_\_\_\_\_  
    If yes, how often?  
       \_\_\_\_\_ I attend at least one special meeting regularly  
       \_\_\_\_\_ I attend special meetings only occasionally  
       \_\_\_\_\_ I never attend special meetings
8. Check the one statement that best describes you.\*  
       \_\_\_\_\_ I am a very religious person.  
       \_\_\_\_\_ I am more religious than most persons.  
       \_\_\_\_\_ I am about as religious as the next person.  
       \_\_\_\_\_ I am not a very religious person.  
       \_\_\_\_\_ I do not consider myself to be a religious person.

## 9. How important is God in your life? \*

- \_\_\_\_\_ I don't believe in God.  
\_\_\_\_\_ I think I believe in God, but he doesn't affect my life much.  
\_\_\_\_\_ I think I would do certain things that I now don't because of  
my belief in God.  
\_\_\_\_\_ God is the center of my life.

## 10. Would you describe yourself as one with a renewed/rediscovered or newly discovered faith/religious beliefs? \_\_\_\_\_

## 11. If yes, how long has it been since this renewal/discovery?

- \_\_\_\_\_ less than 1 month  
\_\_\_\_\_ 1 month - 6 months  
\_\_\_\_\_ 6 months - 1 year  
\_\_\_\_\_ more than a year (if more than a year, please put down number  
of years) \_\_\_\_\_

APPENDIX G



# Alliance Theological Seminary

---

Nyack College  
Nyack, New York 10960  
telephone (914) 358-1710

*Office of Urban Ministries*

Permission for use and reprinting of articles and indexes  
by Craig W. Ellison:

Permission is granted to individuals requesting the use of the Spiritual Well-Being and/or the Spiritual Maturity Indexes for research purposes providing written summary of research results are promptly sent to Dr. Craig Ellison and proper credit is given in any publication of said research.

Commercially prepared copies of article reprints, scales and indexes are not available. Copyright acknowledgement should be placed visibly on any material copied.

DR. CRAIG W. ELLISON  
Alliance Theological Seminary  
NYACK COLLEGE  
NYACK, N. Y. 10960  
Craig W. Ellison, Ph.D.  
Director of Urban Programs  
Psychologist, Professor

[swb.req]  
11/85vm

## APPENDIX H

## APPENDIX H

Dear \_\_\_\_\_,

I am a graduate student in the Department of Psychology at Michigan State University. I am currently working on my master's thesis. The topic of interest is the effects of anxiety and religiosity on life stress (abstract attached).

Participants in this study include college students from the Psychology Department's human subject pool. In addition, I would like to recruit college students who are members of various churches or religious organizations. This is necessary to ensure a sampling of subjects potentially higher in religiosity than the average student.

In this regard, I ask if I may recruit students from you church/organization. The students will be asked to complete several questionnaires (copies of the questionnaires are also attached.) Participation is voluntary, all results will be treated with strict confidence, and anonymity of subjects will be preserved. It will however be necessary for me to code each questionnaire according to source of respondent so as to keep a record of the organizations from which the respondents were recruited. However, the names of these organizations/churches will not be mentioned in the text.

I am also attaching a copy of the consent form the subjects will be receiving, a precautionary measure to protect the rights of the students as subjects.

If you need more information, I would be willing to discuss my study and answer any questions you might have.

I would very much appreciate your cooperation.

Sincerely,

Marita D. Bernardo

## APPENDIX I



## APPENDIX I

Dear \_\_\_\_\_,

I am a graduate student in psychology at Michigan State University. I am currently gathering data for my master's thesis and I would like to solicit your help in this regard.

My thesis investigates experiences of individuals with daily hassles (minor irritating events), and how they deal with these hassles. Your participation involves answering the enclosed set of questionnaires. It will take you approximately 30-45 minutes to answer all the questionnaires. All responses will be anonymous. If you agree to participate, please read the instructions attached to the set.

