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The Effect of Psychotherapy on Spiritual Well-Being and Depression in Outpatient Adults

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by

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APPROVAL

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on Spiritual Well-Being and Depression
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The Effect of Psyhotherapy on Depression and Spiritual Well-Being in Outpatient Adults

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Abstract

In recent years the efficacy of psychotherapy has undergone scrutiny; research has sought to find the client, therapist, and therapy factors that induce positive outcomes in therapy. Religious variables, however, have not been extensively investigated. Religious values, as well as psychiatric symptoms, are altered by participation in psychotherapy. Therefore, a study to assess whether psychotherapy alters psychiatric symptoms and religious variables was needed. This investigation examined depression, as measured by the Beck Depression Inventory (BDI), and a general measure of spiritual health, as represented by the Spiritual Well-Being Scale (SWB). Data was collected at the beginning of treatment and sixty days into treatment.

A quasi-experimental nonequivalent contrast groups design was used. Two groups of psychotherapy outpatients in the Pacific Northwest (designated Group 1 and Group 2), were used as two separate samples. Both groups were administered the BDI, SWB, and a demographic questionnaire in the pretest; the BDI, SWB, and a religious questionnaire were administered in the posttest.

Two hypotheses were tested in this study: (a) SWB scores will rise as a result of psychotherapy, and, (b) BDI scores will fall as a result of psychotherapy. Results supported these hypotheses. Significant differences were noted from the pretest to the posttest. However, the groups themselves did not differ.

The SWB also significantly correlated with church attendance, profession of faith, hours of service, and personal devotions. While the two groups reported very different religious behaviors, SWB and BDI scores from two groups correlated significantly with one another.

Although firm causal conclusions cannot be stated, these results support the hypotheses that psychotherapy increases a person's spiritual well-being while decreasing depression.

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A project such as this one cannot be accomplished single-handedly. It was through the gracious efforts of many people that I was afforded the opportunity to complete this work. I wish to express a sincere thanks to the following individuals who contributed to this paper:

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Lastly, but certainly not least, my wife Julee and our three boys, Adam, Ross, and Tommy. They all put up with hours of frustration and a sometimes absent

husband and father, yet did so with a genuine commitment and love that helped fuel this effort.

Dedication

This dissertation is dedicated to four individuals who formed the basis of an unyielding commitment to their families, of which I am privileged to be a part. This work would have never been accomplished with the support, including financial, emotional, and spiritual support, of my parents, Bud and Doris Renfroe, and my in-laws, Bill and Gay Burleson. My parents should be further lauded for their patience and guidance in my seemingly unending educational endeavors. The love of these individuals is a motivating factor that can never be captured in the margins of any text.

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CHAPTER 1

INTRODUCTION

Since the time of Eysenck's (1952) shocking conclusion that there was no evidence to support the effectiveness of psychotherapy, a great deal of research has been undertaken to demonstrate its efficacy. Garfield & Bergin (1986) noted,

> This rather startling conclusion was challenged by several individuals, and although the controversy has by no means been conclusively settled to date, a large amount of research has appeared since that time..... In general, the results have been relatively favorable for psychotherapy. (p. 5)

Many outcome studies were conducted to demonstrate the positive effects of therapy. Any possible outcome has seemingly been measured, with differing rates of success, yet, in general, psychotherapy has been found to be successful (Lambert, Shapiro, & Bergin, 1986). Garfield (1981) noted, "In my view, the outcome of Eysenck's critical article was positive...Even though a causal relationship cannot be shown between Eysenck's

critique and the gradual increase in research on psychotherapy, such an increase in research has occurred since that time" (p. 179). As psychotherapy has become exposed to the public eye, more critical questions are being asked of it. Hopefully these questions will serve to increase the positive outcome of psychotherapy.

However, religious concerns have been largely overlooked in the quest for optimal outcome in therapy. While some of the literature will grant that the religion of the client is important, it is most often assessed in terms of values or attitudes (Propst, 1980; Worthington, 1988). Furthermore, religious variables have rarely been researched. Most of the research has centered on the merger of the attitudes of therapist and client, and how these effect one another in the therapy context (Beutler, Crago, & Arizmendi, 1986). Yet a growing body of literature seems to indicate that one's perception of his/her religious involvement is also correlated with greater satisfaction in life (Bufford, 1987). It would seem advantageous to explore the idea that outcome in psychotherapy can both benefit a person clinically and religiously. In the clinical arena, depression has been a consistent target of

psychotherapy (Clayton, 1986), and was chosen for assessment of the clinical element of treatment outcome in psychotherapy. In a similar manner, religious variables were assessed as to their change in the course of therapy.

Statement of Problem

This leads us to the statement of the problem that this study sought to resolve. Does psychotherapy make a difference in spiritual well-being and the level of depression of adults? Can we demonstrate that, due to a person's involvement in psychotherapy, both symptomatic and religious variables improve? In terms of this study, is there a difference between two outpatient clinics in the areas of spiritual well-being and depression? The focus of testing was on the differences in the scores obtained in testing spiritual well-being and depression at the beginning of treatment and after sixty days. It was posited that differences in the scores, at least at some level, could be tentatively attributed to the treatment. There are, as with any intact-groups design, some extraneous variables that enter into the picture. Yet the present

study allowed for both comparison within a treatment group and between groups which sought to alleviate some of the extraneous variables.

Literature Review

Although similar to many outcome studies, the present study is unique in its use of the Spiritual Well-Being Scale in a clinical outcome study. Therefore, the review will center on the outcome of psychotherapy in clinic facilities, the conceptualization and past research on both the Spiritual Well-Being Scale (SWB) and depression, and a brief look at the Beck Depression Inventory (BDI), the second instrument used in the present study.

Psychotherapy Outcome

Psychology changed its focus after World War II, becoming more conscious of the need for psychotherapy. Prior to this, psychology had been largely a profession of researchers. The need for individual therapy increased, and its practitioners were no longer solely psychoanalysts (Garfield, 1981).

Eysenck's (1952) classic study posed the question of the effectiveness of psychotherapy. A great deal of research has been spawned in recent years in the area of psychotherapy outcome. Several have sought to complete comprehensive outcome studies (Bergin & Lambert, 1978; Orlinsky & Howard, 1986; Shapiro & Shapiro, 1982; Smith & Glass, 1977). With few exceptions (Eysenck, 1952; Rachman, 1971) psychotherapy has been shown to be beneficial.

This present study had a broad focus in mind. It did not try to explicitly answer how, or why, outcome is achieved in psychotherapy, but rather to demonstrate that there is a positive outcome of the therapy. More specifically, the goal was to show that lowered levels of depression and greater spiritual well-being are the result of psychotherapy. Yet with that in mind, it will be helpful to look at some of the literature on the reasons for success in therapy. Orlinsky and Howard (1986) have posited a five-fold division of outcome research that will be utilized for our purposes here. The five areas they discussed are the therapeutic contract, therapeutic interventions, the therapeutic bond, patient self-relatedness, and therapeutic realizations.

Therapeutic Contract

According to Orlinsky and Howard (1986) the therapeutic contract is the "sine qua non of psychotherapy" (p. 315). The authors add that its function is to govern the understanding of the therapy relationship. It designates the rules, role expectations, and responsibilities of the parties involved. Orlinsky and Howard (1986) concluded that the research on the therapeutic contract in terms of size and composition of the social unit involved in therapy has indicated little effect on therapeutic outcome. In other words, the authors found there to be quite a bit of latitude regarding the specific people involved in therapy.

Therapeutic Interventions

Therapeutic interventions involve the techniques of therapy, those tasks and procedures that the therapist utilizes in response to the difficulties manifested by the client. One fact about interventions seems to echo through the literature. Although positive treatment effects have been repeatedly reported (Orlinsky & Howard, 1986), various treatment methods have not consistently been shown to differ significantly from one another in effectiveness

(Beutler, Crago, & Arizmendi, 1986; Orlinsky & Howard, 1986; Shapiro & Shapiro, 1982). Beutler et al. (1986) noted that different methods may work better for different individuals with characteristic problems, but the overall treatment effect is not significantly different.

One of the stronger factors in the effectiveness of therapeutic interventions is the skillfulness of the therapist (Kernberg et al., 1972; Orlinsky & Howard, 1986). There appears to be a significant positive relationship between therapist skillfulness and positive outcome.

Therapeutic Bond

The therapeutic bond is a fascinating element of the therapeutic process. It is also a variable one, in the same sense that all human relationships vary. The importance of the therapeutic bond is seen in theoretical orientations such as Object Relations Theory (Hamilton, 1988), which posits that the healing of therapy occurs within the relationship between client and therapist. Studies examining the therapy relationship have affirmed this conclusion. "Generally, between 50 and 80 percent of the substantial number of findings in this area

(therapeutic bond) were significantly positive, indicating that these dimensions were very consistently related to patient outcome" (Orlinsky & Howard, 1986, p. 365).

Patient Self-Relatedness

Patient self-relatedness is a description of openness versus defensiveness in therapy. Fourteen out of sixteen studies examined by Orlinsky and Howard (1986) were significant, indicating that openness has an important bearing on therapeutic outcome.

Therapeutic Realization

"Therapeutic realization refers to all those signs within the therapeutic process that indicate that therapy is making a positive impact on the patient" (Orlinsky & Howard, 1986, p. 360). A preponderance of studies (14 out of 18) Orlinsky and Howard (1986) examined verified that positive results in psychotherapy are accompanied by a progressive improvement throughout the course of therapy.

Despite the popularity of briefer therapy presently, Orlinsky and Howard (1986) concluded that clients who have more therapy get more benefit from therapy. Howard, Kopta, Krause, and Orlinsky (1986)

also found a significant positive relationship between length of therapy and client improvement.

Orlinsky and Howard (1986) summarized their exhaustive review of psychotherapy outcome literature with five points about the basis for positive therapeutic outcome:

1. The patient's and therapist's therapeutic bond --that is, their reciprocal role-investment, empathic resonance, and mutual affirmation--is effectively therapeutic.

2. Certain therapeutic interventions, when done skillfully with suitable patients, are effectively therapeutic.

3. Patient's and therapist's focusing their interventions on the patient's feelings is effectively therapeutic.

4. Preparing the patient adequately for participation in therapy and collaborative sharing of responsibility for problem solving are effectively therapeutic.

5. Within certain limits, having more rather than less therapy is effectively therapeutic (p. 371).

After reviewing some of the literature it is helpful to return to our general conclusion that, in

light of all the research, psychotherapy has been shown to be helpful (Garfield, 1981; Landman & Dawes, 1982; Orlinsky & Howard, 1986; Shapiro & Shapiro, 1982). As attention is turned to the religious domain, one could only wish that such voluminous amounts of research were done in that area as well.

Spiritual Well-Being

The empirical investigation of the concept of spiritual well-being began in the 1970's. The basis for the present SWB scale dates back to Moberg's dual-dimension conceptualization of spiritual well-being. Moberg posited that the two demonstrate the relationship between the spiritual and relational aspects of individuals. Moberg (1971, 1979) postulated a horizontal relationship to the world and a vertical one to God.

The Spiritual Well-Being scale (SWB) is an unpublished instrument designed by Ellison and Paloutizian (Ellison, 1983) to measure one's relationship to God and their relationship to others. The SWB is a 20-item self-report measure with two subscales of ten items each. Each of the twenty items is rated on a six-point Likert-type scale with no

midpoint. The Religious Well-Being (RWB) subscale is composed of the odd-numbered items and was intended to measure one's vertical relationship to God, while the Existential Well-Being (EWB) subscale is composed of the even-numbered items and assesses one's horizontal relationship to others along with one's sense of meaning and purpose in life. Higher scores indicate more well-being. On negatively worded items reverse scoring is used. Ellison (1983) reported that SWB is positively related to self-esteem and purpose in life.

A good deal of research on the SWB has been done. A tabular summary of the results is found in Tables 1 and 2.

Table 1

Validity Studies of the Spiritual Well-Being Scale--Positive Correlations

Psychological Health
K Scale of the Minnesota Multiphasic Personality Inventory (MMPI) (Mullins, 1986)
Measures of assertiveness on the Interpersonal Behavior Survey (IBS) (Bufford & Parker, 1985; Campbell, 1983; Hawkins, 1986; Mullins, 1986; Sherman, 1987)
Self-esteem (Campise, Ellison, & Kinsman, 1979; Ellison & Economos, 1981; Ellison, Rashid, Patla, Calica, & Haberman, 1984; Marto, 1984; Paloutzian & Ellison, 1979a)
Internal locus of control (Jang, Paddon, & Palmer, 1985; Marto, 1984; Palmer, 1985)
Hopefulness (Palmer, 1985)
Self-concept as measured by the Tennessee Self Concept Scale (Colwell, 1987; Mitchell & Reed, 1983)
Psychological General Well-Being Scale (PGWB) (Temple, 1987)

(table continues)

Table 1--Continued

Hope Index Scale (Palmer, 1985)
Assertiveness, Self-Confidence, Praise, Requesting Help, and Impression Management Scales of the IBS (Mullins, 1986; Sherman, 1987)
Marriage and Family
Father's self-esteem, but not his children's (Marto, 1984)
Age (Bressem, Waller, & Powers, 1985; Palmer, 1985)
Marital satisfaction as measured by the Marital Satisfaction Index (Quinn, 1984)
Marital Satisfaction Scale (Mashburn, 1987)
Perceived quality of parent-child relationships, memories of family togetherness as a child, and childhood peer relationships (Campise, Ellison, & Kinsman, 1979; Ellison & Paloutzian, 1978; Ellison & Paloutzian, 1979)

(table continues)

Table 1--Continued

Denial (Hawkins, 1986)
Psychopathology
One point and two point code types on the MMPI (Mueller, 1986)
RWB and EWB with the Religious Fundamentalism Subscale-MMPI (Frantz, 1985)
Health Measures
Acceptance of Disability (Campbell, 1983)
Psychological General Well-Being (Temple, 1987)
Self-Report of Health (Hawkins, 1986)
Ideal Body Weight (Hawkins & Larson, 1984)
Decrease in medication after treatment (Mullins, 1986)
Attitude of seeking medical help (Bufford, 1987)
Current health (Bufford, 1987)
Using religious means for coping with pain (Bonner, 1988; Campbell, 1983; Mullins, 1986)

(table continues)

Table 1--Continued

Religiosity
Spiritual Maturity Index (Bressem, 1986; Bufford, 1984; Carr, 1986; Cooper, 1987; Jang, Paddon, & Palmer, 1985; Mueller, 1986; Parker, 1984)
Spiritual Leadership Qualities Inventory (SLQI) (Parker, 1984; Carr, 1986)
Religious Orientation Scale-Intrinsic (ROS-I) (Bufford, 1984; Ellison & Paloutzian, 1979; Mueller, 1986; Quinn, 1984)
Supernatural Locus of Control (SLOC) (Durham, 1986)
REL (Religious Fundamentalism Content) scale from the MMPI (Frantz, 1985)
Importance of religion to an individual (Durham, 1986; Bufford, 1984; Carr, 1986; Carson, Soeken, & Grimm, 1988; Davis, Longfellow, Moody, & Moynihan, 1987; Durham, 1984, Frantz, 1985, Jang, 1987)
Viewing God as causal agent (Durham, 1986)

