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The Effect of Deliberate Faking Good and Faking Bad on Spiritual Well-Being Scale Scores in a Church Sample

Alice V. Moody

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Alice V. Moody

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Signatures:

Rodger K. Bufford, Ph.D.
Committee Chairman

Vice President for Academic Affairs

Wayne E. Colwell, Ph.D.
Committee Member

Date: 12/8/88

Robert C. Anderson, Ph.D.
Committee Member

Date: 9/30/88

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Abstract

This study investigated the effect of faking (good and bad) on Spiritual Well-being (SWB) Scale scores. It is a true experiment with three levels of the independent variable: fake good, honest responding, and fake bad instructions. The sample consisted of 172 adults from a community church Sunday School class and a group for those overcoming some addiction and/or abuse.

A demographic questionnaire was given along with the SWB Scale. An analysis of variance was run for each of the dependent measures: SWB and its two subscales, Religious Well-being (RWB) and Existential Well-being (EWB). ANOVA and Scheffe post hoc test

revealed a very significant difference between the fake bad treatment condition and the other two conditions, but no difference between honest responding and faking good. Results do not rule out the possibility of faking good on the scale as the ceiling to the SWB Scale is not high enough to distinguish honest responding from faking good.

Two other questions were examined. First, would those higher in religious knowledge and experience be able to fake better on the RWB scale? Of seven religious variables, only leadership experience correlated with SWB and RWB under the fake good condition. Second, could several items be found on the SWB Scale which could comprise a faking good or validity scale? This question was abandoned as every RWB and EWB item significantly contributed to the results.

SWB and both its subscales were significantly correlated with frequency of church attendance, Christian profession, religious knowledge and development, church leadership experience, and a social relationships variable dealing with liking to be alone. EWB was significantly correlated with financial condition.

Individual decisions based on SWB scores in the upper range are not recommended. However, low scores may be more meaningful: the person is experiencing a low degree of well-being or wishes to appear low in well-being.

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INTRODUCTION

"American psychologists became leaders in the psychology of religion movement during the period 1880-1925" (Malony, 1985, p. 938). After that time, psychologists seemed to have lost interest in religion for the most part. Then in the 1950's there came a time of religious revival in America, and the 1960's marked another rise in interest in the psychology of religion that was associated with the quality of life movement.

Ellison (1983) says this period in the 1960's became a turning point in the attempts to measure subjective well-being of the American people. Even so, religious well-being was largely ignored in the new research. In an attempt to measure the spiritual dimension of human welfare, Ellison and Paloutzian (1978) developed the Spiritual Well-being Scale (SWB). This scale is becoming quite popular, and in one psychology doctoral program, it has been the subject of over 40 research studies.

The SWB Scale is a self-report inventory, and as such, has certain weaknesses as well as advantages. One potential problem

with the SWB and similar scales is that of social desirability and/or conscious faking.

Ten of these 40+ studies at Western Conservative Baptist Seminary have examined some aspect of social desirability associated with subjects taking the SWB Scale. Most of these have found a significant correlation between social desirability and SWB scores using instruments such as the L and K scales on the Minnesota Multiphasic Personality Inventory (MMPI), and the Edwards Social Desirability Scale (ESDS). No studies, however, have been done to test the scale in terms of deliberate faking good or bad. The purpose of this study is to test the effect of deliberately faking good and faking bad on the SWB Scale.

This chapter will present the historical background for the SWB Scale, giving a brief overview of the psychology of religion and the concept of spiritual well-being. There will be a discussion of the Christian perspective on spiritual well-being. The Spiritual Well-being Scale will be discussed, including its development, and its advantages as an operation to measure the concept of spiritual well-being. An extensive review of the literature will be presented, including research done by authors of the SWB Scale, as well as an overview of the work done at Western Conservative Baptist Seminary. A special section will examine the ten studies having to do with social desirability.

This will be followed by a section on definition problems related to social desirability and conscious faking, including a discussion of the failure in the literature at large to distinguish between social desirability and deliberate faking. Another brief section will present disadvantages and advantages of self-report instruments.

The rationale and purpose for the study will be presented, along with specific hypotheses to be tested.

Brief History of Psychology of Religion

The psychology of religion is that subdomain within psychology that deals with the psychological dimension of religious behavior. This includes such areas as religious worship, conversion, the corporate body life of a congregation, prayer, solitary religious activities, etc. It includes efforts to understand, predict, and control the thoughts, words, feelings, and actions of persons when they are acting religiously. James defined religion as "whatever men do in relation to that which they consider to be divine" (Malony, 1985, p. 938).

American psychologists became leaders in the psychology of religion movement (Malony, 1985). The Clark School of Psychology of Religion (1890-1925) was associated with the early development of psychology in the United States. G. Stanley Hall was the first

president of the American Psychological Association and also chairman of the Clark program. He encouraged the empirical study of religion. Hall wrote about the motivations and psychodynamic rationale for religious conversion.

The American Journal of Psychology and the Psychological Bulletin printed many articles on the psychology of religion and in 1904 the Psychological Bulletin began carrying an annual review of the literature in the field. This Bulletin was one of the most respected of the review publications. Another journal was started by Hall entirely devoted to the topic, the American Journal of Religious Psychology and Education (later changed to the Journal of Religious Psychology). This publication lasted until 1915 (Malony, 1985).

Two students of Hall, Leuba and Starbuck, were also significant contributors. Leuba studied religious conversion at the encouragement of Hall. Starbuck eventually took another direction, discounting anything uniquely religious.

James wrote a book in 1902 called the Varieties of Religious Experience. The focus was on individual experiences of religion. He saw religion as more or less a solitary experience, and did not deal much with the corporate aspect or with conversion.

Malony (1985) gives six reasons for the decline of interest in the psychology of religion between 1920 and 1960:

> 1) an overly close alliance with theology and philosophy and with the goals of religious institutions; 2) the lack of an integrating theory around which to gather facts; 3) the overuse of the questionnaire as a method of data collection; 4) the rise of a behavoristic, positivistic world view that led to an avoidance of subjective introspection; 5) the emphasis on psychoanalytic interpretations which came to supersede empirical approaches; 6) the lack of an impact on general psychology. Although the movement had defined itself as empirical and positivistic, subsequent advances in social psychology, for example, did not incorporate interest in religion; thus the field became neglected in the viewpoint of mainline psychology. Many of the issues of the psychology of religion were taken over by religious-education and pastoral-counseling movements--both of which began in the late 1920's. (p. 939)

A half century earlier psychology of religion had been a highly respected area of study, yet it became a taboo topic (Spilka, Hood & Gorsuch, 1985).

Until recently the area of spirituality has been essentially ignored by social and behavioral scientists (Ellison, 1983).

The 1950's marked a revival in interest in the psychology of religion. Malony (1985) presents two factors responsible for this revival: 1) religious revival in the United States in the

culture at large; and 2) a developing concern for the relationship between religion and mental health.

The empirical psychology of religion appeared to undergo a renaissance in the mid-1950's and movement into the mainstream of psychology is in process. "In the mid 1970's, a great step in this direction was taken when the American Psychological Association formed its Division 36, Psychologists Interested in Religious Issues. The division has flourished, now having a membership of 1,000 professionals" (Spilka, Hood & Gorsuch, 1985, p. xii). The 1988 Register lists 57 Fellows, 1159 Members, and 104 Associate Members, for a total of 1,320 for Division 36 (G. Godwin, personal communication, July 1988).

Concept of Spiritual Well-being

A 1980 Gallup Poll showed evidence of this renewed commitment to traditional religious values in the American culture. In the survey, 94% of Americans reported their belief in God and 84% stated their religious beliefs were fairly or very important (Gallup, 1980, p. 20). A 1983 Gallup Poll survey of adults found that 57% were more interested in religious and spiritual issues than five years earlier, 56% considered themselves more reliant on God, and 44% claimed their spiritual well-being had improved ("Trends," 1983). Zimbardo (1979) said worldwide estimates

indicate over 2 billion people have religious commitments which play an important role in how they experience life.

The increased revival of interest in religion in the culture coincided with scientific attempts to measure subjective well-being.

Ellison (1983) says attempts to measure the subjective well-being of Americans dates back to a 1960 national survey of happiness, worries and experiences conducted by Gurin, Veroff and Feld (1960). Ellison states the focus of subjective well-being research had been with the economic indicators which alone were insufficient to understand the quality of American life. Out of that understanding, the quality of life movement developed. "This movement regards non-economic subjective measures of well-being as valid and essential if the true welfare of the people is to be known" (p.330). An important non-economic subjective measure that has been ignored by many psychologists is the spiritual dimension of human nature, known as spiritual well-being (Ellison, 1983; Moberg, 1985).

In his quality of life research, Campbell (1981) suggested well-being depended on three basic needs: The need for having, the need for relating, and the need for being. "While Campbell's research and multiple need conception of life quality are helpful, he and his colleagues ignore a fourth set of needs which might be termed the need for transcendence" (Ellison & Economos, 1981,

p. 3). This is surprising as Campbell, Converse and Rogers (1976) found religious faith was a highly important domain for understanding quality of life experience for 25% of the American people. This is even more surprising when one looks at McNamara and St. George's (1979) reanalysis of Campbell's data. They found that satisfaction from religion ranked as a much more accurate predictor of well-being than the surveyors reported. Still, Campbell did not utilize it as a significant domain of life quality in subsequent surveys.

Ellison (1983) said the need for transcendence comes when we find purposes to commit ourselves to which involve ultimate meaning for life. The need for transcendence overlaps to some extent with the other needs listed by Campbell, but it is not identical to them, nor reducible to them (Ellison & Economos, 1981). Ellison called this fourth need the spiritual dimension.

Spiritual well-being has been defined as "the affirmation of life in a relationship with God, self, community and environment that nurtures and celebrates wholeness" (National Interfaith Coalition on Aging, 1975, p. 1). Though this definition is imprecise, it suggests that there are two components to spiritual well-being, one a religious component and the other a social-psychological component (Ellison, 1983).

Moberg has been instrumental in focusing the attention of a growing group of sociologists and psychologists on the need to

investigate this spiritual dimension. Since the early 1970's, he has been developing a theoretical and empirical investigation with regard to spiritual well-being.

Moberg and Brusek (1978) have conceptualized spiritual well-being as two-faceted, with both vertical and horizontal components. The vertical dimension refers to one's sense of well-being in relation to God. The horizontal dimension refers to a sense of well-being in relation to perception of life's purposes and satisfaction apart from anything specifically religious.

In clarifying the concept of spiritual well-being, Ellison (1983) made three assumptions. He views spiritual well-being as different from spiritual health, with spiritual well-being being an expression of spiritual health or an indicator of its presence. He also suggests that spiritual well-being and spiritual maturity are not necessarily the same since one might be spiritually mature and not sense well-being for some reason, or one might be immature spiritually and subjectively experience a sense of spiritual well-being. The last assumption is that "spiritual well-being should be seen as a continuous variable, rather than as dichotomous. It is not a matter of whether or not we have it. Rather it is a question of how much, and how we may enhance the degree of spiritual well-being that we have" (p. 332).

Spiritual well-being has developed as an indicator of the concept of spiritual health, an assessment of one's current

spiritual status. Just as psychological and physical health are measured by various tests, it is possible also to measure spiritual well-being. Hundreds of tests have been developed for use with Christian populations (Basset et al., 1981). One test which is becoming widely used within Christian circles is the Spiritual Well-being Scale.

Christian Perspectives on Spiritual Well-being

Ellison (1982) cites seven components of the Christian faith which promote religious and existential well-being. He says they not only produce spiritual well-being but provide an integrative impact which draws the spirit and psyche together, resulting in a healthy, unified personality. The seven components are: conversion, communion, confession, compatibility, celebration, calling and community.

1. Conversion includes a number of theological concepts such as redemption, reconciliation, atonement, and salvation. It means to turn from sin and self-centeredness and go in a new direction through Spirit-activated repentance and faith (II Cor. 5:17). It brings cleansing, change, power, hope, forgiveness, and acceptance. It brings the power to choose and grow both toward holiness and toward health, which comes from the internal activity of God's Holy Spirit and from obedience to God's principles.

2. Communion with God is possible once a person is adopted into God's family (Eph. 1:5), and is given the Holy Spirit to dwell within (Rom. 8:15), for comfort, guidance, and communion. "In this relationship of unchanging love, we are able to rise above the immediate, physically-based world and find Transcendence that fills our immediate world with meaning and satisfaction. Purpose and well-being emerge from our intimate communion with God, who is the source of creativity and health. As a result of our communion with God, we also feel protected at the deepest levels of our being" (Ellison, 1982, p. 19). Obedience is the key to abiding joyfully in God's love (John 15:10, 11).

3. Confession allows the Christian to maintain fellowship with God despite the consequences of a sinful nature. In the act of sinning people unleash the forces of disintegration and find themselves alienated from God and others.

> When we sin we block off the Transcendent dimension of our beings. We become fixed on the present and on ourselves while we ignore God and the Beyond--the results are a feeling of being cut off from Him and His guidance, and a sense of anxiety and guilt which pervade our personality and provoke ego-defensive maneuvers that only partially preserve our well-being. Depression is often experienced when we violate God and ourselves in sin. (Ellison, 1982, p. 21)

Through confession, Christians are able to relate to God, experience healing of spirit and psyche, find relief from self-judgment and self-alienation, and experience a deep sense of gratitude to God (Ps. 32, 38).

4. Compatibility is the matching up of life experiences with ideal self, conscience, values, and spiritual life. As Christians live consistently with inner commitments, the result is an experience of integrity, or internal integration or wholeness. This promotes spiritual wellness. The outcome is satisfaction, life, and a sense of God's affirmation.

> The principle of compatibility, then, reminds us that God has established principles for healthy spiritual, emotional and social functioning. As we live by these guidelines (at many points they are commands) we will experience spiritual well-being. As we wander from God's commands and our own internalized understanding of His ways we will be much less well-off. (Ellison, 1982, p. 22)

5. Celebration. In true worship, mind and emotion are brought together in a way that deepens knowledge and relationship with Christ. Worship is not just for Sunday, but is holistic, whole-hearted, and touching the Christian deeply in spirit seven days a week.

6. Calling refers to a general life purpose and meaning as well as a personal calling implied by gifts and ministries.

> The Christian is not left without purpose and meaning if he dares to explore and accept his special identity as a child of God. No Christian is without a calling. The calling is at first general; to be a Christian means to live out life in concert with the general guidelines of Scripture. For example, Colossians 3:23 commands the Christian to give himself wholeheartedly to his work (regardless of what it is), to do all as if it were an offering of gratitude to the Lord. Talk about transcendence! All situations are given the possibility of spiritual significance and have the potential to promote spiritual growth and health. The transcendent motivation is one of 'pressing on toward the goal for the prize of the upward call of God in Christ Jesus' (Philippians 3:14), that we might be ultimately blessed by the 'well-done' of God. (Ellison, 1982, p. 23 - 24)

In addition to this general call, there is a personal calling implied by the varied gifts and ministries outlined in Rom. 12:3-8 and I Cor. 12. "Adhering to our calling allows us to maintain an inner sense of peace and well-being in the face of the blockages which we face in working our calling out" (Ellison, 1982, p. 24).

7. Community. "Finally, spiritual well-being is enhanced by a properly functioning Koinonia" (Ellison, 1982, p. 24).

Assembling together is an essential ingredient for holiness and healthiness. It involves caring, encouragement, affirmation of gifts, forgiveness, belonging and spiritual instruction.

R. K. Bufford (class lecture, Fall 1987) says a constructive relationship to God, or spiritual well-being, should result in a higher quality of life. The author of Ephesians 6:1-3 speaks about longevity of life from honoring parents. In Psalm 1, David talks about the prosperous life that comes from walking with God. The book of Job begins with the thesis: God blesses the righteous and punishes the wicked. Although there are exceptions, the general principle is still true. Genesis 50 carries the same notion. The blessings and the cursings that Moses gave before entering the Promised Land are listed in Deuteronomy 28. Many of these relate specifically to physical health and illness, others to psychological well-being. Blessing and prosperity are promised for obedience (:1-15), and curses are warned for disobedience (:15ff). Throughout Scripture are references to what is considered psychological health and illness.

Spiritual Well-being Scale

In the absence of any systematic measure of spiritual well-being, Ellison and Paloutzian (1978) began development of an instrument which was based on Moberg's concepts.

After initial testing and revision, Ellison and Paloutzian formally developed the Spiritual Well-being Scale in 1979. Designed to fit with the quality of life research, it is relatively broad based and not narrowly sectarian.

The scale attempts to provide a general measure of spiritual well-being without being hindered by "specific theological issues or a priori standards of well-being which may vary from one religious belief system or denomination to another" (Ellison, 1983, p. 332). It is at least Judeo-Christian in character.

The Spiritual Well-being Scale contains 20 items, ten measuring the vertical dimension, religious well-being (RWB), and ten measuring the horizontal dimension, existential well-being (EWB). The two subscales combine to yield an overall measure of spiritual well-being (SWB).

Factor analysis revealed two factors with an eigenvalue greater than 1.0. All of the items with reference to God loaded on the RWB factor. The existential items (no reference to God) loaded on two sub-factors, "one connoting life direction and one related to life satisfaction" (Ellison, 1983, p. 333).

Reliability has been demonstrated by one-week test-retest coefficients at .93 for SWB, .96 for RWB, and .86 for EWB. Internal consistency was reported by coefficient alphas of .89 for SWB, .87 for RWB, and .78 for EWB (Paloutzian & Ellison, 1979b).

Ellison (1983) says researchers from various settings, such as education, health and therapeutic settings, are using the Spiritual Well-being Scale. He suggests several factors regarding the usefulness of the SWB Scale:

> 1) All of our items deal with transcendent concerns, or those aspects of our experience which involve meaning, ideals, faith, commitment, purpose in life, and relationship to the Divine...our scale measures spiritual well-being. 2) Responses to the items indicate personal experience. Our scale is not a measure of belief, doctrinal correctness, ideology or values. It is a measure of the tone of one's inner, subjective life. 3) The items refer to satisfaction, positive and negative feelings, purpose and meaning, a sense of being valued. These are commonly accepted indicators of well-being and interpersonal health. 4) The scale is multi-dimensional and allows for an overall measure of spiritual well-being while also allowing for differentiated analysis of the religious and existential meanings of spiritual. The importance of this feature may be seen when we consider the influence of various factors on well-being. Certain factors may impact more on existential well-being, others on religious well-being. A single overall measure would not allow comparison or understanding. 5) The scale allows measurement of spiritual well-being as a continuous,

quantifiable variable. For each item, six responses are available. Such quantitative measure allows for systematic comparison with other measures, and also provides the opportunity for a more precise examination of states of well-being and the impact of other variables. It takes spiritual well-being out of the realm of the mystical and untouchable and allows us to study it scientifically. 6) The scale, while partly arising out of the Judeo-Christian conception of religious well-being is non-sectarian and can be utilized across Catholic, Protestant, Jewish and other religions which conceive of God in personal terms. 7) The scale provides a general measure of spiritual well-being while not getting bogged down in specific theological issues or a priori standards of well-being which may vary from one religious belief system or denomination to another. As a general measure this allows us to determine the basic state of affairs. Subsequent analysis based on the particular meaning system of a person or a specific religious or ideological orientation is possible as a follow-up to give more specific, finely calibrated assessment of one's spiritual state. 8) The Scale is short and easy to utilize. It is therefore not expensive to administer or to score--a real asset in today's economic climate! (Ellison, Jan., 1982, p. 10-11)

Research Using the SWB Scale by Ellison, Paloutzian, Others

In studies with a wide range of subjects, Paloutzian and Ellison have found interesting positive and negative correlations (Ellison, 1982).

Looking at social-psychological factors, spiritual well-being has been found to be positively related to self-esteem (Campise, Ellison & Kinsman, 1979; Ellison & Economos, 1981; Paloutzian & Ellison, 1979a). Positive relationships were found with several developmental background influences: how positively a person saw his relationship with his parents while growing up, the feeling of family togetherness during childhood years, and one's perceived level of social competence. In each of these cases, the overall SWB was significant but the amount of relationship with the subscales varied (Ellison, 1983).

Negative relationships were found between SWB and such primary value orientations as individualism, success and personal freedom (Campise, Ellison & Kinsman, 1979; Ellison & Cole, 1982). Living in a large city environment was associated with lower spiritual well-being (Paloutzian & Ellison, 1979a).

Roth (1988) investigated the relationship of spiritual well-being to marital adjustment in a California church sample.

> Responses indicated that spiritual well-being correlated significantly to marital adjustment, with significant differences for years married: Those married 10 - 40 years showed a higher correlation than those married over 40 years. Existential well-being scores correlated highly with marital adjustment scores at most marital stages. (Roth, 1988, p. 153).

Carson, Soeken and Grimm(1988) examined the correlation between hope and SWB in a sample of junior baccalaureate nursing students from a university setting. In this sample of healthy individuals, they found hope related to both the religious and existential dimensions of spiritual well-being, although the relationship between hope and EWB was significantly stronger.

Spiritual well-being has been related to several types of religious variables. Those indicated as "born again" Christians (acceptance of Jesus as personal Savior and Lord) had more positive spiritual, religious and existential well-being than "ethical" Christians (adherence to ethical and moral teachings of Jesus) or non-Christians (Bufford, 1984; Campise, Ellison & Kinsman, 1979; Ellison & Cole, 1982; Ellison & Economos, 1981; Paloutzian & Ellison, 1979b). Spiritual well-being was also related to intrinsic religious orientation, while extrinsic orientation was less positively related (Paloutzian & Ellison, 1979a).

Ellison and Economos (1981) found a strong positive relationship between spiritual well-being and those religious practices which focus on the affirmation and valuing of the believer. SWB was positively associated with doctrinal beliefs, worship orientations, and devotional practices which encourage a sense of personal acceptance by and intimate, positive communion with God and fellow Christians.

They also found that the average number of Sunday services attended each month, as well as the average amount of time spent per day in devotions were significantly related to spiritual well-being. However, the average number of times one had devotions each week was not significantly related. SWB was also positively related to the grounding of one's own positive self-evaluation in God's acceptance, and to the feeling that God's evaluation was more important than that of other people.

Ellison and Cole (1982) explored the relationships between television viewing, the values of materialism and individualism, and one's quality of life. There was a small negative relationship between SWB and amount of television viewing. There was no significant relationship between RWB or EWB and television viewing. "It appears that one's value grid and the types of programs one watches are mediating factors which determine the impact of television on well-being, rather than the simple quantity of viewing alone" (Ellison & Cole, 1982, p. 28). Other

interesting results included: low levels of SWB, RWB, and EWB associated with late-night talk show viewing; significant correlation between SWB, RWB and viewing of religious programs; and no significant correlation between EWB and religious program viewing or comedy viewing.

There was a significant positive relationship found between SWB and spiritual maturity, self-esteem, doctrinal emphases, and belief that God loves, values and accepts one, in other words, that one matters to God (Ellison, Rashid, Patla, Calica & Haberman, 1984). They also found a small negative relationship between SWB and perfectionism.

Other negative correlations are very important to consider for one's mental health. SWB, EWB and RWB have been negatively correlated with loneliness as measured on the UCLA Loneliness Scale (Ellison & Cole, 1982; Ellison & Paloutzian, 1978; Paloutzian & Ellison, 1979c; 1979d; Russell, Peplau & Ferguson, 1978). Russell, Peplau and Ferguson (1978) also found EWB correlated negatively with a sense of rejection. Fehring, Brennan and Keller (1982) found SWB negatively related to depression.