If you have any questions, please feel free to call:

Marita D. Bernardo

355-3251 (home)

353-5193 (office)

I would appreciate your help very much.

Sincerely,

Marita D. Bernardo

APPENDIX J



## APPENDIX J

## INSTRUCTIONS

Please read the consent form on the following page. Sign your name if you agree to participate.

Please answer the questionnaires in this set. Each is accompanied by instructions. Read those carefully before you begin each one. Please respond honestly. Your responses should honestly describe you and/or your experiences. Do not put your name on any of the questionnaires. A self-addressed stamped envelope is enclosed. Please return all questionnaires and the signed consent form by \_\_\_\_\_. If you would like to know the results of the study, write your name and mailing address on the postcard accompanying the set, and mail it separately. Your name cannot possibly be matched with the questionnaires you answer. Your responses will remain anonymous.

Thank you very much for your cooperation.

## APPENDIX K

## APPENDIX K

## CONSENT FORM

1. I have freely consented to take part in a scientific study being conducted by Marita D. Bernardo under the supervision of Dr. Elain Donelson, professor.
2. This research will require that I answer a set of questionnaires. The set includes questionnaires measuring experiences of "daily hassles". It also contains questionnaires measuring other personal variables. It will take approximately 30-45 minutes to complete all the questionnaires.
3. This study has been explained to me and I understand the explanation that has been given and what my participation will involve.
4. I understand that I am free to discontinue my participation in the study at any time without penalty.
5. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.
6. I understand that my participation in the study does not guarantee any beneficial results to me.
7. I understand that, at my request, I can receive additional explanations of the study after my participation is complete.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX L

## APPENDIX L

## FEEDBACK ON "HASSLES"

Hassles are defined as the "irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment" (Kanner, et al., 1980). These hassles can be potent sources of stress (McLean, 1976). This study seeks to identify factors which may be related to perceived stressfulness of these hassles. Some of the factors investigated are anxiety proneness, sense of self-being, religious beliefs and behaviors, sources of social support.

Studies have shown contradictory findings in the relationships between anxiety, stress, and religiosity. The differences may be due to how religiosity was measured. This study uses two questionnaires focusing on one's relationship with God as an indicator of religiosity.

## Suggested Readings:

Batson, C.D. & Ventis, W.L. (1982). The religious experience. New York: Oxford University Press.

Duckitt, J. & Broll, T. (1982). Life event stress, social support and health. Humanitas: Journal for Research in the Human Sciences, 8(4), 377-383. (From Psychological Abstracts, 1984, 71(4), 931).

Ellison, C.W. (1983). Spiritual well-being. Journal of Psychology and Theology, 11(4), 330-340.

Kanner, A.D., Coyne, J.C., Schaefer, C. & Lazarus, R.J. (1980). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. Journal of Behavioral Medicine, 4(1), 1-39.

McLean, P. (1976). Depression as a specific response to stress. In I.G. Sarason & C.D. Spielberger (Eds). Stress and anxiety, Vol.3, Washington D.C.: Hemisphere.



