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Dose-Effect Relations in Simulated Psychotherapy as Measured by the Outcome Questionnaire-45.11

Brian J. Whitehall

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Brian J. Whitehall

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George Fox University

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Signatures:

Rodger Bufford, Ph.D.

Vice President for Academic Affairs

Date: March 21, 2001

Members:

Leonardo Marmol, Ph.D.

Wayne Adams, Ph.D.

Date: 20 March, 2001

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Brian J. Whitehall

Graduate Student of Clinical Psychology at

George Fox University

Newberg, OR

Abstract

Outcome assessment has been used to evaluate the length of treatment needed and has been disputed for some time. Changes within both mental health and health insurance companies have contributed to a trend toward time-limited therapy and the optimal number of sessions has become a central issue. This study sought to extend research in the area of treatment outcome. Specifically, it examined the efficacy of psychotherapy after five and ten sessions on the subjective well-being of university students.

Three hypotheses were tested in this study: (1) Subjective Well-Being scores (as measured by the Outcome Questionnaire-45.11) for the treatment group will be significantly higher than those of the control group on the mid and post-tests. (2) Subjective Well-Being scores will be higher for the treatment group subjects tested after five, and ten sessions of individual psychotherapy than the scores of the same subjects on the pretest. (3) Subjective Well-Being

scores will be higher for the treatment group subjects tested after ten sessions than the scores of the same subjects after five sessions. The results did not support the three hypotheses as clinically significant change was not demonstrated.

When time was compared to group and gender, there were interaction effects. There was a quadratic effect on the Interpersonal Relationships scale and a quadratic effect was found when time, group and sex were compared on the Social Role Performance scale. Chi-square analyses were performed and the Interpersonal Relationships scale, $F(1,19)=3.446$; $p=.079$, approached significance. Although there were no significant group effects found when the two treatment groups were compared, there were three quadratic effects and interaction effects.

Future dose-effect studies may benefit from taking their treatment group from a clinical sample. Using a more diverse sample would also be a better representative of the greater population. In addition, it is proposed that dose-effect studies examine the effects of more or less therapy for a particular problem and avoid seeking to show a particular treatment duration as optimal.

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I am grateful to my wife, Tiffany for her patience through this endeavor, her help, and her loyalty. Thanks to my family for their continuous support and love. Thanks to the friends I have been able to make along this journey and thank God this is over.

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Chapter 1

Introduction

Outcome studies attempt to analyze the effects of psychotherapy and its potential for alleviating different types of mental problems (Lindfors, et al., 1995). Outcome assessment has been practiced since the 1930's (Lambert, Okiishi, Finch, & Johnson, 1998) and has changed with the practice of psychology. Conte (1997) wrote

> Psychotherapy outcome research has evolved substantially, both conceptually and methodologically, since Eysenck's 1952 controversial evaluation of its effectiveness. Since the 1950's and early '60s, we have moved from the relatively unsophisticated question of whether psychotherapy of a nonspecific nature and applied to heterogeneous patient samples can effectively produce personality change to more complex questions. (p. 445)

Some of these more complex questions have led to studies finding that psychotherapy can lead to a decrease in utilization of medical care following psychotherapy (Gabbard, Lazar, Hornberger, & Spiegel, 1997; Mumford, Schlesinger, Glass, Patrick, & Cuerdon, 1984). Outcome studies meet many needs. Mirin and Namerow (1991) affirmed that "Treatment outcome studies, although difficult to design and carry out, are essential in demonstrating the efficacy of psychiatric treatment, rationalizing clinical decision making, and encouraging public support for the availability of appropriate, cost-effective care for the mentally ill" (p. 1007).

Outcome assessment has been used to evaluate the length of treatment needed. This use of outcome assessment has been disputed for some time. Strassberg, Anchor, Cunningham and

Elkins (1977) wrote "Mental health practitioners are increasingly under fire by consumer advocates and others to demonstrate the value of their services. A central issue in this debate concerns the optimal length (many vs. few sessions) of counseling" (p. 477). The issue of treatment duration became more than a debate when the rising healthcare costs of the early 1980's led to the era of accountability and managed mental health care systems (Wells, Burlingame, Lambert, Hoag, & Hope, 1996).

At the same time, changes within both mental health and health insurance companies have contributed to a trend toward time-limited therapy which seems to have begun in the early 80's (Gyorky, Royalty, & Johnson, 1994). In 1992 the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) moved to the Continuous Quality Improvement model which required that ongoing monitoring of patient care and improvement be added to the existing outcome assessment procedures (Burlingame, Lambert, Reisinger, Neff, & Mosier, 1995). This model has helped some practitioners to increase their effectiveness.