Research at Western Conservative Baptist Seminary

Under the leadership of Dr. Rodger Bufford and other faculty at Western Conservative Baptist Seminary, there has been an

abundance of research using the Spiritual Well-being Scale. High interest in the area of spiritual health has resulted in over forty studies using the SWB Scale. These studies will be grouped by general topic for discussion. Topics will include mental health, physical health, psychopathology, religious variables and religious groups, marriage, family or gender issues, and SWB test construction. Because of their special relevance to this study, social desirability findings will follow in a section of its own. Others might have arranged these studies for discussion differently, and admittedly there is some overlap and personal preference in assigning certain studies to categories.

Mental Health and SWB

Three studies particularly relate to mental health. Two address self concept and self-esteem, while the third measures psychological well-being.

Colwell (1987) investigated the relationship between self concept and spirituality among adult male Master of Divinity students at Western Conservative Baptist Seminary. The SWB Scale was used, along with the Tennessee Self Concept Scale (TSCS), the Spiritual Maturity Index (SMI), and the Religious Orientation Scale (ROS). A significantly positive relationship was found between SWB, EWB, RWB and a positive self concept. The conclusion of the study was that in this seminary sample, spirituality is

positively related to a healthy self concept. Marto (1983) also found a positive association between EWB items and self esteem.

Temple (1987) investigated the relationship between adults' psychological well-being and aspects of their religiosity. Psychological General Well-being Index (PGWB) scores were positively correlated with SWB, and both of its subscales (RWB and EWB).

Bufford and Parker (1985) also used the SWB and Interpersonal Behavior Survey (IBS) together in a validity study of the SWB. They found the SWB and its two subscales were negatively correlated with all seven aggressiveness scales, Dependency and Shyness on the IBS, and positively correlated with five of the eight assertiveness scales on the IBS. This suggests that SWB is associated with low aggressiveness and high assertiveness in this sample of an evangelical seminary population. Appendix C contains a summary table of the intercorrelation of SWB and IBS scales from the Bufford and Parker (1985) study.

IBS relationships to SWB are a productive field of research when discussing SWB and mental health. Mauger and Adkinson (1980) discuss this in their manual for the Interpersonal Behavior Survey.

> A strong relationship of IBS scales and psychopathology will be observed when there are high elevations of the aggressiveness and the relationship scales (indicating excess

of these behaviors) and low scores on the assertiveness scales. Individuals with such IBS scale elevations are quite apt to have abnormal MMPI profiles, although this is not always true. (Mauger & Adkinson, 1980, p. 20)

For this reason it is worthy to note the correlation between SWB scores and IBS scores.

Physical Health and SWB

In a generally healthy college sample, Bufford (1987, June) found some support for the view that spiritual well-being and physical health are positively related.

Mullins (1986) found that SWB predicted post treatment reduction of medication use in chronic pain patients. It did not predict functional activity level, subjective pain rating, or return to work. SWB was negatively correlated with IBS subscales of aggressiveness and Minnesota Multiphasic Personality Inventory (MMPI) clinical scale elevations. SWB was positively correlated with religious coping, religious demographics, IBS scales of assertiveness, self-confidence, praise, requesting help, and impression management.

Campbell (1983), in a study of patients with renal failure who were undergoing hemodialysis, found a positive correlation between SWB scores and the adjustment of the patients. There were also significant positive correlations between spiritual well-being and

measures of assertiveness, religious coping, and acceptance of the disability. It was found that SWB had a significant negative correlation with depression as measured by the Beck Depression Inventory. The purpose of Campbell's study was to determine the best predictive instruments in assessing coping with hemodialysis. The two strongest correlations with positive response to hemodialysis were the SWB scale and the General Assertiveness subscales of the IBS.

Campbell, Mullins and Colwell (1984) used the data from the above study to analyze the correlation between SWB and IBS; this was not a part of the original Campbell (1983) study. Results indicated that SWB was positively correlated with Denial, one aggressiveness subscale and five assertiveness subscales. SWB was negatively correlated with two aggressiveness subscales, Conflict Avoidance, and Dependency. RWB was positively correlated with Denial and three assertiveness subscales. RWB was negatively correlated with Infrequency, two aggressiveness subscales, Conflict Avoidance and Dependency. EWB was positively correlated with three aggressiveness subscales and seven assertiveness subscales. EWB was negatively correlated with Infrequency, one aggressiveness subscale, Conflict Avoidance and Dependency.

In a stop smoking class, Palmer (1985) examined hope's relation to behavior through measurements of hope, locus of control, and SWB. He found SWB positively related to the Hope

Index Scale (HIS) scores. SWB, RWB, and EWB were not significantly correlated with treatment outcome (graduation from the Smoke Free Program). SWB and Rotter-Internal Locus of Control were positively correlated.

Hawkins and Larson (1984) looked at the relationship between measures of physical health and spiritual well-being. Age was negatively correlated with RWB. SWB, RWB and EWB were positively correlated with self ratings of health. Weight ratio was negatively correlated with SWB and EWB when pregnant women were removed from the sample, indicating people who are higher in SWB tend to be closer to their ideal body weight.

High blood pressure along with Conflict Avoidance were found to be negatively correlated in a medical outpatient population; however, a positive correlation was found between IBS assertiveness subscale and SWB (Hawkins, 1986).

Psychopathology and SWB

Several studies have investigated the relationship of SWB to psychopathology.

Mueller (1986) found no positive correlations between religiosity and psychopathology in a sample of male seminary students. Findings indicated that MMPI one-point code-types, which are indicators of type of pathology, are negatively

correlated with EWB and SWB. Two-point code-types were also negatively correlated with EWB and SWB.

In a psychological outpatient population, Frantz (1985) studied MMPI and DSM III diagnosis in relationship to religious orientation, religious fundamentalism, and SWB. Results indicated a positive correlation between EWB, RWB and the Religious Fundamentalism (REL) subscale of the MMPI. "High scorers on this scale (REL) see themselves as religious, church-going people who accept as true a number of fundamentalist religious convictions. They also tend to view their faith as the true one" (Greene, 1980, p. 181). EWB was negatively related to MMPI level of pathology. REL and RWB revealed a stronger relationship than did REL and EWB. Frantz found no significant relationship between psychopathology and SWB. EWB was also positively related to ROS Intrinsic scores in this study.

A positive correlation between IBS assertiveness scales and the SWB Scale was found in an eating disordered population (Sherman, 1987). Eating disordered patients experienced less EWB and RWB than non-eating disordered medical patients.

In a study of Oregon State Penitentiary inmates, 25 non-religious and 27 orthodox Christian male sociopaths were administered the SWB Scale along with five other instruments. Agnor (1986) found that non-religious sociopathic males scored lower in spiritual well-being.

Papania (1988) measured the effect of religious orientation, istory of sexual trauma, and typology on spiritual well-being and nterpersonal behavior among adult male child molesters. The ample consisted of 55 child molesters, ages 19 to 72. Molesters ho identified themselves as Christians scored significantly igher (M = 95.72, SD = 18.16) than the non-Christian molesters M = 76.35, SD = 14.71). Those offenders who identified themselves s Christians and claimed no sexual trauma history scored the ighest of all groups on SWB.

An analysis of RWB scores found a main effect for religious rientation. All Christian molesters scored significantly higher n the RWB subscale than non-Christian molesters, which parallels he findings of Agnor (1986). Papania (1988) said, "this may uggest that their Christian belief system and perceived sense of elating to God is not affected by sexual trauma. The Christian eliefs they hold may strongly reinforce their perceived sense of relationship to God despite the developmental abuse inflicted pon them as children" (p. 134).

Kathy Rodriquez (1988) studied predictors of self-esteem and piritual well-being among sexually abused women in a sample of 50 omen ages 18 to 60. As in the Papania study, results indicated igher RWB than EWB. The mean for SWB was 85.90 with a SD of 9.70. The mean for RWB was 46.46 with a SD of 11.48. The mean or EWB was 39.44 with a SD of 10.80. Rodriquez reported the

majority of her sample were actively practicing their religious beliefs yet their SWB scores did not reflect the degree of well-being that might be expected to accompany their degree of religious practice. Rodriquez concluded, "the implication is that religiosity without emotional well-being does not lead to overall spiritual well-being" (p. 107).

Religious Variables, Groups and SWB

Several studies have examined the relationship between SWB and spiritual maturity using the Spiritual Maturity Index (SMI) developed by Ellison. Correlational relationships between the subscales of the SWB and the SMI have been found to be very high, calling into question the proposition by Ellison that the scales are measuring distinct factors (Bressem, 1986; Bufford, 1987, Fall; Cooper, 1986; Jang, Paddon & Palmer, 1985, Mueller, 1986).

Moberg commented about the intercorrelations that exist among current measures of spiritual life:

> Since these apparently are highly and significantly intercorrelated, they presumably reflect aspects of a larger whole, whether that be spiritual or wholistic well-being. This supports my belief that the directly and indirectly observable aspects of spiritual well-being comprise a complex multidimensional phenomenon, not a simple unidimensional variable. (Moberg, 1985, p. 9)

In a validation study for the Spiritual Maturity Index (SMI), RWB was related to pastor/leader perceptions of greater spiritual maturity and Christian walk (practical application of Christian faith). SWB was positively associated with the pastor/leader evaluations of present relationship to God, spiritual maturity, religious knowledge, and Christian walk (Bressem, Colwell, Mueller, Neder & Powers, 1985).

Parker (1984) found a positive relationship between spiritual maturity or leadership and the SWB, except for SLQI (Spiritual Leadership Qualities Inventory) subscales of good reputation, desire to be an overseer, and not self-willed.

Several other studies have investigated the relationship between SWB and various religious variables.

Bufford (1984) found SWB to be positively correlated with EWB and RWB and Intrinsic Religiosity as measured by Allport and Ross's (1967) Religious Orientation Scale. RWB was negatively correlated with ROS-E (Religious Orientation - Extrinsic). SWB, RWB and EWB were positively correlated with frequency of church attendance, frequency of family devotions, and importance of religion, frequency and duration of personal devotions. All but EWB were correlated with self-report of religious knowledge.

Durham (1985) hypothesized that measures of religiosity (church attendance, importance of religion, ethical vs. born again) would be positively correlated with SWB. It was also

hypothesized that belief in God as causal agent and attributions to supernatural intervention would be positively correlated to SWB. Results confirmed that religiosity, except for attendance, was positively correlated with SWB. God as causal agent and supernatural locus of control were positively correlated with SWB.

In an earlier study, Durham (1984) compared two different Christian denominations in terms of supernatural attribution, spiritual well-being, and God as a causal agent (GCA). Results indicated that SWB and the subscales were not significantly different between denominations but were higher for the born again group than for the ethical group. SWB and its subscales were correlated with GCA and with importance of religion. EWB was negatively correlated with age and years as a church member.

Bressem, Waller and Powers (1985) studied cognitive style and spiritual well-being in church attenders. No correlation was found between SWB and Visualizer-Verbalizer scores. However, both SWB and RWB were positively correlated with frequency and duration of personal devotions. EWB was positively correlated with age.

Bressem (1986) found SWB, RWB and EWB to be positively correlated with frequency and duration of personal devotions. He did not find imaginal ability as measured by the Betts Questionnaire of Mental Imagery, Gordon Test of Visual Imagery Control, and Christian Use of Imagery to positively correlate with SWB as hypothesized. RWB was positively correlated with attitude

toward charismatic practices. SWB was not associated with years of education, years as a Christian, years as a Christian leader, or church attendance in this population of Bible college students.

Clarke (1987) used the SWB Scale as the dependent variable and 19 predictor variables measuring job-related areas, Christian life, family background, and demographic factors in his attempt to construct an adequate predictive model of SWB in full-time Youth for Christ workers. The study failed to produce such a model according to Clarke.

Jang, Paddon and Palmer (1985) found internal locus of control, as measured by Rotter's Locus of Control Scale, was positively correlated with SWB scores, particularly RWB but not EWB. Frequency of religious devotions per week was significantly correlated with RWB and SWB.

Huggins (1988) studied the effect of small group attendance, personal devotions, and church attendance on spiritual well-being of 285 adult attenders of Conservative Baptist churches in Oregon. An analysis of variance (ANOVA) regression procedure was used to analyze the data. Significant main effects were found for small group attendance, personal devotions, and church attendance. Huggins concluded it is useful to encourage small group and church attendance and personal devotions as a means of promoting spiritual well-being and ultimately an individual's quality of life.

The SWB Scale has been used with various religious groups as well. Lewis (1986) found Baptist students were higher on RWB but not on EWB compared to the Unitarians. There was a positive relationship between SWB and COG (Concept of God as Seen in Adjective Ratings) but no significant relationship between SWB and ambivalence (measured by the Intense Ambivalence Scale).

Bufford, Bentley, Newenhouse and Papania (1986) compared religious and nonreligious groups on SWB, RWB and EWB using descriptive data from eight clinical studies involving fifteen samples. Analysis results were as follows:

> 1) Unitarians scored significantly lower than all other groups except for non-Christian sociopathic convicts on SWB and RWB; 2) Non-Christian sociopathic convicts scored significantly lower than all other samples on EWB; and 3) Seminarians scored significantly higher than medical outpatients, United Methodists, Presbyterians, Baptists, Evangelicals, Unitarians and non-Christian sociopathic convicts on RWB and EWB but not on SWB. (p. 8)

Appendix D shows the means and standard deviations for various groups studied thus far using the SWB Scale.

Jang (1986) investigated the effects of acculturation and age on spiritual well-being of Chinese-Americans. It was found that acculturation significantly affected EWB. Age was significantly related to SWB and EWB. Religious commitment and importance of

religion were related to greater SWB, RWB and EWB. Frequency of church attendance was related to SWB and RWB but not to EWB. Also related to greater SWB, RWB and EWB were frequency of personal devotions, religious knowledge, application of Bible principles, and years as a Christian. Related to greater SWB and EWB were family closeness among married couples, full-time employment, and financial independence.

Marriage, Family, Gender and SWB

Two studies examined the relationship of parental spiritual well-being on their children's adjustment. Marto (1983) examined how paternal variables such as spiritual well-being related to children's self-esteem in a Catholic High School sample. He did not find a significant relationship between a father's spiritual well-being and his child's self-esteem. Analysis of subscales revealed that self-esteem in fathers was better predicted by EWB and was not significantly related to RWB in the overall sample population.

Newenhouse (1988) examined the relationship between maternal WB and social adaptation status (SAS) of first grade children and found mixed results. It appeared that maternal EWB was most clearly associated with children's SAS.

Two studies examined the relationship between spiritual well-being and marital satisfaction. Upshaw (1984) looked at the

effect of communication skills training on marital satisfaction, commitment, social desirability and spiritual well-being. Pre- and post-treatment and follow-up results indicated that Couples Communication Program treatment decreased EWB temporarily. EWB was higher for the film strip group than for the Wait List group which was higher than the Couples Communication group. RWB and EWB pretest scores were positively correlated with SWB pretest.

Quinn (1984) examined the relationship between religiosity and marital satisfaction. Little relationship was found between indicators of marital distress and SWB, RWB, and EWB. SWB, EWB and RWB were positively correlated with ROS-I and negatively correlated with ROS-E. Religiosity as measured by ROS and SWB was 8th of 10 variables that predicted marital satisfaction, not a strong relationship.

Four other studies complete this category. Temple, Upshaw and Quinn (1983) found working and nonworking mothers did not differ on SWB or EWB. RWB was correlated with role orientation scale of the Marital Satisfaction Inventory (MSI) for both women and husbands. For women, SWB was not correlated with MSI except for dissatisfaction with children, but for men, EWB was negatively correlated with global distress, affective communication, problem solving communication, time together, sexual dissatisfaction, dissatisfaction with children, and conflict over childbearing.

Mitchell (1984) studied spiritual well-being and mood state during pregnancy. Negative correlation was found between SWB and POM (Profile of Mood) in continuing mothers but no relationship between SWB and POM in abortion patients. However, the two groups were significantly different on demographic variables. The abortion group more likely to come from an ethnic background other than Caucasion, were less likely to be married, less likely to be pregnant for the first time, less likely to have planned the pregnancy, less likely to have father's support, and more likely to describe self as non-Christian.

Mashburn (1987) conducted an interesting study to ascertain whether the specified couple sex-role combinations and sex-role identity had an effect on marital satisfaction and SWB. Androgynous couples and individuals tended to have higher SWB scores.

Carpenter and Dean (1985) hypothesized that SWB would be related to developmental stage and therefore greater in young and older women, but not in middle aged women, and that women with higher education would have greater SWB. Results in this study provided no support for the hypothesis.

SWB Scale Test Construction

There has been one study to date at Western on the SWB scale format. Meyers (1986) tested the effect of two likert labeling

formats on the SWB Scale. A significant difference was found between one form which included labels "always true" to "never true" with a numerical scale of 1-6 and the present form which defines labels "SA" to "SD". Though the newly defined labels resulted in slightly higher means, it was concluded that the present SWB Scale is adequate and there does not need to be an adjustment for the differences found in this study. "...though minor changes in Likert format may effect results, those changes do not critically affect outcomes" (Meyers, 1986, p. 14).

Research on Social Desirability and SWB

According to Ellison (1983), the SWB Scale did not appear to be seriously affected by artifacts such as social desirability, but that this had yet to be demonstrated empirically. While the subject of social desirability will be discussed in depth later, it has been conceptualized on different instruments, such as the MMPI L, F, and K scales, and on the Edwards Social Desirability Scale (ESDS) and Marlowe-Crowne Social Desirability Scale (MCSDS).

Edwards (1957) referred to social desirability as "the scale value for any personality statement such that the scale value indicates the position of the statement on the social desirability continuum" (p. 3). He used items on the ESDS from the MMPI.

Crowne and Marlowe (1960) argued that the Edwards items may be characterized by their content (with psychopathological implications). To separate the item content from the test-taking behavior of the respondent, they developed the MCSDS as a content-independent measure of social desirability response style.

The Validity Scales (L, F, and K) are typically used to define social desirability on the MMPI. Duckworth (1979) defines the L scale as measuring the degree to which a person is trying to look good in an obvious way; the higher the scale, the more the individual is claiming socially correct behavior, and the lower the scale, the more the person is willing to own up to general human weaknesses.

The F scale "is nearly always measuring the degree to which a person's thoughts are different from those of the general population. Only rarely is an elevated F indicative of purposeful faking-bad" (p. 21). Significantly low scores may represent an attempt to fake good.

The K scale "measures defensiveness and guardedness" (p. 33). It measures approximately what the L scale does but in a more subtle and effective manner, according to Lachar (1974).

At Western Conservative Baptist Seminary there have been ten studies which speak to this issue. Appendix E is a summary of the results from these studies. Some of these have been discussed earlier while others are discussed here for the first time.

Parker (1984) examined the relationship between spiritual well-being and the validity and clinical scales of the MMPI, the IBS, and the SLQI for a seminary sample. He found the L and K scales of the MMPI and the Denial (DE) and Impression Management (IM) scales on the IBS were all positively correlated with SWB scores, while the F scale of the MMPI and the Infrequency (IF) scale on the IBS were negatively correlated with SWB.

> The high sample mean scores and the strong positive relationships between the subscales of the SLQI and all of the validity scales of the IBS and MMPI suggest (1) in the absence of a curvilinear relationship between the validity scales and the SLQI, caution should be exercised with the validity of the SLQI as considered with this population and (2) consideration should be given to providing a measure of social desirability for the SLQI. (p. 113)

Relationships between the subscales of the SLQI and the SWB proved significantly positively related ($p \leq .005$). Thus one could infer these concerns also apply to SWB.

Bufford and Parker (1985) found SWB, RWB and EWB to be positively correlated with the Denial and Impression Management validity scales of the IBS. The positive relationship between SWB and Denial and Impression Management raises some interpretive problems. Yet, seminarians tend to score higher than the general

population on these (Parker, 1984), and the scores were within normal limits.

Campbell, Mullins and Colwell (1984) found SWB scores positively correlated with the Denial scale of the IBS in a population of patients at a kidney center. The authors note this is not necessarily representative of something negative.

> One understanding of this correlation is that with physical disease denial has been positively correlated with recovery. People scoring high on religious variables tend to deny common problems or shortcomings because they genuinely don't do some of the things mentioned in these questions (making fun of others, swearing, procrastinating) and because they view their relationship with God as giving them added strength to deal with life's difficulties. Within the context of these understandings denial can be seen as adaptive rather than maladaptive. (p. 12)

Mitchell and Reed (1983) examined the relationship between self-concept, spiritual well-being, and social desirability. Results confirmed self-concept was correlated with SWB, but also SWB was correlated with Edwards Social Desirability Scale. In discussing the social desirability aspect, the authors write:

> Though social desirability correlates highly with self-concept, it should be noted that there seems to be a curvilinear relationship between social desirability and

> psychological adaptiveness. People with low scores in social desirability tend to have low ego resources and those with high scores tend to be defensive but moderate scores seem to be the most functional. Therefore, people with positive self-concepts would have moderate social desirability, whereas people with low self-concepts could have either low or high social desirability. (Mitchell & Reed, 1983, p. 10)

Consistent with Mitchell and Reed's findings were the results from a study designed to examine the relationship between social desirability and scores on the SMI and SWB scales (Clark, Clifton, Cooper, Mishler, Olson, Sampson & Sherman, 1985). They hypothesized that social desirability would be positively correlated with SWB, and that SWB would be significantly influenced by social desirability. Results indicated that social desirability was significantly correlated with SWB and EWB. An analysis using multiple regression, however, suggested the test results were not due to social desirability.

Carr (1986) used the SWB Scale as one of the independent variables in a construct validity study of the Spiritual Leadership Qualities Inventory. Results relating to the SWB Scale are of particular interest. SLQI was positively correlated with SWB, RWB and EWB, and SMI was positively correlated to SWB and its subscales. Carr hypothesized that Edwards Social Desirability Scale would correlate positively with the SLQI, SWB and subscales

and SMI, which it did. Edwards Social Desirability scale was positively correlated with SWB, EWB and RWB, sharing 24%, 24% and 16% common variance respectively. "Because the SLQI, SWB and subscales, and SMI are self-report inventories a proportion of the variance should be due to the response set of social desirability" (p. 161).

This suggests that especially the SLQI and SWB have a substantial part of their variance due to the response set of social desirability.

> Wiggins (1968)...sees the response set of social desirability as an organized disposition within individuals to respond in a consistent manner across a variety of substantive domains. Edwards (1957) believes there is evidence to indicate that this tendency is a stable personality characteristic or style. Thus it adds data concerning the individual himself. Another dimension of understanding is added by the large percent of variance (26%) due to social desirability in relation to the construct of the SLQI and as it relates to the personality structure and attitudes of the individual. (Carr, 1986, p. 162)

Mullins (1986) found SWB to be positively correlated to the K scale of the MMPI in a study with 41 chronic pain patients. He also found SWB, RWB, and EWB positively correlated with IBS Impression Management.

Frantz (1985) also examined L, F, and K MMPI scales in relation to SWB in his study with a psychological outpatient population mentioned earlier. He found the MMPI F scale negatively correlated with SWB, RWB, and EWB. He found nonsignificant correlations between SWB and the MMPI L and K scales. This is interesting in light of the fact that of all three validity scales on the MMPI, the L, F, and K, the L scale is recognized as the most valid indicator of someone invalidly responding or intentionally lying. Another interpretation for the F scale besides faking is that it is simply sensitive to pathology; when a person is pathological, perhaps it will lower well-being.