## BIBLIOGRAPHY

## BIBLIOGRAPHY

- Allport, G.W. (1958). The person in psychology. Boston: Beacon Press.
- Allport, G.W. & Ross, J.M. (1967). Personal religious orientation and prejudice. Journal of Personality and Social Psychology, 5, 432-443.
- Argyle, M. & Beit-Hallahmi, B. (1975). The social psychology of religion. London: Routledge and Kegan Paul.
- Baker, M. & Gorsuch, R. (1982). Trait anxiety and intrinsic-extrinsic religiousness. Journal for the Scientific Study of Religion, 2, 119-122.
- Batson, D. & Ventis, W.L. (1982). The religious experience. New York: Oxford University Press.
- Bergin, A.E. (1983). Religiosity and mental health: A critical reevaluation and meta-analysis. Professional Psychology: Research and Practice, 14, 170-184.
- Brown, D.G. & Lowe, W.L. (1951). Religious beliefs and personality characteristics of college students. Journal of Social Psychology, 33, 103-129.
- Byrne, D.G. (1983). Personal determinants of life event stress and myocardial infarction. Psychotherapy and Psychosomatics, 40 (1-4), 106-114. (From Psychological Abstracts, 1984, 71, 3097).
- Chattopadhyay, P.K. and Das, M. (1983). Stressful life events and psychopathological episodes. Indian Journal of Clinical Psychology, 10, 227-231. (From Psychological Abstracts, 1984, 71, 3066).
- Cooke, D.J. & Hole, D.J. (1983). The aetiological importance of stressful life events. British Journal of Psychiatry, 143, 397-400.
- Dittes, J. (1969). Psychology of religion. In G.Lindzey & E. Aronson (Eds). Handbook of Social Psychology, Vol.5. London: Addison-Wesley.
- Duckitt, J. & Broll, T. (1982). Life event stress, social support and health. Humanitas: Journal for Research in the Human Sciences, 8, 377-383. (From Psychological Abstracts, 1984, 71, 931).

- Eckenrode, J. (1984). Impact of chronic and acute stressors on daily reports of mood. Journal of Personality and Social Psychology, 46(4), 907-918.
- Ellis, A. (1980). Psychotherapy and atheistic values: A response to A.E. Bergin's "Psychotherapy and religious values." Journal of Consulting and Clinical Psychology, 48, 635-639.
- Ellison, C.W. (1983). Spiritual well-being: Conceptualization and measurement. Journal of Psychology and Theology, 11, 330-340.
- Ellison, C.W. & Paloutzian, R.F. (1979). Religious experience and quality of life. Symposium presented at the annual meeting of the American Psychological Association, New York. (from Ellison, C.W. Journal of Psychology and Theology, 11, 330-340).
- Entner, P. (1977). Religious orientation and mental health. Dissertation Abstracts International, 38(4-B), 1949.
- Fehr, L. & Heintzelman, M. (1977). Personality and attitude correlates of religiosity: A source of controversy. Journal of Psychology, 95(1), 63-66.
- Feldman, K.A. (1969). Change and stability of religious orientation during college. In H.N. Malony (Ed), 1977, Current perspectives in the psychology of religion, Grand Rapids, Michigan: Wm.B.Eerdmans Publ.Co.
- Feldman, K.A. & Newcombe, T.M. (1969). The impact of college on students. San Francisco: Jossey-Bass.
- Ford, T.R. (1960). Status, residence and fundamentalist religious beliefs in the Southern Appalachians. Social Forces, 39, 41-49.
- Freud, S. (1933). New introductory lectures on psychoanalysis. translated by J. Strachey, New York: W.W.Norton & Company.
- Funk, R.A. (1956). Religious attitudes and manifest anxiety in a college population. American Psychologist, 11, 375.
- Gorsuch, R.L. & Smith, C.S. (1983). Attributions and responsibility to God: An interaction on religious beliefs and outcomes. Journal for the Scientific Study of Religion, 22, 340-352.
- Graff, R. & Ladd, C. (1971). POI correlates of a religious commitment inventory. Journal of Clinical Psychology, 27, 502-504.
- Hadaway, C.K. (1980). Denominational switchings and religiosity. Review of Religious Research, 21, 451-461.
- James, W. (1902). The varieties of religious experience. New York: Longmans Green.