More recently, the mental health field's understanding has gained depth concerning the impact of psychotherapy on individuals. Gabbard et al., (1997) wrote

> In the last decade or so, the emphasis in the mental health field has shifted away from cost offset to a more complex understanding of the economic impact of psychosocial interventions. One factor in this shift has been the recognition that the concept of cost offset tends to ignore the effects of psychiatric disorder on the quality and quantity of life. Inherent in the concept of cost offset is the notion that treating mental illnesses is only beneficial because it reduces overall costs of medical care. (p. 147-148)

Since that time, treatment outcome has come to mean different things for different groups. Lowry and Ross (1997) wrote "discrepancies may also be attributable to differences in outcome

criteria used by therapists (i.e., clinically significant change), third-party payers (i.e., medically necessary), and clients (i.e., symptom relief)" (p. 276). Despite this, everyone seems to agree that the need for accountability, and the practical constraints of applied science drive current outcome assessment efforts (Lambert et al., 1998).

Treatment and Cost Management

Practitioners have been frustrated by this trend and the increasing emphasis on cost management. Psychologists have complained of a decline in emphasis on quality health care and a loss of decision making capacity. These changes have now affected psychotherapists working in most settings. Schaeffer (1998) wrote "Finding effective and economical interventions in brief therapy has become a challenge for therapists of all orientations needing to make noticeable progress within a short period and to achieve positive, measurable outcomes" (p.14).

Some psychologists have proposed that the over-emphasis on cost containment be stopped and clinical decision making be returned to the psychologist. Mirin and Namerow (1991) wrote "The mental health industry must now assume responsibility for developing its own cost-containment strategies, lest others in the executive and legislative branches of government, as well as in the private sector, develop them independently" (p. 1007). In fact, these limitations are being imposed already. A limit of 10-20 outpatient mental health visits per year is standard and enforced by many managed care organizations and state/federal agencies of mental health care (Lowry & Ross, 1997).

Wells et al. (1996) reminds readers that for most practitioners, tracking psychotherapy outcomes is becoming a requirement, not an option. This requirement not only stresses the efficacy of treatment but the importance of documentation of treatment decisions based on treatment outcome studies. Burlingame et al. (1995) wrote "it is essential for health care

providers to document clinical results (endpoint assessment) and employ procedures for identifying and correcting problematic components of treatment through continuous ongoing monitoring of patient care (i.e., continuous quality improvement [CQI])" (pp. 226-227). These procedures have already been demanded for some time. Lambert and Brown (1996) wrote

> The wholesale purchasers of health care services (employers, insurance companies, government) are increasingly demanding that measurement of clinical outcomes be incorporated into all aspects of health care delivery, and that treatment decisions are made based on sound empirical evidence for efficacy and value rather than financial considerations alone. (p. 176)

Regardless of new requirements to track patient progress in psychotherapy, there is a growing realization among practitioners of the need to set themselves apart as professionals. In this regard, Lambert, Ogles, and Masters (1992) wrote "Whereas the charlatan relies on selected case testimonials to justify using marginal treatments, the professional counselor understands his or her ethical obligation to provide objective evaluation of the quality of service" (p. 527). Treatment decisions are likely to be most appropriate when they originate with the service provider. Lowry and Ross (1997) stated "psychologists are guided by professional ethics to provide a necessary and sufficient amount of psychotherapeutic intervention to adequately treat a client's problem(s)" (p. 272). The goal of improvement of services can only aid in the process of ensuring future practitioners' management of their care. Increased quality of care, based on effective interventions, will allow therapists to regulate treatment conditions better and avoid third-party payment struggles. Johnson and Shaha (1996) wrote

> Developing quality improvement models allows professional psychology to undo the disastrous mistakes of the past of opposing managed care (psychology's opposition to

> managed care only marginalized the profession and certainly did not contribute to any resolution of the problems with managed care). Continuous Quality Improvement will promote effective treatment options based on results of treatment. (p. 227)

Low-cost systematic measurement of treatment effects by the practitioner will establish a basis for treatment decisions made by him or her.

In addition to the above, managed care has put brief intervention models at the forefront of treatment modalities. This emphasis on cost-effective therapy is not all bad, however, and can be used to provide prescriptive treatments that bring lasting change. Even psychologists agree that there are some problems that can be effectively treated in relatively few psychotherapy sessions. Lowry and Ross (1997) wrote

> The findings suggest that situational (e.g., work difficulties, adjustment disorder) or symptom-based (e.g., sleep problems, simple phobia) problems are expected to require significantly less psychotherapeutic intervention than relational problems or personality problems. Moreover, disorders typically viewed as biologically based (e.g., schizophrenia) were considered as requiring the largest number of psychotherapy sessions or were considered untreatable by psychotherapy alone. (p. 276)

Some clients feel that less counseling is preferable and sufficient (Warner, 1996). In such cases, service providers can limit the number of sessions needed to reduce symptoms and ensure gains. Salzer, Bickman, and Lambert (1999) affirmed that "the relationship between number of outpatient psychotherapy sessions and clinical outcome has become a focus of attention" (p.235). This kind of approach is crucial if future therapists want to market their skills effectively. Going beyond "good-enough therapy," this type of patient-service considers the cost of treatment and is more responsible for it.