(table continues)

Table 1--Continued

Frequency and/or duration of personal devotions (Bressem, 1986; Bressem, Waller, & Powers, 1985; Bufford, 1984; Carr, 1986; Clarke, 1987; Colwell, 1987; Davis, Longfellow, Moody, & Moynihan, 1987; Ellison & Economos, 1981; Huggins, 1988; Jang, 1987; Jang, Paddon, & Palmer, 1985)
Frequency of church attendance (Bufford, 1984; Colwell, 1987; Durham, 1986; Ellison & Economos, 1981; Frantz, 1985; Hawkins, 1986; Huggins, 1988; Jang, 1987; Mitchell, 1984; Quinn, 1984; Sherman, 1987)
Frequency of family devotions (Bufford, 1984)
Pastor/leader evaluations of present relationship to God (Bressem, Waller, & Powers, 1985)
RWB and one's attitude toward charismatic practices (Bressem, 1986)
Religious knowledge (Bressem, Colwell, Mueller, Neder, & Powers, 1985; Carr, 1986; Davis et al., 1987; Jang, 1987)
Church leadership experience (Moody, 1988)

(table continues)

Table 1--Continued

Feeling accepted and valued by God (Ellison & Economos, 1981; Ellison, Rashid, Patla, Calica, & Haberman, 1984)
Estimation of one's spiritual maturity (Davis et al., 1987)
Attending seminary (Bufford, Bentley, Newenhouse, & Papania, 1986)
Participation in religious activities (Bonner, 1988)
Small group participation (Huggins, 1988)

Table 2

Validity Studies of the Spiritual Well-Being Scale--Negative Correlations

Psychopathology
Loneliness (Ellison & Paloutzian, 1979; Paloutzian & Ellison, 1979a; Paloutzian & Ellison, 1979c; Paloutzian & Ellison, 1979d)
Depression as measured by the Beck Depression Inventory (Campbell, 1983)
Aggression as measured by the Interpersonal Behavior Survey (IBS) (Bufford & Parker, 1985; Hawkins, 1986; Mullins, 1986)
Physical Aggressiveness, Passive Aggressiveness, Dependency, and Avoidance of Conflict Scales of the IBS (Campbell, Mullins, & Colwell, 1984)
Shyness and dependency as measured by the IBS (Bufford & Parker, 1985)
MMPI clinical scales (Frantz, 1985; Mueller, 1986; Mullins, 1986)

(table continues)

Table 2--Continued

Health Measures
Blood pressure (Hawkins, 1986)
Age (Bufford, 1984; Durham, 1984; Hawkins, 1986)
Marriage and Family
Existential Well-Being subscale (EWB) with number of marriages (Hawkins, 1986)
Psychological Health
Individualism, success, and personal freedom (Campise, Ellison, & Kinsman, 1979)

Research on the Spiritual Well-Being Scale can be divided into five categories: psychological health, marriage and family, psychopathology, health measures, and religiosity.

In the area of psychological health measures, SWB positively correlated with the K Scale of the Minnesota Multiphasic Personality Inventory (MMPI) (Mullins, 1986), measures of assertiveness on the Interpersonal Behavior Survey (IBS) (Bufford & Parker, 1985; Campbell, 1983; Hawkins, 1986; Mullins, 1986; Sherman, 1987), self-esteem (Campise, Ellison, & Kinsman, 1979;

Ellison, & Economos, 1981; Ellison, Rashid, Patla, Calica, & Haberman, 1984; Marto, 1984; Paloutzian & Ellison, 1979d), internal locus of control (Jang, Paddon, & Palmer, 1985; Marto, 1984; Palmer, 1985), hopefulness (Palmer, 1985), self-concept as measured by the Tennessee Self Concept Scale (Colwell, 1987; Mitchell & Reed, 1983), the Psychological General Well-Being Scale (PGWB) (Temple, 1987), and the Hope Index Scale (Palmer, 1985). Mullins (1986) and Sherman (1987) both found positive correlations between SWB and the Assertiveness, Self-Confidence, Praise, Requesting Help, and Impression Management Scales of the IBS. Campbell, Mullins, and Colwell (1984) found a negative correlation between SWB and the Physical Aggressiveness, Passive Aggressiveness, Dependency, and Conflict Avoidance Scales of the IBS.

A number of marriage and family measures have been studied in relation to SWB. SWB has displayed positive relationships to marital satisfaction as measured by the Marital Satisfaction Index (Quinn, 1984), the Marital Satisfaction Scale (Mashburn, 1987), and perceived quality of parent-child relationships, memories of family togetherness as a child, and childhood peer relationships (Campise, Ellison, &

Kinsman, 1979; Ellison & Paloutzian, 1978; Ellison & Paloutzian, 1979). Other positive correlations with SWB include denial (Hawkins, 1986); father's self-esteem, but not his children's (Marto, 1984); and age (Bressem, Waller, & Powers, 1985; Palmer, 1985). However, age was also found to negatively correlate with SWB (Bufford, 1984; Durham, 1984; Hawkins, 1986). Lewis (1985) found no relationship between SWB and ambivalence.

SWB and psychopathology have negatively correlated with one-point and two-point code types on the MMPI (Mueller, 1986). The SWB subscales RWB and EWB also negatively correlated with the Religious Fundamentalism Subscale of the MMPI (Frantz, 1985). Negative relationships were found with loneliness (Ellison & Paloutzian, 1979; Paloutzian & Ellison, 1979a; Paloutzian & Ellison, 1979c; Paloutzian & Ellison, 1979d), depression as measured by the Beck Depression Inventory (Campbell, 1983); aggression as measured by the IBS (Bufford & Parker, 1985; Hawkins, 1986; Mullins, 1986), shyness and dependency as measured by the IBS (Bufford & Parker, 1985), and MMPI clinical scales (Frantz, 1985; Mueller, 1986; Mullins, 1986).

Some research has been done with SWB and health measures. SWB has been found to positively correlate with acceptance of disability in patients on dialysis (Campbell, 1983), psychological general well-being (Temple, 1986), self-report of health (Hawkins, 1986), ideal body weight (Hawkins & Larson, 1984), decrease in medication after treatment (Mullins, 1986) attitude of seeking medical help (Bufford, 1987), current health (Bufford, 1987), and using religious means for coping with pain (Bonner, 1988; Campbell, 1983; Mullins, 1986). A negative correlation was found with blood pressure (Hawkins, 1986).

A considerable amount of research has examined the relationship of SWB and religious beliefs, attitudes, and behaviors, labeled in Tables 1 and 2 as religiosity. SWB has been shown to positively correlate with the following scales: Spiritual Maturity Index (Bressem, 1986; Bufford, 1984; Carr, 1986; Cooper, 1987; Jang, Paddon, & Palmer, 1985; Mueller, 1986; Parker, 1984), the Spiritual Leadership Qualities Inventory (SLQI) (Carr, 1986; Parker, 1984), the Religious Orientation Scale - Intrinsic (ROS-I) (Bufford, 1984; Ellison & Paloutzian, 1979; Mueller, 1986; Quinn, 1984), Supernatural Locus of Control

(SLOC) (Durham, 1986), and the Religious Fundamentalism Content (REL) Scale of the MMPI (Frantz, 1985).

SWB has also been positively correlated with self reports of the importance of religion to an individual (Bufford, 1984; Carr, 1986; Carson, Soeken, & Grimm, 1988; Davis, Longfellow, Moody, & Moynihan, 1987; Durham, 1984; Durham, 1986; Frantz, 1985; Jang, 1987), viewing God as a causal agent (Durham, 1984), frequency and/or duration of personal devotions (Bressem, 1986; Bressem, Waller, & Powers, 1985; Bufford, 1984; Carr, 1986; Clarke, 1987; Colwell, 1987; Davis et al., 1987; Ellison & Economos, 1981; Huggins, 1988; Jang, 1987; Jang, Paddon, & Palmer, 1985), frequency of church attendance (Bufford, 1984; Colwell, 1987; Durham, 1986; Ellison & Economos, 1981; Frantz, 1985; Hawkins, 1986; Huggins, 1988; Jang, 1987; Mitchell, 1984; Quinn, 1984; Sherman, 1987), frequency of family devotions (Bufford, 1984), and pastor/leader evaluations of present relationship to God (Bressem, Colwell, Mueller, Neder, & Powers, 1985).

A strong positive correlation was shown between RWB and one's attitude toward Charismatic practices (Bressem, 1986). Other positive relationships were found with religious knowledge (Bressem et al., 1985;

Carr, 1986; Davis et al., 1987; Jang, 1987), church leadership experience (Moody, 1988), feeling accepted and valued by God (Ellison & Economos, 1981; Ellison, Rashid, Patla, Calica, & Haberman, 1984), attending seminary (Bufford, Bentley, Newenhouse, & Papania, 1986), participation in religious activities (Bonner, 1988), and small group participation (Huggins, 1988).

No relationship has been found between SWB and the following scales: Hood's Mysticism Scale, Gorden Test of Mental Imagery Control, Betts Questionnaire of Mental Imagery and the Christian Use of Imagery Scale (Bressem, 1986); the Profile of Mood in abortion patients (Mitchell, 1984); Religious Orientation Scale-Extrinsic (Mueller, 1986) and the Visualizer-Verbalizer Questionnaire (Bressem, Waller & Powers, 1985).

Reliability

The reliability coefficients for the SWB have been fairly consistent and adequate for assessment purposes. Brinkman's (1989) test-retest coefficients were lower than those originally reported by Ellison (1983) but still fell within an acceptable range of one another. Brinkman (1989) reported that test-retest reliabilities of SWB to be .93 (SWB), .96 (RWB), and .86 (EWB). Ellison (1983) concluded that SWB had high reliability

and internal consistency. Brinkman (1989) and Ellison (1983) reported very consistent Cronbach alpha coefficients which are both acceptable for assessment purposes. Reliability studies are summarized in Table 3:

Table 3

Reliability Coefficients of the SWB Scale

	SWB	RWB	EWB
Test-Retest (Ellison, 1983)	.93	.96	.86
(Brinkman, 1989)	.82	.88	.73
Cronbach's Alpha:			
(Ellison, 1983)	.89	.87	.78
(Brinkman, 1989)	.86	.82	.76
(Brinkman, 1989)	.92	.94	.86

Validity

A summary of validity coefficients is summarized in Table 4. These were chosen as a representative summary of those coefficients that correlated with religiously-oriented instruments.

Table 4

Validity Coefficients of the SWB Scale with Other Measures

Spiritual Maturity Index (Brinkman, 1989)		.71*
Religious Orientation Intrinsic Scale (Brinkman, 1989)		-.51
Concept of God Subscales (Two Samples) (Brinkman, 1989)		
Traditional Christian	.46*	.60*
Benevolent Deity	.53*	.72*
Companionable	.45*	.63*
Kindliness	.45*	.60*
Evaluation	.45*	.45*
Deisticness	-.48*	
Omni-ness	.59*	
Eternality	.48*	
Irrelevancy	-.41*	
Spiritual Distress Scale (Brinkman, 1989)		-.78*

*$p < .001$

The type of validity that is most appropriate for evaluating the SWB is construct validity. A part of construct validity, convergent validity, was presented earlier in chapter one. Developmental changes, another aspect of construct validity, was not a part of the original theory that went into the construction of the SWB scale. Most of the studies conducted with the SWB scale have shown no correlation with age (Brinkman, 1989).

Brinkman's (1989) study laid some basis for construct validation. The SWB scale was found to correlate in expected directions with several religious scales and single item measures. The SWB scale correlated positively with the Spiritual Maturity Index (r = .71), and negatively with the Religious Orientation Intrinsic scale (r = -.51). These findings are similar to those of other studies (Bufford, 1984; Carr, 1986; Davis et al. 1987; Quinn, 1984).

The SWB scale correlated moderately and significantly with the Concept of God (COG) subscales Traditional Christian (r = .46 and .60), Benevolent Deity (r = .53 and .72), Companionable (r = .45 and .63), Kindliness (r = .45 and .60), Evaluation (r = .45 and .45), Deisticness (r = -.48), Omni-ness (r = .59),

Eternality (r = .48), and Irrelevancy (r = -.41) A high negative correlation existed between the SWB fullscale and the Spiritual Distress Scale (r = -.78) (Brinkman, 1989).

Factor analysis has also been used to validate the SWB scale. Ellison (1983) reported three factor loadings, yet this data has not been sufficiently replicated (Bufford, 1984). Cooper (1987) and Davis et al. (1987) also looked at the scale from a factor analytic perspective (although done in the context of research on the Spiritual Maturity Index) and found different results than those of Ellison (1983). Ellison (1983) reported two factors with eigenvalues of 7.1 and 2.7, respectively, while Davis et al. (1987) found more factors that loaded positively, with the first general factor having an eigenvalue of 13.6. Twelve factors had eigenvalues of 2.0 or more. In summary, the factor structure of the SWB Scale is ambiguous for the scale correlates strongly with other measures, yet the factor structure cannot be precisely determined at this time (Ledbetter, Smith, Vosler-Hunter, & Fischer, 1988).

In summary, there is much evidence that supports the validity of the SWB scale in terms of construct

validity. The scale correlates with other scales that it should theoretically. A concern is factor analysis, in determining what the subscales are actually measuring.

In this study the emphasis is on SWB as an outcome measure. A review of the literature revealed that the SWB had not been previously used to determine treatment effects. Thus, this study sought to use the SWB scale in a different manner, attempting to answer the question, "Will SWB be sensitive to therapeutic interventions?" Thus the goal is to broaden the scope of the SWB research to include treatment outcomes as a variable.

In summary, the SWB has been used extensively in seeking to assess the bidimensional model proposed by Moberg. Its research has covered many topics and areas of study and has been shown to be a useful instrument in studying this complex concept. The SWB scale was used in the study to assess whether one's spirituality was affected by psychotherapy in an outpatient setting. However, the present study did not deal with SWB alone. As an added measure, the study sought to measure depression in a clinical population. Depression has been measured extensively and the instrument used to

assess depression in this study, the Beck Depression Inventory, has demonstrated significant outcomes in previous studies (Burkhart, Rogers, McDonald, McGrath, & Arnoscht, 1984; Strober, Green, & Carlson, 1981).

Depression

According to Arieti and Bemporad (1978), the psychic state we call depression has been known since biblical and Homeric times. When Hippocrates delineated his four body humours to distinguish personality types, one was the melancholic, the forerunner to modern-day depression. Interest in depression has intensified in the last two decades and research has shown that the disorder is quite common (Arieti & Bemporad, 1978).

Depression is classified under the heading of affective disorders, meaning that it is a disorder of mood. According to the Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition, Revised (American Psychiatric Association, 1987), affective disorders are characterized by a disturbance of mood, which is defined as a "prolonged emotion that colors the whole psychic life; it generally involves either depression or elation" (p. 205).