Hawkins (1986) found SWB positively related to denial on the IBS. In explaining this finding, Hawkins says the values which promote spiritual well-being might also promote denial. He states:

> A low amount of denial can be just as destructive physically as a high amount of denial. If this is the case, these findings are not as concerning as they first appear. Hardly anyone would disagree with the fact that you cannot deal with all of life's problems all the time. This is simply impossible from a psychological point of view. All at times need to place conflicts 'out of their mind,' to be dealt with at a later time. Certainly The Scriptures support a laying

> aside of problems, as is expressed in 'casting all your care upon Him' (I Peter 5:7 K.J.V.). When one truly believes that he is being cared for and protected by the Lord, it is possible not to become overly concerned about day to day problems. Of course, striving for a balance between personal problem solving and denial is the key. From a religious point of view perhaps denial is not the best term, but rather 'faith' and 'trust'. (Hawkins, 1986, p. 82-83)

Throughout these studies there seems to be a trend toward moderate correlations with validity type scales, although the correlations vary with the samples. Even with a .3 significant correlation, one must keep in mind this accounts for less than 10% of the variance. Though these results give reason for the present study, the reader should not get the impression these results invalidate the SWB Scale.

Furnham (1986a) gives three reasons for high correlations with social desirability measures: First, the person may indeed be conscientious, coping, adjusted, etc. which would inevitably lead to a high social desirability score. "It would indeed be an irony if honest, healthy respondents were all seen as liars" (p. 386). Second, social desirability may measure a disposition which overlaps (positively or negatively) with the other test. A significant correlation may simply indicate a certain convergence between two individual difference measures. Third, to say the

test may simply be measuring a response set tends to ignore the inevitable individual differences in faking, preferring to dismiss the usefulness of the test outright.

Upshaw (1984) found no significant relationships between SWB or its subscales and the Marlowe-Crowne Social Desirability Scale. This finding is inconsistent with the rest of the studies in this section which used the Edwards Social Desirability Scale. One additional study off our present topic might shed light on this. Tanaka-Matsumi and Kameoka (1986) examined "whether popular self-report measures of depression could be distinguished from self-report measures of anxiety and social desirability response style" (p. 328). Results from their study showed quite different results for the Edwards scale than for the Marlowe-Crowne scale. They predicted there would be a high negative correlation between both scales and depression scores, since depressed people tend to present themselves in a negative light. This was true for the Edwards scale but not for the Marlowe-Crowne results. Their warning was to separate stylistic variance from content variance.

> When item content of social desirability scales overlaps with that of anxiety and depression scales, as in the ESDS, it is extremely difficult to assess response style independently using such social desirability scales. Campbell and Fiske (1959) argued that when a measure of another construct (social desirability) is 'caught' in the

> nomological net of the construct of theoretical interest (depression), then the evidence of covariation would strengthen rather than weaken the case for construct validity. (Tanaka-Matsumi & Kameoka, 1986, p. 332)

Crowne and Marlowe (1960) found consistently higher correlations between the Edwards SDS and the MMPI scales than they did between the Marlowe-Crowne SDS and the MMPI scales. They say this raises the "question of whether the Edwards SDS and the MMPI scales (Pt, Sc, and MAS) are not, in effect, functionally unitary" (p. 352).

In the next two sections, some problems and advantages of self-report inventories will be discussed.

Social Desirability and Faking Definition Problems

Most people have a concept in their minds of what social desirability means. In the previous section this was defined by the particular authors and tests discussed. However, a review of the literature shows definitions are imprecise and confusing, especially when trying to distinguish between social desirability and faking (good or bad). Both of these terms fall under the general heading of response bias.

"Considerable evidence indicates that personality and interest tests can be faked. Of 34 empirical studies of instruments used

in industrial testing, 20 showed that faking increased the favorability of responses, one showed no faking effects and the remainder were equivocal" (Thornton & Gierasch, 1980, p. 48). Anastasi (1982) also noted self-report inventories are especially vulnerable to faking good or bad despite instructions to answer in an honest fashion.

The importance of the issue of falsification or faking was indicated in the discussion of testing and public policy by the American Psychological Association (APA, 1970), and yet most of the literature reviewed did not distinguish between social desirability and faking good (Furnham, 1986a; 1986b; Stanwyck & Garrison, 1982); Thornton & Gierasch, 1980). As a matter of fact, most defined social desirability as faking good. This becomes a problematic distinction.

Furnham (1986a) defines response bias as "a generic term for a whole range of responses to interviews, surveys or questionnaires which bias the response (from the correct, honest, accurate response)" (p. 385). They include the socially desirable or faking good response, faking bad, acquiescence or yea-saying, nay saying, extremity response set, mid-point response set, etc.

Furnham (1986a) defines faking, lying and dissimulating as concealing the truth under a feigned semblance of something different, or when a respondent is deliberately giving false responses in order to create a specific impression. He defines

social desirability as one sort of faking -- the presentation of self in a positive light.

Cronbach (1946) was one of the early researchers to test response bias. His studies concentrated mostly on true-false achievement type tests, and the tendency for positive responding. Since those original studies, hundreds of other response bias studies have been completed, mostly in two areas. "The largest number have used self-report personality inventories and focused on acquiescence (the tendency to answer 'true' or 'yes') and social desirability (the tendency to endorse items rated as reflecting socially desirable behaviors" (Brown, 1987, p. 979).

There are basic concerns at three levels of data analysis when considering the effects of response bias. One has to do with the interpretation of the individual respondent's test score. If response bias is involved, the interpretation of that score will be changed. The second concern involves the consideration of scores of a group of test takers. Response bias may affect the score distribution as well as the test's reliability and validity. The third concern involves whether a response bias operates consistently from test to test. If so, it will represent an individual differences dimension which might be worthy of study in its own right (Brown, 1987).

The first two concerns view response biases as sources of error in a test. The third views response biases in terms of a

stable characteristic of the test taker, which may be irrelevant to the purpose of the test. "In addition, if response biases are sources of reliable individual differences, the question of how to separate the effects of response biases from the effects of the trait or characteristic measured becomes an important issue" (Brown, p. 979-980).

Rorer (1965) distinguished between response sets and response styles. He said response sets are content dependent and occur when individuals want to present a particular picture of themselves. Examples of this would be faking good, faking bad, and social desirability. He classified response styles as being relatively content independent and occur when the stimuli or tasks are ambiguous or the test taker is unsure or undecided about the appropriate response. Examples of this would be guessing, positional habits, and most rating errors.

However they are classified, one important assumption made by those who use self-report inventories is that an individual's response to any particular question reflects his or her disposition toward the content of that item. "To the extent that this assumption is not correct, research using such measures may be misleading" (Neale & Liebert, 1980, p. 48).

Edwards (1970) said social desirability style is different from and to some extent independent of tendencies to deliberately

lie, dissimulate, or engage in impression management for ulterior motives.

Dillman (1978) defined a socially desirable answer as "to answer questions in a way that conforms to dominant belief patterns among groups to which the respondent feels some identification or allegiance" (p. 62).

Some subjects may distort their responding in light of their own motives or self-interest. Even if there is no blatant distortion, subjects are likely to alter slightly the image of themselves that they present and interpret the items in a way that places themselves in a positive light. This is referred to as social desirability:

> Individuals who complete self-report items are likely to endorse the socially condoned behaviors rather than the socially inappropriate behaviors. The pervasiveness of social desirability as a response style has led investigators to posit a specific personality trait referred to as the 'need for social approval' (Crowne & Marlowe, 1964). Individuals who are high in their need for social approval on a self-report measure behave in experimental situations in a way that maximizes approval from others. Thus the bias on self-report inventories goes beyond a specific set of measures. (Kazdin, 1980, p. 230)

Crowne & Marlowe (1964) did not distinguish social desirability from faking responses, but they did speak to the importance of the issue. They said it is an important issue for self-report inventories because of the relationship between an individual's responses to personality test items and the significance attached to his responses in light of construct validity. If the subject is faking good or faking bad when answering the questions, then what the scale is actually measuring, or the validity, comes into question.

Anastasi (1982) cites several studies which show evidence of success by examinees in dissembling on personality inventories. She cites two common ways this faking good or bad can be demonstrated. One way is to have three groups of respondents with different instructions: one group is told to be honest, one group is told to look good, and the third group is told to look bad. The other method Anastasi cited was to have the same group of people take the same test twice, one time being honest and one time faking good, and comparing the results for significant difference.

Although the distinction between social desirability and faking good or bad is not clear in most of the literature, some observations need to be summarized. There does seem to be a socially desirable response set for many people. It would seem that for some this is unconscious, while for others it may be in

their awareness. There is also evidence from the literature that it is possible to fake good or bad on many tests. In most cases, faking good or bad is seen as a deliberate attempt to do so. However, in other cases, authors used these terms (faking good or bad) in ways that might fit unconscious responding. It would seem that definitions are crucial to this question; however, only one place clearly separated social desirability from faking (Meehan, Woll, & Abbott, 1979); but even they did not define either term. In the literature, there do not appear to be clear, distinguishing definitions given for social desirability and faking responses.

Helmes and Holden (1986) speak to the problem of definition at the end of their article in the section suggesting future research. They capture the problem well:

> The concepts of social desirability and self-deception and the approval motive are also worthy of further study. Are these the same constructs under different names? What factors influence the conscious faking of a test? These and other questions suggest that research in this area will continue to be useful. (p. 858)

For the purposes of this study, the author sees social desirability and faking responses as two different issues, either of which could be present in a test taker. Social desirability is simply the desire to be seen in a positive light (or negative light in certain circumstances). Depending on one's insight and

self-awareness, this may be conscious or unconscious. Faking is defined as a conscious attempt to respond good or bad for some particular reason. The reason could be social desirability, or a host of other reasons unrelated to social desirability. Gordon and Gross (1978) define this as a concept, whereas, the present author has used faking as a verb, something done by the test taker. Gordon and Gross say:

> Fakability is a concept that refers to the vulnerability of some psychological instruments to deliberate systematic distortion of answers by respondents intent upon creating a particular impression of themselves in terms of the scored results of the tests. The fakable instrument allows the respondent to emphasize socially desirable personal characteristics through careful selection of his/her answers. (p. 772)

To the extent that one is trying to conceal part of his personality, Edwards (1970) would call that impression management.

Helmes and Holden (1986) say social desirability is "seen as a semiconscious or unconscious process of normal personality functioning and not as a deliberate manipulation" (p. 853):

> Our data on levels of social desirability responding raise the suspicion that pathological content arouses a defensive style among some individuals in normal populations, which minimizes reported abnormal behavior (Arkin, 1981). This

> characteristic, termed *self-deception* by Paulhus (1984), is distinct from another component of social desirability, impression management. *Impression management* is characteristic of a response style, whereas self-deception is an enduring characteristic or personality trait of an individual. (Helmes & Holden, 1986, p. 857)

Disadvantages and Advantages of Self-Report Instruments

Certainly the imprecise and confusing nature of definitions is a disadvantage, at least in communicating about social desirability and/or faking responses. The following paragraphs will elaborate some disadvantages or problems in the use of self-report instruments.

Lewin (1979) elaborates eight sources of response sets which would fit the definition above. The first one is demand characteristics of the experimental setting. These are "cues which suggest to a subject what the hypothesis is or suggest other information which significantly influences his or her behavior" (p. 103). The second is awareness of the hypothesis. This has been studied by psychologists interested in conditioning of verbal responses by the experimenter. The third is enlightenment effects. This happens if examinees are psychologically sophisticated and aware of certain results of past research. The

fourth and fifth types are the good and bad subject roles, which relate more to social desirability.

> A subject who, deliberately or not, is trying to act so as to support what he or she guesses to be the experimenter's preferred outcome is doing something quite different from simply reacting to the independent variable as it would occur in a non-experimental situation. (p. 104)

The sixth source listed by Lewin is evaluation apprehension. This is one type of personality trait which may confound an experiment if the examinee is worried about revealing himself. The seventh is reactance. Reactance is a tendency to defend one's freedom of choice by acting the opposite of what one feels pressured or forced to do. Experimenter expectancy is the eighth. This is affected by all these confounding factors. "The experimenter normally knows the hypothesis being tested and can hardly help but have some opinion as to the probable (or desired) outcome" (p. 105).

Kazdin (1980) mentions other problems with self-report inventories. They tend to depend heavily upon verbal skills, and thus, intelligence and verbal comprehension play a role. Some strategies to reduce the role of response styles, such as wording questions negatively as well as positively, may increase comprehension problems.

A final potential limitation given by Kazdin is evaluating whether the inventory is sufficiently sensitive to reflect the influence of the independent variable.

> Self-report measures have been designed to assess a wide range of characteristics, which vary in the degree to which they are stable and amenable to change. Some measures are designed to assess persistent abilities and skills that should not change very much over time; others are designed to assess characteristics that are very transient and readily subject to change. (Kazdin, 1980, p. 232).

Although there is not much data on this, according to Ellison's conceptualization, the SWB Scale is sensitive to changes over time, measuring SWB at a given point in time.

Yuker (1986) says the possibility of faking should make us wary of using certain self report measures if interpreting scores as indicative of absolute levels of attitudes. However, he suggests a distinction between a fakeable instrument and faked scores:

> Even though many instruments may be fakeable, particularly by knowledgeable participants, we need to know the conditions under which responses are faked. Actual faking may well depend more on the conditions under which the instrument is administered and the uses to which the results are put than to potential faking of the measure. (Yuker, 1986, p. 203)

Such instruments should not be used as selection devices, but can be used in research conditions where the subjects have little motivation to fake their answers. Yuker suggests another possible use for faked scores:

> In addition, it might be interesting to conduct research to determine whether scores obtained under instruction to 'fake well' could be used as a predictor variable. Persons who are able to obtain very positive ATDP (Attitude Toward Disabled Persons) scores under instructions to fake might turn out to be effective rehabilitation personnel because they seem to be aware of what constitutes 'positive attitudes.' It is possible that in the course of graduate training, students learn to express 'appropriate' attitudes. If these attitudes are expressed in behavior, we need not be concerned with whether or not they are 'deeply felt.' Perhaps some rehabilitation personnel do not know what positive attitudes toward disabled persons are, which, along with methodological problems, could account for some of the findings indicating that service providers have negative perceptions of disabled persons. (Yuker, 1986, p. 203)

Even with all that has been said, there are definite advantages in using self-report inventories. They permit assessment of several aspects of behavior that are not readily available with other assessment techniques, because the client is

in a unique position to report on his or her thoughts, feelings, and behaviors, across a wide range of different situations. The client can provide a comprehensive portrait of himself in everyday performance. Self-report inventories are convenient due to ease of administration. They are ideal initial screening devices, and are an important dimension for treatment in its own right.

> One obvious factor that makes self-report measures absolutely central is the fact that many psychological problems are defined by what clients say or feel. That is, aspects of many problems or the central problem itself, may be included in self-reports about the world or one's experience. (Kazdin, 1980, p. 228)

Self reports are subject to all the advantages as well as response biases and limitations mentioned in the above sections. "Furnham and Henderson (1982) have argued that the greater the face validity of the measure, as well as the comprehensibility (popularity) of the concept being measured, the more easy it is to fake" (Furnham, 1986, p. 810). The SWB Scale is a self-report instrument with high face validity. It has not been tested to see if respondents can deliberately fake good or bad on it to a degree that would make a significant score difference. It has been shown in previous sections that some studies indicate measures of social desirability and validity scales are at least moderately correlated with SWB. To ferret out correct interpretation of

those results, one missing first step is to explore whether the SWB Scale is sensitive to faking. If the person is trying to look good (or bad) consciously or unconsciously, can he or she manipulate answering questions on the SWB Scale to that end? This has not been tested.

Rationale and Purpose of the Study

It has been seen that interest in the psychology of religion, and in particular, interest in spiritual well-being is increasing as mental health professionals are becoming more open to measuring subjective qualities of life. The Spiritual Well-being Scale developed by Ellison and Paloutzian is being used today to measure spiritual well-being. At Western Conservative Baptist Seminary alone, there have been over 40 studies investigating some aspect of well-being using the SWB Scale.

Although Ellison (1983) did not think the SWB Scale was significantly affected by social desirability, research suggests a positive correlation between social desirability and SWB scores. Some authors might suggest these results would therefore lead us to question the usefulness of the SWB Scale. Others have suggested there may be a curvilinear relationship between social desirability and SWB, and that moderate correlations are healthy.

Most people have a concept in their minds of what it means when it is said something is affected by social desirability. However, a review of the literature has shown definitions are imprecise and confusing, especially when trying to distinguish between social desirability and faking good (or bad). Both of these terms fall under the general heading of response bias, something to which self report instruments, such as the SWB Scale, are especially susceptible.

For this study social desirability is defined as a more or less unconscious tendency for an individual to present herself or himself in a positive light. Faking is defined as a deliberate conscious attempt to create an impression on a test. Thus faking may be due to a social desirability factor or to some other factor.

The fakability of the SWB Scale has not been tested. If the SWB Scale cannot be faked then any correlations with social desirability indicators take on a different meaning. Whether the interest is in social desirability or some other response bias, the first missing step in the research is to determine if the SWB Scale is fakable. That problem has not been addressed. Therefore, the purpose of this study is to determine if the SWB Scale is sensitive to faking.

Three conditions will be examined in a true experimental design: fake good, fake bad, and respond honestly. The null hypotheses are that there will be no main effect for faking.

The null hypotheses are:

1) There will be no significant difference among the means of the three treatment groups for SWB.

2) There will be no significant difference among the means of the three treatment groups for RWB.

3) There will be no significant difference among the means of the three treatment groups for EWB.

Two other research questions will be examined. The first is whether or not religious knowledge and experience correlates significantly with ability to raise or lower the RWB score.

The second question is related to the possible development of a faking good or validity scale. If there is a significant difference between the faking good and honest means, can several items be found which could comprise a faking good scale?

Correlations between SWB and demographic questions will also be examined.

CHAPTER 2

METHOD

This chapter details the method used in this study of faking good and faking bad on the Spiritual Well-being Scale. The chapter consists of three parts: (a) a demographic description of the subjects, (b) an explanation of the instruments used, and (c) the procedure used to gather and analyze the data.

Subjects

Participants for this study were drawn from a Portland, Oregon evangelical community church. Specifically, 135 adult male and female members from a church group for those overcoming some addictive area in their lives were used for one group. The other group consisted of 55 adult male and female members of a Sunday school class in the same church. Permission to test each group was secured from the pastor who leads each group. The Sunday school class was tested June 26, 1988, and the larger group on June 27, 1988; 52 test packets were returned completed from the Sunday school class (19 fake good, 15 fake bad, 18 honest, and 3 declined to participate), and 120 test packets were returned

completed from the larger group (40 fake good, 41 fake bad, 39 honest, and 15 declined to participate; nine of these 15 were asked to decline because of their participation in the Sunday school class testing). Though these were unequal sample sizes, it is not a major problem. The Statistical Package for the Social Sciences (SPSS) program can handle differences of these size samples as each group was large enough (G. H. Roid, personal communication, July 25, 1988).

Instruments

This section is divided into two parts: (a) a description of the background information questionnaire or demographics, and (b) the Spiritual Well-being Scale.

Background Information Questionnaire

Subjects were asked to respond to a demographic questionnaire supplying the following data: age, sex, marital status, frequency of church attendance, frequency of personal devotions, length of time spent in personal devotions, Christian profession and number of years as a professing Christian, income, importance of religion, financial condition, religious knowledge and development, church leadership experience, and three questions related to social relationships. These variables were chosen for

three reasons. First, they are similar to those used in other studies on SWB and serve in data analysis for comparative purposes. Second, they were used in comparing the different groups for generalizability, and they were used in comparing the different treatment groups to ascertain if there were significant differences among the groups other than on the independent variable. The third reason related to personal interest by the pastor in future planning for the church groups. A copy of the demographic questionnaire is found in Appendix A. The questions are in a close-ended, ordered answer choices format as suggested by Dillman (1978). Dillman gives the following advantage to this format:

> The feature that distinguishes close-ended questions with ordered answer choices from all other forms of questions is that each choice offered for a particular question represents a gradation of a single dimension of some concept. This question structure is ideally suited for determining such things as intensity of feeling, degree of involvement, and frequency of participation...Researchers also find this question structure particularly attractive for asking series of attitude and belief questions...Another attractive feature of questions with ordered response choices is that they are usually less demanding than questions of any other type, a

result of the precisely prescribed response expectations. (p. 89-90)

Spiritual Well-being Scale

The Spiritual Well-being Scale (SWB), developed by Ellison and Paloutzian, is a 20-item self-report questionnaire (found in Appendix B). The scale contains 10 Religious Well-being items, all of which contain a reference to God, and 10 Existential Well-being items, none of which contain a reference to God, but which deal with life satisfaction.

The Spiritual Well-being Scale yields three scores. One is the overall Spiritual Well-being (SWB) score comprised of all items. One is the Religious Well-being (RWB) score from the 10 Religious Well-being items. The last is the Existential Well-being (EWB) from the 10 Existential items. About half the items in each subscale are positively worded, and half the items are negatively worded to control for acquiescent responding (Paloutzian & Ellison, 1979a).

Spiritual Well-being items are scored from 1 to 6, with the higher range indicating greater well-being. Six response alternatives are used to prevent subjects from answering neutrally. Meyers (1986) tested the effect of two likert labeling formats on the SWB Scale. A significant difference was found between one form, which included labels "always true" to "never

true" with a numerical scale of 1-6, and the present form, which defines labels "SA" to "SD" (strongly agree to strongly disagree). Though the defined labels resulted in slightly higher means, it was concluded that the present SWB Scale is adequate and there does not need to be an adjustment for the differences found in this study. "...though minor changes in Likert format may effect results, those changes do not critically affect outcomes" (Meyers, 1986, p. 14).

Paloutzian and Ellison (1979a) list one-week test-retest reliability coefficients as .93 for SWB, .96 for RWB, and .86 for EWB. Alpha coefficients reflecting internal consistency were .89 for SWB, .87 for RWB, and .78 for EWB. The SWB and its subscales correlated positively with the Purpose in Life Test (Crumbaugh & Maholick, 1969; Paloutzian & Ellison, 1979a), as well as with other measures in predicted ways to establish concurrent validity. A more complete description of data on SWB was given in Chapter 1.

Procedure

The total test packet, including the Background Information Questionnaire and the Spiritual Well-being Scale, was given to each church group at its regular meeting. Time was given for instructions and for filling out and collecting forms there in the meeting to insure maximum return of materials.

All the Background Questionnaires were the same. The SWB Scale was printed with three separate sets of instructions at the top:

(1) The first group was told to "attempt to create an exceptionally favorable impression. Show the best picture of yourself, as if you were trying to impress someone with your degree of adjustment, spiritual maturity and well-being."

(2) The second group was told to "attempt to create an exceptionally poor impression. Show the worst picture of yourself, as if you were trying to impress someone with your lack of adjustment, lack of spiritual maturity, and lack of well-being."

(3) The third group was told to "attempt to give an exceptionally honest response. Show the accurate and honest picture of yourself, as if you were trying to impress someone with how well you know yourself and can report those strengths and weaknesses accurately."

The wording of the instructions for the first group was identical to Mauger and Adkinson's (1980) similar study in establishing validity scales for the Interpersonal Behavior Survey (IBS), except for changing "adjustment and responsibility" in their study to "adjustment, spiritual maturity and well-being" in the present study.