Client attrition, dosage limits, and average length of treatment have all been considered when making treatment decisions. Phillips (1988) wrote "Today, more and more psychotherapists think in terms of planned short-term treatment--whether using a 6-session (the most common), 16-session, or 26-session mode" (p. 669). Treatment duration decisions have also been influenced by client diagnosis, therapist theoretical orientation, therapist age, experience, and gender (Lowry & Ross, 1997). Furthermore, since many patients terminate so early in treatment, service providers need to weigh carefully the amount of psychotherapy they recommend.

The concern of many practitioners is whether or not brief therapy will be intentionalized (Steenbarger, 1992). The number of sessions prescribed must always be in the best interests of the patients and must consider the patients' willingness and commitment to treatment. This can become quite difficult with certain disorders. Franko and Erb (1998) wrote

> The challenge of treating patients with eating disorders, together with the increasing intrusion of third-party payers into the healthcare system presents a dual dilemma for mental health clinicians. Although there are potent treatments for patients with anorexia nervosa and bulimia nervosa, most therapies require substantially more than a brief number of sessions in order to be effective. (p. 43)

Patients' mental health needs, symptom severity, risk, as well as financial means to pay for treatment are a few of the factors that need careful consideration when treatment recommendations are made. Often, clients are highly aware of their problems and are ready to form an alliance with practitioners (Steenbarger, 1994). These clients can collaborate with their therapists to make some decisions about the duration of treatment.

Service providers also need to inform their clients about treatment alternatives and expected positive and negative outcomes, as well as recommend what is the best course of

treatment for them. A study done by Consumer Reports showed that clients who stayed in therapy more than six months reported the most progress and those who began therapy with more serious problems reported the best outcomes after staying in therapy for two years (Gurin, 1995). Seligman (1995) wrote about the results of the Consumer Reports study, "Long-term therapy produced more improvement than short-term therapy. This result was very robust, and held up over all statistical models" (p. 968). As symptom severity increases, clinicians and third party payers must be open to more treatment. As has been stated above, ongoing assessment of treatment outcomes can help practitioners increase their effectiveness and maintain control over treatment decisions. Lambert and Brown (1996) wrote

> There is no doubt that standardized monitoring of patient progress will further demonstrate the value of psychotherapy and lead to greater understanding of just how and when it is most and least effective. We look forward to the time when clinicians routinely and systematically gather and share information about the effects of their work, blending the best of the art and science of psychotherapy. (p. 177)

Improvement over Various Durations

Other studies have looked at the percentages of patients improved for various amounts of psychotherapy. Howard, Kopta, Krause, and Orlinsky, (1986) wrote

> By eight sessions, 48% to 58% of patients would be expected to have measurably improved. About 75% of patients should have shown measurable improvement by the end of six months of once-weekly psychotherapy (26 sessions) and about 85% by the end of a year of treatment. (p. 162)

One study of the benefits of differing doses of psychotherapy on college students found that 11% of the college students reported improvement on interpersonal relations after 2 to 5 sessions, this

increased, however, to 38% for those completing 11 to 20 sessions (Weitz et al., 1975). Furthermore, the length of therapy has been found to be a significant predictor of improvement, particularly for the less severe mental and emotional conditions (Knesper, Belcher, & Cross, 1987).

Another study of clients seen at a college counseling center found a strong linear relationship between the proportion of clients improved and treatment length up to about 20 sessions (Strassberg et al., 1977). Salzer et al. (1999) stated that dose-effect studies such as the ones above have had a tremendous influence on the mental health field and have encouraged other dose-effect studies. If clinicians or managed care organizations are rigid about lengths of time for treatment, some clients may never get the help they need. One study surveyed 1,000 members of American Psychological Association Division 29 (Psychotherapy) and found psychologists expected 30 to 40 sessions of individual psychotherapy to achieve clinically significant change (Lowry & Ross, 1997).

As can be seen from the above-mentioned studies, many clients need more than eight sessions to demonstrate measurable improvement. For example, Steenbarger (1994) has found in his review of brief therapy that

> Clients who are highly aware of focal problem patterns and form a ready, involving alliance may benefit from symptom-centered, prescriptive interventions that achieve their goals within 8 to 10 sessions. Within this group and over this limited span, there appears to be a strong relationship between duration and outcome, and considerable evidence that enduring changes can be achieved. At the other end of the continuum, clients with broad, diffuse, and poorly understood patterns and who need considerable time to form a trusting alliance may benefit from an extended period of exploratory work that moves

> treatment to the limits of brevity and beyond. (p. 116)