In 1973 the National Institute of Mental Health reported that the prevalence of depression had become a major health problem in the United States. They estimated that 2% to 4% of the population required treatment for depression each year (Dean, 1985). Epidemiological studies have consistently shown the prevalence of depressive symptoms to be 16% - 18% in the general population (Zigler & Glick, 1988). Clayton (1986) reported that the lifetime prevalence of a definite major depressive disorder was 18%; over a lifetime, 12% of men and 26% of women could be expected to develop a major depressive disorder. The age of onset is broad, ranging from 15 to 70, with the mean age being in the early 40's. Depression is known to reoccur in those affected by the disorder.

The causes of depression are many and vary with each individual. Genetic factors, physical health, environmental events, and personality style all contribute to depression; in a cyclic fashion these events and the depression tend to exacerbate one another (Clayton, 1986). Barrett, Oxman, & Gerber, (1987) found that 8.8% of the sample of a rural medical practice could be diagnosed with a depressive disorder. Of this 8.8% group, 16.2% were between the ages 18-34,

most were employed, and most were divorced or separated.

Since depression affects the whole scope of an individual's life (Beck, 1967) it is often hard to know precisely the severity of depression at one moment of time. Two methods of assessing the severity of depression have been traditionally utilized, spontaneous verbal communication from the patient or his family, and observations made by trained personnel (Pichot, 1986). However, the development of psychometric instruments to assess depressive qualities has greatly reduced the man hours needed for diagnosis and helped to standardize the assessment of depression.

The measurement of depression is an area that has grown in conjunction with the growing sophistication of statistical analysis techniques. Beck (1967) reported that Jasper's 1930 Depression-Elation test was the first known depression measure, followed by the Depression Scale (D-Scale) of the Minnesota Multiphasic Personality Inventory (MMPI) over a decade later. Recently, more instruments have been developed for measuring depression.

In a review of the literature, Levitt, Lubin, and Brooks (1983) noted at least fifty instruments used in

the measurement of depression. They concluded that the instruments could be classified into two groups: trait and state measures. The first, the trait measure, is composed of instruments that are self-administered and that seek to measure a condition of the individual that has been relatively stable over a long period of time. Examples of this type are the MMPI D-Scale and the Trait Depression Scale. The second class, the state measure, seeks to measure an immediate, momentary condition. The Current Behavior Checklist and the Depression Rating Scale are examples of this class. All of these measures seek to assess a single component of depression, yet arrive at that distinction through different methodology (Levitt, Lubin, & Brooks, 1983).

In order to measure depression in this study, the Beck Depression Inventory (BDI) was chosen. Since the goal of this study was to measure depression at different intervals, along with its relationship to treatment outcome, a state measure was needed. The BDI is an effective tool for measuring state depression; in other words the BDI is an effective measure of the momentary state of depression (Levitt et al., 1983).

Some information on the BDI further accentuates its usefulness in this study. The Beck Depression

Inventory (BDI) is a 21-item, self-report scale that was designed to assess "the presence and severity of affective, cognitive, motivational, vegetative, and psychomotor components of depression" (Corcoran & Fischer, 1986, p. 107). Designed by Aaron T. Beck and associates, it is one of the most widely used measures of depression. It has been used extensively on both clinical and non-clinical populations. The goal of the inventory is to measure the intensity of depression in order to aid diagnosis, achieve economy due to its simplicity, provide numerical data for comparisons to other scales, and become a more sensitive indicator of depth of depression than the clinical interview (Beck, 1967). The twenty-one items include one item intended to measure each of the following areas: (a) Mood; (b) Pessimism; (c) Sense of failure; (d) Lack of satisfaction; (e) Guilty feeling; (f) Sense of punishment; (g) Self-dislike; (h) Self-accusation; (i) Suicidal wishes; (j) Crying spells; (k) Irritability; (l) Social withdrawal; (m) Indecisiveness; (n) Body image; (o) Work inhibition; (p) Sleep disturbance; (q) Fatigability; (r) Loss of appetite; (s) Weight loss; (t) Somatic preoccupation; and, (u) Loss of libido.

Oliver and Simmons (1984) found that the BDI was sensitive in detecting depression as it correlated with the depression categories in the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III; American Psychiatric Association, 1980). Their research concluded that the BDI was more precise than the DSM-III categories. Despite the findings reported by Oliver and Simmons (1984), King and Buchwald (1982) found that the BDI exhibited more depressive symptoms from women then men when the BDI was administered by a same-sex person. They attributed this to the possibility that women tended to admit to more depressive symptoms than men due to cultural factors. Bryson and Pilon (1984) reported conflicting results; they found no evidence that the severity of depression varied with the sex of the respondent, the sex of the experimenter, or the interaction thereof. Gallagher, Nies, and Thompson (1982) found that the BDI was a good screening inventory for the elderly. Beck's (1967) study with adults also provided very high correlational data with psychiatric interviews.

The BDI has been used in a number of psychiatric and psychological settings and has proven very useful in the measurement of the severity of depression. It

is for this purpose that it was chosen for this particular study. The goal was to determine whether the patients improved in their depressive symptoms as a result of their course of treatment involving psychotherapy.

Hypotheses

Based on the above information, the following hypotheses and questions were tested for the two experimental groups in a quasi-experimental intact-groups design involving a pretest and posttest.

Hypothesis #1: The scores on SWB will increase following therapy. The level of SWB will increase from pre-test to post-test score.

Hypothesis #2: The scores on the BDI, reflecting the severity of depression, will decrease from pretest score to post-test score. The level of depression will fall following psychotherapy.

Along with the above-mentioned hypotheses, additional questions will be examined in the subsequent material. First, the two groups were used to compare/contrast with one another. These two groups were initially chosen to replicate the findings beyond

a single-group study. Thus, a large part of the study focused on group comparisons. Secondly, it was noted as to which counseling center demonstrated the greatest amount of change in SWB and BDI. This information was also looked at in light of the demographic and religious questionnaires. In other words, the change in SWB and BDI scores were compared to information gathered in the demographic and religious questionnaires. Thirdly, it was assumed that higher levels of SWB would be associated with higher ratings on the Religious Belief Questionnaire. This assumption was investigated.

Hypotheses 1 and 2 were statistically analyzed utilizing the technique of analysis of covariance. This technique allows one to assess the difference in scores in a pretest/posttest setting while statistically controlling for extraneous variables that might hinder, invade, and disrupt treatment effects. Pretest scores were held constant and used as the covariate in this instance. Other statistical methods such as analysis of variance and t-tests were also used to ascertain differences between variables within the design. This data allowed for the investigation of some of the questions that were discussed above.

CHAPTER 2

METHODS

This section of the study describes how the concepts discussed in Chapter 1 were operationalized with the participants in question, how the procedures were carried out, and the overall design of the study. This will be accomplished in four sections. First, the participants will be described in terms of their selection and demographics. Secondly, the instruments used in the study will be discussed. Thirdly, the procedure will be delineated. Finally, the design of the study will be sketched and discussed.

Participants

The participants in this study were adult clients at two counseling centers in the Pacific Northwest, one in Portland, Oregon (Group 1) and one in Vancouver, Washington (Group 2). These participants were selected in order to study the treatment effect of psychotherapy in both centers.

These two centers were selected due to the similarity of their clientele to the overall population of the study, which is any depressed adult in a outpatient counseling center. Yet due to the closeness in proximity of the two samples and their unique features, generalizations to the population cannot be made too hastily.

The participants of the study were self-referred to the centers. No strict inclusion rule was used for entrance into the groups. It was assumed that some disturbance of mood or behavior caused the clients to refer themselves for therapy. All adult clients who entered treatment at the time the study was being done were asked to participate. Acutely psychotic clients or those seen for substance abuse were excluded from the study, since the goal was to gain a representative sample of outpatients with some level of depression.

There were 14 participants in Group 1 and 11 participants in Group 2. They were assigned by virtue of voluntary participation in a particular clinic's treatment program. The mechanics of the study made it impossible to know how many clients refused to participate in the study.

The participants from Group 1 included 12 females and 2 males. The average age of the Group 1 sample was 30.4 years; 14.3% were never married, 35.7% were first married, 42.9% were separated or divorced, and 7.1% were remarried. The average income of Group 1 was in the $10,000 - $20,000 bracket. Educational percentages saw 42.9% with some college education, 28.6% with a high school degree, and an equal distribution of those who had never completed high school, those who had a college degree, those who had some graduate training, and those who had a graduate degree (7.1% each). The greatest number of participants were white (92.9%) with 7.1% Oriental. On religious affiliation, 50% identified with the Protestant religious faith (consisting of sub-categories such as Baptist, Pentecostal, and Christian), 28.6% described themselves as "other" (consisting of Community church, Church of Christ, and non-denominational descriptions), 14.3% described themselves as Catholic, and 14.3% affiliated with no organized religion.

The participants from Group 2 included 7 females and 4 males. The average age of the Group 2 sample was 31.8 years. Results showed 36.4% were never married, 27.3% were first married, 9.1% were separated or

divorced, and 27.3% were remarried. The average level of income was in the $10,000 - $20,000 bracket. Educational percentages showed that 36.4% had some college education, 27.3% had a trade or business degree, 18.2% were high school graduates, and equal percentage of college graduates and graduate degrees (9.1% each). All of the participants classified themselves as caucasian. Regarding religious orientation, 36.4% identified themselves as Protestant (subcategorized as non-denominational, Lutheran, and Baptist), 27.3% identified with no religion, 27.3% chose the "other" designation (categorized by Christian and Jesus and his teachings), and 9.1% reported themselves to be Catholic.

Instruments

The use of the instruments was discussed in Chapter 1. The psychometric properties of the instruments will be discussed in this chapter. There were two instruments used in this study, the Spiritual Well-Being Scale (SWB) and the Beck Depression Inventory (BDI). Some additional data was gathered on demographics and religious values. The SWB was

discussed in Chapter 1 and the reader is referred there for information related to validity and psychometric properties.

Beck Depression Inventory

The Beck Depression Inventory (BDI) was employed as a measure of depression in this study. The BDI is a 21-item self-report measure. It measures 21 symptoms and attitudes which are rated on a 4-point scale ranging from 0 to 3 in terms of severity of depression (Beck & Steer, 1987). It was chosen for its sensitivity to intensity of depression. The BDI has become one of the most widely accepted instruments in clinical psychology and psychiatry for assessing the intensity of depression in psychiatric settings (Piotrowski, Sherry, & Keller, 1985) and for assessing depression in normal populations (Steer, Beck, & Garrison, 1985).

Reliability

Reliability coefficients for the BDI are presented in Tables 5, 6, and 7.

Table 5

Split-Half Reliability Coefficients of the BDI

Corcoran & Fischer (1986)	.78 to .93	
Gallagher, Nies, & Thompson (1982)	.84	(total sample)
	.74	(normal elderly)
	.58	(depressed elderly)

Table 6

Test-Retest Reliability Coefficients of the BDI

Corcoran & Fischer (1986)	.48 to .74	
Oliver & Simmons (1984)	.54	(five weeks)
	.78	(three weeks)
Gallagher, Nies, & Thompson (1982)	.90	(total sample)
	.86	(normal elderly)
	.79	(depressed elderly)

Table 7

Coefficient Alpha Reliability Coefficients of the BDI

1961 Version (Beck & Steer, 1984)	.88	
1978 Version (Beck & Steer, 1984)	.86	
Bosscher, Koning, & Van Meurs (1986)	.82	
Gallagher, Nies, & Thompson (1982)	.91	(total sample)
	.76	(normal elderly)
	.73	(depressed elderly)

Corcoran and Fischer (1986) reported general psychometric properties of the scale. They concluded that the BDI had good to excellent reliability. Split-half reliabilities ranging from .78 to .93 have been reported (Corcoran & Fischer, 1986), indicating good internal consistency. Test-retest reliabilities have been poor to good, ranging from .48 for psychiatric patients after three weeks to .74 for undergraduate students after three months (Corcoran & Fischer, 1986). Oliver and Simmons (1984) reported test-retest reliabilities at .54 across a five-week interval in an

unselected population and .78 in a three-week interval in a university population. The alpha coefficients for the 1961 version of the BDI was .88 while the 1978 version was .86, thus showing good internal consistency of the newer self-report version (Beck & Steer, 1984).

Bosscher, Koning, & Van Meurs (1986) found that the internal consistency of the BDI was .82 in a college population. Gallagher, Nies, & Thompson (1982) found that the BDI had good internal consistency in an older adult population and that it could be used as an adequate screening tool for depression in the elderly. Test-retest coefficients were .90 for the entire sample, .86 for the normal elderly, and .79 for depressed elderly patients. Split-half coefficients were .84 (total sample), .74 (normal elderly), and .58 (depressed elderly). Coefficient alphas reported were .91 (total sample), .76 (normal elderly), and .73 (depressed elderly) (Gallagher, Nies, & Thompson, 1982).

Validity

Some of the validity studies on the BDI were discussed in Chapter 1. The purpose of this section is to deal with the psychometric aspects of validity. Corcoran and Fischer (1986) reported that the BDI had

good to excellent validity. "Research has shown significant correlations with a number of other depression measures indicating strong concurrent validity" (p. 107). It has also been shown to correlate significantly with clinician's ratings and has been shown in several studies to be sensitive to clinical changes (Beck & Steer, 1987). Beck and Steer (1984) sought to validate the 1978 updated version of the original 1961 instrument. The original test was to be examiner administered, and the 1978 version was changed to a self-report instrument.

Beck and Steer (1987) reported five types of validity for the BDI: content validity, construct validity, discriminant validity, concurrent validity, and factorial validity.

Content Validity. In the area of content validity, Moran and Lambert (1983) reported on the BDI's content as compared to the American Psychiatric Association's (1980) Diagnostic and Statistical Manual on Mental Disorders, 3rd Edition (DSM-III). They concluded that the BDI reflected only six of the nine DSM-III criteria items for an Affective Disorder. Two DSM-III criteria were partially addressed, and one was not included.

Vredenburg, Krames, and Flett (1985) reported similar observations.

Discriminant Validity. Beck and Steer (1987) noted that the BDI was not designed to discriminate among patients with different psychiatric diagnoses. Yet a number of studies indicated that the BDI has discriminative properties. Steer, Beck, Riskind, and Brown (1986) reported that the BDI was able to differentiate psychiatric patients from normals. It has been found to discriminate between Dysthymic and Major Depressive Disorders (Steer, Beck, Brown, & Berchick, 1987) and between Generalized Anxiety Disorders and Major Depressive Disorders (Steer, et al., 1986). Plumb and Holland (1977) and Cavanaugh, Clark, and Gibbons (1983) reported that the BDI was able to differentiate among psychiatric, medical, and normal samples.

Construct Validity. The BDI has been used to confirm construct validation. Some of the studies mentioned are summarized in Table 8.