The forms were mixed to approximate random distribution to the entire group at once. They were stacked in the following order before distribution: three fake good forms, three fake bad forms, three honest forms, followed by one remaining form. Every third person received each of the three forms. There was no bias in giving out the forms as far as thinking how any respondent might perform. Forms were distributed as subjects entered the room. Subjects were seated in a random fashion. Rows were lengthy such that every instruction was represented on the front rows as well as the back rows, to prevent subject differences that might be for those normally sitting in the front or back. While this was not truly random, it was adequate, and study results support the conclusion that groups were equivalent.

Respondents were told that the instructions were vital, and were asked to read them twice before answering questions on the SWB. They were informed of the confidentiality of the testing and reassured of that due to the absence of giving their names. They were told briefly the need for the demographic questions in order to validate the findings. They were not told the three groups' instructions, only that there were different instructions and that it was therefore crucial that they read the instructions carefully.

Research Design

This is a true experimental design with three levels of independent variables: fake good, fake bad, and be honest. An analysis of variance was run for each of the dependent measures (SWB, RWB, and EWB). The dependent variable for the first ANOVA was the total SWB score, for the second ANOVA it was the EWB score, and for the third it was the RWB score.

When the F statistic showed a significant effect, a Scheffe post hoc test was done after the analysis of variance to determine where the differences lie.

These are appropriate statistics for this study according to Gravetter and Wallnau (1985), Kerlinger (1973), Isaac and Michael (1981) and Schmidt (1979). Gravetter and Wallnau say, "analysis of variance is a statistical technique that is used to compare two or more treatments (or two or more populations) to determine whether there are any mean differences among them" (p. 390). It tests the null hypothesis that says no differences among the treatment means exists versus an alternative hypothesis that says the treatment means are different. The Scheffe post hoc test is a general method that can be applied to all comparisons of means after an analysis of variance (Kerlinger, 1973). It enables you to go back through the data and compare the individual treatments two at a time (Gravetter & Wallnau, 1985). In this case, the fake

good and fake bad scores will be compared to the honest responding, and to each other. The null hypothesis for this study is that there will be no main effects.

The SPSS manual (1986) lists seven available post hoc tests: Least-significant difference (LSD), Duncan's multiple range test (Duncan), Student-Newman-Keuls (SNK), Tukey's alternate procedure (TukeyB), Honestly significant difference (Tukey), Modified LSD (LSDMOD), and Scheffe's test. There is an implied ordering from the most liberal to the most conservative. In his classic text on analysis of variance, Winer (1962) gives a similar listing of critical values for the differences between pairs of ordered totals. Scheffe is the most stringent. It will result in the least false positives.

> The Scheffe approach has this optimum property: the type 1 error is at most alpha for any of the possible comparisons...The Scheffe method is clearly the most conservative with respect to type 1 error; this method will lead to the smallest number of significant differences. (p. 88-89).

It is true if one uses a more liberal post hoc test, there will likely be a greater chance of finding significant results, but it seems better for the scale to add more stringent criteria. This will also minimize the possibility of other factors besides the independent variable accounting for the results.

Before all of the above took place, a 2 x 3 analysis of variance was run to determine if the Sunday school class data and the group data should be considered separately or combined. Two groups (the Sunday school class and the group) comprised one factor, and fake good, fake bad, and honest the three levels of the other factor. A Scheffe post hoc test was run. Since there was no main effect for groups, the Sunday school class data and the group data were collapsed for simplicity of analysis and reporting. If the data had shown significant differences, then the two groups would have been compared for generalizability. Actually, the two groups were compared by both demographics and SWB score means.

For Research Question 1, correlations were calculated using a Pearson Product Moment Correlation Coefficient to determine if there was a link between religious knowledge and development and the ability to raise or lower RWB scores.

Research Question 2 depended on the results of the ANOVA's. If significant differences had been found between the fake good and honest group (and/or between the fake bad and honest groups), then an ANOVA would have been run to see if individual items showed a significant difference in responding between fake good and honest conditions (and/or between fake bad and honest). These could have then been the subject of a future study to possibly develop validity scales for faking good and/or faking bad.

CHAPTER 3

RESULTS

In this chapter the results of the data analysis are presented in the following sections: (a) the missing data and incomplete responses; (b) the rationale for combining the two samples (class and group); (c) descriptive statistics for the total sample in terms of demographics and religious variables; (d) correlations between RWB, EWB, SWB and the demographic variables; (e) the presentation of the results pertaining to hypotheses 1 - 3; and (f) the presentation of the results pertaining to research questions 1 - 2.

All statistics were calculated utilizing the Statistical Package for the Social Sciences/Personal Computer (SPSS/PC+) computational package on an IBM XT computer system. Cross tabulations and Chi-Square were calculated for demographic variables. Correlations were calculated using the Pearson Product Moment Correlation Coefficient. Hypotheses were tested using one way ANOVA and Scheffe post hoc tests. Critical values for significance were established at the $p < .05$ level for all statistics.

Missing Data and Incomplete Responses

Three people declined to participate in the Sunday school class, and 15 did not participate in the group. In the group, 9 of 15 were asked by the examiner not to participate because of their participation in the Sunday school class testing the morning before. Out of a total of 190 people from both groups, 18 did not participate, or 9%. If the nine who were asked to not participate are subtracted, only 4% declined to participate in the study. Thus, there was a 96% participation rate.

Demographic questions were computed for the number who completed that particular question. Eighteen people did not complete one or more questions on the Spiritual Well-being Scale; thus, their profiles were discarded in the computations for total SWB scores and for the subscale score for which they left any items incomplete.

Combination of Samples

Initial consideration was given to whether the two samples were similar enough to constitute one sample. The Sunday school class (N = 52) and group (N = 120) samples did not differ

significantly on any SWB subscale item, subscale score or total SWB score (see Appendix F).

Of 18 demographic variables, only two showed a significant difference for the two samples. These were frequency of personal devotions and time spent in personal devotions. See Appendix G for Sample 1 descriptive variables, including mean, standard deviation, range, minimum and maximum scoring and number. See Appendix H for the same information for Sample 2. See Appendix I for a comparison of means and standard deviations between the two samples.

Cross tabulation suggested a significant difference for frequency of personal devotions, Chi-Square (5, n = 40) = 12.09, $p < .05$ (see Appendix J). The other significant difference came on the variable time spent in personal devotions; however, this variable is being deleted from the study due to the inadvertent omission of one answer category, without which the question and answers are meaningless.

In light of the above findings, the two samples were combined for the remainder of the study.

Demographics

Of the total sample (*N* = 172), 57 fell in the honest treatment group, 59 in the fake good treatment group and 56 in the fake bad treatment group. The demographics will be discussed in this section in terms of the total population, and in some cases information will be broken down into treatment groups to show how the treatment groups compared.

Age

The mean age of the sample was 39.45 (*SD* = 11.41) with a range of 58, from 17 years of age to 75. Table 1 shows how this compared across treatment groups.

Table 1

Descriptive Statistics - Age

	Mean	*SD*	Cases
Entire Population	39.45	11.41	172
Tx 1 Honest	40.61	12.61	57
Tx 2 Fake Good	39.97	11.12	59
Tx 3 Fake Bad	37.71	10.38	56

Gender

Although analysis will not take gender into account, it is reported here as a demographic variable describing the sample. For the entire sample, 55, or 32%, were male, and 116, or 67.4%, were female; one person did not respond to this item. Table 2 shows the number and percent of males and females in each of the treatment groups.

Table 2

Descriptive Statistics - Gender

	Male		Female	
	N	Percent	N	Percent
By Entire Population	55	32%	116	67.4%
By Treatment				
Honest	21	36.8%	36	63.2%
Fake Good	17	28.8%	41	69.5%
Fake Bad	17	30.4%	39	69.6%

Note: Percentages do not add up to 100 due to 1 missing observation (.6%).

Education

Mean years of education was 13.67 (SD 2.06), and a range of 13 years from 8 years to 21 years. Table 3 gives the mean and standard deviation for this and each of the treatment groups. A count from the raw data showed 4% (n = 8) having below 12 years of school, and 6% (n = 11) having post college years, leaving 90% of the sample having had from 1 to 4 years of college.

Table 3

Descriptive Statistics · Education

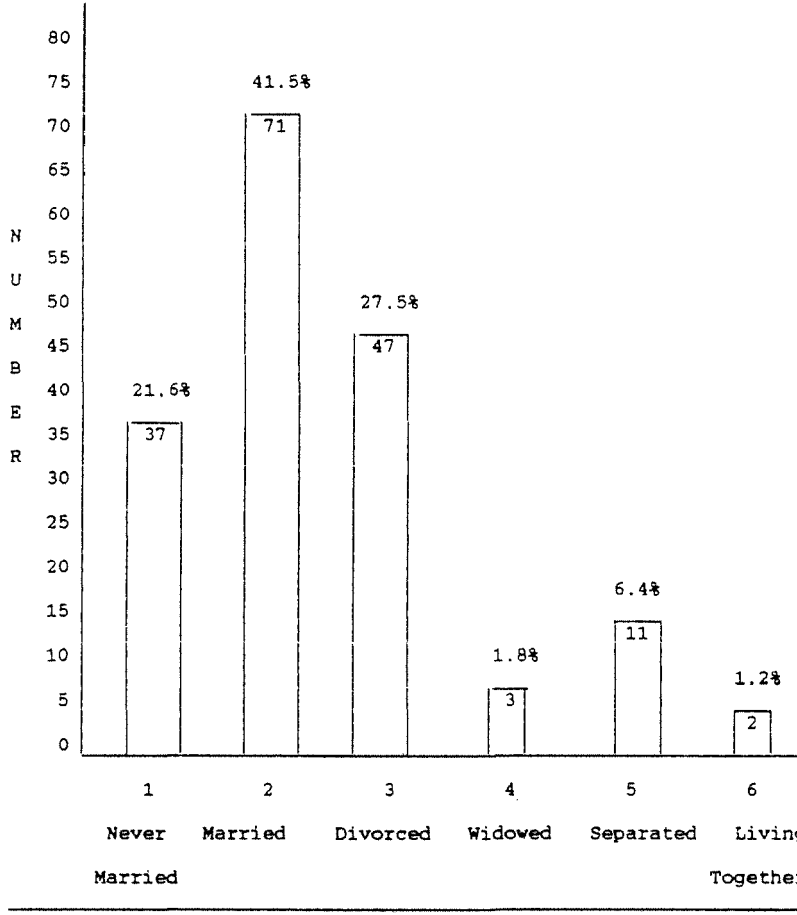
	Mean Yrs	SD.	Cases
By Entire Sample	13.58	1.99	172
By Treatment			
Honest	13.67	2.06	57
Fake Good	13.53	2.16	59
Fake Bad	13.55	1.76	56

Marital Status

Figure 1 shows the number and percent of people falling in each of the six categories describing marital status. Forty-one percent of the people were married (n = 71). The next largest number of people (n = 47) were divorced. Thirty-seven (21.6%) indicated they were never married. Only small percentages indicated they were widowed, separated, or living together. Several people wrote in that they were remarried, suggesting an additional category for future demographics. Only two people indicated they were living together, although pastoral descriptions of this sample suggest more for that category. Table 4 shows the breakdown of marital status by treatment group.

Frequency of Church Attendance

Figure 2 shows the frequency of church attendance for the sample. A large percentage of people in this sample (52.4%) indicated they attended church more than once a week. Only 17 people, or approximately 10%, indicated they attended less than 11 times a year. Approximately 90% indicated they attended once a month or more. Table 5 shows a breakdown of church attendance for treatment group.



Note: N = 171.

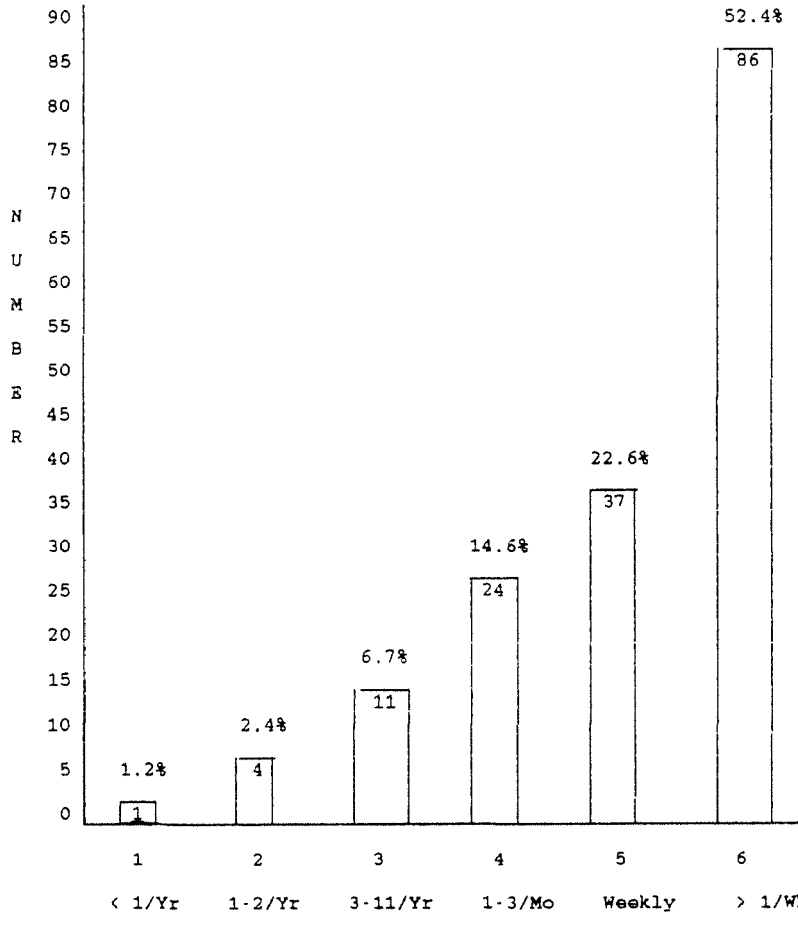
Figure 1. Descriptive Statistics for Marital Status

Table 4

Description of Marital Status by Treatment

	Honest		Fake Good		Fake Bad	
	N	Percent	N	Percent	N	Percent
Category						
1 Never Married	9	15.8%	13	22.0%	15	27.3%
2 Married	22	38.6%	25	42.4%	24	43.6%
3 Divorced	21	36.8%	14	23.7%	12	21.8%
4 Widowed	1	1.8%	1	1.7%	1	1.8%
5 Separated	4	7.0%	5	8.5%	2	3.6%
6 Live Together	0		1	1.7%	1	1.8%
Total	57		59		55	

Note: N = 171.



Note: N = 164.

Figure 2. Frequency of Church Attendance

Table 5

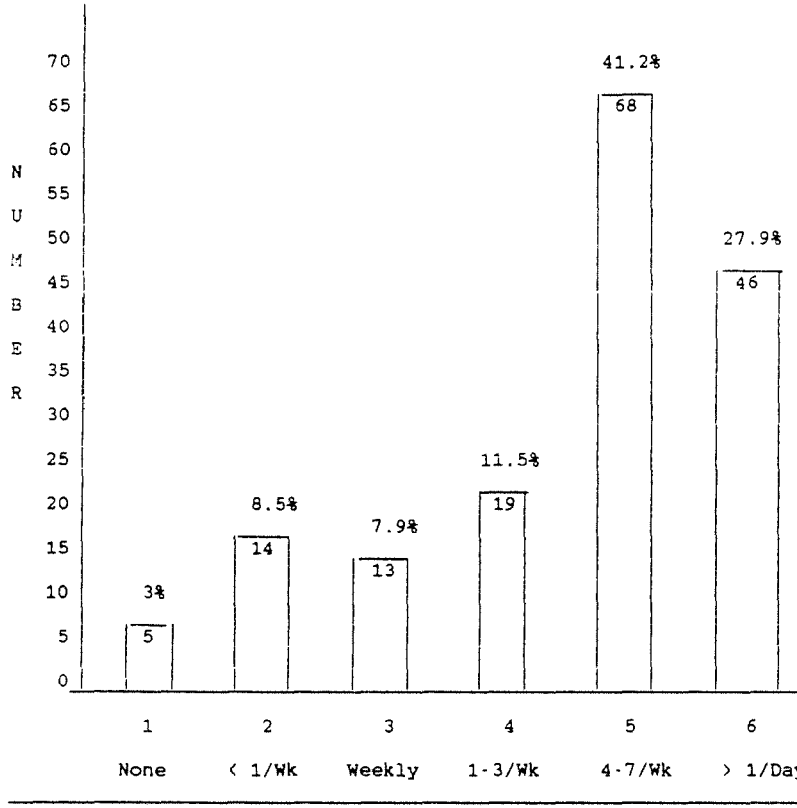
Frequency of Church Attendance by Treatment

	Honest		Fake Good		Fake Bad	
	N	Percent	N	Percent	N	Percent
Category						
1 < 1/Yr.	0		1	1.8%	1	1.9%
2 1-2/Yr.	1	1.9%	3	5.3%	0	
3 3-11/Yr.	6	11.3%	3	5.3%	2	3.7%
4. 1-3/Mo.	6	11.3%	7	12.3%	11	20.4%
5. Weekly	9	17.0%	16	28.1%	12	22.2%
6. > 1/Wk.	31	58.5%	27	47.4	28	51.9%

Note: Honest: N = 53. Fake Good: N = 57. Fake Bad: N = 54.

Frequency of personal devotions

Figure 3 shows the frequency of personal devotions for the sample. Approximately 70% of the people indicated they had personal devotions more than 4 times a week. Forty-six people (27.9%) indicated they had them more than once a day. Only 5 people (3%) indicated they did not have personal devotions at all. Table 6 shows the breakdown of frequency of personal devotions by treatment group.



Note: N = 165.

Figure 3. Frequency of Personal Devotions

Table 6

Frequency of Personal Devotions by Treatment

	Honest		Fake Good		Fake Bad	
	N	Percent	N	Percent	N	Percent
Category						
1. Not at All	1	1.8%	3	5.5%	1	1.9%
2. < than 1/Wk	6	10.7%	2	3.6%	6	11.1%
3. Weekly	4	7.1%	5	9.1%	4	7.4%
4. 1-3 times/Wk	5	8.9%	6	10.9%	8	14.8%
5. 4-7 times/Wk	24	42.9%	19	34.5%	25	46.3%
6. > than 1/Day	16	28.6%	20	36.4%	10	18.5%

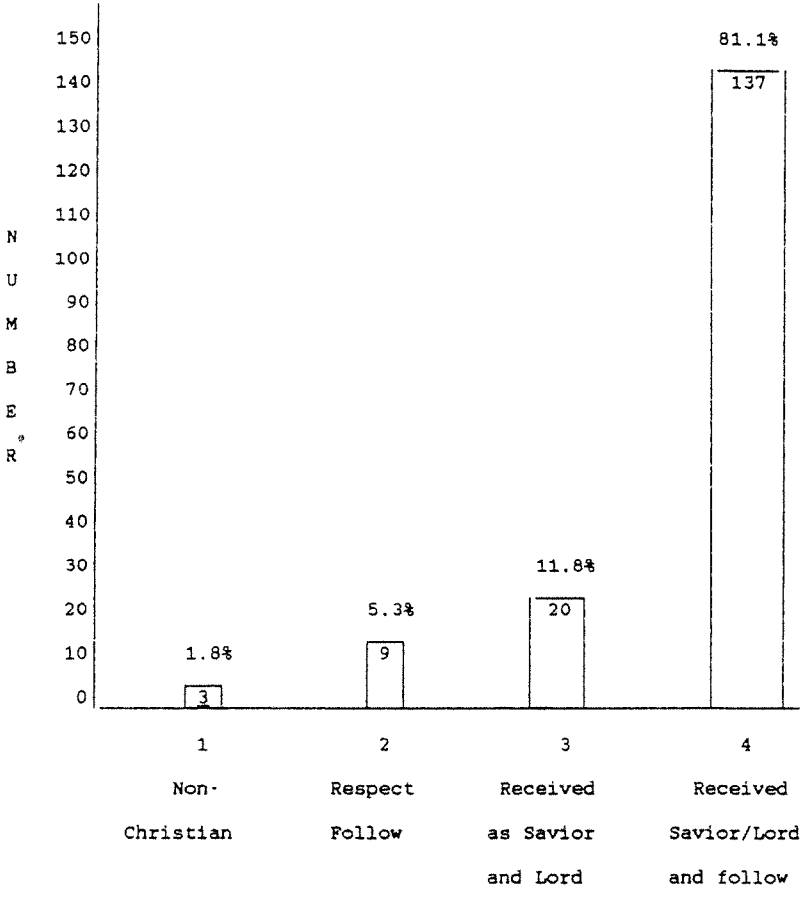
Note: Honest: N = 56. Fake Good: N = 55. Fake Bad: N = 54.

Christian Profession

Figure 4 shows the number of people who indicated their response to various statements about belief in Christ and their Christian profession. There were four choices: (1) No, I do not profess to be a Christian; (2) Yes, I respect and attempt to follow the moral and ethical teachings of Christ; (3) Yes, I have received Jesus Christ into my life as my personal Savior and Lord; and (4) Yes, I have received Jesus Christ as my personal Savior and Lord and I seek to follow the moral and ethical teachings of Christ. Over 80% chose the fourth category. Table 7 shows how these answers broke down for the different treatment groups.

Number of Years Professing Christian

The mean number of years indicated for Christian profession was 17.58 (*SD* = 15.01) with a range of 67 (from 0 to 67 years). Seven people gave their age and the number of years as being a Christian as the same number. There were other people in the age range of 60 to 75 who indicated they had been Christians for 50 to 67 years. Since the range is so great, Table 8 shows how these numbers fell in terms of number of years as Christian. Forty-six people (29.4%) had been a Christian 5 years or less. Seventy-one people (45.3%) had been Christians 10 years or less.



Note: N = 169.

Figure 4. Christian Profession

Table 7

Christian Profession by Treatment Group

	Honest		Fake Good		Fake Bad	
	N	Percent	N	Percent	N	Percent
Category 1 (Non-Christian)	1	1.8	1	1.7	3	1.8
Category 2 (Respect & follow)	5	8.9	4	6.9	0	
Category 3 (Received as Savior/Lord)	6	10.7	8	13.8	6	10.9
Category 4 (Received as Savior/Lord and Follow)	44	78.6	45	77.6	48	87.3

For the honest treatment group the mean was 17.94 (*SD* = 14.48) with a range of 0 to 50. For the fake good group the mean was 18.83 (*SD* = 14.40) with a range of 0 to 58. For the fake bad group the mean was 15.88 (*SD* = 16.26) with a range of 0 to 67 years. Table 8 shows the number of people indicating years as a Christian in five year blocks and the percentages of people for those blocks of years. Table 9 shows the comparison of means and standard deviations for each group.

Table 8

Number of Years Professing Christian

Years	*N*	Percent	Years	*N*	Percent
0 - 5	46	29.3	31 - 35	11	7.0
6 - 10	25	15.9	36 - 40	9	5.7
11 - 15	13	8.3	41 - 45	6	3.9
16 - 20	18	11.5	46 - 50	3	1.9
21 - 25	8	5.0	51 - 55	0	
26 - 30	15	9.6	56 - 60	2	1.3
			61 - 67	1	.6

Note: *N* = 157.