This seems to support cost management when clients are appropriate for briefer therapy, and, at the same time, supports therapists trying to best meet the needs of their clients when larger amounts of psychotherapeutic interventions are needed. One study found that even general functioning increased with a longer duration of therapy. Seligman (1995) wrote

> The advantages of long-term treatment by a mental health professional held not only for the specific problems that led to treatment, but for a variety of general functioning scores as well: ability to relate to others, coping with everyday stress, enjoying life more, personal growth and understanding, self-esteem and confidence. (p. 969)

There is a current need for ongoing research in psychotherapy dose-effects. The need for increased quality of services dictates that practitioners learn from the services they provide and seek to better customize interventions. Information can be shared with other providers to ensure maximum effectiveness of treatment and the avoidance of premature discontinuation or excess where not needed. Herron, Eisenstadt, Javier, and Primavera (1994) wrote "If session effectiveness research becomes more extensive, sophisticated, and comparable, it could be a valuable tool for more informed decisions by policy makers, funders, consumers, and providers" (p. 284).

The trend toward managed care involvement in decisions must alert practitioners to continue to seek effective interventions and psychotherapy amounts. Franko and Erb (1998) stated

> In reality, most [insurance] plans offer four to eight sessions and the authorization of additional visits requires a substantial crisis or life-threatening behaviors. Therapists are required to manage patients in increasingly less time and are pressured by third-party

payers to do so or risk being denied further referrals. (p. 44)

Measuring treatment efficacy across visits will increase as third-party payers seek to maximize their service-to-cost ratio (Umphress, Lambert, Smart, Barlow, & Clouse, 1997).

It seems certain at this point that the very diversity of challenges that face therapists will ensure no one appropriate dose for all. Steenbarger (1994) wrote "The present review raises the possibility that there is no one function linking duration and outcome across all clients, concerns, and helping approaches" (117).

Brief Therapy

It is difficult to study dose-effects of psychotherapy without being impacted by brief therapy. This treatment model seems to be the goal of many of the funders of mental health services. Limits on insurance coverage for psychotherapy have always existed (Herron et al., 1994) and so this should not alarm us. In fact, financing problems of health insurance companies, a growing demand for psychotherapy, and the restricted number of psychotherapists have all contributed to the development of short-term psychotherapies and their standardization (Kordy, Von Rad, & Senf, 1988). Brief treatment models have also gained support from clinicians who need to stay on provider panels and demonstrate cost effectiveness to managed care organizations.

At times, even patients seem to advocate for brief therapy. "Spontaneous remission" seems to illustrate this. Howard et al., (1986) wrote "Our meta-analysis suggests that about 15% of patients will feel and/or show measurable improvement before attending the first session of psychotherapy" (p. 163). Many times situational or symptom-based problems can be treated effectively in a relatively short duration. Because brief therapy has been, at times, unfairly compared with other treatment modalities of longer duration, it has been viewed as lesser by some practitioners. Steenbarger (1992) wrote

> Given that brief therapy is viewed as less effective than time-unlimited treatments for most clients, it would not be surprising if therapists tended to underestimate the effects of such work relative to the ratings of clients and neutral observers. This, in fact, appears to be the case. (p. 54)

This is unfortunate as brief therapy can be an effective intervention for various problems. Herron et al. (1994) wrote "Given a particular goal, such as symptom removal, brief psychotherapy may do as well or better than unlimited psychotherapy. That does not mean that short-term and long-term therapies are interchangeable or that they have identical results" (p. 283).

In summary, outcome studies have been a part of mental health treatment for a long time and have been used for a variety of reasons. Recently, changes within both mental health and health insurance companies have contributed to the use of outcome studies to investigate the issues of treatment duration and the quality of patient care. The practitioners who deliver these services seem to be both frustrated and stimulated by these challenges and would like to demonstrate a high degree of professionalism in these matters. Therapists are also concerned that brief therapy will be intentionalized for reasons of cost containment and the best interests of the patient will be secondary. As for the literature in this area, many studies have supported the efficacy of psychotherapy and the benefits of it in larger amounts for some patients while other studies have found brief treatment to be sufficient for problems such as symptom removal. It seems that short-term and long-term therapies serve unique functions for distinct populations.

Given the inconsistencies in the research findings regarding the effectiveness of time-limited therapy, the author decided to conduct an outcome study of varying amounts of psychotherapy. It is necessary to understand dose-effects so that treatment decisions can best be made, ethical standards can be met, and quality of service can increase. Specifically, the aim of

this study was to investigate the effects of varying doses of psychotherapy given over a 10 week period to undergraduate students who served as analog psychotherapy patients. These varying doses of psychotherapy were the independent variables in this study. The dependent variables were the symptoms of the participants in the study as they reported them on the OQ-45.11.