Table 8

Construct Validity Coefficients of the BDI with Other Constructs

Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974):	
Major Depression, Single Episode	.38
Alcoholic	.76
Depth of Depression (Oliver & Simmons, 1984)	.77

Beck and Steer (1987) reported numerous studies between the BDI and the hopelessness construct. Beck, Weissman, Lester, and Trexler (1974) found that scores on the Hopelessness Scale were positively related to the BDI scores in all six normative samples. Coefficients range from .38 (Major Depression, Single Episode) to .76 (Alcoholic). Oliver and Simmons (1984) reported the validity of the BDI in a university population; using depth of depression as the criterion, they found the Pearson product-moment correlation coefficient to be .77.

Concurrent Validity. A summary of the findings regarding the concurrent validity of the BDI are found in Table 9:

Table 9

Concurrent Validity of the BDI and Other Measures

Clinical Ratings of Depression (Beck & Steer, 1987):	
Psychiatric Patients	.72
Nonpsychiatric Patients	.60
Zung Self-rating Depression Scale (Beck & Steer, 1987)	<.55
MMPI-Depression Scale (Beck & Steer, 1987)	<.55
Hamilton Psychiatric Rating Scale for Depression (Beck, Steer, & Garbin, in press)	.73

Beck and Steer (1987) reported that meta-analyses of the BDI and concurrent measures of depression found a mean correlation of .72 between clinical ratings of depression and the BDI for psychiatric patients and a

mean correlation of .60 between clinical ratings of depression and BDI scores for nonpsychiatric subjects. Correlations with other instruments have been done as well. Relationships between the BDI and both the Zung Self-rating Depression Scale and MMPI-Depression Scale were greater than .55 for the two groups measured (Beck & Steer, 1987). Correlation coefficients for the Hamilton Psychiatric Rating Scale for Depression (HRSD) and the BDI have ranged from .87 to .40 (significant beyond the .001 level) for the six samples mentioned above. Beck, Steer, and Garbin (in press) found a mean correlation of .73 between the HRSD and the BDI for five psychiatric samples.

Factorial Validity. The BDI has been factor analyzed with both clinical and nonclinical populations. The number of factors extracted is dependent upon the characteristics of the clinical and nonclinical samples being studied (Beck, Steer, & Garbin, in press). However, Tanaka and Huba (1984) and Cavanaugh, et al. (1983) reported that the BDI represented one underlying syndrome of depression which could be decomposed into three highly intercorrelated factors. The three factors reflect cognitive-affective, performance, and somatic complaints.

A short form of the BDI has also been developed. It consists of 13 of the original 21 items. Vredenburg, Krames, and Flett (1985), Gould (1982), and Reynolds and Gould (1981) have investigated the psychometric properties of the long and short form and have found differing results. Vredenburg et al. (1985) questioned the need for the short form since it lacked the breadth to measure important aspects of depression. Gould (1982) disagreed. He found the internal consistency to be .82 for the long form and .78 for the short form. He supported the use of the short form for research purposes. For the purposes of the present study, the long form was employed since the shortened form did not offer a great savings in time or gain in psychometric properties.

Other Measures

Along with the two empirical measures described above, demographic information about the participants was obtained in the pretesting situation by way of a pencil-and-paper questionnaire. A packet of information was given to the patients which contained the two scales and the demographic questionnaire, in the pretest, and a religious questionnaire, in the

posttest. All of the information was obtained be way of self-report. The participants were asked to report age, gender, marital status, and income level. Age was obtained in terms of whole years. Gender, marital status, income, educational level, ethnic background, and religious affiliation were asked through a forced choice method. This questionnaire is found in Appendix E.

In addition to this, the Religious Belief Questionnaire (RBQ), a survey of religious beliefs, attitudes, and behaviors, was included in the post-test packet. Items of this type have been shown to correlate with high commitment to religion (Gorsuch, 1984; Worthington, 1988). A number of studies using these same items have consistently found significant correlations between these items and religious commitment and involvement (Brinkman, 1989; Bufford, 1984; Cooper, 1987; Davis et al., 1987). These items include frequency of church attendance, frequency of personal devotions, profession of Christian faith, length of being a Christian, importance of religion, and time investment in religious activities or service. This questionnaire is found in Appendix H.

Procedures

The procedures of the study were fairly simple and straightforward. Administration of the testing and documentation procedures were coordinated by a person at each center, a receptionist or secretary, who supplied the therapists with the material and collected the completed forms. The individual actually handing out the tests was the intake coordinator. The administration of the packet of materials was part of the initial treatment plan workup. The participants were administered the SWB and BDI upon initiation of therapy and again sixty days into the therapy process. The two empirical instruments were coupled in the pretest packet with a cover letter explaining the anonymity, freedom of the subject to participate, and related items to orient the patient to the study. The pretest packet also included a demographic questionnaire. The posttest packet included the above-mentioned empirical scales, minus the demographic information, along with a religious questionnaire. These are all found in the Appendices.

In order to protect the identity of the patient, the following procedures were used in gathering the

data. The packets of information were numbered, allowing for fifty participants at each of the two centers. The Group 1 pretest contained the numbers 101a - 150a. The Group 2 pretest were assigned numbers ranging from 201a - 250a. The Group 1 posttest were assigned numbers 101b - 150b, while the Group 2 posttest used numbers 201b - 250b. As the client was given a pretest packet of information, the person responsible at each location gave him/her the next available packet in the numerical sequence. The client's name was recorded on a master list that was kept in a central location of the center, out of sight of the general public. The number assigned to the pretest packet will correspond to the posttest packet. For example, the subject who received pretest packet numbered 101a received posttest packet numbered 101b. The master sheets containing the names were destroyed when all the data was collected. An example of these master sheets is found in Appendix I.

The structure of the research design consisted of an intact-groups pretest-posttest design. Both groups received psychotherapy treatment, yet at different facilities. The instruments were used to ascertain differences in scores on the scales (SWB and BDI).

Therefore, the participants were given the same instructions in dealing with the written material. They were asked to fill out the questionnaires as honestly as they could, basing their answers on how they felt at the present moment. The one exception is the BDI which instructs the test taker to base his/her answers on how he/she feels at the moment, and during the past week. The participants were encouraged to fill out the materials in one sitting, at the beginning of therapy for the pretest, and at whatever point they were in for the posttest. The dependent measures were recorded on the answer sheets and were statistically analyzed.

Design

Using Campbell and Stanley's (1963) terminology, the design of the study is a modification of their nonequivalent control-group design. The difference in this study was that no "control" or untreated group was utilized, but rather a contrast group. In other words, the pretest-posttest design remained but the thrust of the study was to ascertain differences between the two groups, not just within one group, using another

treatment group for comparison purposes. This was a quasi-experimental design, for random selection or assignment of the participants was not possible.

Internal Validity

This design was not without its threats to internal validity. The internal validity determines the degree to which the study allows the researcher to determine if there is a causal relationship between the independent and dependent variables (Campbell & Stanley, 1963). Campbell and Stanley (1963) cited several of these threats. The first of these is history. History is a threat to a study's internal validity when an extraneous event outside or within the study affects the status of most or all the participants in the study. Between the first and second administrations of the the tests, change-producing events may occur that could account for the change in test scores. The longer the time lapse, the more problematic history becomes.

The second confounding variable is maturation. "This terms is used here to cover all of those biological or psychological processes which systematically vary with the passage of time,

independent of specific external events" (Campbell & Stanley, 1963, pp. 7-8). Maturation refers to an event that is not relevant to the research hypothesis but could potentially affect the study's outcome. Thus, change could be attributed to some other variable than the desired one. In this study, the occurrence of the natural recovery or healing processes was the most likely maturational factor.

A third confounding variable is the effect of testing. The effect of the pretest itself could create practice effects and reduce the anonymity of the testing situation, thus reducing the reactivity of the individual. In other words, taking a test can alter a subject's performance on the second administration of the test. However, designing a pretest in such a way as to minimize memory and practice effects can help to control this problem.

A fourth confounding variable mentioned by Campbell and Stanley (1963) is statistical regression. Statistical regression is the tendency of extreme scores to regress, or move closer, to the mean. Regression toward the mean is a reality in most testing situations and an "inevitable accompaniments of imperfect test-retest correlation for groups..."

(Campbell & Stanley, 1963, p. 11). It is assumed that extreme scores will regress toward the mean upon retesting when the correlation of pretest and posttest scores is less that 1.0. The presence of extreme scores in a group makes regression more of an issue. Groups with extreme scores which are chosen for reasons unrelated to scores on the variable of interest may show little or no regression on a subsequent testing, since "random and extraneous sources of variance have been allowed to affect the initial scores in both directions" (p. 12). Thus, it is wise to ensure that there are not just extreme scores in the group, but that they represent the group as a whole. In this study, choosing people who sought help for depression and related disorders insured that regression would be a potential problem. However, it would not affect comparisons between the two groups unless they differed in extremity of pretest scores. Further, since extremity on SWB and BDI scores was not a factor in selection, regression is less of a concern than if they had been.

A fifth extraneous variable is <u>experimental mortality</u>. Mortality refers to the discontinuation of subjects during the course of of the study. Depending

on the extreme nature of pretest scores of these individuals, this variable could cause damage to the particular design in this study. This brings the above-mentioned problem of statistical regression into focus if the remaining scores in the sample are extreme. An aspect of mortality also deals with the use of volunteers, and the characteristics thereof.

Finally, the interaction of these factors (statistical regression and experimental mortality) can also have an effect on the outcome of the study. For example, if scores are exactly equal between groups, it would be hard to pinpoint the exact reason for this lack of variance. Likewise, if scores are quite variant the interaction of extraneous variables still makes it difficult to say exactly what caused the variance.

External Validity

While the limitations mentioned above threaten the internal validity of causal conclusions of a study, external validity refers to threats to generalizability of the results. Four variables have been noted that pose threats to external validity (Campbell & Stanley, 1963).

The first of these is interaction effects based on sample selection. The method of selection of participants and the makeup of the sample limit generalizability. In this study, random selection was not possible, nor random assignment. However, the samples formed intact groups that were assumed to be representative of the population parameters within psychotherapy.

A second limitation is the interaction effect of pretesting. This has been alluded to earlier. Pretesting may limit the generalizability of findings by increasing or decreasing the sensitivity of the participants to the treatment that follows the pretest. While this is a difficulty, the effect of testing in this study appears to have been as minimal as possible, for the participants were self-referred for therapy and chose to participate in the study and continue in therapy in spite of any outside intervention.

A third variable is the effects of experimental procedures. The presence of observers or equipment may alter the response of the participant, thus decreasing generalizability. This factor was virtually nonexistent in this study for the method of collecting data was unobtrusive. The participants were all

volunteers and results of the study apply only to those who have chosen to be a part of the study.

A final interactive variable that threatens external validity is multiple-treatment interference. The exposure of the subject to two or more treatments can alter the outcome of the study. Thus, generalization may only be made to those who have experienced the same level of treatment. In this study, this factor was not an issue since only one treatment was used.

A schematic representation of the design is presented in Table 10. The basis of the design is a comparison of the two groups for changes in scores on the empirical instruments and correlations with the questionnaire measures.

Table 10

Schematic Representation of the Research Design

	Pretest		Posttest
Group 1	O_1	X_1	O_2
Group 2	O_1	X_2	O_2

Note: The O's stand for the respective administration of SWB and BDI (observations) and the X represents the treatment of psychotherapy.

The design utilized the statistical technique of analysis of covariance (ANCOVA) to analyze the data. In this design the independent variable was the treatment (psychotherapy) given to each group. The dependent variables were the scores obtained on the instruments, the BDI and SWB. The scores of these two instruments were analyzed using the ANCOVA technique, with the pretest scores serving as the covariates. Since the groups were in a clinical setting, it was assumed that there would be some confounding variables that were uncontrolled, such as the use of medication and its interaction with depression, each person's

individual progress in the respective programs, individual differences, and so forth. This statistic specifically controls for differences in the participants at pretest only. Huitema (1980) noted:

> The analysis of covariance (ANCOVA) model represents an integration of the analysis of variance (ANOVA) and the analysis of variance of regression (ANOVAR) models. Similar to ANOVA, ANCOVA is often used to test the null hypothesis that two or more sample means were obtained from populations with the same mean. The basic advantage of ANCOVA over ANOVA are (1) generally greater power and (2) reduction in bias caused by differences between groups that exist before experimental treatments are administered. (p. 13)

Huitma (1980) further notes that the primary use of ANCOVA was to increase power that may have been lost with the comparison of two groups receiving separate treatment. ANCOVA reduces the size of the error difference between the measured groups.

Other statistical measures were employed, such as analysis of variance (ANOVA) and/or *t*-tests, since significant differences were noted in the scores between the two groups. These statistics were used to

detect some of the correlation variables that may have accounted for the variance between the two groups.

The standard for interpretation of the F statistics with both the ANOVA and ANCOVA were set a priori at the .05 level.

Summary of Procedures

The two groups at the respective counseling centers were administered the SWB, BDI, and demographic questionnaire in the pretest and the SWB, BDI, and RBQ on the posttest. Efforts were made and communicated to the participants insuring the confidentially of the information in the handling of the materials. A coordinating person at each center agreed to take responsibility for the numbering and safe-keeping of the materials. Participants were asked to be involved in the study, yet were not required to do so.

This study is a quasi-experimental design and is not without its limitations. These limitations were addressed and controlled as much as possible. The data obtained was statistically analyzed through the techniques of analysis of covariance (ANCOVA), analysis

of variance (ANOVA), *t*-tests, and correlational methods.

CHAPTER 3

RESULTS

The first two chapters of this manuscript described the background for the study and the procedures used to complete it. This present chapter describes the results of the study. The thrust of the chapter is the statistical results of the design that was outlined in chapter two. The results will be presented in a four-fold manner. First, further statistical descriptions of the sample will be presented. Secondly, general parameters of the instruments will be presented, such as means and standard deviations. Thirdly, the hypotheses set forth in chapter one will be dealt with respectively. Finally, a presentation of the other statistical tests that were used to analyze the data will follow.

Descriptions of the Sample

The two samples were verbally described in chapter two as to their composition. Here descriptive statistics of the sample will be provided.

Due to the pretest-posttest design, a number of participants took part in the pretest and did not continue through the posttest (attrition). They will be referred to as "dropouts." There were 13 dropouts in Group 1 and 13 dropouts in Group 2. Some analysis was conducted to see if the dropouts significantly differed from those who chose to continue. They were compared on the pretest SWB and BDI. Table 11 reports Group 1 and Group 2 SWB and BDI t-test scores. The Group 1 SWB data (t [9.64] = 1.38, p = .20, two-tailed) and the Group 1 BDI data (t [12.18] = -1.29, p = .22, two-tailed) show no difference between dropouts and those who continued. The Group 2 SWB data (t [19.93] = -.93, p = .36, two-tailed) and the Group 2 BDI data (t [20] = -.15, p = .88, two-tailed) show no difference between dropouts and those who continued.