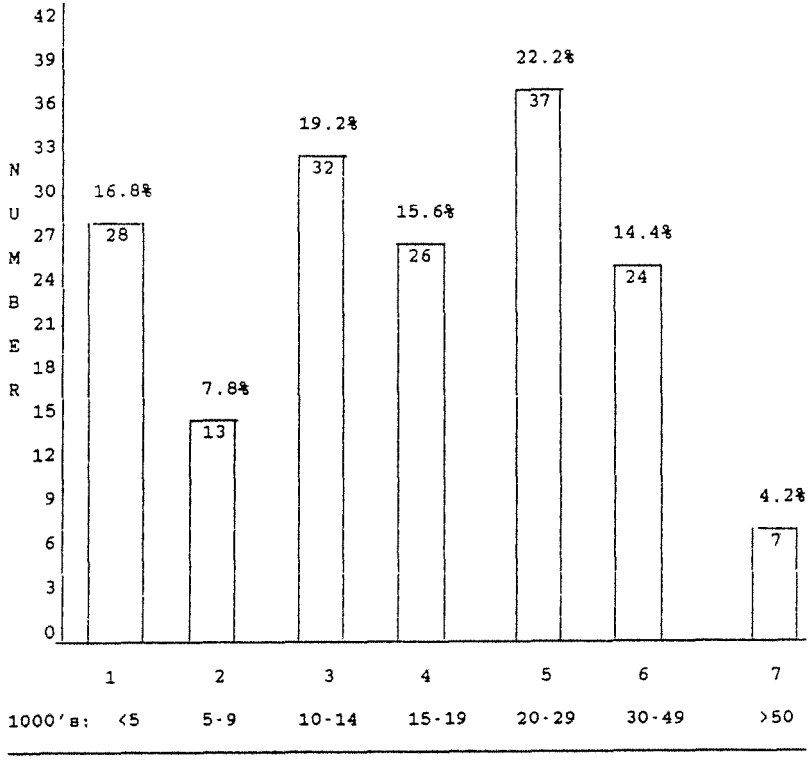
Table 9

Number of Years Professing Christian by Treatment

	Mean	SD	Cases
Entire Population	17.58	15.01	157
Honest	17.94	14.48	52
Fake Good	18.83	14.40	54
Fake Bad	15.88	16.26	51

Gross Income Level

Almost 17% of the sample earned less than $5000. It was not clear in the directions as to whether or not this was for the individual or for the household. Figure 5 shows the breakdown of gross income level by categories ranging from less than $5000 to over $50,000 a year.

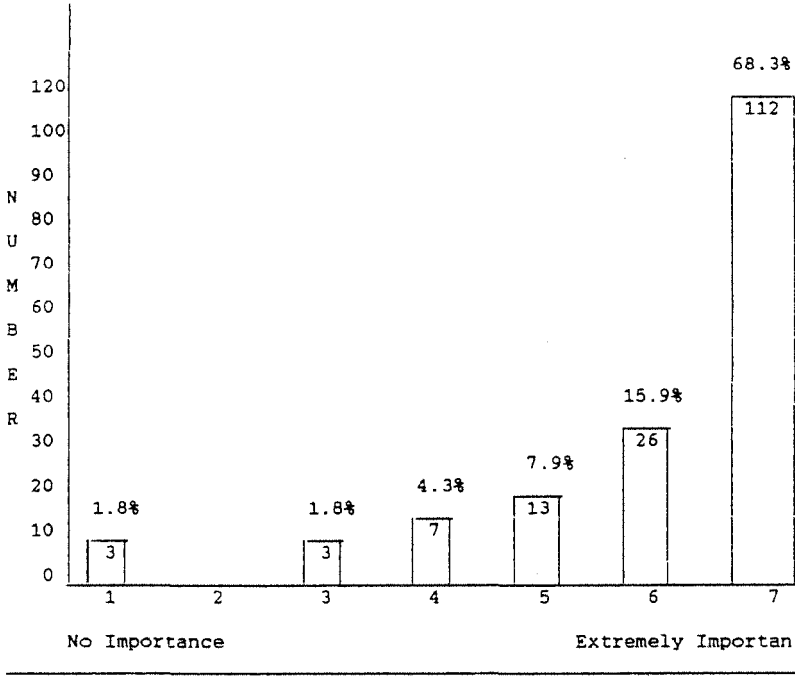


Note: N = 167.

Figure 5. Gross Income Level

Importance of Religion

Figure 6 shows the rating of the sample on how important their religion is to them from 1, no importance, to 7, extremely important. Over 68% rated importance of religion in the highest category. Only 3 people indicated that it was of no importance.

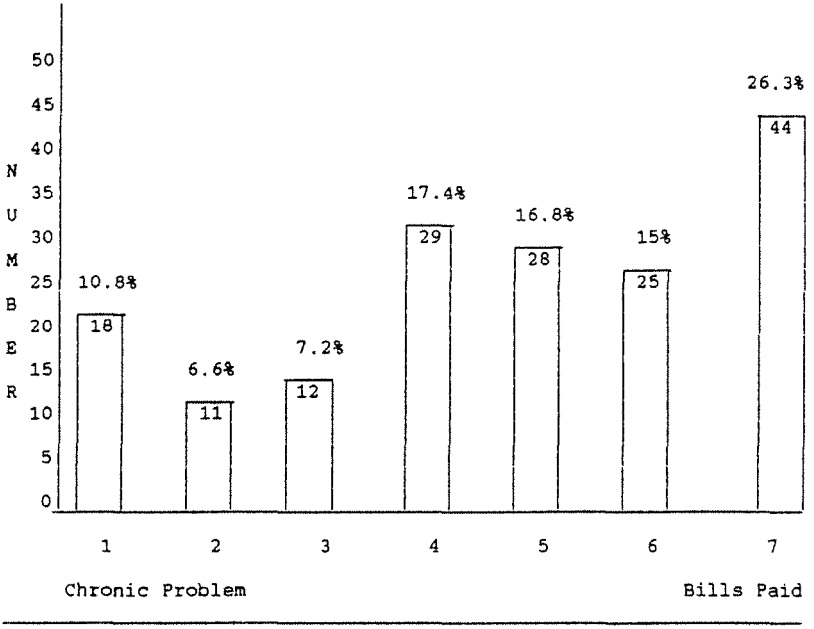


Note: N = 164.

Figure 6. Importance of Religion

Financial Condition

Figure 7 shows the financial condition of the sample on a scale of 1 to 7, with 1 indicating a chronic problem and 7 indicating that bills are paid. Approximately one quarter of the people reported their bills were paid. Only ten percent reported being in the worst financial condition indicating that their finances were a chronic problem.



Note: N = 167.

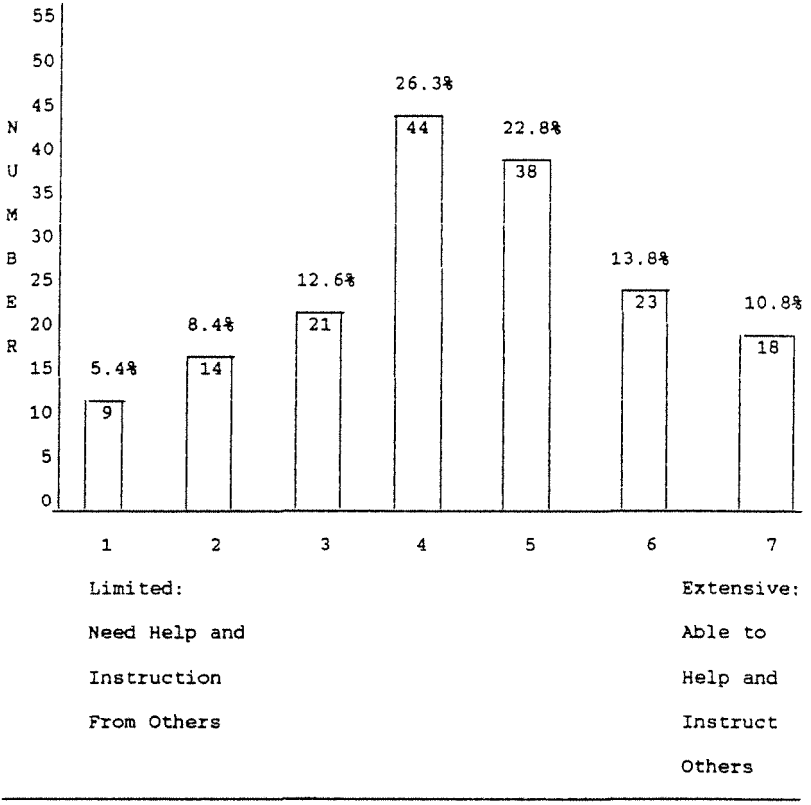
Figure 7. Financial Condition

Religious Knowledge and Development

Figure 8 shows a 7 point scale indicating religious knowledge and development. At the lower end of the categories a 1 represents someone with limited knowledge who needs help and instruction from others. At the upper end of the categories a 7 represents someone whose knowledge is extensive enough to be able to help and instruct others. The sample followed a normal distribution for this variable with the largest number of people (26.3%) indicating responses in the middle category, 4. Ten percent indicated they felt they had extensive religious knowledge and development to the point of being able to help and instruct others.

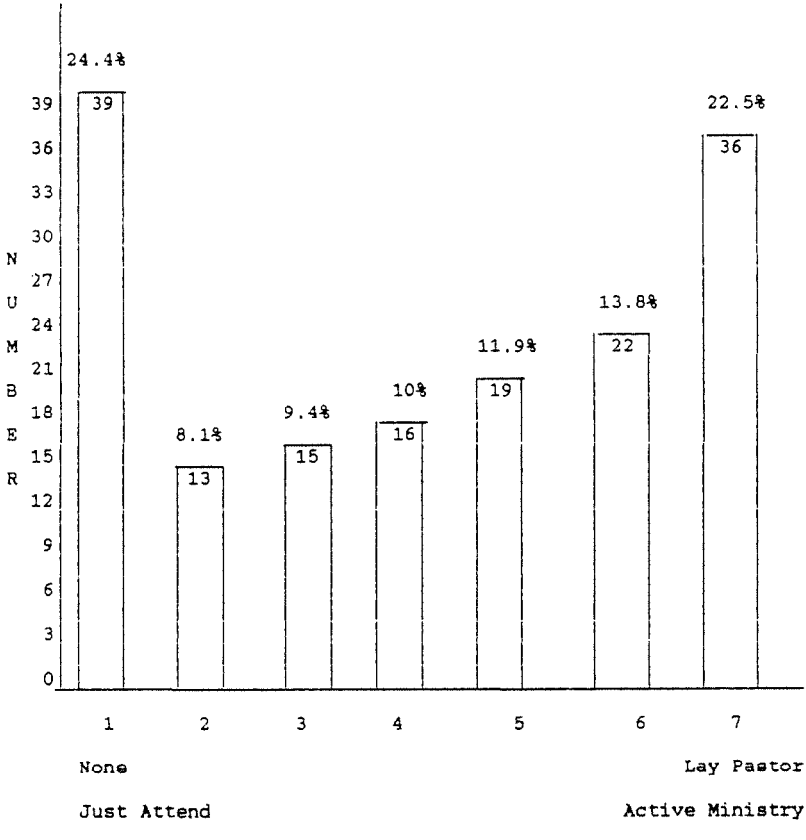
Church Leadership Experience

Church leadership experience was rated in categories from 1 (Experience: None, just attend) to 7 (Experience: Lay Pastor and active, growing ministry). There was a bimodal distribution with almost a quarter of the people at either end. Twenty-four percent said they had no leadership experience and that they just attended. Twenty-two percent said they were church leaders (lay pastors) and had active, growing ministries. Figure 9 shows the actual numbers and percentages for each category.



Note: N = 167.

Figure 8. Religious Knowledge and Development

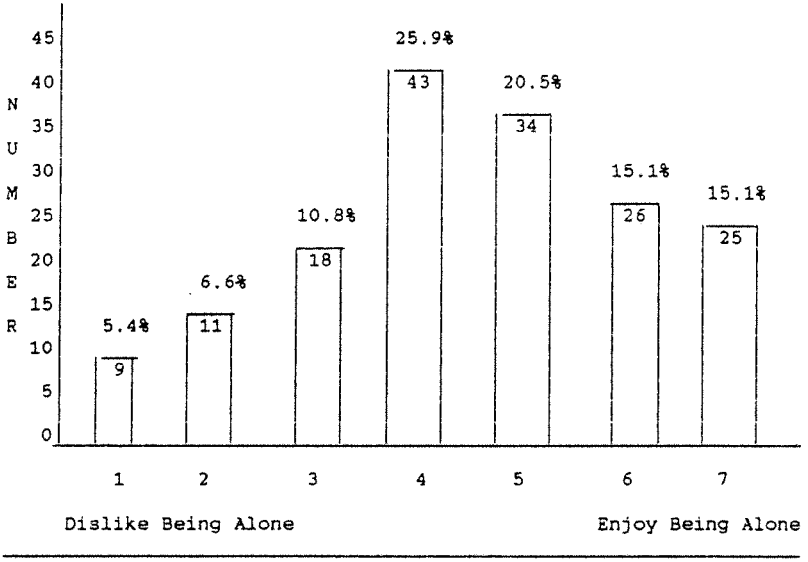


Note: N = 160.

Figure 9. Church Leadership Experience

Social Relationships -- Alone

Figure 10 shows a rating of categories 1 to 7 for social relationships pertaining to whether a person dislikes being alone (category 1) to enjoys being alone (category 7). A little over a quarter of the people rated themselves in the middle category. Over 77% rated themselves from the middle to the highest category of enjoying being alone. Only 22% put themselves in the first three categories indicating more of a dislike for being alone.

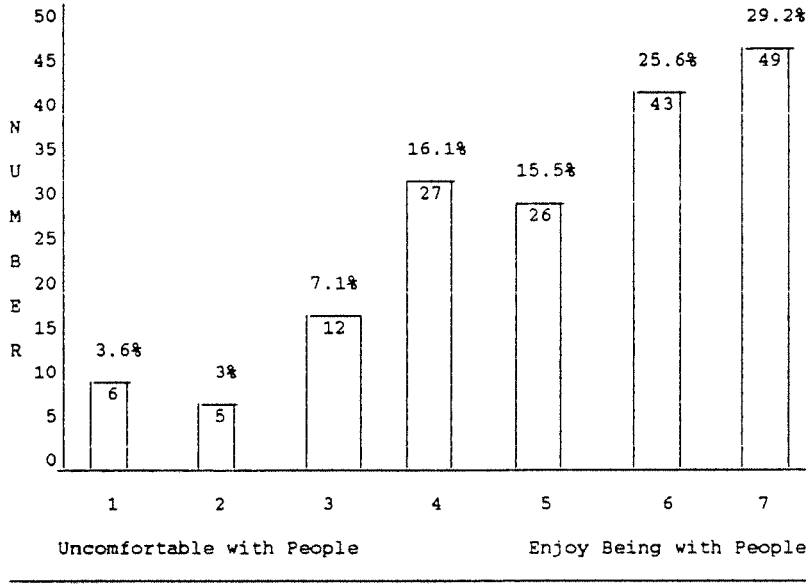


Note: N = 166.

Figure 10. Social Relationships -- Alone

Social Relationships -- Comfort with People

Figure 11 rates social relationships in terms of comfort with other people. The categories range from 1 (uncomfortable with people) to 7 (enjoy being with people). Almost 30% rated themselves in the highest category indicating they enjoyed being with people. Only 13.7% rated themselves in the lower three categories, leaving 86.4% rating themselves in the middle to the highest category indicating an enjoyment of being with people.



Note: N = 168.

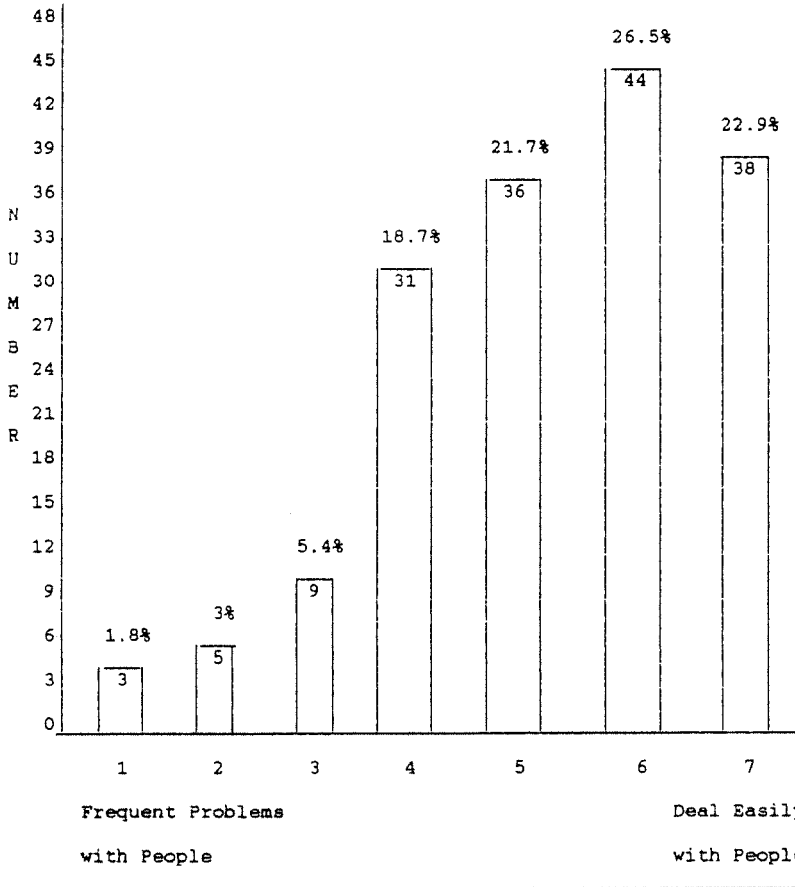
Figure 11. Social Relationships -- Comfort with People

Social Relationships -- Problems with People

Figure 12 gives a 7 point rating of social relationships in terms of having problems with people (1) to dealing easily with people (7). Almost 90% of the people rated themselves from the middle category to dealing easily with people. Only 3 people (1.8%) gave themselves the lowest rating of having frequent problems with people. This is uncharacteristic of pastor ratings for this sample. As a matter of fact, only 17 people (10.2%) gave themselves a rating below the middle of the scale.

Correlations between RWB, EWB, SWB and Demographics

Within the honest treatment group significant positive correlations were found for 6 of 16 variables. Frequency of church attendance significantly correlated with RWB (r = .4027; $p \leq .01$), and with SWB (r = .3799; $p \leq .001$). Christian profession significantly correlated with RWB (r = .6977; $p \leq .001$), EWB (r = .5043; $p \leq .001$), and SWB (r = .5909; $p \leq .001$). Financial condition correlated significantly with EWB (r = .3951; $p \leq .01$). Religious knowledge and development correlated significantly with RWB (r = .4228; $p \leq .01$), EWB (r = .4999; $p \leq .001$), and SWB (r = .4997; $p \leq .001$). Church leadership experience correlated significantly with RWB (r = .4134; $p \leq .01$), EWB (r = .4937; $p \leq .001$), and SWB



Note: N = 166.

Figure 12. Social Relationships -- Problems with People

(r = .4915; $p \leq .001$). Social relationships having to do with liking or disliking being alone correlated significantly with RWB (r = .3999; $p \leq .01$), EWB (r = .4761; $p \leq .001$), and SWB (r = .4745; $p \leq .001$). See Appendix J for the complete table of correlations between RWB, EWB, SWB and the demographic variables.

Though the correlations between the demographic variables and the treatment groups fake bad and fake good are meaningless for normal comparisons, they are included to show they were different from what they were under normal conditions; they will be discussed later under Question 1. Tables 10 - 12 show these comparisons. Rather than the six correlations found in the above section, two variables correlated for the fake good treatment group: Marital status with EWB which did not correlate for the honest treatment group, and church leadership experience with RWB and SWB, but not EWB. Religious knowledge and development, frequency of church attendance, Christian profession, financial condition, and social relationships dealing with aloneness did not correlate with RWB, EWB or SWB under the fake good conditions as they had under honest conditions. For the fake bad treatment group, no correlations showed up at all.

Table 10

Correlations for RWB under each Treatment Condition

	Honest	Fake Good	Fake Bad
AGE	-.0945	.3443	.2293
SEX	.3118	-.0445	.2032
EDLEV	-.0643	.0789	-.3093
MARITAL	-.0515	-.0082	-.0284
CHURCH	.4027*	.2182	-.1710
DEVOTIONS	.2137	.3437	-.0551
CHRISTIANPROFESS	.6077**	.2131	.0410
YEARSCHRISTIAN	.0036	.1920	-.0882
INCOME	.2192	.3188	-.1968
IMPORTANCEREL	.1222	.2645	.0710
FINANCECOND	.2517	.0641	-.1038
RELIGIOUSKNOW	.4228*	.0157	-.2532
CHURCHLEADER	.4134*	.5648**	-.2132
RELATIONSALONE	.3999*	.2465	.0783
RELATIONSCOMFORT	.1965	-.2384	.0493
RELATIONSPROBLEMS	.1012	-.2675	-.0534

NOTE: $N = 36$

* $p < .01$, ** $p < .001$

Table 11

Correlations for EWB under each Treatment Condition

	HONEST	FAKE GOOD	FAKE BAD
AGE	-.1085	.1679	.3044
SEX	.1044	-.0343	.2086
EDLEV	-.0567	-.2060	-.1847
MARITAL	-.1904	-.4213*	-.0505
CHURCH	.3145	.2002	-.2285
DEVOTIONS	.2137	.0601	-.1031
CHRISTIANPROFESS	.5043**	.1242	-.0129
YEARSCHRISTIAN	.0036	.0340	-.0717
INCOME	.1142	.2576	-.0729
IMPORTANCEREL	.1467	.0317	.0165
FINANCECOND	.3951*	-.0157	-.0949
RELIGIOUSKNOW	.4999**	-.2191	-.2668
CHURCHLEADER	.4937**	.3542	-.1704
RELATIONSALONE	.4761**	.1670	.1053
RELATIONSCOMFORT	.1460	-.0178	.1438
RELATIONSPROBLEMS	.3032	-.0007	-.0124

* $p < .01$, ** $p < .001$

Table 12

Correlations for SWB under each Treatment Condition

	HONEST	FAKE GOOD	FAKE BAD
AGE	-.1098	.2709	.2697
SEX	.2114	-.0433	.2094
EDLEV	-.0645	-.0986	-.2545
MARITAL	-.1379	-.2806	-.0396
CHURCH	.3799*	.2333	-.2019
DEVOTIONS	.1213	.1998	-.0793
CHRISTIANPROFESS	.5909**	.1810	.0157
YEARSCHRISTIAN	-.0692	.1119	-.0818
INCOME	.1729	.3179	-.1404
IMPORTANCEREL	.1457	.1441	.0460
FINANCECOND	.3554	.0196	-.1013
RELIGIOUSKNOW	.4997**	-.1367	-.2642
CHURCHLEADER	.4915**	.4962*	-.1963
RELATIONSALONE	.4745**	.2247	.0927
RELATIONSCOMFORT	.1809	-.1229	.0959
RELATIONSPROBLEMS	.2287	-.1252	-.0345

* $p < .01$, ** $p < .001$

Results in Relationship to Hypotheses 1 - 3

An analysis of variance was run for each of the dependent measures (RWB, EWB, and SWB). The significance level used for the ANOVA was .05. The null hypotheses that there would be no significant differences among the means of the three treatment groups for RWB, EWB, and SWB were rejected. In each treatment group there was a significant treatment effect. The *F* statistic in each case was substantial.