Four research questions were addressed by this exploratory study. First, what, if any, is the rate of change in reported symptoms by a group of "normal" undergraduates exposed to 10 sessions of psychotherapy? Second, if the psychotherapy does reduce the subjects' symptoms, are 10 sessions more effective than 5 at doing so? Third, is there a linear relationship that can be seen for the effect of the psychotherapy on the subjects' symptoms? Fourth, did gender affect the outcome within the treatment group, and, if so, in what way?

Hypotheses

Three hypotheses were tested in this study: (1) Subjective Well-Being scores (as measured by the Outcome Questionnaire-45.11) for the treatment group will be significantly lower than those of the control group on the mid and post-tests. (2) Subjective Well-Being scores will be lower for the treatment group subjects tested after five, and ten sessions of individual psychotherapy than the scores of the same subjects on the pretest. (3) Subjective Well-Being scores will be lower for the treatment group subjects tested after ten sessions than the scores of the same subjects after five sessions.

Chapter 2

Method

Participants

Participants included college student volunteers serving as analog individual psychotherapy clients for first-year students in a doctoral clinical psychology program. The sample of 60 students was taken from a Northwest university. Ages ranged from 18 years to 20 years. The gender composition was approximately 56% female and 44% male with most of the participants being Caucasian. The participants tested were currently enrolled in an Introduction to Psychology class and received research credit for their participation in the individual psychotherapy.

The experimental group was formed by taking the weekly schedules provided by the participants interested in the psychotherapy, giving them to the graduate student trainees, and having the trainees contact participants whose schedules would allow the trainees to meet with them on a weekly basis. The control group was formed by asking the students of 4 Introduction to Psychology classes to take the Outcome Questionnaire-45.11 and other measures. Although the Religious Orientation Scale and an Experimental Measure of Religious Practices were also administered, this study did not utilize those data. Research credit was provided for those students who completed the measures all three times. They were administered over a twelve-week period.

Measures

Treatment effects were assessed by means of the OQ-45.11. The OQ-45.11 is a 45-item

measure that includes items that assess subjective discomfort, interpersonal relationships, and social role performance (Burlingame, Hansen, Lambert, Lunnen, & Umphress, 1994). These areas represent how persons feel, how they are getting along with significant others, and how they are doing in important life tasks such as work and school (Burlingame et al., 1994). Each item is responded to on a five point Likert continuum from Never to Almost Always. The OQ-45.11 measures patient progress in therapy and was designed to be repeatedly administered during the course of treatment and at termination. Gross treatment assignment decisions can be made from the OQ-45.11 as it was designed to be used as a baseline screening instrument. Normal scores for Undergraduates on the OQ-45.11 are: Subjective Distress - 23.08, Interpersonal Relations - 8.95, Social Role - 10.37, and Total - 42.4.

The OQ-45.11 was chosen for this study over other measures for its brevity (taking one-half the time of similar measures), its breadth of use, as well as its sensitivity to change over short periods of time while maintaining high levels of reliability and validity (Wells et al., 1996). The co-efficient for internal consistency of the OQ-45.11 Total score is .93, and the test-retest reliability is .84. The co-efficients for validity are .7824 with the General Symptom Index of the Symptom Check List-90-Revised, .7959 with the Beck Depression Inventory, .8625 with the Taylor Manifest Anxiety, and .6449 with the Social Adjustment Scale.

The OQ-45.11 is a broad measure as well, designed to assess common symptoms across a wide range of mental disorders and syndromes including stress related illness and V. codes (Burlingame et al., 1994). Although the OQ-45.11 is a face-valid test, and could be distorted consciously, the participants would have received no benefit from doing so.

Procedure

The participants for the treatment group were selected by the graduate students

conducting the psychotherapy. The graduate students were told to select one female and one male participant to ensure counseling experience with each gender. The graduate students chose participants whose schedules were similar to theirs so that finding times to meet together would be easily facilitated. Of the participants left in the sample, 62 were assigned to the control group as they had completed the OQ-45.1 1 all three times it was administered. Twenty-three of the participants served in the treatment group with similar numbers of males and females in each treatment and control group.

The participants were given the OQ-45.1 1 three times: 1) before beginning psychotherapy, 2) after five sessions, and 3) following ten sessions of psychotherapy. The measure was given to the treatment and the control group participants by their Introduction to Psychology instructors all three times. The participants were selected out of 4 classes taught by 4 different instructors. Informed consent was collected by the instructors during the first administration of the measure. All participants were selected, treated, and tested within a twelve-week time frame to minimize "history" effects.

Participation in the study was voluntary. Participants were given information regarding involvement in the testing and how the experience may have affected their treatment. Because assessment was done in the classroom and not overtly linked with the treatment, the experience of the testing is expected to have little, if any, effect on treatment. Participants were instructed that no negative repercussions would result from declining to participate except that the treatment group would not receive research credit if they did not complete the psychotherapy. Attempts were made to encourage all of the participants to remain in the study.