Table 11

T-Test Results of Dropouts versus Continuers from Both Groups

	SWB			BDI		
	t	df	2-tail prob.	t	df	2-tail prob.
Group 1	1.38	9.64	.20	-1.29	12.18	.22
Group 2	- .93	19.93	.36	- .15	20.00	.88

N = 25

Thus, the dropouts from both Group 1 and Group 2 were not different from those who continued in the study on the pretest measures of SWB and BDI. In addition to the data on SWB and BDI, an analysis was done to ascertain the differences between the dropouts and continuers on demographic variables. The results found no difference between the dropouts and continuers on any of the deomographic items.

The sample consisted of two groups of adult outpatients in two counseling centers, one in Portland, Oregon (Group 1) and the other in Vancouver, Washington (Group 2). The mean age of Group 1 was 30.4 years and

the mean age of Group 2 was 31.8 years. The samples were predominantly caucasian in race; Group 1 had one Oriental participant while 100% of Group 2 participants described themselves as caucasian. Other descriptive information about the sample follows in Tables 12-15.

Table 12 summarizes the marital status for each sample. In Group 1, 42.9% were separated or divorced, 35.7% were first married, 14.3% were never married, and 7.1% were remarried. In Group 2, 36.4% were never married, 27.3% were first married, 27.3% were remarried, and 9.1% were separated or divorced.

Table 12

Marital Status Percentages of Groups 1 and 2

	Group 1[a]	Group 2[b]
Single (Never Married)	14.3	36.4
First Marriage	35.7	27.3
Separated or Divorced	42.9	9.1
Remarried	7.1	27.3

[a] n = 14. [b] n = 11.

The percentage breakdown of income is described in Table 13. Group 1 had the highest percentage of participants in the $10,001 - $20,000 range (28.6%), followed by the $20,001 - $30,000 range (21.4%). Three ranges showed equal percentages, the less than $10,000, the $30,001 - $40,000, and the $40,001 - $50,000 (14.3%). The more than $50,000 range contained 7.1%. Group 2 had two divisions at 27.3%, the less than $10,000 and the $20,001 - $30,000 ranges. Two ranges also contained 18.2% of the sample, the $10,001 - $20,000 range and the $40,001 - $50,000 range. The $30,001 - $40,000 range contained 9.1%. The more than $50,000 group had no members.

Table 13

Income Level Percentage of Groups 1 and 2

	Group 1[a]	Group 2[b]
Less than $10,000	14.3	27.3
$10,001 - $20,000	28.6	18.2
$20,001 - $30,000	21.4	27.3
$30,001 - $40,000	14.3	9.1
$40,001 - $50,000	14.3	18.2
More than $50,000	7.1	0.0

[a] n = 14. [b] n = 11.

The educational percentages of Groups 1 and 2 are found in Table 14. Group 1 saw 42.9% with some college education, 28.6% high school graduates, and 7.1% each of those who never completed high school, were college graduates, those who had some graduate work, and those with a graduate degree. No business or trade school degrees were noted. Group 2 saw 36.4% of the sample have some college education, 27.3% possess a trade or business degree, 18.2% have a high school degree, and 9.1% both college graduates and possessing graduate

degrees. All participants possessed at least a high school degree.

Table 14

Educational Percentages of Groups 1 and 2

	Group 1[a]	Group 2[b]
Never Completed High School	7.1	0.0
High School Graduate	28.6	18.2
Trade/Business School	0.0	27.3
Some College	42.9	36.4
College Graduate	7.1	9.1
Some Graduate Work	7.1	0.0
Graduate Degree	7.1	9.1

[a] $n = 14$. [b] $n = 11$.

Religious preferences are found in Table 15. In Group 1 half (50.0%) professed to be Protestant, 28.6% considered themselves "other" (with a subcategorization), 14.3% were Catholic, and 14.3% reported having no religious preference. Group 2 found

36.4% Protestant, 27.3% "other," 27.3% no religious orientation, and 9.1% Catholic.

Table 15

Religious Preference Percentages of Groups 1 and 2

	Group 1[a]	Group 2[b]
Protestant (Baptist, Pentecostal, Lutheran)	50.0	36.4
Other (Church of Christ, non-denominational, Community church, Christian)	28.6	27.3
Catholic	14.3	9.1
None	14.3	27.3

[a] $n = 14$. [b] $n = 11$.

The Religious Belief Questionnaire (RBQ) was used to gather some information regarding religious practices. Group 1 had a mean of 9.0 years being a Christian and spent a mean of 2.07 hours a week in ministry. Group 2 had a mean of 18.9 years being a Christian and spent 1.46 hours a week in ministry. The

remaining data will be discussed separately and summarized in Tables 16-18.

Table 16

Church Attendance Percentages

	Group 1[a]	Group 2[b]
Less than once per year	7.1	45.5
3 - 12 times a year	14.3	9.1
1- 3 times a month	21.4	9.1
Weekly	21.4	18.2
More than once a week	35.7	18.2

[a] n = 14. [b] n = 11.

Table 16 lists the figures for church attendance for the two groups. Group 1 saw 35.7% attend more than once per week, 21.4% attend both weekly and 1 - 3 times a month, 14.3% attend 3 - 12 times a year, and 7.1% attend less than once per year. Group 2 had 45.5% attend church less than once per year, 18.2% attend weekly and more than once per week, and 9.1% attend 3 - 12 times a year and 1 - 3 times a month.

Table 17 contains information regarding the frequency of personal devotions. Percentages for each sample is displayed. Group 1 had 28.6% of the participants involved in personal devotions 1 - 3 times a week and 4 - 7 times a week, and 14.3% either had no devotions, were involved less than once per week, or daily. Group 2 saw 36.4% having no devotions, 18.2% either less than once per week, 1 - 3 times a week, or 4 - 7 times a week and 9.1% had devotions daily.

Table 17

Personal Devotion Percentages

	Group 1[a]	Group 2[b]
None	14.3	36.4
Less than once per week	14.3	18.2
1 - 3 times a week	28.6	18.2
4 - 7 times a week	28.6	18.2
Daily	14.3	9.1

[a] n = 14. [b] n = 11.

The percentages of each sample regarding profession of faith is found in Table 18. In Group 1, a large number (78.6%) confessed to having received Jesus Christ as Lord and Savior and sought to follow his moral teachings. In addition, 14.3% sought to follow his moral and ethical teachings, and 7.1% confessed to no profession of faith. Group 2 had 36.4% who either followed the moral and ethical teachings of Christ or had received him as personal Savior and Lord. Finally, 18.2% coupled receiving Jesus Christ as Savior and Lord and the desire to follow his moral and ethical teachings. Only 9.1% reported having made no profession of faith.

Table 18

Profession of Faith Percentages

	Group 1[a]	Group 2[b]
None	7.1	9.1
Moral	14.3	36.4
Personal	0.0	36.4
Personal/Moral	78.6	18.2

Note: Moral = Follow the moral and ethical teachings of Christ; Personal = Have received Jesus Christ into my life as my personal Savior and Lord; Personal/Moral = Have received Jesus Christ as my personal Savior and Lord and seek to follow the moral and ethical teachings of Christ.

[a] $n = 14$. [b] $n = 11$.

Some further statistical analyses were conducted on the RBQ items to determine significant differences between the groups. Analyses were conducted on the difference of the groups with regard to the demographic items. No difference between the two groups on the demographic items (gender, marital

status, income, educational level, and ethnic background) was found.

Chi-square analyses were performed on some of the RBQ items in order to analyze the difference between the groups. The items measured were profession of faith, church attendance, and personal devotions. This data is found in Table 19. The data for profession of faith is as follows: Chi-square, 6.74; degrees of freedom, 1; significance level, .009. The data for personal devotions is: Chi-square, .673; degrees of freedom, 1; significance level, .41. The data for church attendance contained too few data to be analyzed by a Chi-square test. A Fisher's Exact Test was used and found a one-tail probability of .06.

Table 19

Chi-Square and Fisher's Exact Test of Profession of Faith, Personal Devotions, and Church Attendance for Combined Groups

	Chi-Square Test		
	x^2	df	p
Profession of Faith	6.74	1	.009
Personal Devotions	0.67	1	.410
	Fisher's Exact Test		
Church Attendance			.06

N = 25

The results of the Chi-square tests and the Fisher's Exact Text showed that there was a difference between the groups in profession of faith, but not personal devotions or church attendance.

Parameters of the Instruments

Two instruments were used as measurement devices in this study: the Spiritual Well-Being Scale (SWB) and the Beck Depression Inventory (BDI). The SWB is further broken down into two subscales, the Religious Well-Being Scale (RWB) and the Existential Well-Being Scale (EWB). The means and standard deviations of all four scales are presented below. This data was analyzed together since there was no significant difference between the groups on the measures of SWB and BDI. Table 20 contains pretest and posttest data from Group 1. Table 21 contains pretest and posttest data from Group 2.

Table 20

Pretest and Posttest Means and Standard Deviations--Group 1

	Pretest		Posttest	
	M	*SD*	*M*	*SD*
SWB	88.93	16.30	98.27	15.50
EWB	40.71	8.23	45.11	9.17
RWB	48.21	10.43	52.84	6.94
BDI	15.29	6.21	8.54	6.08

N = 14

Table 21

Pretest and Posttest Means and Standard Deviations--Group 2

	Pretest		Posttest	
	M	SD	M	SD
SWB	82.50	14.52	94.45	9.41
EWB	40.73	9.62	48.96	4.83
RWB	42.00	11.26	45.59	11.50
BDI	10.73	6.72	5.73	4.43

N = 11

An observation of the means and standard deviations of the samples shows that there were changes in these values from the pretest to the posttest. Group 1 pretest SWB mean score was 88.93 (SD = 16.30), compared to a posttest mean of 98.27 (SD = 15.50). The EWB mean went from a pretest of 40.71 (SD = 8.23) to a posttest mean of 45.11 (SD = 9.17). The RWB pretest mean was 48.21 (SD = 10.43), compared to a posttest mean of 52.84 (SD = 6.94). The BDI pretest mean was

15.29 (SD = 6.21), compared to a posttest mean of 8.54 (SD = 6.08).

Group 2 also showed changes from pretest to posttest scores. The pretest SWB mean was 82.50 (SD = 14.52) compared to the posttest mean of 94.45 (SD = 9.41). The EWB pretest mean was 40.73 (SD = 9.62) compared to a posttest mean of 48.86 (SD = 4.83). The RWB pretest mean was 42.00 (SD = 11.26) compared to a posttest mean of 45.95 (SD = 11.50). The BDI pretest mean was 10.73 (SD = 6.72) compared to a posttest mean of 5.73 (SD = 4.43).

The pretest means of SWB, EWB, and RWB are quite close to the average of means of counselees reported earlier (Frantz, 1985; Rodriguez, 1988; Sherman, 1987). The posttest means reflect those of religious groups (Davis, et al., 1987; Durham, 1986; Huggins, 1988; Lewis, 1985; Mueller, 1986).

These differences in means lead into a direct examination of the hypotheses stated in chapter one. The hypotheses dealt with the change in values of the measured instruments.

Spiritual Well-Being Effects

The first hypothesis in chapter one stated that there would be an increase in SWB scores from pretest to posttest following therapy. A cursory look at the preceding tables affirm that there were indeed changes in the means from pretest to posttest. However, the issue of significance must also be addressed. In order to accomplish this, individual sample *t*-tests and an analysis of covariance (ANCOVA) were utilized. Table 22 presents data from the SWB, RWB, and EWB from the pretest. SWB presents a *t* value of 1.02 with 20.82 degrees of freedom and a 2-tail probability of .32. RWB has a calculated *t* value of 1.37, 18.58 degrees of freedom, and a 2-tailed probability of .19. EWB displays a *t* value of .00, 19.77 degrees of freedom, and a 2-tailed probability of .99.

Table 22 displays the same *t*-test data but in comparison to the posttest scores. The posttest SWB displays a *t* value of .74, 20.14 degrees of freedom, and a 2-tailed probability of .47. RWB presents a *t* value of 1.83, 15.85 degrees of freedom, and a 2-tailed probability of .09. EWB displays a *t* value of -1.32,

20.48 degrees of freedom, and a 2-tailed probability of .20.

Table 22

Comparison of Pretest and Posttest t-Test Results of SWB, EWB, and RWB from the Combined Groups

	Pretest			Posttest		
	t	df	p	t	df	p
SWB	1.02	20.82	.32	0.74	20.14	.47
RWB	1.37	18.58	.19	1.83	15.58	.09
EWB	0.00	19.77	.99	-1.32	20.48	.20

N = 25

The individual t-tests on each measure assessing the difference in the pretest measures show no significant difference between the groups on any of the pretest or posttest measures.

An analysis of covariance (ANCOVA) was used to ascertain the differences between the two groups on the two posttest measures, SWB and BDI. The ANCOVA was

utilized on SWB, RWB, EWB, and BDI; in all the cases the pretest scores from the groups were used as the covariates. Table 23 presents the results of the ANCOVA for SWB and its subscales. BDI will be discussed in the next section. The table shows SWB having an F value of .007 and a significance level of .93. EWB was calculated at an F value of 2.00 with a significance level of .17, and RWB displayed an F value of .259 and a significance level of .62.

Table 23

Results of ANCOVA Comparing SWB, EWB, and RWB on the Posttest with Pretest as a Covariate

	SS	MS	df	F	p
SWB	0.962	0.962	1	0.007	.93
EWB	86.650	86.650	1	2.000	.17
RWB	11.390	11.390	1	0.259	.62

Note: SS = Sum of Squares; MS = Mean Square.

N = 25

An analysis of variance (ANOVA) was performed in order to ascertain the difference from pretest to posttest scores. Table 24 displays this data. The sum of squares for SWB was 1145.27, degrees of freedom was 1, mean square was 1145.27, F value 11.98, and level of significance was .002. The interaction effect displayed this data: sum of squares, 61.61; mean square, 61.61; degrees of freedom, 1; F value, .64, significance level, .43.

RWB was also examined by ANOVA. The sum of squares was 158.15, mean square 158.15, degrees of freedom, 1, F value 5.92, and the level of significance was .02. The data on the interaction effect was: sum of squares, 2.94; mean square, 2.94; degrees of freedom, 1; F value, .11; level of significance, .74.

The data from EWB is also found in Table 23. It is as follows: sum of squares, 483.50; mean square, 483.50; degrees of freedom, 1; F value, 14.90; significance level, .001. The interaction effect yielded these results: sum of squares, 43.16; mean square, 43.16; degrees of freedom, 1; F value, 1.33; level of significance, .26.

Table 24

Results of Pretest-Posttest ANOVA of SWB, RWB, and EWB

	SS	MS	df	F	p
SWB Change	1145.27	1145.27	1	11.98	.002
Interaction - SWB	61.61	61.61	1	0.64	.430
RWB Change	158.15	158.15	1	5.92	.020
Interaction - RWB	2.94	2.94	1	0.11	.740
EWB Change	483.50	483.50	1	14.90	.001
Interaction - EWB	43.16	43.16	1	1.33	.260

Note: SS = Sum of Squares; MS = Mean Square.