Scheffe post hoc tests were run. As was discussed in Chapter 2, the Scheffe test was used because it is the most stringent post hoc test, which will result in the least false positives. Results confirmed significant differences between the fake bad treatment group and the fake good treatment group. There was not a significant difference between the fake good and honest groups for RWB, EWB, or SWB. Tables 13 - 15 summarize the results of these ANOVA's and post hoc tests for each run. Even the use of a Modified LSD (LSDMOD) post hoc test did not reveal significant differences between the honest and fake good groups.

Table 13

Summary Data and One-way ANOVA for RWB by Treatment

	Honest	Fake Good	Fake Bad
n:	55	56	55
M:	51.42	54.70	25.91
SD:	8.44	7.40	16.24

Source	*df*	*SS*	*MS*	*F*	*F* Prob.
Between Groups	2	27433.	13716.	105.	$p < .001$
Within Groups	163	21097.	129.		
Total	165	48531.			

Table 14

Summary Data and One-way ANOVA for EWB by Treatment

	Honest	Fake Good	Fake Bad
n:	47	56	52
M:	43.96	47.63	24.02
SD:	10.11	10.22	14.41

Source	*df*	*SS*	*MS*	*F*	*F* Prob.
Between Groups	2	16965.	8482.	61.	$p < .001$
Within Groups	152	21024.	138.		
Total	154	37989.			

Table 15

Summary Data and One-way ANOVA for SWB by Treatment

	Honest	Fake Good	Fake Bad
n:	47	55	51
M:	94.87	102.91	50.02
SD:	17.34	15.36	29.91

Source	*df*	*SS*	*MS*	*F*	*F* Prob.
Between Groups	2	83892.	41946.	88.	$p < .001$
Within Groups	150	71298.	475.		
Total	152	155191.			

In addition to the SWB subscale and summary score ANOVAS reported above, Table 16 shows the results of an ANOVA for individual SWB questions by treatment and sample. The results show a treatment effect for every single item, no sample effects

Table 16

Anova for RWB and EWB Items by Treatment and Sample

	Means			F · Value		
	Honest	Fake Good	Fake Bad	Treatment	Sample	Interaction
RWB Items						
R1	5.00	5.47	2.46	64.71***	0.10	0.12
R2	5.61	5.76	2.77	87.96***	0.60	1.85
R3	5.38	5.66	2.84	63.22***	1.23	1.332
R4	5.05	5.36	2.52	73.23***	.82	1.05
R5	4.86	5.31	2.73	45.03***	.22	1.57
R6	5.35	5.63	2.68	76.95***	3.38	.73
R7	5.00	5.34	2.46	67.69***	.08	1.38
R8	4.81	5.21	2.45	62.11***	.12	1.78
R9	5.28	5.36	2.57	67.27***	.01	.44
R10	5.23	5.39	2.63	62.73***	.01	.82
EWB Items						
E1	4.56	5.14	2.27	55.16***	.02	.91
E2	4.38	4.95	2.37	40.90***	.26	.79
E3	3.55	4.02	2.25	17.52***	.01	1.19
E4	3.87	4.38	2.14	35.78***	.01	1.30
E5	4.35	4.84	2.46	38.15***	2.07	.20
E6	4.70	5.03	2.31	54.32***	.33	.48

Table 16 (contd.)

Anova for RWB and EWB Items by Treatment and Sample

	Means			F - Value		
	Honest	Fake Good	Fake Bad	Treatment	Sample	Interaction
E7	4.33	4.83	2.30	45.94***	.13	1.01
E8	3.62	3.88	2.20	17.50***	.27	.45
E9	5.09	5.12	2.75	43.55***	.04	.23
E10	5.16	5.47	2.79	54.38***	.69	.60

$p < .001$ ***

for any item, and no interaction effects. The treatment is extremely powerful.

Tests for homogeneity of variance showed significant differences between the variances of the treatment groups. Though this is a violation of an assumption behind analysis of variance, Hays (1963) says the assumption of equal variances appears to be relatively unimportant when the number of observations in each sample do not differ significantly. The sample sizes in the present study are close enough to meet this restriction

(RWB Tx n's = 55, 56, 55; EWB Tx n's = 47, 56, 52; and SWB Tx n's =47, 55, 51).

Another issue concerns the ceiling effect with the SWB scale. The ceiling most likely has suppressed the range of scores for both the honest and fake good groups, thereby limiting the standard deviation in the honest and fake good groups in comparison to the fake bad group. See Tables 17 - 20 for information on the range of scores. Table 17 shows the frequency and percent of RWB scores for the different treatment groups, Table 18 shows this for EWB, and Table 19 shows this for SWB. Table 20 summarizes the ranges for each treatment group by giving the range and minimum and maximum scores for each treatment group. Within the Fake Good treatment, 38 people (64.5%) scored in the top 5 points of the RWB scale, 18 people (30.6%) scored in the top 5 points of the EWB scale, and 15 people (25.5%) scored in the top 5 points of the total SWB scale.

The EWB and SWB range of scores for the fake bad group was much greater than for the honest or fake good group. For RWB the range within the fake bad treatment group was 50, whereas it was 34 for honest and 33 for fake good. The range for SWB within the fake bad group was 93, but only 60 for the honest group and 59 for the fake good group. For EWB the ranges were closer. The honest range was 38, the fake good range was 40, and the fake bad range was 43.

Table 17

Frequency and Percent of RWB Score Ranges by Treatment Group

	Honest		Fake Good		Fake Bad	
	Freq	Percent	Freq	Percent	Freq	Percent
Score						
10 - 14	0		0		17	30.4
15 - 19	0		0		11	19.7
20 - 24	0		0		5	9.0
25 - 29	1	1.8	1	1.7	1	1.8
30 - 34	1	1.8	0		4	7.2
35 - 39	3	5.4	2	3.4	2	3.6
40 - 44	8	14.1	4	6.8	7	12.6
45 - 49	6	10.7	4	6.8	2	3.6
50 - 54	9	15.9	7	11.9	1	1.8
55 - 60	27	47.5	38	64.5	5	9.0

Table 18

Frequency and Percent of EWB Score Ranges by Treatment Group

	Honest		Fake Good		Fake Bad	
	Freq	Percent	Freq	Percent	Freq	Percent
Score						
10 - 14	0		0		20	35.8
15 - 19	0		0		7	12.6
20 - 24	2	3.6	1	1.7	5	9.0
25 - 29	3	5.3	3	5.1	2	3.6
30 - 34	5	8.9	4	6.8	4	7.2
35 - 39	3	5.3	5	8.5	3	5.4
40 - 44	8	14.1	6	10.2	4	7.2
45 - 49	9	15.9	8	13.6	4	7.2
50 - 54	12	21.1	11	18.7	3	5.4
55 - 60	5	8.9	18	30.6	0	

Table 19

Frequency and Percent of SWB Score Ranges by Treatment Group

	Honest		Fake Good		Fake Bad	
	Freq	Percent	Freq	Percent	Freq	Percent
Score						
20 · 24	0		0		12	21.5
25 · 29	0		0		4	7.1
30 · 34	0		0		8	14.3
35 · 39	0		0		3	5.4
40 · 44	0		0		4	7.2
45 · 49	0		0		1	1.8
50 · 54	0		0		0	
55 · 59	0		0		1	1.8
60 · 64	3	5.4	1	1.7	1	1.8
65 · 69	3	5.4	1	1.7	2	3.6
70 · 74	2	3.6	1	1.7	1	1.8
75 · 79	1	1.8	3	5.1	2	2.8
80 · 84	4	7.2	2	3.4	3	5.4
85 · 89	5	8.8	5	8.5	2	3.6
90 · 94	2	3.6	0		1	1.8
95 · 99	4	7.1	4	6.8	2	3.6
100·104	6	10.6	8	13.6	1	1.8
105·109	7	12.3	6	10.2	1	1.8
110·114	5	8.8	9	15.3	6	3.6
115·120	5	8.9	15	25.5	0	

Table 20

Range and Minimum to Maximum Scores for RWB, EWB, and SWB

	Honest	Fake Good	Fake Bad
RWB			
N	57	59	56
M	51.42	54.70	25.91
Range	34	33	50
Min - Max.	26 - 60	27 - 60	10 - 60
n scoring min	1	1	13
n scoring max	12	21	3
EWB			
N	57	59	56
M	43.96	47.63	24.02
Range	38	40	43
Min. - Max.	22 - 60	20 - 60	10 - 53
n scoring min	1	1	13
n scoring max	3	8	1
SWB			
N	57	59	56
M	94.87	102.91	50
Range	60	59	93
Min. - Max.	60 - 120	61 - 120	20 - 113
n scoring min	1	1	8
n scoring max	3	6	1

The minimum and maximum scores for the honest and fake good groups were almost identical. For RWB the honest group scored from a minimum score of 26 to a maximum score of 60. The fake good group scored from 27 to 60. The same pattern was found for EWB and SWB. For EWB honest scores went from 22 to 60 and fake good scores from 20 to 60. For SWB honest scores went from 60 to 120 and for the fake good group they went from 61 to 120. The fake bad group spread was greater as shown in the summaries above. For RWB the spread was from a score of 10 to 60, for EWB, a score of 10 to 53, and for SWB a score of 20 to 113.

A quick look at the pattern in Tables 17 - 19 show the same trend. When broken down into score units of 5 points, the honest and fake good columns look identical, whereas the range for the fake bad column is extended. (For each score, it's frequency and the percent of people receiving that score before grouping, see Appendix L.)

Results in Relationship to the Research Questions

Question 1 asked whether religious knowledge and development correlated with a person's ability to fake on the SWB Scale. Tables 10 - 12 shed light on this topic.

There were no significant correlations between SWB, EWB, RWB and any of the demographic or religious variables for the fake bad treatment group.

Within the fake good group, leaders were better able to fake good. Church leadership experience was significantly correlated with fake good RWB scores (r = .5648; $p \leq .001$) and SWB scores (r = .4962; $p \leq .01$). There were no significant correlations between EWB and the religious variables for the fake good group.

Question 2 had to do with developing a validity scale if there were items which were significantly different for the fake bad or fake good groups. Every item contributed significantly, however, so this task was abandoned (see Table 16).

Summary

The statistical analysis of the data produced several interesting results. The means given represent a new sample to add to the body of research on the SWB Scale. Descriptive statistics were presented for this sample of those recovering from addiction and/or abuse.

Surprisingly, hypothesis 1 - 3 were rejected in part and retained in part. ANOVA's and a Scheffe post hoc test showed a substantial difference between the fake bad treatment group and the others (fake good and honest) on all three dependent measures

(RWB, EWB, and SWB). Fake good treatment did not differ from honest treatment even when using the least stringent LSD post hoc test.

There were no statistical results which would allow questions 1 and 2 to be pursued adequately. Though religious knowledge and development correlated significantly to RWB scores for the honest treatment group, it did not correlate significantly under fake good or fake bad conditions. As a matter of fact, there was a slight negative correlation under the faking conditions. SWB and religious knowledge and development correlated significantly for the honest condition, but not for fake good or fake bad. There was a negative correlation (though not significant).

Results of ANOVA revealed that every item on the EWB and RWB scale significantly contributed to the treatment at the $p < .001$ level. Scheffe post hoc test for each item showed a significant fake bad effect for every item and no fake good effect for any item. There were no sample effects or interaction effects.

Under the honest directions significant correlations were found for SWB and various religious and demographic variables. SWB and its subscales, EWB and RWB was significantly correlated with frequency of church attendance, Christian profession, religious knowledge and development, church leadership experience, and social relationships having to do with liking or disliking being alone. EWB was significantly correlated with financial

condition. No other significant correlations were found for the honest treatment group.

The range of scores for each treatment group was interesting in light of ceiling effects for the SWB Scale. The fake bad group had the largest range of scores. Fake good and honest groups were less variable, and had 47.5% scoring in the top five points on the RWB Scale for the honest group and 64.5% scoring in the top five points for the fake good group.

EWB scores showed the same pattern although the range of difference between fake bad and the other two treatment groups was not as great. The top five points on the scale represented 8.9% of the honest responders and 30.6% of the fake good responders. If this comparison is expanded to the top 10 points on the scale, the ceiling effects are seen even more clearly. In the honest group 30% scored within the top ten points and in the fake good group 49.3% scored in the top ten points.

A similar pattern was found for SWB scores. The fake bad group again had the largest range. Fake good and honest groups again had smaller ranges with larger percentages of people scoring at the top.

CHAPTER 4

DISCUSSION

This chapter will include a discussion of the results of the study and evaluate and interpret the findings. Sections will include: (a) a discussion of descriptive statistics for demographic and religious variables, (b) correlations between RWB, EWB, SWB and the demographic and religious variables, (c) hypotheses 1 - 3, (d) Questions 1 - 2, (e) implications for use of the SWB Scale, (f) implications for future research, and (g) a summary.

Demographics

Individuals participating in this study were selected from two groups at a local community church. One of these groups is unusual in that it is a recovery support group for anyone trying to overcome drugs, alcohol, or any other addictive behavior in their lives; many of these persons also were abused in one way or another as children. This group comprised almost 2/3 of the

sample. The Sunday school class did not differ significantly from this group, however, except for one religious variable - frequency of personal devotions. One would think these groups might differ in many more respects. Perhaps the fact that the same pastor leads both groups accounts for some similarity in attendance. The Sunday school class topic is also related in such a way that one would expect similar people to attend. The class centers on "Inner Healing" topics. Caution should be exercised in generalizing the findings to groups dissimilar to the ones mentioned above.

The mean for the sample (only using honest group -- n = 57) for SWB was 94.87. Because of the nature of the Sunday school class and the group, a comparison to most other means gathered is not warranted. The closest group of similar subjects would be Rodriquez's (1988) sample of sexually abused women. Their mean for SWB was 85.90. Rather than a comparison with groups studied thus far, the current means for the honest group are viewed as a new source of data describing a sample of recovering addicted and abused individuals. One limitation in the present study was in not asking specific questions in the demographics that would have more specifically described the sample. Rather, this sample labeling is based on the nature of the two groups and their pastor's chief ministry in the church.

In the following discussion of demographics all groups (honest, fake good, and fake bad) are used unless correlations with EWB, RWB or SWB are being discussed, in which case only the honest treatment group is used.

Age

The mean age of the sample was 39.45, with a range from 17 years old to 75 years old. No significant correlations were found between age and SWB scores in this sample. This finding is consistent with what would be expected as scores on SWB are not thought to be associated with age based on the majority of past studies. Only three studies found relationships between age and SWB, RWB, or EWB scores (Bufford, 1984; Hawkins & Larson, 1984; Jang, 1986).

Gender

Although analysis did not take gender into account, it is reported as a sample description. There have not been studies which have found a correlation between gender and SWB. Only 32% of the sample were male. Females comprised 67% of the group. This trend held true for each treatment group as well. This ratio of women to men is not uncommon for many church settings.

Education

Mean years of education for the sample was 13.67, with a range of 8 years in grammar school to 21 years into post college. A count from the raw data showed 4% had below 12 years of school, 6% had post college years, and 90% had from 1 to 4 years of college.

The mean years of education for the three treatment groups were virtually identical.

Consistent with previous studies, there were no significant correlations between number of years of education and SWB scores. It probably would have been helpful to have asked how many people actually received a college degree as opposed to number of years attended, since four years of college in not synonymous with having received a degree.

Marital Status

Forty-one percent of the sample were married. An important category for this sample would have been remarried. This was not asked, but many wrote in this description. Divorced was the next largest category with 27.5%. Never married comprised 21.6% of the sample. Only two people indicated they were living together, although pastoral descriptions of this sample would suggest others for that category.

Frequency of Church Attendance

Consistent with previous studies, frequency of church attendance correlated significantly with SWB scores (r = .3799; p < .001) and with RWB (r = .4027; p < .01).

Over half the people in this sample (52.4%) indicated they attended church more than once a week. Only 17 people (approximately 10%) indicated they attended less than 11 times a year.

These statistics could be misleading when thinking about typical church attendance. It was not asked whether church attendance meant to a service, typical church meeting, or to the group alone. This could be an important distinction, since some of these people may be treating the group in a similar way that people attend AA meetings for support. Nevertheless, the group meetings are Christian in nature, and constitute what can be considered a Christian service for the majority of the meetings.

Frequency of Personal Devotions

Frequency of personal devotions did not correlate significantly with any of the SWB scores. A very high percent (69%) of the sample indicated they had personal devotions more

than 4 times a week. Almost 30% indicated they had them more than once a day.

Definition of what constitutes personal devotions is left to the individual taking the test. It would be interesting to know how this was defined by the 30% who indicated having them more than once a day, as this seems a high percentage. Only 3% of the sample indicated they did not have personal devotions at all. This seems remarkable for this particular sample, but again it would be interesting to know how they defined the question.

Christian Profession

Christian profession was significantly correlated to SWB score (r = .5909; p < .001) and to EWB (r = .5043; p < .01) and to RWB (r = .6077; p < .01) subscales.

Over 81% indicated they had received Jesus Christ as personal Savior and Lord and that they sought to follow the moral and ethical teachings of Christ. Only 3 people indicated they did not profess to be a Christian.

Number of Years Professing Christian

The mean number of years indicated for Christian profession was 17.58, with a range of 0 to 67 years. Seven people gave their age and the number of years as a Christian as the same number

indicating more of a Catholic view than what is meant by born again Christians. Almost 30% said they had been a Christian 5 years or less. This is not surprising for this sample. The meetings are evangelistic in nature and and attract a large number of non- or new Christians.

No relationship was found between number of years as professing Christian and SWB in this sample. The only study reviewed where number of years as a professing Christian and SWB significantly correlated was with a Chinese-American sample (Jang, 1986). This is consistent with the view that SWB measures spiritual "health" rather than "maturity".

Gross Income Level

Almost 17% of the sample indicated they earned less than $5000 a year. Directions did not make it clear whether this was to be for the individual or for the household. This seems a high percentage of low income situations, although this would not be surprising for the sample. It is lower than the 1979 Portland Census figures for per capita income which was $8092. The median income for the sample, however, was in the $15,000 to $19,000 range.

Importance of Religion

Surprisingly, importance of religion did not correlate significantly with SWB scores for this sample as it has in previous studies on SWB. Scores were rated on a 7 point scale from religion not being important to religion being extremely important.

Religion was very important to this sample, however, with 68.3% rating it at the highest level. Only 3 people (1.8%) indicated it was of no importance at all, and only 6 people (3.2%) rated themselves in the lower 3 categories.

Financial Condition

Financial condition was significantly correlated with EWB scores ($r = .3951$; $p < .01$) but not with RWB or SWB. On a scale of 1-7 (financial condition being a chronic problem to bills paid) approximately one quarter of the sample reported they were in the best financial condition with bills paid. Only ten percent reported it was a chronic problem. This is surprising and, it accurate, a positive note in light of the number of low income people represented in the sample.

Religious Knowledge and Development

The largest percentage of people (26.4%) scored in the middle of 7 categories indicating religious knowledge and development. The lower categories indicated limited knowledge, needing help and instruction from others. The highest categories indicated extensive knowledge and ability to help and instruct others. The spread of scores was one of the only variables which approximated a normal curve.

Church Leadership Experience

Church leadership experience correlated significantly with RWB scores ($r = .4134$; $p < .01$) and with EWB ($r = .4937$; $p < .001$) and SWB scores ($r = .4915$; $p < .001$). Almost a quarter of the people scored at each extreme of this scale, with 24.4% saying they just attended, while 22.5% gave themselves the highest rating for a Lay Pastor with an active, growing ministry.

Social Relationships

Social relationship - alone was the only social relationships variable which correlated significantly with SWB scores. This variable measures whether a person dislikes being alone or enjoys being alone. This variable correlated significantly with RWB

(r = .3999; p < .01), with EWB (r = .4761; p < .001), and with SWB (r = .4745; p < .001).

On a scale of 1 to 7 from disliking being alone to enjoying being alone, 25.9% scored in the middle category. Over 77% rated themselves from the middle to the highest category of enjoying being alone. Only 22% put themselves in the first three categories indicating more of a dislike for being alone. It should be noted this variable is not in contrast to being with people. It is only a measure of enjoyment or dislike of being alone.

In terms of comfort with people, almost 30% rated themselves in the highest category indicating they enjoyed being with others. Only 13.7% rated themselves in the lower 3 categories, leaving 86.4% in the middle to highest categories.

In terms of problems with people, almost 90% of the sample rated themselves from the middle category upward to dealing easily with people. Only 3 people (1.8%) gave themselves the lowest rating of having frequent problems with people. As a matter of fact, only 10% gave themselves a rating below the middle of the scale. This seems uncharacteristic for this sample and should be suspect based on pastoral report concerning this population. Though the emphasis in the group and in the church as a whole is on people needing and caring for each other and on interpersonal

relationship skills, this percentage seems contradictory to pastor reports describing the group. The suspicion is that they are rating themselves more in relation to growth and how far they have come, than in comparison to some actual realistic average. Another possible interpretation is that they are experiencing denial in regard to social relationships problems.

Correlations between RWB, EWB, SWB and Demographics

Within the honest treatment group six variables were found to correlate significantly. Four of these were typically religious variables, and their correlations are consistent with correlations found in previous studies using the SWB Scale.

Frequency of church attendance significantly correlated with RWB and with SWB. Christian profession significantly correlated with SWB and both subscales, EWB and RWB. Religious knowledge and development correlated significantly with RWB, EWB and SWB. Church leadership experience correlated with all three scores as well.

Two other variables had significant correlations. Financial condition correlated significantly with EWB, and social relationships dealing with aloneness correlated with SWB and both its subscales. Both of these variables have also been found to be significantly correlated with SWB in previous studies.

Unlike previous studies, in this sample frequency of personal devotions and importance of religion were not found to be significantly correlated with SWB. One possible explanation for this lack of significant correlation in the present population is the extremely high rating given these two variables by so many. Approximately 70% of the people indicated they had personal devotions more than 4 times a week. Almost 80% of the people rated importance of religion in the highest three categories of seven categories, indicating devotions more than once a week.

It was interesting to note that these correlations were affected under the faking instructions. Under the fake bad treatment condition there were no significant correlations at all. Under the fake good condition only church leadership experience was significantly correlated, as it was for the honest group. Leaders were able to fake good more effectively. Marital status was significantly correlated whereas it was not for the honest condition.

Hypotheses 1 - 3

Is the Spiritual Well-being Scale sensitive to faking? The answer is yes and no for the scale in its present form.

All three hypotheses were rejected in part and retained in part. The 3 hypotheses were that there would be no significant

difference among the means of the three treatment groups for SWB, RWB, and EWB.

An analysis of variance was run for each of the dependent measures (RWB, EWB, SWB), and the F statistic in each case was substantial. Scheffe post hoc tests revealed that for each dependent measure there was a significant difference between the fake bad condition and the other two (fake good and honest). Even when the least stringent post hoc test (LSD) was used, the fake good and honest groups did not differ.

The conclusion from the present study is that the SWB Scale can be faked, at least in a negative direction. The results are inconclusive as to whether it can be faked in a positive or socially desirable direction.

The fact that there was no significant difference between the fake good and honest treatment groups for SWB or either of its subscales, presents some interesting problems and possible interpretations.

One immediate problem comes to mind: In its present form, to the extent that faking good occurs, there is no way to tell a faked good score from an honest score. This problem will be discussed more fully in a section to follow regarding implications for the use of the SWB Scale.

What are some possible interpretations for the lack of finding a significant difference between the honest and fake good group? First, perhaps the honest group is already responding from a social desirability stance and thus there is no difference between its scores and those of the fake good group. It was seen on a few of the demographics that there were instances of discrepancy between how the pastor saw the group and how the group responded to the questions. This might lead one to think the group was answering in a socially desirable direction even on demographics.