The participants were assured anonymity and confidentiality of all responses. Each participant was given a number. All data was identified by the number only. The author kept the

master list of names and numbers as well as all consent forms. When all the data was collected, the list of names and numbers was destroyed. Participants were told that all responses were for the purposes of "training a graduate student in clinical psychology." Participants were given the option to discontinue at any point.

Directions for completing the OQ-45.11 are printed on the answer sheet. The test administrator(s) encouraged the participants to fill out the scale in an honest and conscientious manner and complete all items. The average time required for taking the OQ-45.11 is less than ten minutes.

The treatment process consisted of the trainees meeting with their client one time per week for fifty minutes. The trainees were first year graduate students and were using basic counseling skills rather than a particular therapeutic orientation. The focus was on attending, listening, understanding, basic empathy, probing, summarizing, challenging, and helping clients plan and work for what they wanted. The manual that was used to train the graduate students for this experience was Exercises in Helping Skills, (6th ed.) by Gerard Egan (1998).

The trainees were supervised by either the professor teaching the counseling skills class or one of two graduate assistants. The supervision hour consisted of groups of three trainees meeting with their supervisors and sharing audio or video recordings of themselves with a client. They were asked to share instances of themselves demonstrating specific skills as well as difficulty and success at helping the client. A critique of the skills and ideas for further work with the client was shared by the supervisor.

Statistical Analysis

The above-mentioned three level design utilized an analysis of variance with repeated measures to test for the significance of the independent variable, psychotherapy (Brase & Brase,

1995). The data was read into SPSS and descriptive data was used to make group and occasion comparisons. A 2 X 3 multivariate analysis of variance with repeated measures (treatment vs. control groups, pre, five week and ten week outcomes) was used to compare this data.

Chapter 3

Results

Of the 135 participants who completed the OQ-45.11, 57 (42%) failed to complete it all three times: 48 of these 57 participants were in the control group and were removed from the study. The remaining 9 were in the treatment group and 1 of the 9 was removed from the study as he/she had failed to take the OQ-45.11 during either the first or second administration. An additional treatment group participant was not included in the study as he/she was referred for additional treatment. Of the 23 participants in the treatment group, 10 (43%) were male and 13 (57%) were female. Of the 62 participants in the control group, 28 (45%) were male and 34 (55%) were female.

The OQ-45.11 is a screening measure that includes items assessing subjective discomfort, interpersonal relationships, and social role performance. It yields scores for subjective distress, interpersonal relations, social role, and has a total score. These four scores provided the data to be analyzed. Figures 1-4 represent each of these domains at the pre-test, mid-test and post-test for the treatment groups. Descriptive statistics for each of the main variables are included in Table 1.