N = 25

Thus, the data shows that there was a significant difference between pretest and posttest scores on SWB, RWB, and EWB, yet the groups themselves were not significantly different from one another at either pretest or posttest and no interaction was found.

Depression Effects

The second hypothesis stated that the scores on the BDI would fall following therapy. Moreover, the posttest scores will be lower than the pretest scores.

The results of the BDI scores mirrored the effects of SWB scores described above. Table 25 demonstrates that there was no significant difference between the groups based on individual sample *t*-tests on either the pretest or posttest measure of BDI. The BDI pretest between the groups shows a *t* value of 1.74, 20.73 degrees of freedom, and a 2-tailed probability of .10. Posttest scores from both groups for the BDI display a *t* value of 1.31, 21.59 degrees of freedom, and a 2-tailed probability of .21.

Table 25

Individual Sample T-Tests of BDI on Pretest and Posttest

	t	df	p
Pretest	1.74	20.73	.10
Posttest	1.31	21.59	.21

N = 25

As with hypothesis #1, no significant difference was found between the groups on either the pretest or the posttest measure.

Table 26 displays the results of the ANCOVA performed with the BDI data. As with SWB, the pretest was used as the covariate from which the comparisons were made. The table displays a sum of squares of 13.48, a mean square of 13.48, degrees of freedom of 1, an F value of .509, and a significance level of .48.

Table 26

Results of ANCOVA Comparing BDI on the Pretest and Posttest for Both Groups

	SS	MS	df	F	p
BDI	13.48	13.48	1	.509	.48

Note: SS = Sum of Squares; MS = Mean Square.

N = 25

An ANOVA was also performed on the BDI data identical to the ANOVA performed on the SWB data. Similar results were obtained. The ANOVA revealed a sum of squares of 375.76, a mean square of 375.76, degrees of freedom of 1, an F value of 16.63, and a significance level of .000. The interaction effects of the two groups displayed a sum of squares of 4.51, a mean square of 4.51, degrees of freedom of 1, an F value of 16.63, and a significance level of .66. Table 27 presents this data.

Table 27

Results of Pretest-Posttest ANOVA for BDI

	SS	MS	df	F	p
BDI	375.76	375.76	1	16.63	.000
Interaction	4.51	4.51	1	0.20	.660

Note: SS = Sum of Squares; MS = Mean Square.

N = 25

Thus, a significant difference on the BDI was found from the pretest to the posttest, but no difference between the two groups and no interaction effects were found.

Other Statistical Results

Some other statistical techniques were employed in order to further analyze the data. More specifically, correlations were run among the dependent measures, and between the dependent measures and items from the RBQ. These were done both as an entire sample and for the individual groups. Table 28 displays correlations for Group 1 SWB data versus several single item measures,

such as church attendance (CHATT), personal devotions (DEV), profession of faith (PROFESS), years a Christian (YEARS), and hours of service (SERVH). In all the tables that follow, the SWB and subscales are preceded by an A or B reflecting the pretest or posttest. For example, ARWB refers to the pretest measure of the SWB subscale of RWB.

Table 28

Correlations of SWB and RBQ Items--Group 1

	CHATT	DEV	PROFESS	YEARS	SERVH
ARWB	.47	.45	.68*	.44	.38
AEWB	.03	-.09	.15	.26	.04
ASWB	.32	.24	.51	.41	.27
BRWB	.49	.26	.66*	.09	.31
BEWB	.31	.23	.45	.34	.47
BSWB	.41	.23	.61	.23	.42

Note. * $p < .01$, one-tailed. A = Pretest data; B = Posttest data. CHATT = Church Attendance; DEV = Personal Devotions; PROFESS = Profession of Faith; YEARS = Years a Christian; SERH = Hours of Service. $N = 14$

The correlations of the pretest and posttest SWB scores and RBQ items were relatively low. The only ones marked as significant at a .01 level were the pretest and posttest RWB scores with profession of faith. No other relationships were statistically significant.

Table 29

Correlations of SWB and RBQ Items--Group 2

	CHATT	DEV	PROFESS	YEARS	SERVH
ARWB	.59	.75*	.62	.40	.62
AEWB	-.12	-.27	-.65	.01	-.08
ASWB	.38	.40	.03	.32	.43
BRWB	.41	.84**	.72*	.46	.60
BEWB	-.67	-.42	-.89**	-.02	-.48
BSWB	.16	.81*	.42	.55	.49

Note. * $p < .01$, one-tailed. ** $p < .001$, one-tailed.

A = Pretest data; B = Posttest data.

CHATT = Church Attendance; DEV = Personal Devotions; PROFESS = Profession of Faith; YEARS = Years a Christian; SERH = Hours of Service.

N = 11

Table 29 displays Group 2 data. The correlation of the Group 2 SWB data with the RBQ yielded more statistically significant relationships. A significant relationship was seen between both pretest and posttest RWB scores and personal devotions. The posttest SWB score also showed a strong correlation with personal

devotions. The posttest EWB score correlated significantly and negatively with profession of faith. This correlation is quite high and illustrates an inverse relationship between the posttest score on EWB (one's perception of meaning and purpose in life) and Profession of Faith. The posttest RWB correlated positively with profession of faith.

Table 30 contains the correlational data of the combined samples with the RBQ items.

Table 30

Correlations of SWB and RBQ Items - Combined Groups

	CHATT	DEV	PROFESS	YEARS	SERVH
ARWB	.58*	.61**	.69**	.24	.49*
AEWB	-.054	-.17	-.19	.06	-.02
ASWB	.38	.34	.38	.20	.34
BRWB	.53*	.67**	.74**	.18	.50*
BEWB	-.14	-.05	-.02	.23	.14
BSWB	.28	.45	.50*	.25	.45

Note. * $p < .01$, one-tailed. ** $p < .001$, one-tailed.

A = Pretest data; B = Posttest data.

CHATT = Church Attendance; DEV = Personal Devotions; PROFESS = Profession of Faith; YEARS = Years a Christian; SERH = Hours of Service.

$N = 25$

Consistent with the correlation matrices for the individual groups, the RWB subscale shows the greatest number of significant correlations with the RBQ items. The pretest and posttest both correlated positively with church attendance, personal devotions, profession of faith, and hours of service. The posttest SWB also

significantly correlated with profession of faith. EWB was not related to profession of faith when the two groups are combined.

One correlation in Table 30 warranted further analysis. The correlation between BEWB and Profession of Faith of -.02 is somewhat unlike the results of past research. Therefore, an ANOVA was conducted to ascertain the differences. The levels of Profession of Faith were partitioned to delineate the differences between the levels of the Profession of Faith factor. Unfortunately, the cell sizes were too small to draw any legitimate conclusions from the data. The statistical analysis between the groups is outlined in Table 31. This data reveals a sum of squares of 49.56, a mean square of 16.52, 3 degrees of freedom, an F value of .25, and a significance level of .86.

Table 31

ANOVA Results of Profession of Faith and EWB

	SS	MS	df	F	p
EWB by PROF	49.56	16.52	3	.25	.86

Note. SS = Sum of Squares; MS = Mean Square.

N = 25

Thus, EWB does appear to have a different relationship with Profession of Faith than in previous studies, but the relationship between the two is not significantly different. The high negative correlation of Group 2 (-.89) appears to have pulled the relationship of the two down to where virtually no statistical relationship was found to exist between the combined groups (-.02).

Further analysis was done on the correlation of EWB and profession of faith. A test for non-linearity was performed to ascertain the shape of the relationship of the two variables. The Eta coefficient was used for this analysis for it does not assume a linear relationship between two variables. The results reveal that the eta value was .19 and the square of eta

was .035. Thus, only 4% of the total variance was accounted for by non-linearity. This relationship was not significant for a non-linear relationship.

The tables that follow will display correlations of the clinical scales (SWB, BDI) with their subscales, and with each other. Table 32 presents the data from the combined groups.

Table 32

Correlations of Clinical Scales--Combined Groups

	ARWB	AEWB	ASWB	BRWB	BEWB	BSWB
ARWB	1.00					
AEWB	0.23	1.00				
ASWB	0.83**	0.73**	1.00			
BRWB	.76**	-.08	.48*	1.00		
BEWB	.07	.51*	.34	0.08	1.00	
BSWB	.58*	.24	.55*	0.80**	0.65**	1.00

(table continues)

Table 32--Continued

	ABDI	BBDI
ARWB	0.02	-0.21
AEWB	-0.76**	-0.44 +
ASWB	-0.42 +	-0.40 +
BRWB	0.33	-0.17
BEWB	-0.41 +	-0.68**
BSWB	.000	-0.53*
ABDI	1.00	0.41 +
BBDI	0.41 +	1.00

Note. * $p < .01$, one-tailed. ** $p < .001$, one-tailed.
A = Pretest data; B = Posttest data. + $p < .05$
N = 25

A look at Table 32 reveals that the correlations between the SWB subscales were fairly consistent. SWB correlated significantly with RWB on both pretest and posttest. The SWB pretest correlated significantly with the EWB pretest, but not the posttest. RWB did not significantly correlate with EWB on any of the

trials. All of the SWB scales correlated significantly with themselves from pretest to posttest. The measure of SWB and its subscales from pretest to posttest amounts to test-retest reliability, except that therapy intervened. The correlations for SWB, RWB, and EWB were lower than those reported by Brinkman (1989). The BDI showed a significant negative correlation with EWB on both pretest and posttest and with BSWB on the posttest (BBDI). This result is consistent with the negative correlation found by Campbell (1983). The BDI did not correlate with itself from pretest to posttest, which is to be expected with the intervention of psychotherapy.

Table 33 focuses on the correlations of the clinical scales, but with Group 1 data only.

Table 33

Correlations of Clinical Scales--Group 1

	ARWB	AEWB	ASWB	BRWB	BEWB	BSWB
ARWB	1.00					
AEWB	0.52+	1.00				
ASWB	0.90**	0.84**	1.00			
BRWB	0.45	0.16	0.36	1.00		
BEWB	0.47	0.53+	0.57+	0.78**	1.00	
BSWB	0.49	0.39	0.50+	0.92**	0.96**	1.00

(table continues)

Table 33--Continued

	ABDI	BBDI
ARWB	-.35	-.47
AEWB	-.82**	-.46
ASWB	-.64*	-.53+
BRWB	-.05	-.66+
BEWB	-.25	-.77**
BSWB	-.19	-.76*
ABDI	1.00	0.39
BBDI	0.39	1.00

Note. * $p < .01$, one-tailed. ** $p < .001$, one-tailed. + $p < .05$

A = Pretest data; B = Posttest data.

N = 14

Table 33 contains information regarding the correlations of the clinical scales with Group 1 data. A similar pattern seems to be occurring in the Group 1 data that occurred with the data from the combined groups. In some subscales, the pretest correlated with the pretest score of another subscale and the posttest

score correlated with the posttest score, but a crossover of the pretest correlating with the posttest did not occur. For example, ARWB correlated with ASWB very significantly, but ARWB did not correlate significantly with BSWB. Likewise, AEWB correlated significantly with ASWB, but not with posttest scores. The converse of this was true also. BRWB correlated significantly with BEWB and BSWB, but not with any pretest scores. BEWB also correlated significantly with BSWB.

The BDI scores showed a similar pattern. The BDI pretest (ABDI) correlated with the EWB and SWB pretests (AEWB and ASWB) but not with any posttest scores. Likewise, BBDI correlated with BEWB and BSWB but with no pretest scores.

Table 34 displays correlations of the clinical scales with Group 2 data.

Table 34

Correlations of Clinical Scales--Group 2

	ARWB	AEWB	ASWB	BRWB	BEWB	BSWB
ARWB	1.00					
AEWB	-0.08	1.00				
ASWB	0.72*	0.63+	1.00			
BRWB	.92**	-.26	.54	1.00		
BEWB	-.60+	.64+	-.02	0.60+	1.00	
BSWB	.81*	.01	.65+	0.91**	-0.23	1.00

(table continues)

Table 34--Continued

	ABDI	BBDI
ARWB	.25	-.02
AEWB	-.81*	-.50
ASWB	-.37	-.36
BRWB	.43	.01
BEWB	-.65 +	-.32
BSWB	.20	-.15
ABDI	1.00	0.33
BBDI	0.33	1.00

Note. * $p < .01$, one-tailed. ** $p < .001$, one-tailed.
A = Pretest data; B = Posttest data. + $p < .05$
N = 11

Table 34 contains information regarding the correlations of the clinical scales with the data from Group 2. The pattern in this group was very much unlike that of Group 1. Of the SWB scales the only significant correlations contained RWB as a component. RWB correlated significantly with SWB in both pretest

and posttest and with itself from pretest to posttest. The only other significant correlation was a negative relationship between the EWB pretest and the BDI pretest.

Summary

The results of the statistical analyses supported the hypotheses stated in chapter one. There was a significant increase in SWB scores from pretest to posttest (Hypothesis #1). However, it was also determined that the groups themselves were not significantly different from one another.

The second hypothesis stated that the scores on the BDI would fall following therapy. Again, the results showed that there was a statistically significant decrease in the scores, thus affirming Hypothesis #2. The two groups did not differ on the BDI at pretest or posttest.

Other statistical tests examined the relationships between the clinical scales (SWB, BDI) and the items on the RBQ, and the clinical scales with themselves. In the former, the SWB subscale RWB displayed a greater number of significant correlations than of any of the

other scales. It correlated significantly with church attendance, profession of faith, hours of service, and personal devotions. The overall SWB scale correlated fairly consistently with profession of faith.

Finally, an examination of the correlation matrices of the clinical scales with themselves showed decidedly different results from the two groups, and another result from the data of both groups. However, RWB and SWB were found to fairly consistently correlate with one another, as did EWB and BDI. The RWB scale appeared to correlate more closely with the SWB scale, and the SWB scale appeared to consistently correlate with itself.

Chapter four will examine the implications of the results and directions for future study.

CHAPTER 4

DISCUSSION

The first three chapters of this manuscript sought to establish the basis of the study, provide some groundwork for procedure and psychometric understanding, and, finally, present the statistical results of the study. This final chapter makes interpretations and future suggestions based on the data found in the earlier chapters. The order of presentation will be similar to that of the preceding chapters. First, some comments regarding the makeup of the sample and its general characteristics are warranted. Secondly, the implications of the Spiritual Well-Being (SWB) research will be discussed. Thirdly, the implications of the research on depression through the use of the Beck Depression Inventory (BDI) will be examined. Finally, other research implications from the data obtained from the Religious Belief Questionnaire (RBQ) will be discussed along with some of the correlational data obtained from the

relationships between all of the above-mentioned scales.