A second and more probably interpretation is that the ceiling to the SWB Scale is too low for the fake good group to go very far in trying to look good. Three related things would support this view: the standard deviations of the groups, the range of scores, and the numbers of people scoring at the top of a scale score. Previous studies (Colwell, 1987; Mueller, 1986) have also concluded the SWB Scale ceiling is perhaps too low.

It has been shown, however, that the Spiritual Well-being Scale is sensitive to different groups, even in its present form (Bufford, Bentley, Newenhouse & Papania, 1986). Only three samples scored below the mean of 95 in the present sample on SWB: ethical Christians, Unitarians, and non-religious sociopath convicts. Other groups such as seminary students, Assembly of God, Conservative Baptists, Foursquare, Christian Church, Orthodox

Christian sociopath convicts, United Methodist and Presbyterian, had higher SWB scores than the present sample. This suggests there is enough room at the top for ceiling effects not to be as influential. In the present sample, the mean of 43.96 for the honest group on EWB leaves about 1 1/2 standard deviation room at the top of the scale for scoring. Even the fake good treatment SWB mean of 103 is lower than nine samples studied thus far (see Appendix D).

If a ceiling effect is operating in the present study, it most likely suppressed the range of scores for both the honest and fake good treatment groups. The range of scores for the fake bad group was much greater than for the honest or fake good groups. For RWB the range within the fake bad group was 50, but for honest it was only 34 and for fake good it was only 33. The range for SWB for the fake bad was 93, but only 60 for the honest group and 59 for the fake good group. EWB ranges were closer. The honest group's range was 38, the fake good group was 40 and the fake bad group was 43.

These suppressed ranges in the honest and fake good groups accounted for standard deviation differences for fake good and honest compared to fake bad. On SWB the fake bad group's standard deviation (29.91) was much greater than for the fake good group (15.36) or the honest group (17.34).

Although these differences between the standard deviations violate an assumption of ANOVA, Hays (1963) says this is not much of a problem in statistical terms if the sample sizes are equal. In the present study the sizes were nearly equal. But also in the present study, if the ceiling effect is pulling down the range for the fake good and honest groups compared to the fake bad, then the same results in terms of different standard deviations will occur no matter what.

Related to this is how the scores grouped along the range. Within the fake good group, a huge 64.5% scored within the top five points of the scale for RWB, 30.6% within the top five points for EWB, and 25.5% within the top five points for SWB.

Both of these issues suggest if the fake good group had had a higher ceiling on the SWB Scale, the range would have been greater and the scores more spread out at the top. This same problem holds for the honest group. On RWB 47.5% of the honest group scored within the top five points. On EWB 30% scored within the top ten points. For SWB 40.6% scored within the top twenty points, with 8.9% scoring within the top five points.

Therefore, the ceiling problem may not only be an issue for those trying to fake good, it may be an issue for the SWB Scale itself. It has already been seen that with certain church and seminary populations the ceiling is an issue. Now it is seen as

an issue for a group such as recovering alcoholic and abuse victims.

Third, it is possible that the SWB Scale is relatively impervious to the effects of faking good. The previous discussion of means for various samples would lend supporting evidence to this view. Also related to this is the fact that those with church leadership experience were able to raise scores on the RWB scale, though none of the other religious variables correlated with fake good scores. This will be addressed more fully in the following section.

Research Questions 1 - 2

Research question 1 was whether or not religious knowledge and development related to a person's ability to fake on the RWB scale. In previous studies, for example, Bufford (1984), this variable has correlated significantly with scores on RWB and SWB. In the present study RWB, EWB and SWB correlated significantly with religious knowledge and development. But under faking conditions this variable did not correlate significantly with RWB, EWB or SWB. It is not clear what happened to these correlations under faking conditions. They were greatly affected. If they had only been affected for the fake good group, it could be hypothesized that the ceiling effects discussed above might

somehow be responsible. They were also affected for the fake bad condition where the range of scores was no problem. It still seems logical to this author that increased religious knowledge and development and a test with high face validity should result in greater fakability. Of six religious variables, only church leadership experience correlated with fake good SWB and RWB scores. This did not hold true for fake bad scores.

The second research question had to do with the development of a validity scale for the SWB Scale. This has been one of the standard approaches to solving the problem of social desirability responding on some tests. The SWB Scale in its present form does not lend itself to such a validity scale because every item significantly contributed to the faking results at the $p < .001$ level. This is an issue perhaps related to the high face validity of the instrument. Subtle and obvious item differentiation does not seem possible for the scale in its present form either. If it were possible, it would seem that what would be subtle or obvious would depend on the respondent's Christian maturity and knowledge of the Christian life, which would confound the issue further. Worthington and Schlottmann (1986) say the predictive validity of empirically derived subtle and obvious psychological test items is a matter of debate anyway, and that even subtle items may be manipulated by a test taker trying to fake. The L and K scales on the MMPI illustrate this.

Implications for Future Research

It would seem there are several approaches that could be taken in future studies. First, some might want to replicate the present study since it is the first of its kind using the SWB Scale. There are also other ways to tackle the same problem such as having the same group of people alternately take the scale twice, once answering honestly and once faking good.

Second, Van Gorp and Meyers (1986) say the "best" and "worst" faking instructions have drawn much criticism, and that a much better approach would be to suggest a role situation to the test taker. Such roles might be application to a church board as a pastor, requesting to be a church counselor, or application for the position of deacon.

Third, another study might explore changing the test itself, either by changing the answering format or by changing or adding to the question content. One such study is underway (Brinkman, personal report) to test what effect changing the answering format to allow rating each item from 0 to 100 rather than from 1 to 6 (Strongly Agree to Strongly Disagree) might have. On trial runs, no one has achieved the top full scale score, thus ceiling effects seem less likely with this response format.

Another route might be to add a lie scale to the current question format. Such questions might include; I never miss having personal devotions, I always witness to new people I meet, etc. As soon as these questions are added, several problems come to mind, however. What if Christians in fact do these things consistently? This is the same problem faced on the MMPI lie scale. Some Christians (and non-Christians) simply do or don't do the things asked in a direction which are scored as lying.

Similar to the above approach would be to include parallel forms of the questions which are already present in a similar manner as done on the IBS. This could perhaps tackle the problem of trying to raise the ceiling on the scale.

If questions are added or changed, the advantages of the Scale, as Ellison sees it, may be lost. As it is, some advantages include the fact that it's non-sectarian, broad based, and unhindered by specific theological issues. The more definition that is given, the more some of these unique advantages of the scale may decrease.

One other suggestion for future research does not specifically relate to the SWB Scale but to the growing body of demographic questions which tend to be asked quite frequently. Of interest to this author would be a study investigating some of the definitions respondents are placing on these questions. Although this is an oversimplification, in every study there seems to be emerging two

studies. One has to do with the hypotheses and research questions that prompted the study and the other has to do with correlations between selected demographic and religious variables and the SWB and its subscale scores. Both results seem to be emerging with equal importance. Earlier in discussion of the present study several demographic questions were mentioned in terms of lack of clarity. If these demographic questions are to continue to be explored along with the primary research questions, it seems a worthy pursuit to evaluate and possibly formalize a body of demographic questions to accompany SWB research, while leaving room for unique tailoring to the sample and research question at hand.

Implications for Use of the SWB Scale

What good is the SWB Scale if the examiner cannot tell the difference between an honest score and a faked good score? Before addressing that, there are three things that will help before the scale is actually administered.

As with any self-report instrument there are some things which will enhance honest responding. Confidentiality is probably the biggest help in this regard. Along with this is group as opposed to individual use of the scale. As noted in Chapter 1, Lewin (1979) suggested several kinds of response sets. To control the

influence of response sets, careful instructions and control of the setting are important. This holds true whether the examiner is a pastor, lay leader, or researcher.

After the test is taken, how are scores interpreted since the SWB Scale is sensitive to faking? The present study shows it can most definitely be faked bad. The discussion of ranges, standard deviations, and percentages of people scoring at the upper limits in both the honest and fake good groups shows the ceiling to the SWB Scale is too low; in its present form, there is not enough evidence to conclude whether the SWB can be faked good. Practically, this means an honest score cannot be distinguished from a fake good score. There seem to be two ways to look at a resulting good score.

First, suppose a person does fake good on a SWB score. This could also represent something good. Christians are taught to live on two planes. In addition to earthly reality is the reality of Christians' position in Christ. To see oneself above earthly problems, forgetting what lies behind, claiming a Christian inheritance, owning and growing into the character ascribed as a child of God--these are not only healthy but commanded in Scripture. It would seem the only problem would come when the person is out of touch with earthly reality and cannot balance his or her position as Scripture does.

As Yuker (1986) pointed out, there is merit in knowing how to fake. There is something to be said for the Christian simply knowing what the Christian life should be. Both measurement of reality and knowing what the Christian life should be have positive benefits, although the latter may be more of a goal than actuality. Certainly a knowledge of who Christians are in Christ and what the Christian life is supposed to be like is a positive step in growing into that position in Christ.

Second, while faking good cannot be ruled out, given the present evidence there is an equal possibility that SWB scores are honest. The Holy Spirit lives inside the Christian and certainly motivates and guides in a truthful direction. A short literature search did not reveal studies that tested the quality of truthfulness for Christians versus any other population.

However, simply mentioning honest versus faking as alternatives greatly oversimplifies the issue. As was seen in the previous discussion of social desirability in Chapter 1, the issue is complex. A socially desirable response may be conscious or unconscious. To the degree that it is conscious and deliberate the person would be said to be faking. For unconscious responding, several other factors might come into play, such as self-deception, self-awareness, and personality style. It would seem these are discussions of things not yet well defined, and as such, interpretations of research based on these concepts are

equally problematic. The cart seems to be before the horse: there are instruments measuring social desirability but imprecise definitions for the concept of social desirability. Also, these scales generally have limited validation support. Therefore, how are data from research using these instruments to be interpreted?

Even with all that has been said, the strengths of the SWB Scale as an operational measure of the concept of spiritual well-being are numerous, as was seen in Chapter 1. The scale provides a general measure of spiritual well-being without being hindered by specific theological issues or standards of well-being which might vary from one denomination or belief system to another. Reliability studies are promising. Concurrent validity has been established with other measures in predicted ways. It is an excellent instrument to help Christian researchers move from the sidelines into the mainstream of research relevant for today's society. It is a ministry and an obligation that Christian theorists research and publish their findings. Rather than developing new measures for SWB, it seems wise to continue to perfect the present instrument by finding the appropriate way to raise the ceiling.

There is a caution in interpreting research using the SWB Scale in light of the present study. Some studies, such as Papania (1988), have suggested higher RWB scores for Christian psychiatric populations may mean they are in fact experiencing

higher religious well-being because of their Christianity in spite of their pathology. This may well be true. An alternative hypothesis is also possible. These individuals may be faking good in light of their Christian background. Though no variable measuring religious knowledge and development significantly correlated with faking ability in this sample it must be kept in mind that there was no significant difference between the faking good and honest scores for SWB, EWB, or RWB. While a superficial glance at these results might lead one to conclude the Spiritual Well-being Scale cannot be faked in a positive direction, the results in light of standard deviations, ranges, and clusters of scores at the top of the scale indicate, in fact, an honest score cannot be distinguished from a fake good score of the Spiritual Well-being Scale in its present form. All we can conclude is that the present data provides no evidence for the view that SWB scores may be faked in a positive direction.

Summary

It has been seen that interest in the psychology of religion, and in particular, interest in spiritual well-being is increasing as mental health professions are becoming more open to measuring subjective qualities of life. The Spiritual Well-being Scale developed by Ellison and Paloutzian is a self-report instrument

being used today to measure spiritual well-being. At Western Conservative Baptist Seminary alone, there have been over 40 studies investigating some aspect of well-being using this scale.

Although Ellison did not think the SWB Scale was significantly affected by social desirability, research has suggested a positive correlation between various measures of social desirability and SWB scores.

Most people have a concept in mind of what it means when something is said to be affected by social desirability. A review of the literature, however, revealed imprecise and confusing definitions, especially when trying to distinguish between social desirability and faking (good or bad). Both of these terms fall under the general heading of response bias, something to which self-report instruments such as the SWB Scale are especially susceptible.

For this study, social desirability was defined as a more or less unconscious tendency for an individual to present himself or herself in a positive light. Faking was defined as a deliberate conscious attempt to create a certain impression. Faking may be due to social desirability or to some other factor.

Fakability of the SWB Scale had not been tested before this study. If the SWB Scale could not be faked then any correlations with social desirability would take on a different meaning than if

it were possible to deliberately create an impression on the scale.

Whether the interest is in social desirability or some other response bias, the first missing step in the research was to determine if the SWB Scale is fakable. The purpose of this study was to see if the Spiritual Well-being Scale is sensitive to faking.

This was a true experimental design, with three levels of independent variables: fake good, honest, and fake bad instructions. The sample consisted of 172 adults from a local community church Sunday school class and group for those overcoming the effects of some addiction and/or abuse. An analysis of variance was run for each of the dependent measures (SWB and its two subscales, RWB and EWB). ANOVA's and a Scheffe post hoc test revealed a substantially significant difference between fake bad treatment and the other two conditions (fake good and honest) for all scale scores (SWB, RWB, and EWB). Surprisingly, there was not a significant difference between fake good and honest groups on any of the dependent measures. Therefore, the null hypotheses which stated there would be no significant differences among the means of the three treatment groups for SWB, RWB, or EWB were rejected in part and retained in part.

The present study showed the SWB Scale can definitely be faked in a negative direction. It would be incorrect, however, to assume the SWB Scale cannot be faked good even though no significant differences were found between the honest and fake good groups. The range of scores, the standard deviations of the groups, and the percentage of people scoring at the top of the scale would suggest the ceiling is too low to adequately measure for honest responding. Further, because of the ceiling problems, and because of similarity between honest and fake good conditions, it remains unclear whether there is a tendency to give "desirable" responses on the Spiritual Well-being Scale under honest instructions.

Two research questions were pursued. One question was whether or not religious knowledge and development correlated significantly with a person's ability to fake scores in one direction or another. Religious knowledge and development as a variable did not correlate significantly under the fake good condition, and had a slight (though not significant) negative correlation with fake bad. However, leadership experience did correlate with SWB and RWB scores in the fake good condition, suggesting that the leaders may be more able to fake good on the scale.

The other research question had to do with the possible identification of scale items which might comprise a validity type

scale within the SWB Scale. This question was abandoned as every RWB and EWB item significantly contributed to the faking results at the $p < .001$ level. Also, there were no sample effects or interaction effects.

Significant correlations were found for SWB and various religious and demographic variables. Spiritual Well-being Scale and its subscales, EWB and RWB were significantly correlated with frequency of church attendance, Christian profession, religious knowledge and development, church leadership experience, and social relationships having to do with like or dislike of being alone. EWB was significantly correlated with financial condition.

Some avenues of further research might be to replicate the present study, to test faking using role situations rather than best and worst instructions, to add a lie scale, to change the answer format, or to develop parallel questions of a subtle and obvious nature.

In light of the present results, it is not possible to conclude whether SWB scores can be faked good. Though results suggest a faked good score cannot be distinguished from an honest score, the SWB Scale still has major strengths that make it an excellent operational measure of the concept of spiritual health for research purposes. Individual decisions based on SWB scores in the upper range are not recommended. However, low scores may

be more meaningful: the person is experiencing a low degree of well-being or wishes to appear low in well-being.

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APPENDIX A

INSTRUCTIONS AND DEMOGRAPHICS

INTRODUCTION

You have been asked to participate in a study of personal religious beliefs and life satisfaction. Your cooperation will allow for the development of valid and reliable instruments for use with Christian populations. The attached questionnaire and instrument will require about 10 minutes to complete. PLEASE READ THE INSTRUCTIONS PROVIDED FOR EACH SECTION CAREFULLY BEFORE BEGINNING. Please DO NOT PLACE YOUR NAME on any of the test materials to insure confidentiality of your responses.

AGREEMENT TO PARTICIPATE IN RESEARCH STUDY

By filling out the questionnaire and answering the questions on the attached pages I agree to participate in the above research study. I understand that my role in this study is completely confidential, that the results of this study may be published, but that my name will not be used and I will not be identifiable from the results in any way. I further understand that I may decline to participate and simply return the unanswered questionnaire.

THANK YOU FOR YOUR PARTICIPATION!

BACKGROUND INFORMATION

Please complete the background information questions (1-14) honestly and in full. Complete each question in order. Do not jump ahead in the test materials. Remember, your answers are confidential, and this information is needed to insure the validity of the findings. Please be careful to answer each question. Unless otherwise stated, simply check the appropriate line:

1. Age: _____ (Write in your current age)

2. Sex: _____Male _____Female

3. Education: (show highest level completed)
   _____ Grades 1 - 12 (specify highest grade completed)
   _____ College (specify number of years completed)
   _____ Post College (specify number of years completed)

4. Marital Status:
   _____ Never Married
   _____ Married
   _____ Divorced
   _____ Widowed
   _____ Separated
   _____ Living Together

5. Frequency of Church Attendance:
   _____ Less than once/year
   _____ Once or twice/year
   _____ 3 - 11 times/year
   _____ 1 - 3 times/month
   _____ Weekly
   _____ More than once/week

8. Frequency of Personal Devotion:
   _____ Not at all
   _____ Less than once/week
   _____ Weekly
   _____ 1 - 3 times/week
   _____ 4 - 7 times/week
   _____ More than once/day

7. Length of Time spent in Personal Devotion (average):
   _____ Not applicable
   _____ Less than 5 minutes
   _____ 5 - 9 minutes
   _____ 10 - 14 minutes
   _____ 15 - 29 minutes
   _____ 60 minutes or more

8. Do you profess to be a Christian? (Mark the one response that best describes you)
   _____ No
   _____ Yes, I respect and attempt to follow the moral and ethical teachings of Christ.
   _____ Yes, I have received Jesus Christ into my life as my personal Savior and Lord.
   _____ Yes, I have received Jesus Christ as my personal Savior and Lord and I seek to follow the moral and ethical teachings of Christ.

If Yes, _____ number of years you have been a professing Christian.

9. Income (Gross)
   _____ Less than $5,000./year
   _____ $5,000. to $9,999./year
   _____ $10,000. to $14,999./year
   _____ $15,000. to $19,999./year
   _____ $20,000. to $29,999./year
   _____ $30,000. to $49,999/year
   _____ $50,000. or more/year

For each of the following questions circle the number that best describes you:

10. Importance of religion:

    No importance 1 2 3 4 5 6 7 Extremely important

11. Financial Condition:

    Chronic Problem 1 2 3 4 5 6 7 Bills Paid

12. Religious Knowledge and Development:

    Limited; need help and instruction from others 1 2 3 4 5 6 7 Extensive; able to help and instruct others.

13. Church Leadership Experience:

None; Just attend	1 2 3 4 5 6 7	Lay Pastor and/or active growing ministry.

14. Social Relationships:

A. Dislike being alone	1 2 3 4 5 6 7	Enjoy being alone.
B. Uncomfortable with people.	1 2 3 4 5 6 7	Enjoy being with people.
C. Frequent problems with people	1 2 3 4 5 6 7	Deal easily with people.

Thank You !

Please Move To The Next Page And Carefully Read The Instructions

Before Beginning

APPENDIX B

SWB SCALE WITH DIFFERENT INSTRUCTIONS

Instructions

In answering the questions below, attempt to create an exceptionally favorable impression. Show the best picture of yourself, as if you were trying to impress someone with your degree of adjustment, spiritual maturity and well-being.

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 in light of the above instructions:

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 am going. SA MA A D MD SD
3. I believe that God love 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 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

Instructions

In answering the questions below, attempt to create an exceptionally honest response Show the accurate and honest picture of yourself, as if you were trying to impress someone with how well you know yourself and can report those strengths and weaknesses accurately.

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 in light of the above instructions:

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 am going. SA MA A D MD SD
3. I believe that God love 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 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

Instructions

In answering the questions below, attempt to create an exceptionally poor impression. Show the worst picture of yourself, as if you were trying to impress someone with your lack of adjustment, lack of spiritual maturity and lack of well-being.

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 in light of the above instructions:

SA = Strongly Agree	D = Disagree
MA = Moderately Agree	MD = Moderately Disagree
A = Agree	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 am going.	SA MA A D MD SD
3. I believe that God love 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 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

Spiritual Well-Being Scale Scoring Key

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

Item Number	RWB	EWB	SA	MA	A	D	MD	SD
1	r		1	2	3	4	5	6
2		e	1	2	3	4	5	6
3	r		6	5	4	3	2	1
4		e	6	5	4	3	2	1
5	r		1	2	3	4	5	6
6		e	1	2	3	4	5	6
7	r		6	5	4	3	2	1
8		e	6	5	4	3	2	1
9	r		1	2	3	4	5	6
10		e	6	5	4	3	2	1
11	r		6	5	4	3	2	1
12		e	1	2	3	4	5	6
13	r		1	2	3	4	5	6
14		e	6	5	4	3	2	1
15	r		6	5	4	3	2	1
16		e	1	2	3	4	5	6
17	r		6	5	4	3	2	1
18		e	1	2	3	4	5	6
19	r		6	5	4	3	2	1
20		e	6	5	4	3	2	1

___RWB ___EWB RWB + EWB = SWB

APPENDIX C

INTERCORRELATIONS OF SWB AND IBS SCALES

Intercorrelations of SWB and IBS Scales

IBS Scales	SWB	RWB	EWB
Validity			
Denial	.343*	.269*	.352*
Infrequency	-.325*	-.322*	-.258*
Impression Management	.468*	.362*	.486*
Aggressiveness			
General Aggressiveness	-.564*	-.528*	-.499*
Hostile Stance	-.510*	-.463*	-.465*
Expression of Anger	-.339*	-.229*	-.389*
Disregard for Rights	-.257*	-.209*	-.257*
Verbal Expression	-.394*	-.367*	-.354*
Physical Aggressiveness	-.262*	-.231*	-.247*
Passive Aggressiveness	-.456*	-.359*	-.465*
Assertiveness			
General Assertiveness	.260*	.319*	.269*
Self Confidence	.350*	.357*	.343*
Initiating Assertiveness	.338*	.350*	.260*
Defending Assertiveness	.046	.065	.017
Frankness	.054	.042	.054
Praise	.298*	.291*	.252*
Requesting Help	.363*	.370*	.290*
Refusing Demands	.065	-.004	.123
Conflict Avoidance	-.022	-.010	-.025
Dependency	-.251*	-.235*	-.219*
Shyness	-.340*	-.320*	-.294*

(Bufford and Parker, 1985).

APPENDIX D

MEANS AND STANDARD DEVIATIONS FOR VARIOUS SAMPLES

Means and Standard Deviations for Various Samples

S		RWB		EWB		SWB	
	N	M	SD	M	SD	M	SD
A	90	56.19	5.15	53.78	5.31	109.99	9.44
B	41	56.73	5.42	53.15	6.78	109.88	11.58
C	24	56.21	4.64	52.37	6.03	108.58	8.98
D	143	55.64	5.87	52.48	6.31	108.13	11.08
E	30	55.73	5.97	51.70	6.58	107.43	11.44
F	31	54.94	6.22	51.00	7.23	105.94	12.72
G	27	51.10	10.40	50.10	10.40	105.50	13.15
H	66	53.96	5.63	50.12	6.93	104.08	11.30
I	46	53.46	7.35	50.57	8.11	104.02	14.23
J	43	52.85	6.96	49.60	5.90	102.45	11.15
K	88	51.03	10.93	50.34	8.35	101.37	17.11
L	54	52.71	8.97	48.52	10.82	101.24	18.11
M	32	49.64	7.43	49.47	7.29	99.09	13.48
N	19	48.32	10.20	49.74	7.49	98.05	16.79
O	33	46.76	8.30	46.67	7.78	93.42	14.63
P	45	34.10	13.03	48.71	7.57	82.81	15.02
Q	25	35.60	9.20	40.70	9.20	76.30	16.30

Bufford, R. K., Bentley, R. H., Newenhouse, J. M., & Papania, A. J., 1986.