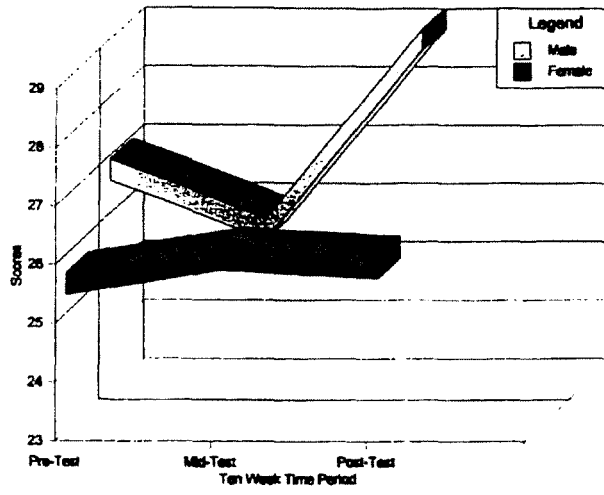

Figure 1. Subjective Distress

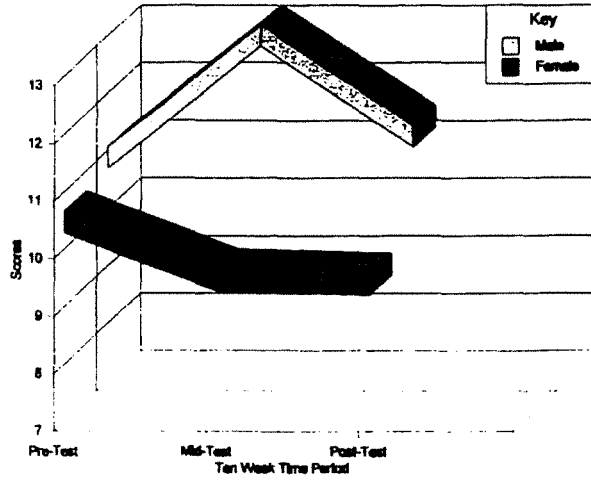

Figure 2. Interpersonal Relations

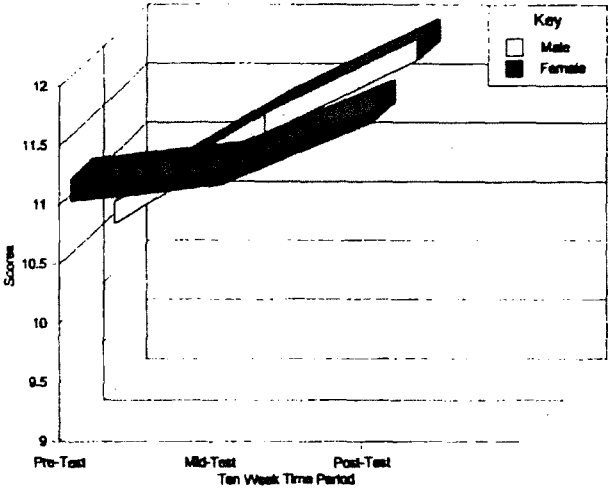

Figure 3. Social Role

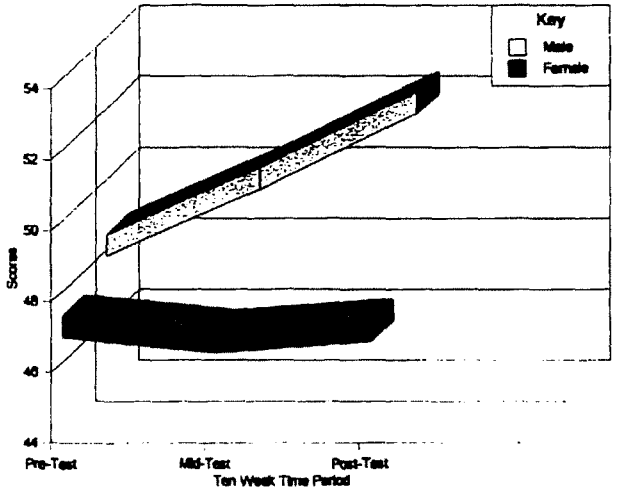

Figure 4. Total

Table 1

Means and Standard Deviations on OQ45.11 for Treatment and Control Groups by Occasions

Variable	Group	Gender	Mean	Standard Deviation	N
Symptom Distress 1	Treatment	Male	26.75	16.10	8
		Female	29.63	12.00	8
		Total	28.19	13.80	16
	Control	Male	25.50	8.11	28
		Female	23.44	7.37	34
		Total	24.37	7.72	62
	Total	Male	25.78	10.14	36
		Female	24.62	8.62	42
		Total	25.15	9.31	78
Symptom Distress 2	Treatment	Male	25.75	12.68	8
		Female	27.38	12.32	8
		Total	26.56	12.10	16
	Control	Male	25.93	9.58	28
		Female	22.21	7.69	34
		Total	23.89	8.73	62
	Total	Male	25.89	10.15	36
		Female	23.19	8.82	42
		Total	24.44	9.49	78
Symptom Distress 3	Treatment	Male	29.00	17.08	8
		Female	26.75	11.49	8
		Total	27.88	14.11	16
	Control	Male	25.79	9.52	28
		Female	20.82	8.03	34
		Total	23.06	9.01	62
	Total	Male	26.50	11.41	36
		Female	21.95	8.94	42
		Total	24.05	10.34	78

Table Continues

Table 1 Continued

Variable	Group	Gender	Mean	Standard Deviation	N
Interpersonal Relations 1	Treatment	Male	10.88	7.75	8
		Female	10.38	4.60	8
		Total	10.63	6.16	16
	Control	Male	10.46	5.24	28
		Female	7.24	3.83	34
		Total	8.69	4.77	62
	Total	Male	10.56	5.76	36
		Female	7.83	4.12	42
		Total	9.09	5.10	78
Interpersonal Relations 2	Treatment	Male	13.00	9.32	8
		Female	8.25	5.06	8
		Total	10.63	7.65	16
	Control	Male	9.46	4.83	28
		Female	6.79	3.07	34
		Total	8.00	4.15	62
	Total	Male	10.25	6.13	36
		Female	7.07	3.51	42
		Total	8.54	5.12	78
Interpersonal Relations 3	Treatment	Male	11.25	9.22	8
		Female	10.25	5.28	8
		Total	10.75	7.28	16
	Control	Male	9.39	4.89	28
		Female	6.88	3.21	34
		Total	8.02	4.21	62
	Total	Male	9.81	6.01	36
		Female	7.52	3.85	42
		Total	8.58	5.06	78
Social Role 1	Treatment	Male	10.50	3.16	8
		Female	11.38	3.96	8
		Total	10.94	3.49	16
	Control	Male	11.04	2.63	28
		Female	8.59	3.41	34
		Total	9.69	3.30	62
	Total	Male	10.92	2.72	36
		Female	9.12	3.64	42
		Total	9.95	3.35	78