Discussion of the Sample

The sample consisted of two groups, Group 1 in Portland, Oregon, and Group 2 in Vancouver, Washington. There were 14 members in Group 1 and 11 in Group 2. These sample sizes are somewhat smaller than predicted in chapter one. Yet the fact that this was a clinical study coupled with a dropout rate due to the necessity of the pretest-posttest design, lowered the sample size. As reported earlier, there were 13 dropouts in both Group 1 and Group 2, 26 all together. The dropouts were not different from those who remained in the study in terms of SWB and BDI pretest scores.

The size of the samples creates some problems for the statistical assumptions of population distributions and sampling parameters. This is mainly due to the need to conduct the study with a pure clinical sample, or a sample that is made up of clients in a real therapy setting, as opposed to college sophomores, a traditionally available sample. The size of the sample does not seem to have radically affected the

statistical analysis of the groups and the significant findings appear to be legitimate from the standpoint of sample size. Many more correlations might be significant with a larger sample; also groups might differ in terms of demographic variables, or might differ on the pretest or posttest measures.

No major differences between the groups are noted on the basic demographic data. Marital status, income level, and educational level all display acceptable variations. Despite the fact that Group 1 reported greater affiliation with religious practices than Group 2, the groups appear to be roughly equivalent.

It is not until one looks at the RBQ item analyses that the demographic differences between the groups are made clearer. According to these behavioral self-reports, Group 1 is the more religiously-oriented sample. The difference between church attendance is one example. In Group 1, 57% of the participants report they attend services at least once per week while 45% of Group 2 participants claim to attend less than once per year. Thus, it appears that the two groups represent a church-attending sample versus a non-church-attending sample.

Likewise, the measure of personal devotions differed. While the Group 1 data was scattered fairly evenly throughout the five choices, 36% of Group 2 participants reported that they had no personal devotions. Therefore, it appears that personal time alone with God on a regular basis was more important to Group 1.

Finally, profession of faith percentages also dramatically differed. Nearly 79% of Group 1 members reported that they "have received Jesus Christ as my personal Savior and Lord and seek to follow the moral and ethical teachings of Christ." The Group 2 data was much more evenly spread out, with few choosing the category that was overwhelmingly endorsed by Group 1.

Despite the observable differences, a *t*-test did not find a significant difference between the groups in the comparison of church attendance and personal devotions.

Yet the data on number of years being a Christian and hours of service (SERVH) appear to cloud this issue. Group 1 had a mean of 9.0 years of being a Christian and a mean of 2.07 hours of service per week. Group 2 had a mean of 18.9 years of being a Christian and 1.46 hours of service per week. This data in

itself appears to be conflictual, as the group which reports the longest tenure as believers (Group 2) served God less. The answer to this puzzle appears to be in the definition of what "being a Christian" means for the two groups. There is an apparent discrepancy between the groups in their perception of Christianity. From the data presented above on profession of faith, Group 1 overwhelmingly understood this to mean a personal relationship with God through Jesus Christ and a desire to follow his moral and ethical teachings. Group 2 did not appear to interpret this question in this manner. On this item the groups differed significantly.

In summary, the two groups appear to be fairly similar, aside from the differences in religious beliefs and involvement. It is apparent that the two groups represent a highly religious group (Group 1) versus a nominally religious group (Group 2). This difference in religious behaviors warrants some discussion as the empirical measures are discussed later.

Implications of Spiritual Well-Being Research

The first hypothesis stated in chapter one proposed that the SWB scores would rise from pretest to posttest. There was a statistically significant difference between these scores for the combined groups. What exactly caused this change cannot be definitively concluded. This study began as a method to test the effectiveness of psychotherapy, and its relationship to the specific measures. It appears that the use of therapy in between the two measurements may have had an impact on the outcome. While the inclusion of psychotherapy does not prove that it is the causal agent, it is indeed one plausible explanation for the difference observed from pretest to posttest.

Earlier in this document the limitations of the research design were outlined. Taking these into account, the one thing that was common to each group, and to each individual in the groups, was the treatment of psychotherapy. These findings appear to support those found in the literature promoting the positive outcome of psychotherapy (Garfield, 1981; Orlinsky & Howard, 1986).

Another limitation is the lack of definition of "therapy" in this study. Orlinsky and Howard (1986) reported that when therapy is undefined in a study, outcomes are weakened. Current literature (Bergin & Lambert, 1978; Orlinsky & Howard, 1986) reported that the average affect size for psychotherapy with relation to outcome measure is about one standard deviation. The results of this study were very close to, or within this range.

Other limitations of this study affected its internal validity. History was a threat to this study due to the lack of random assignment of participants. The short time frame of this study helped to counterbalance this problem. Statistical regression is another possible problem with this study. However, the scores on the pretest from both groups did not represent extreme scores. Differential mortality (dropouts) was a threat to this study. Yet is was shown that the scores of those who chose not to continue were not significantly different from the participants who did. Perhaps the greatest threat in this study was testing. The testing in this study minimized memory and practice effects. The significant

change in scores argues against testing as being an overly confounding variable in this study.

One thing is clear from this study: SWB is sensitive to change factors associated with psychotherapy. Put another way, Spiritual Well-Being appears to be increased by means of psychotherapy. The SWB scale has not been used in an outcome study before and this data represents a new area of research for the scale. The exact mechanism of change is not known. It may be that therapy mimics a religious healing experience, or that close, interpersonal contact with a therapist affects Christian experience. At any rate, the SWB scale appears to be a most useful instrument to measure these religious change factors as they occur in psychotherapy.

Psychotherapy appears to have been a positive experience for the participants in this study. Of the SWB subscales, EWB appears to have undergone the greatest change. This is congruent with Ellison's original model which saw EWB as one's horizontal relationship to others, a primary ingredient in therapy. Thus, as individuals grew in their understanding of themselves and others, the EWB scores rose.

Implications of Depression Research

The second hypothesis dealt with the change in the level of depression reported by the participants. It was hypothesized that the level of depression would fall following therapy. According to the analysis in chapter three, this hypothesis was supported. There was a significant decrease in the level of depression reported by the groups from pretest to posttest. However, the two groups did not significantly differ from one another at either the pretest or posttest. Thus, the respective pretests and posttests did not differ from each other, but the posttest was different from the pretest, affirming the above-stated hypothesis.

This is consistent with the research done by Beck (1967) regarding the successful treatment of depression with psychotherapy. The experience of therapy appears to have a positive effect on alleviating depression. Perhaps it is a cathartic effect of sharing information with someone else, the client-therapist relationship that is formed, or the change in cognitive structure, as Beck (1967) proposed. This is also consistent with the findings of Burkhart, Rogers, McDonald, McGrath,

and Arnoscht (1984) with an outpatient population and Strober, Green, and Carlson (1981) with an inpatient adolescent population. Like the SWB research, the design of the study prohibits drawing any definitive conclusions about the effectiveness of psychotherapy with depression, yet the importance of therapy, especially coupled with prior research (Beck, 1967), cannot be overlooked. Psychotherapy appears to have been a major factor in the amelioration of depressive symptoms in this sample. As with SWB, the change in BDI scores were in the vicinity of one standard deviation.

The BDI correlated negatively with SWB, as one would expect. This is consistent with Campbell's (1983) research. There appears to be an inverse relationship between the two scales.

Implications of Other Research

Other statistical data was obtained through examining the relationship of the clinical scales and the RBQ items. This material was generally in the form of correlational data. The RBQ items consisted of church attendance (CHATT), personal devotions (DEV),

profession of faith (PROFESS), years a Christian (YEARS), and hours of service (SERVH).

The correlations of the SWB scales with the RBQ items for the combined groups yielded fairly predictable results. The RWB subscale correlated most frequently on both pretest and posttest with the RBQ items. Significant correlations were noted on both pretest and posttest with church attendance, personal devotions, profession of faith, and hours of service.

A non-significant correlation with years as a Christian is worth noting. It would appear that one's religious well-being is not related to time spent in religious service. However, Group 2, which showed lower religious participation also claimed to be Christians for a longer time. Thus this data may simply reflect differences in what it means to be a Christian for the two groups.

Another correlation worthy of note, and further analysis, was the -.02 correlation between posttest EWB and profession of faith. This data is contradictory to that reported previously (Brinkman, 1989; Bufford, 1984). Further analysis did not find a significant relationship between them. The magnitude of the relationship appears to have been skewed by the strong

negative correlation of Group 2 (-.89), whose profession of faith report was greatly different from Group 1, thus resulting in an insignificant correlation. The example of the Group 2 data (-.89) consisting of a low Profession of Faith score and a high EWB score may be a characteristic of non-religious samples; this finding may be of further interest. It suggests that persons with no religious faith may function better on EWB than those with nominal faith.

The correlations of the clinical scales with one another for the combined groups reveal that the pretest and posttest results were quite different. Only the correlation of ARWB with BRWB was consistent. All of the other correlations were lower than reported test-retest reliabilities. This appears to be due to the changes in the scores from the pretest to the posttest which made the scales appear much different from pretest to posttest.

Some other questions from the data can be raised. Group 1, the more religious of the two groups, displayed a much higher score on the BDI pretest than Group 2. They also had a higher score on SWB upon pretest than Group 2, yet the change in the two groups was not significantly different; it is unclear whether

the small sample size obscures a real difference. From this data one would wonder if more religiously-oriented people tend to wait longer for treatment, thus being more depressed at the outset, due to their religious ideation. Perhaps they try to cope longer by utilizing spiritual help, or guidance, yet remain depressed all the same.

A question that has run throughout the history of psychology is the relationship between belief and behavior. Traditionally, there has been little correlation between the two, and this also has been reported in the religious domain (Davis et al., 1987). Looking at Group 1 data this trend appears to be true here as well. The correlations of the clinical scales and RBQ items display significant correlations between RWB pretest and posttest and profession of faith. Yet, for a religiously-oriented sample, no other significant correlations are noted. The other RBQ items deal with religious behaviors, while profession of faith would be classified as an attitude, or belief. It appears from this data that the discrepancy between beliefs and behaviors in the religious domain remains intact. This group, while reporting religiosity, does not fully demonstrate it in its behaviors.

Recommendations for Further Study

Based on the data obtained from this study, the following recommendations are made for encouraging future research:

1. This study needs to be replicated with a larger sample. The population of outpatient adults is still a viable one, yet the effects reported here need to be checked. The larger sample would guard against statistical flaws that are inherent with smaller sampling distributions.

2. This type of study, utilizing the SWB especially, needs to be replicated in a pretest-posttest design with a variety of populations to assess generality. An inpatient study would be interesting, as well as populations that deal with special problems and age ranges.

3. The interaction/discrepancy of the religious belief vs. behavior issue warrants further study. Refinement of present scales along with the development of new ones should focus on this needed area. This type of data is quite important to church leaders and theologians, as well as psychologists and researchers.

4. The negative correlation between EWB and profession of faith is something to examined further. A distinction was apparently made between those on either end of Christian faith (belief and non-belief) and nominal believers. Those who report extreme belief or extreme non-faith appear to function better on EWB than nominal believers. This is in need of more study.

Summary

The hypotheses of increased SWB and decreased BDI from pretest to posttest were supported in this quasi-experimental study of the effects of psychotherapy. Changes were about one standard deviation on both scales. It is assumed that the intervention of psychotherapy had a great deal to do with the significant changes. Although firm causal conclusions cannot be drawn, psychotherapy appears to increase the client's sense of spiritual well-being and decrease his/her level of subjective depression. Discrepancies were found between beliefs and behaviors, which is consistent with prior research. Due to the groundbreaking nature of this study in terms of using SWB in an outcome study, this work needs to be

replicated either directly or indirectly, and with a variety of populations to establish generality.

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APPENDICES

Appendix A

Spiritual Well-Being Scale

SWB

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

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

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

Appendix B

Beck Depression Inventory

BDI

Date: _____

Name: _____ Marital Status: _____ Age: _____ Sex: _____

Occupation: _____ Education: _____

This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which **best** describes the way you have been feeling the **past week, including today.** If several statements within a group seem to apply equally well, circle each one. **Be sure to read all the statements in each group before making your choice.**

1	0	I do not feel sad.
	1	I feel sad.
	2	I am sad all the time and I can't snap out of it.
	3	I am so sad or unhappy that I can't stand it.
2	0	I am not particularly discouraged about the future.
	1	I feel discouraged about the future.
	2	I feel I have nothing to look forward to.
	3	I feel that the future is hopeless and that things cannot improve.
3	0	I do not feel like a failure.
	1	I feel I have failed more than the average person.
	2	As I look back on my life, all I can see is a lot of failures.
	3	I feel I am a complete failure as a person.
4	0	I get as much satisfaction out of things as I used to.
	1	I don't enjoy things the way I used to.
	2	I don't get real satisfaction out of anything anymore.
	3	I am dissatisfied or bored with everything.
5	0	I don't feel particularly guilty.
	1	I feel guilty a good part of the time.
	2	I feel quite guilty most of the time.
	3	I feel guilty all of the time.
6	0	I don't feel I am being punished.
	1	I feel I may be punished.
	2	I expect to be punished.
	3	I feel I am being punished.
7	0	I don't feel disappointed in myself.
	1	I am disappointed in myself.
	2	I am disgusted with myself.
	3	I hate myself.
8	0	I don't feel I am any worse than anybody else.
	1	I am critical of myself for my weaknesses or mistakes.
	2	I blame myself all the time for my faults.
	3	I blame myself for everything bad that happens.
9	0	I don't have any thoughts of killing myself.
	1	I have thoughts of killing myself, but I would not carry them out.
	2	I would like to kill myself.
	3	I would kill myself if I had the chance.
10	0	I don't cry any more than usual.
	1	I cry more now than I used to.
	2	I cry all the time now.
	3	I used to be able to cry, but now I can't cry even though I want to.
11	0	I am no more irritated now than I ever am.
	1	I get annoyed or irritated more easily than I used to.
	2	I feel irritated all the time now.
	3	I don't get irritated at all by the things that used to irritate me.
12	0	I have not lost interest in other people.
	1	I am less interested in other people than I used to be.
	2	I have lost most of my interest in other people.
	3	I have lost all of my interest in other people.
13	0	I make decisions about as well as I ever could.
	1	I put off making decisions more than I used to.
	2	I have greater difficulty in making decisions than before.
	3	I can't make decisions at all anymore.

_____ Subtotal Page 1 CONTINUED ON BACK

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9-018359

14	0	I don't feel I look any worse than I used to.
	1	I am worried that I am looking old or unattractive.
	2	I feel that there are permanent changes in my appearance that make me look unattractive.
	3	I believe that I look ugly.
15	0	I can work about as well as before.
	1	It takes an extra effort to get started at doing something.
	2	I have to push myself very hard to do anything.
	3	I can't do any work at all.
16	0	I can sleep as well as usual.
	1	I don't sleep as well as I used to.
	2	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
	3	I wake up several hours earlier than I used to and cannot get back to sleep.
17	0	I don't get more tired than usual.
	1	I get tired more easily than I used to.
	2	I get tired from doing almost anything.
	3	I am too tired to do anything.
18	0	My appetite is no worse than usual.
	1	My appetite is not as good as it used to be.
	2	My appetite is much worse now.
	3	I have no appetite at all anymore.
19	0	I haven't lost much weight, if any, lately.
	1	I have lost more than 5 pounds.
	2	I have lost more than 10 pounds.
	3	I have lost more than 15 pounds.
		I am purposely trying to lose weight by eating less. Yes _____ No _____
20	0	I am no more worried about my health than usual.
	1	I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
	2	I am very worried about physical problems and it's hard to think of much else.
	3	I am so worried about my physical problems that I cannot think about anything else.
21	0	I have not noticed any recent change in my interest in sex.
	1	I am less interested in sex than I used to be.
	2	I am much less interested in sex now.
	3	I have lost interest in sex completely.