- Jung, C.G. (1933). Modern man in search of a soul. New York: Harcourt, Brace Jovanich.
- Kanner, A.D., Coyne, J.C., Schaefer, C. & Lazarus, R.S. (1980). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. Journal of Behavioral Medicine, 4(11), 1-39.
- Kobasa, S.C. (1979). Stressful life events, personality and health: An inquiry into hardiness. Journal of Personality and Social Psychology, 37, 1-11.
- Lindethal, J., Myers, J. Pepper, M. & Stern, M. (1970). Mental states and religious behavior. Journal for the Scientific Study of Religion, 9, 143-149.
- Lustman, P.J., Sowa, C.J. & O'Hara, D.J. (1984). Factors influencing college student health: Development of the Psychological Distress Inventory. Journal of Counseling Psychology, 31(1), 28-35.
- Malony, H.N. (1977). Current perspectives in the psychology of religion. Grand Rapids, Michigan: Wm.B.Eerdmans Publ.Co.
- Martin, W.T. (1984). Religiosity and U.S. suicidal rates, 1972-1978. Journal of Clinical Psychology, 40(5), 1166-1169.
- Martin, C. & Nichols, R. (1962). Personality and religious belief. Journal of Social Psychology, 56, 3-8.
- Mayo, C.C., Puryear, H.B. & Richek, H.G. (1969). MMPI correlates of religiousness in late adolescent college students. The Journal of Nervous and Mental Disease, 149(5), 381-385.
- McFarlane, A.H., Norman, G.R. & Streiner, D.L. (1983). The process of social stress: Stable, reciprocal and mediating relationships. Journal of Health and Social Behavior, 24(2), 160-173.
- McLean, P. (1976). Depression as a specific response to stress. In I.G. Sarason & C.D. Spielberger (Eds). Stress and anxiety, vol.3. Washington, D.C.: Hemisphere.
- Moberg, D.O. (1971). Spiritual well-being: Background and issues. Washington, D.C. White House Conference on Aging.
- Meadow, M.J. & Kahoe, R.D. (1984). Psychology of religion: Religion in individual lives. New York: Harper and Row.
- Monroe, S.M. (1983). Major and minor life events as predictors of psychological distress: Further issues and findings. Journal of Behavioral Medicine, 6(2), 189-205.
- Myers, D.G. (1978). The human puzzle: Psychological research and Christian belief. San Francisco: Harper and Row Publishers.

- National Interfaith Coalition on Aging (1975). Spiritual well-being: A definition. (cited by Ellison, C.W. Journal of Psychology and Theology, 11(4), 330-340.
- Nelson, D.W. & Cohen, L.H. (1983). Locus of control and control perceptions and the relationship between life stress and psychological disorders. American Journal of Community Psychology, 11(6), 705-722.
- Payne, D.S. (1983). Trait anxiety moderation of the effects of life stress on state anxiety. Journal of Research in Personality, 17, 300-307.
- Rokeach, M. (1960). The open and closed mind: Investigations into the nature of belief systems and personality systems. New York: Basic Books.
- Sarason, I.G., Johnson, J.H. & Siegel, J.M. (1978). Assessing the impact of life changes: Development of the Life Experiences Survey. Journal of Consulting and Clinical Psychology, 46(5), 932-946.
- Sklar, L.S. & Anisman, H. (1981). Stress and cancer. Psychological Bulletin, 89(3), 369-406.
- Spielberger, C.D., Gorsuch, R.L., Lushene, R., Vagg, A.R., & Jacobs, G.A. (1983). Manual for the State-Trait Anxiety Inventory. Palo Alto, Ca: Consulting Psychologists Press.
- Stark, R. (1971). Psychopathology and religious commitment. Review of Religious Research, 12, 165-176.
- Sturgeon, R.S. & Hamley, R.W. (1979). Religiosity and anxiety. Journal of Social Psychology, 108(1), 137-138.
- Tansey, M. (1976). Religious commitment and anxiety level as a function of ego strength. Dissertation Abstracts International, 37(3-B), 1452.
- Wilson, W. & Miller, H. (1968). Fear, anxiety and religiousness. Journal for the Scientific Study of Religion, 7(1), 111.
- Trent, J.W. & Medsker, L.L. (1968). Beyond high school: A study of 10,000 high school graduates. San Francisco: Jossey-Bass.
- Zautra, A.J. & Reich, J.W. (1983). Life events and perceptions of life quality: Developments in a two-factor approach. Journal of Community Psychology, 11(2), 121-132.

MICHIGAN STATE UNIV. LIBRARIES



31293005506088