Abbreviationa: S = Study; N = Sample Size; M = Mean; SD = Standard Deviation.

Identification of Samples: A = Seminary Students; B = Assembly of God; C = Conservative Baptist; D = Born Again Christians; E = Foursquare; F = Christian Church; G = Orthodox Christian Sociopath Convicts; H = Evangelical Christians; I = Baptists (General Conference); J = Baptists; K = Medical Outpatients; L = Medical Outpatients; M = United Methodist; N = Presbyterian; O = Ethical Christians; P = Unitarians; Q = Non-religious Sociopath Convicts.

Comparison of Other Samples on SWB

Sample	Mean	SD	N	t
SEXABUSE	85.90	19.70	50	
INP	77.59	15.43	37	2.21*
OUTP	80.36	17.05	25	1.26
MEDP	99.89	16.01	56	3.98**
PAINP	85.34	19.75	41	.13
SEM	106.00	10.29	51	6.41**
YFC	106.20	10.94	298	7.10**

Note: * $p < .05$, ** $p < .01$

SEXABUSE = Sexually Abused Women

INP = Eating Disorder Inpatients

OUTP = Eating Disorder Outpatients

MEDP = Medical Patients

PAINP = Chronic Pain Patients

SEM = Seminary Students

YFC = Youth for Christ

Comparison of Other Samples on RWB

Sample	Mean	SD	N	t
SEXABUSE	46.46	11.48	50	
INP	41.65	10.04	37	2.07*
OUTP	39.56	12.15	25	2.36*
MEDP	51.50	9.67	56	2.43*
PAINP	43.93	10.81	41	1.29
SEM	54.75	5.92	51	4.55**
YFC	55.35	5.27	298	5.40**

Note: * $p < .05$, ** $p < .01$

SEXABUSE = Sexually Abused Women

INP = Eating Disorder Inpatients

OUTP = Eating Disorder Outpatients

MEDP = Medical Patients

PAINP = Chronic Pain Patients

SEM = Seminary Students

YFC = Youth for Christ

Comparison of Other Samples on EWB

Sample	Mean	SD	N	t
SEXABUSE	39.44	10.80	50	
INP	35.92	8.20	37	1.73
OUTP	40.80	8.67	25	.59
MEDP	48.50	8.38	56	4.79**
PAINP	41.66	11.13	41	.96
SEM	51.25	5.88	51	6.82**
YFC	50.96	6.92	298	7.34**

Note: * $p < .05$, ** $p < .01$

SEXABUSE = Sexually Abused Women

INP = Eating Disorder Inpatients

OUTP = Eating Disorder Outpatients

MEDP = Medical Patients

PAINP = Chronic Pain Patients

SEM = Seminary Students

YFC = Youth for Christ

APPENDIX E

SOCIAL DESIRABILITY AND SWB

Correlations between SWB and measures of Social Desirability/Response Bias

Scale and Study	Sample Size	SWB	RWB	EWB
IBS (Denial)				
Bufford, Parker (1985)	90	.343*	.269*	.352*
Hawkins (1986)	88	.272**	.219*	.271**
Campbell, Mullins, Colwell (1984)	28	.331#	.335#	.2410
IBS (Impression Management)				
Mullins (1986)	41	.585**	.499**	.592**
Parker (1984)	90	.468**	.362**	.486**
Bufford, Parker (1985)	90	.468*	.362*	.486*
Social Desirability (Edwards)				
Carr (1986)	239	.487**	.399**	.492**
Clark, Clifton, Cooper, Mishler, Olson, Sampson, Sherman (1985)	33	.44#	.09#	.66#
Mitchell, Reed (1983)	49	.32#		
Social Desirability (Marlowe-Crowne)				
Upshaw (1984)	48	No significant relationships were found.		

p less than .05 * p less than .01 ** p less than .001

Correlations between SWB and measures of Social Desirability/Response Bias

Scale and Study	Sample Size	SWB	RWB	EWB
MMPI (L Scale)				
Frantz (1985)	72	.2430	.2466	.1736
Parker (1984)	90	.350**	.332**	.251*
		.191	.291	.075
MMPI (F Scale)				
Frantz (1985)	72	-.5193**	-.4142**	-.5258**
Parker (1984)	90	-.317**	-.340**	-.301**
		.378	.34	.241
MMPI (K Scale)				
Frantz (1985)	72	.2706	.2046	.2676
Mullins (1986)	41	.464*	.386*	.493**
Parker (1984)	90	.489	.450	.327

* p less than .01 ** p less than .001

APPENDIX F

ANOVA FOR RWB, EWB, SWB BY TREATMENT AND SAMPLE

ANOVA for RWB, EWB, SWB by Treatment and Sample

	F Value	Significance
RWB		
Treatment	99.78	.001
Sample	.542	.463
Interaction	1.78	.172
EWB		
Treatment	64.36	.001
Sample	.977	.325
Interaction	.914	.403
SWB		
Treatment	89.07	.001
Sample	.824	.366
Interaction	1.44	.241

APPENDIX G

SAMPLE 1 DESCRIPTIVE VARIABLES

Sample 1 Descriptive Variables

Variable	Mean	Std Dev	Range	Min	Max	N
AGE	43.00	11.62	50	25	75	52
SEX	1.87	1.10	8	1	9	52
EDLEV	13.92	2.10	13	8	21	52
MS	2.31	1.18	4	1	5	52
CA	5.24	.98	3	3	6	50
PD	5.14	.87	4	2	6	49
PROFESS	3.88	.33	1	3	4	51
CYEAR	23.08	16.62	66	1	67	50
INCOME	3.71	1.76	6	1	7	52
IR	6.62	.83	4	3	7	50
FC	4.88	1.91	6	1	7	51
RKD	4.70	1.61	6	1	7	50
CLE	4.53	2.20	6	1	7	49
SRA	4.86	1.65	6	1	7	51
SRB	5.26	1.64	6	1	7	50
SRC	5.19	1.67	6	1	7	48

APPENDIX H

SAMPLE 2 DESCRIPTIVE VARIABLES

Sample 2 Descriptive Variables

Variable	Mean	Std Dev	Range	Min	Max	N
AGE	37.91	11.01	58	17	75	120
SEX	1.66	.48	1	1	2	120
EDLEV	13.43	1.93	12	9	21	120
MS	2.34	1.08	5	1	6	119
CA	5.07	1.23	5	1	6	114
PD	5.41	1.46	5	1	6	116
PROFESS	3.65	.73	3	1	4	118
CYEAR	15.01	13.52	50	0	50	107
INCOME	3.82	1.79	6	1	7	115
IR	6.26	1.31	6	1	7	114
FC	4.66	2.02	6	1	7	116
RKD	4.23	1.59	6	1	7	117
CLE	3.88	2.34	6	1	7	111
SRA	4.43	1.65	6	1	7	115
SRB	5.32	1.62	6	1	7	118
SRC	5.30	1.35	6	1	7	118

APPENDIX I

COMPARISON OF MEANS AND STANDARD DEVIATIONS OF SAMPLES 1 AND 2

Comparison of Means and Standard Deviations of Samples 1 and 2

Variable	Class (n =52) M	SD	Group (n =120) M	SD
AGE	43.00	11.62	37.91	11.01
SEX	1.87	1.10	1.66	.48
EDLEV	13.92	2.10	13.43	1.93
MS	2.31	1.18	2.34	1.08
CA	5.24	.98	5.07	1.23
PD	5.14	.87	4.41	1.46
PROFESS	3.88	.33	3.65	.73
CYEAR	23.08	16.62	15.01	13.52
INCOME	3.71	1.76	3.82	1.79
IR	6.62	.83	6.26	1.31
FC	4.88	1.91	4.66	2.02
RKD	4.70	1.61	4.23	1.59
CLE	4.53	2.20	3.88	2.34
SRA	4.86	1.65	4.43	1.65
SRB	5.26	1.64	5.32	1.62
SRC	5.19	1.67	5.30	1.35

APPENDIX J

SAMPLE 1 AND 2 CHI-SQUARE STATISTICS FOR SELECTED DEMOGRAPHICS

Sample 1 and 2 Chi-Square Statistics for Selected Demographics

Variable	Class (n =52) M	SD	Group (n =120) M	SD	Chi-Square	Sign
SEX	1.87	1.10	1.66	.48	3.06	.2170
MS	2.31	1.18	2.34	1.08	9.93	.0773
CA	5.24	.98	5.07	1.23	7.72	.1721
PD	5.14	.87	4.41	1.46	12.09	.0335
PROFESS	3.88	.33	3.65	.73	5.65	.1299
INCOME	3.71	1.76	3.82	1.79	5.95	.4283

p < .05

APPENDIX K

SUMMARY OF RWB, EWB, SWB CORRELATIONS WITH DEMOGRAPHIC VARIABLES FOR THE HONEST TREATMENT GROUP

Summary of RWB, EWB, SWB Correlations with Demographic Variables for the Honest Treatment Group

	RWB	EBW	SWB
AGE	-.0945	-.1085	-.1098
SEX	.3118	.1044	.2114
EDLEV	-.0643	-.0567	-.0645
MS	-.0515	-.1904	-.1379
CA	.4027*	.3145	.3799**
PD	.2137	.0318	.1213
PROFESS	.6077**	.5043**	.5909**
CYEAR	.0036	-.1193	-.0692
INCOME	.2192	.1142	.1729
IR	.1222	.1467	.1457
FC	.2517	.3951*	.3554
RKD	.4228*	.4999**	.4997**
CLE	.4134*	.4937**	.4915**
SRA	.3999*	.4761**	.4745**
SRB	.1965	.1460	.1809
SRC	.1012	.3032	.2287

NOTE: $N = 40$
* $p < .01$, ** $p < .001$

APPENDIX L

EXACT FREQUENCIES OF RWB, EWB, SWB SCORES BY TREATMENT GROUP

Exact Frequencies of RWB, EWB, SWB Scores

by Treatment Group -- Honest

RWB			EWB			SWB		
Val	Freq	Percent	Val	Freq	Percent	Val	Freq	Percent
26	1	1.8	22	1	1.8	60	1	1.8
32	1	1.8	23	1	1.8	62	1	1.8
37	1	1.8	26	2	3.5	63	1	1.8
38	1	1.8	28	1	1.8	65	1	1.8
39	1	1.8	30	2	3.5	68	1	1.8
40	2	3.5	31	1	1.8	69	1	1.8
41	3	5.3	33	1	1.8	72	1	1.8
43	2	3.5	34	1	1.8	74	1	1.8
44	1	1.8	36	1	1.8	75	1	1.8
45	1	1.8	37	2	3.5	80	1	1.8
46	1	1.8	40	2	3.5	81	1	1.8
47	1	1.8	41	1	1.8	82	1	1.8
48	2	3.5	42	1	1.8	83	1	1.8
49	1	1.8	43	2	3.5	85	2	3.5
50	1	1.8	44	2	3.5	86	1	1.8
51	4	7.0	45	1	1.8	88	2	3.5
52	1	1.8	46	2	3.5	90	1	1.8
53	1	1.8	47	3	5.3	94	1	1.8
54	2	3.5	48	1	1.8	96	1	1.8
55	4	7.0	49	2	3.5	97	2	3.5
56	3	5.3	50	3	5.3	99	1	1.8
57	2	3.5	51	2	3.5	102	2	3.5
58	3	5.3	52	4	7.0	103	3	5.3
59	3	5.3	53	1	1.8	104	1	1.8
60	12	21.1	54	2	3.5	106	4	7.0
			55	1	1.8	108	1	1.8
Missing 2			56	1	1.8	109	2	3.5
Mean = 51.42			60	3	5.3	111	2	3.5
						112	1	1.8
			Missing 10			114	2	3.5
			Mean = 43.96			115	1	1.8
						116	1	1.8
						120	3	5.3
						Missing 10		
						Mean = 94.87		

Note: N = 57

Exact Frequencies of RWB, EWB, SWB Scores

by Treatment Group -- Fake Bad

RWB			EWB			SWB		
Val	Freq	Percent	Val	Freq	Percent	Val	Freq	Percent
10	13	23.2	10	13	23.2	20	8	14.3
12	2	3.6	11	2	3.6	22	1	1.8
13	2	3.6	12	1	1.8	23	1	1.8
15	6	10.7	13	1	1.8	24	2	3.6
16	1	1.8	14	3	5.4	25	4	7.1
17	1	1.8	15	3	5.4	30	3	5.4
18	3	5.4	16	1	1.8	31	4	7.1
20	3	5.4	17	2	3.6	32	1	1.8
22	1	1.8	19	1	1.8	37	1	1.8
24	1	1.8	20	1	1.8	38	1	1.8
29	1	1.8	21	2	3.6	39	1	1.8
30	1	1.8	23	1	1.8	41	1	1.8
32	2	3.6	24	1	1.8	42	1	1.8
33	1	1.8	27	1	1.8	43	1	1.8
38	2	3.6	29	1	1.8	44	1	1.8
40	2	3.6	30	1	1.8	47	1	1.8
42	1	1.8	31	1	1.8	59	1	1.8
43	1	1.8	32	1	1.8	64	1	1.8
44	3	5.4	33	1	1.8	65	1	1.8
45	1	1.8	37	1	1.8	68	1	1.8
46	1	1.8	38	1	1.8	72	1	1.8
50	1	1.8	39	1	1.8	77	1	1.8
55	1	1.8	40	3	5.4	78	1	1.8
57	1	1.8	41	1	1.8	81	2	3.6
60	3	5.4	48	2	3.6	84	1	1.8
			49	2	3.6	85	2	3.6
			51	1	1.8	92	1	1.8
			52	1	1.8	95	1	1.8
			53	1	1.8	99	1	1.8
						103	1	1.8
Missing 1			Missing 4			109	1	1.8
Mean = 25.91			Mean = 24.02			111	1	1.8
						113	5	1.8
						Missing 5		
						Mean = 50.02		

Note: N = 56

Exact Frequencies of RWB, EWB, SWB Scores

by Treatment Group ·· Fake Good

RWB			EWB			SWB		
Val	Freq	%	Val	Freq	%	Val	Freq	%
27	1	1.7	20	1	1.7	61	1	1.7
37	1	1.7	28	2	3.4	67	1	1.7
39	1	1.7	29	1	1.7	70	1	1.7
41	1	1.7	32	3	5.1	77	2	3.4
42	2	3.4	34	1	1.7	78	1	1.7
43	1	1.7	35	1	1.7	81	1	1.7
46	2	3.4	36	1	1.7	84	1	1.7
48	1	1.7	37	1	1.7	85	1	1.7
49	1	1.7	39	2	3.4	86	1	1.7
50	1	1.7	40	1	1.7	87	1	1.7
51	1	1.7	41	1	1.7	89	2	3.4
52	2	3.4	44	4	6.8	95	1	1.7
54	3	5.1	46	3	5.1	99	3	5.1
55	4	6.8	47	3	5.1	100	1	1.7
56	2	3.4	48	1	1.7	101	3	5.1
58	5	8.5	49	1	1.7	102	2	3.4
59	6	10.2	50	3	5.1	104	2	3.4
60	21	35.6	51	3	5.1	105	2	3.4
			52	1	1.7	106	1	1.7
Missing 3			53	3	5.1	107	1	1.7
N = 59			54	1	1.7	109	2	3.4
Mean = 54.70			55	3	5.1	110	2	3.4
			56	1	1.7	111	2	3.4
			57	4	6.8	112	2	3.4
			58	2	3.4	113	1	1.7
			60	8	13.6	114	2	3.4
						115	1	1.7
			Mean = 47.63			116	1	1.7
			Missing 3			117	4	6.8
						118	2	3.4
						119	1	1.7
						120	6	10.2
						Missing 4		
						Mean = 102.91		

Note: N = 59

APPENDIX M

DEFINITION OF TERMS

Definition of Terms

Spiritual Well-Being: Spiritual well-being is the affirmation of life in a relationship with God, self, community, and environment that nurtures and celebrates wholeness. Spiritual well-being may not be the same thing as spiritual health. It arises from an expression of it, much like the color of one's complexion and pulse rate are expressions of good health.

Religious Well-Being: Religious well-being refers to a perceived sense of well-being related to God.

Existential Well-Being: Existential well-being refers to a general sense of satisfaction and purpose in life with no reference to anything specifically religious.

APPENDIX N

DATA DEFINITION AND LEGEND FOR ABBREVIATIONS

```
DATA DEFINITION
DATA LIST FILE = 'AMSWB.DAT'/ID 1-3 SAMPLE 5 TX 7 AGE 9-10 SEX 12
EDLEV 14-15 MS 17 CA 19 PD 21 PDTIME 23 PROFESS 25 CYEAR 27-28
INCOME 30 IR 32 FC 34 RKD 36 CLE 38 SRA 40 SRB 42 SRC 44 R1 46 E1
47 R2 48 E2 49 R3 50 E3 51 R4 52 E4 53 R5 54 E5 55 R6 56 E6 57 R7
58 E7 59 R8 60 E8 61 R9 62 E9 63 R10 64 E10 65.
VARIABLE LABELS
TX       =  Treatment Group
AGE      =  Age in Years
EDLEV    =  Highest Education Level Completed
MS       =  Marital Status
CA       =  Frequency of Church Attendance
PD       =  Frequency of Personal Devotion
PDTIME   =  Time Spent in Personal Devotion
PROFESS  =  Profess to be a Christian
CYEAR    =  Number of Years Profession Christian
INCOME   =  Gross Income Level
IR       =  Importance of Religion
FC       =  Financial Condition
RKD      =  Religious Knowledge and Development
CLE      =  Church Leadership Experience
SRA      =  Social Relation - Alone
SRB      =  Social Relation - Uncomfortable with People
```

SRC = Social Relation - Problems

VALUE LABELS SAMPLE 1 = Sunday School Class. 2 = New Life Group.

TX 1 = Honest. 2 = Fake Good. 3 = Fake Bad.

SEX 1 = Male. 2 = Female.

MISSING VALUES

EDLEV	(99)	CLE	(9)	R8	(9)	E9	(9)
MS	(9)	SRA	(9)	R9	(9)	E10	(9)
CA	(9)	SRB	(9)	R10	(9)		
PD	(9)	SRC	(9)	E1	(9)		
PDTIME	(9)	R1	(9)	E2	(9)		
PROFESS	(9)	R2	(9)	E3	(9)		
CYEAR	(99)	R3	(9)	E4	(9)		
INCOME	(9)	R4	(9)	E5	(9)		
IR	(9)	R5	(9)	E6	(9)		
FC	(9)	R6	(9)	E7	(9)		
RKD	(9)	R7	(9)	E8	(9)		

APPENDIX O

RAW DATA

```
DATA LIST FILE = ' AMSWB.DAT'/ID 1-3 SAMPLE 5 TX 7 AGE 9-10 SEX 12
EDLEV 14-15 MS 17 CA 19 PD 21 PDTIME 23 PROFESS 25 CYEAR 27-28
INCOME 30 IR 32 FC 34 RKD 36 CLE 38 SRA 40 SRB 42 SRC 44 R1 46
E1 47 R2 48 E2 49 R3 50 E3 51 R4 52 E4 53 R5 54 E5 55 R6 56 E6 57
R7 58 E7 59 R8 60 E8 61 R9 62 E9 63 R10 64 E10 65.

001 1 2 40 2 16 1 5 4 5 4 15 5 6 3 5 5 7 5 4 66666666666666666666
002 1 2 48 2 13 5 4 6 5 4 41 5 7 7 5 5 4 4 4 66666464636662636466
003 1 2 58 1 21 5 6 5 5 4 50 4 7 4 6 6 3 5 5 64666352546565646566
004 1 2 39 2 10 1 6 6 2 3 30 1 7 7 7 9 5 9 9 65616665611562251511
005 1 2 33 1 13 2 5 4 5 3 15 5 6 2 5 2 6 4 5 64646465644666666666
006 1 2 29 2 13 1 3 9 5 4 15 1 7 1 2 1 1 1 1 66646466666666996666
007 1 2 39 2 13 3 5 5 5 4 19 5 7 4 5 3 6 3 4 65646464656564536666
008 1 2 45 1 16 3 9 6 6 4 30 6 6 6 4 6 2 6 6 62656152555555525365
009 1 2 44 2 12 2 5 5 9 4 19 5 7 6 6 4 9 4 9 66646565656664636564
010 1 2 41 2 15 3 3 6 1 9 10 3 4 4 4 1 4 4 4 64666464556154644656
011 1 2 45 9 14 2 5 9 9 4 10 6 7 7 7 7 6 6 6 66666465666666666666
012 1 2 46 2 12 2 6 6 5 4 36 3 7 6 4 7 5 6 7 46666666666666266666
013 1 2 57 2 17 3 6 5 3 4 40 3 6 5 6 6 7 7 7 66656266666665536666
014 1 2 35 2 14 1 5 6 5 4 02 1 7 4 5 7 7 7 7 43666445545564694444
015 1 2 30 2 13 2 5 6 5 4 01 1 7 2 4 1 4 4 7 14652465265445644466
016 1 2 40 2 13 1 6 5 5 4 34 4 7 6 4 5 5 7 4 66656355646555336466
017 1 2 35 2 12 1 6 9 6 4 28 4 9 7 9 9 4 9 9 66616163624165416646
018 1 2 39 2 13 1 6 5 3 4 26 3 7 6 7 7 6 6 7 66666666666666636666
019 1 2 62 2 08 3 6 5 5 4 58 4 7 7 5 7 5 7 7 66666666666666666666
020 1 3 39 2 14 1 4 5 4 4 15 4 6 4 4 4 5 5 5 22343333333333334332
```

021 1 3 48 2 16 3 9 6 3 4 23 5 7 7 9 5 7 7 9 666963636464664696666

022 1 3 37 2 16 3 6 6 5 4 02 3 7 7 3 5 7 7 5 121915111111112111111

023 1 3 57 1 13 2 6 6 3 4 57 5 7 7 7 7 5 3 7 11111111111111111111

024 1 3 44 2 16 3 6 5 5 4 32 6 7 5 5 7 5 6 4 121114111211223211111

025 1 3 36 2 14 3 5 5 5 4 99 2 7 4 3 2 4 5 5 11111111111111111111

026 1 3 29 1 13 1 6 5 5 4 01 3 7 5 7 7 5 7 7 61111111111111111111

027 1 3 37 1 17 1 6 6 2 4 01 5 3 7 6 7 4 7 6 11111111111111111114

028 1 3 41 2 13 1 6 5 5 4 01 3 7 3 3 5 2 7 6 112321322222311123 21

029 1 3 32 2 13 3 6 3 5 4 99 6 7 7 3 5 2 6 5 11111111111111111111

030 1 3 32 1 13 1 6 5 4 4 17 1 7 2 3 4 2 2 2 124141313141114143 43

031 1 3 75 2 13 4 6 6 6 4 67 4 7 7 7 7 7 7 7 626661666666666666 66

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