_____ Subtotal Page 2

_____ Subtotal Page 1

_____ Total Score

Appendix C

Pretest Cover Letter - Group 2

The Counseling Center of Vancouver

521 East 33rd St.
Vancouver, WA 98663
206-694-7046

Dear Client:

As a part of your therapy experience, we would like to ask your participation in filling out the enclosed materials. Gathering this data will allow us to gain valuable information about you, and will enable us to better help you. Please be aware that involvement in this is purely voluntary and will in no way affect your treatment.

The information you give to us will be kept strictly confidential. No names will be placed on this packet of information. Please take the time (approximately 10-12 minutes) to fill out the materials and return them to your therapist or receptionist.

Your response to this material is critical and valuable. We greatly appreciate your cooperation.

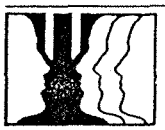
Sincerely,

Wilson Renfroe
Principal Investigator

Jeffery Brockway
Counseling Center Director

Appendix D

Pretest Cover Letter - Group 1



Western Psychological and Counseling Service, P.C.

6040 S.E. Belmont St. Portland, Oregon 97215 (503) 230-7700

Dear Client:

We would like to ask your participation in filling out the enclosed materials as part of a clinic research project. Gathering this data will allow us to gain valuable information that will enable us to render better service to our clients. Involvement is purely voluntary. Results of the questionnaires will be provided to your counselor for use in the counseling process.

The information you give to us will be kept strictly confidential and anonymous. Please take the time (approximately 10-12 minutes) to fill out the materials and return them to the receptionist.

Your response to this material is indeed valuable. We greatly appreciate your cooperation in helping with this research. Thank you.

Sincerely,

Wilson Renfroe, M.A.

Appendix E

Demographic Questionnaire

Today's Date _____

Q1 What is your age? _____ YEARS

Q2 Your gender: (circle number of your answer)

1 MALE
2 FEMALE

Q3 Your present marital status: (circle number)

1 SINGLE (NEVER MARRIED)
2 FIRST MARRIAGE
3 SEPARATED OR DIVORCED
4 REMARRIED
5 LIVING TOGETHER
6 OTHER (PLEASE SPECIFY)_____

Q4 What was your approximate total family income from all sources, before taxes, in 1988? (circle number)

1 LESS THAN $10,000
2 $10,001 TO $20,000
3 $20,001 TO $30,000
4 $30,001 TO $40,000
5 $40,001 TO $50,000
6 OVER $50,000

Q5 What is the highest level of education that you have completed? (circle number)

1 DID NOT FINISH HIGH SCHOOL
2 COMPLETED HIGH SCHOOL (OR G.E.D.)
3 ATTENDED OR COMPLETED TRADE OR BUSINESS SCHOOL
4 SOME COLLEGE
5 COMPLETED COLLEGE
6 SOME GRADUATE WORK
7 A GRADUATE DEGREE

Q6 Which of the following best describes your racial or ethnic background? (circle number)

1 BLACK (NEGRO)
2 CHICANO (MEXICAN AMERICAN)
3 NATIVE AMERICAN (AMERICAN INDIAN)
4 ORIENTAL
5 WHITE (CAUCASIAN)
6 OTHER (PLEASE SPECIFY) _____

Q7 Which religion, or faith, do you most closely identify with? (circle number)

1 CATHOLIC
2 JEWISH
3 PROTESTANT (PLEASE SPECIFY) _____
4 OTHER (PLEASE SPECIFY) _____
5 I DON'T IDENTIFY WITH ANY ORGANIZED RELIGION

Appendix F

Posttest Cover Letter - Group 2

The Counseling Center of Vancouver

521 East 33rd St.
Vancouver, WA 98663
206-694-7046

Dear Client:

Several months ago you agreed to participate in a clinic research project. Please fill out the enclosed materials which will complete your involvement in the project. Gathering this information will allow us to continue to better serve our clients. Involvement is strictly voluntary.

The information you give to us will be kept strictly confidential and anonymous. Please take to time (approximately 10 minutes) to fill out the materials and return them to the receptionist. For those of you who have completed treatment we would ask that you fill out the materials and return them in the stamped envelope provided.

Your response to this material is very valuable. We greatly appreciate your cooperation with this research. Thank you.

Sincerely,

Wilson Renfroe, M.A.

Appendix G

Posttest Cover Letter - Group 1

Western Psychological and Counseling Service, P.C.

6040 S.E. Belmont St. Portland, Oregon 97215 (503) 230-7700

Dear Client:

Several months ago you agreed to participate in a clinic research project. Please fill out the enclosed materials which will complete your involvement in the project. Gathering this information will allow us to continue to better serve our clients. Involvement is strictly voluntary.

The information you give to us will be kept strictly confidential and anonymous. Please take to time (approximately 10 minutes) to fill out the materials and return them to the receptionist. For those of you who have completed treatment we would ask that you fill out the materials and return them in the stamped envelope provided.

Your response to this material is very valuable. We greatly appreciate your cooperation with this research. Thank you.

Sincerely,

Wilson Renfroe, M.A.

Appendix H

Religious Belief Questionnaire

RBQ

For each of the following statements circle the number, check the correct blank, or fill in the space with a number as it describes you personal experience:

Q1: How frequently have you attended church during the past year?

_____ Less than once per year
_____ Once or twice a year
_____ Between 3 & 12 times a year
_____ Between once a month & once a week
_____ Weekly
_____ More than once per week

Q2: In the past year how often have you had personal religious devotions (such as personal Bible study, prayer and meditation)?

_____ Not at all
_____ Less than once per week
_____ Weekly
_____ 1-3 times a week
_____ 4-7 times a week
_____ More than once a day

Q3: Do you profess to be a Christian? (Mark the number corresonding to the response which best describes you).

1 - No
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.
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.

Q4: For how many years have you been a professing Christian (If not a professing Christian, enter 0)?

_____ Number of years
_____ Months if less than one year

Q5: How many hours per week have you spent (averaged over the last year) in some form of church ministry or service (for example, teaching, serving on elder or deacon boards, visitation, personal evangelism, counseling, discipleship, child care, preparation of food, providing practical helps to others, and the like)?

_____ Hours per week

Q6: How important are your religious beliefs and practices?

No importance; Have no religion 1 2 3 4 5 6 7 Extremely important; religious faith is the center of my life

Appendix I

Instructions and Master List

Western Psychological and Counseling Services

Instructions for Administration of Questionnaires

1. This master list needs to be kept in a safe, accessible place. It should be available for therapists to place names on, but not open to the general public.

2. Those who should be "eligible" for the study are people who have depression as a factor in their symptoms. Participants are asked, not required, to take part. They should be persons WHO ARE BEGINNING IN THERAPY OR WHO HAVE BEEN IN THERAPY FOR NO MORE THAN TWO WEEKS. Please place their name and the date of testing on this sheet in the next available spot. The number on the sheet should correspond with the number in the upper right hand corner of the questionnaire itself. THE "a" COLUMN IS FOR THE PRE-TEST AND THE "b" COLUMN WILL BE USED FOR THE POST-TEST. The post-tests will be administered 90 days after the pre-test. If the client terminates therapy before that time, administer the post-test anyway.

3. The testing time should be no more that 10-12 minutes and could be done in session or in the waiting room.

4. When the tests are completed, place them in the file labeled "completed pre-test surveys" and they will be picked up.

PRE-TEST			POST-TEST		
	Name	Date		Name	Date
Example:	John Doe	3/10/89		John Doe	6/10/89
101a			101b		
102a			102b		
103a			103b		
104a			104b		
105a			105b		
106a			106b		
107a			107b		
108a			108b		
109a			109b		
110a			110b		
111a			111b		
112a			112b		
113a			113b		
114a			114b		
115a			115b		
116a			116b		
117a			117b		
118a			118b		
119a			119b		
120a			120b		
121a			121b		
122a			122b		
123a			123b		
124a			124b		
125a			125b		
126a			126b		
127a			127b		

128a	128b
129a	129b
130a	130b
131a	131b
132a	132b
133a	133b
134a	134b
135a	135b
136a	136b
137a	137b
138a	138b
139a	139b
140a	140b
141a	141b
142a	142b
143a	143b
144a	144b
145a	145b
146a	146b
147a	147b
148a	148b
149a	149b
150a	150b

Counseling Center of Vancouver

Instructions for Administration of Questionnaires

1. This master list needs to be kept in a safe, accessible place. It should be available for therapists to place names on, but not open to the general public.

2. Those who should be "eligible" for the study are people who have depression as a factor in their symptoms. Participants are asked, not required, to take part. They should be persons WHO ARE BEGINNING IN THERAPY OR WHO HAVE BEEN IN THERAPY FOR NO MORE THAN TWO WEEKS. Please place their name and the date of testing on this sheet in the next available spot. The number on the sheet should correspond with the number in the upper right hand corner of the questionnaire itself. THE "a" COLUMN IS FOR THE PRE-TEST AND THE "b" COLUMN WILL BE USED FOR THE POST-TEST. The post-tests will be administered 90 days after the pre-test. If the client terminates therapy before that time, administer the post-test anyway.

3. The testing time should be no more that 10-12 minutes and could be done in session or in the waiting room.

4. When the tests are completed, place them in the file labeled "completed pre-test surveys" and they will be picked up.

PRE-TEST		POST-TEST	
Name	Date	Name	Date
Example: John Doe	3/10/89	John Doe	6/10/89
201a		201b	
202a		202b	
203a		203b	
204a		204b	
205a		205b	
206a		206b	
207a		207b	
208a		208b	
209a		209b	
210a		210b	
211a		211b	
212a		212b	
213a		213b	
214a		214b	
215a		215b	
216a		216b	
217a		217b	
218a		218b	
219a		219b	
220a		220b	
221a		221b	
222a		222b	
223a		223b	
224a		224b	
225a		225b	
226a		226b	
227a		227b	

228a	228b
229a	229b
230a	230b
231a	231b
232a	232b
233a	233b
234a	234b
235a	235b
236a	236b
237a	237b
238a	238b
239a	239b
240a	240b
241a	241b
242a	242b
243a	243b
244a	244b
245a	245b
246a	246b
247a	247b
248a	248b
249a	249b
250a	250b

Appendix J

Raw Data

Explanation of Raw Data

Columns 1-3:	Identification Number
Columns 5-6:	Age in years
Column 7:	Gender
Column 8:	Marital Status
Column 9:	Income Level
Column 10:	Educational Level
Column 11:	Ethnic Background
Columns 12-13:	Religious Affiliation
Columns 15-34:	Pretest Spiritual Well-Being Scale
Columns 36-56:	Pretest Beck Depression Inventory
Columns 57-64:	Religious Belief Questionniare
Columns 66-85:	Posttest SWB
Columns 87-107:	Posttest BDI
Column 109:	Group Membership (1 or 2)

001 272226508 25336355253432222421 1111111111111111110010
65410047 66126511611661151611 0000000100000000000000 1
002 162161511 56116613421643343611 10010031101000101 1000
62414016 66116112621661261611 0000000093000001100009 1
003 202314513 14124314441444131424 1111101103112120111102
66415056 66136453633463353521 1011101203112 1
004 281244509 66116324641353142611 11201300011000011 1010
66408047 66116325531353133621 10000000011010111 0010 1
005 342127505 324293449445359366 91 01110011001000101 2002
11100001 3442 345 5 5 2 5 6 3 1111001000112011100 01 1
006 262232510 41156135441544323433 1111111201122012112 12
544 006 66136122641554131611 1010111100000010000 10 1
007 362234407 56136433531552241521 0000000000300000000002
45415007 55354535453549323413 1020101201000000000000 1
008 362342505 54116333541643233631 1103001103102021000 00
31200005 64216252631422213631 1103001103112021200 00 1
009 282255507 66136213631453141411 1011101100110100000 01
45405057 66116212621662151611 0010100100110100000 01 1
010 222324501 542252222252522422423 1111101211112113110 01
35408015 552262225225522225 22 1011101100100112000 11 1
011 352452508 65116513611651131611 0001001100000010101 00
54402017 66116611611661131611 0000000000000000000000 1
012 312324510 64146115651465342433 2123222000000021031 10
64409027 66136214641464441433 1120111000210011000 10 1
013 411334510 66116314641663161611 1011121100000000111 10
54430057 16116612621661341611 0000000000000000000000 1
014 452312503 23252155263524534631 1111001202122020002 00
42201015 52345136463435623623 1111002201102011020 00 1
050 421434507 66116512621662151611 0000000000000000010000
45243036 66116512651662142611 0000000000000000000000 2
051 441232501 562222235355425556 52 0000000100000000102 01
11230004 262255335235522535 32 0000000000000000000 201 2
052 292444503 64136414631463343411 1011101111111011100 00
54420026 64136413631463341411 0010001100100101001 00 2
053 302457505 16919661619611656661 0000101000000000000000
11100002 26912651515621665651 0000100100000000000000 2
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Appendix K

Vita

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Educational Background

Psy.D	(Doctor of Psychology in Clinical Psychology Candidate) George Fox College, Newberg, Oregon. Anticipated graduation: September, 15, 1990
Intern	1989-1990, University Park Hospital, Tyler, Texas 1989-1990, Charles T. Fries, Ed.D, Tyler, Texas, Psychologist in private practice
Practicum	1/88 to 4/89, Minnehaha Community Church, Vancouver, Washington (approximately 750 hours)
M.A.	1988, Western Conservative Baptist Seminary, Portland, Oregon, Clinical Psychology
Th.M.	1984, Dallas Theological Seminary, Dallas, Texas, Pastoral Ministries
B.A.	1980, Austin College, Sherman, Texas

Professional Experience in Academic Settings

1988-1989	Graduate Fellow, Western Conservative Baptist Seminary, Portland, Oregon, Department of Counseling

Employment

Present	Staff Therapist, University Park Hospital, Tyler, Texas Therapist, Charles T. Fries, Ed.D., P.C., Tyler, Texas
1987-1989	Staff Counselor, Minnehaha Community Church, Vancouver, Washington
1987-1989	Inpatient Counselor, Christian Therapy Program, Woodland Park Hospital, Portland, Oregon
1986-1987	Mental Health Specialist, Cedar Hills Hospital, Portland, Oregon

Dissertation Title

The Effect of Psychotherapy on Spiritual Well-Being and Depression in Outpatient Adults