Table Continues

Table 1 Continued

Variable	Group	Gender	Mean	Standard Deviation	N
Social Role 2	Treatment	Male	11.25	2.82	8
		Female	9.75	3.58	8
		Total	10.50	3.20	16
	Control	Male	11.18	3.69	28
		Female	8.71	3.23	34
		Total	9.82	3.64	62
	Total	Male	11.19	3.48	36
		Female	8.90	3.28	42
		Total	9.96	3.54	78
Social Role 3	Treatment	Male	11.88	4.91	8
		Female	12.25	3.24	8
		Total	12.06	4.02	16
	Control	Male	11.71	3.11	28
		Female	7.91	3.04	34
		Total	9.63	3.60	62
	Total	Male	11.75	3.51	36
		Female	8.74	3.49	42
		Total	10.13	3.79	78
Total 1	Treatment	Male	48.13	25.90	8
		Female	51.38	18.91	8
		Total	49.75	21.97	16
	Control	Male	47.00	13.52	28
		Female	39.26	12.87	34
		Total	42.76	13.62	62
	Total	Male	47.25	16.59	36
		Female	41.57	14.75	42
		Total	44.19	15.78	78
Total 2	Treatment	Male	50.00	23.65	8
		Female	45.38	18.83	8
		Total	47.69	20.79	16
	Control	Male	46.57	15.26	28
		Female	37.71	12.45	34
		Total	41.71	14.38	62
	Total	Male	47.33	17.14	36
		Female	39.17	13.95	42
		Total	42.94	15.93	78

Table Continues

Table 1 Continued

Variable	Group	Gender	Mean	Standard Deviation	N
Total 3	Treatment	Male	52.13	28.26	8
		Female	49.25	17.47	8
		Total	50.69	22.74	16
	Control	Male	46.89	15.15	28
		Female	35.62	13.02	34
		Total	40.71	15.01	62
	Total	Male	48.06	18.48	36
		Female	38.21	14.76	42
		Total	42.76	17.20	78

The first research hypothesis concerned how 10 sessions of psychotherapy would affect the rate of reported symptoms of a group of undergraduates. An analysis of variance with repeated measures revealed no significant treatment effects across administrations of the OQ-45.11. There were no significant group effects when the treatment group was compared to the control group at the pre-therapy, $F(1,74)=2.996$, $p.=.088$; and post-therapy testings, $F(1,74)=1.605$, $p.=.209$; and no significant occasion effects, $F(1,74)=1.751$, $p.=.190$. However the Interpersonal Relationships scale was close to significance, $F(1,74)=3.553$, $p.=.063$; and a significant gender effect was observed, $F(1,74)=4.029$, $p.=.048$. No time (occasion) by group interactions were found, $F(1,74)=.988$, $p.=.324$; and no time by group by gender interactions. ($F(2,148)=3.404$; $p.=.036$).

The second research hypothesis investigated the differences between the treatment group's symptoms at pretest and at 10 sessions. No main effects for treatment were found, $F(1,19)=.140$, $p.=.712$. Chi-square analyses were performed and the Interpersonal Relationships scale, $F(1,19)=3.446$, $p=.079$, was near significance. The Subjective Distress scale, $F(1,19)=1.069$, $p=.314$; Social Role scale, $F(1,19)=2.165$, $p=.158$; and Total scale, $F(1,19)=2.073$, $p=.166$ were

not significant.

The third research hypothesis addressed whether or not there was a linear relationship that could be seen for the effect of the psychotherapy on the subjects' symptoms. An analysis of variance with repeated measures again revealed no significant treatment effects across administrations of the OQ-45.11, $F(1,19)=1.999$, $p=.174$.

The final research hypothesis was interested in gender and if it would affect the outcome within the treatment group. A 2 X 3 multivariate analysis of variance with repeated measures revealed that there were no main effects for participants' gender. However, when time was compared to group and gender, a significant linear effect for time by gender interaction was found on the Subjective Discomfort scale, $F(1,74)=5.56$, $p=.022$; and significant quadratic effects were found on the Interpersonal Relationships scale, $F(1,74)=5.379$, $p=.023$, for time, group, and gender. Significant quadratic interactions were also found for time by group by gender for Interpersonal Relationships, $F=6.568$, $p=.012$, and for Social Role, $F=4.372$, $p=.040$. Results of analysis of variance for each of the main variables are included in Table 2.

Treatment Groups Compared

There were no differences found between participants in the treatment group who completed the OQ-45.11 all three times and those who did not on the Subjective Discomfort scale, $F(1,19)=1.069$, $p=.314$; Social Role Performance scale, $F(1,19)=2.165$, $p=.158$; or Total scale, $F(1,19)=2.073$, $p=.166$. Although there were no significant group effects found when the two treatment groups were compared, there were three quadratic effects and interaction effects found, time by gender for Interpersonal Relationships, $F(1,19)=5.379$, $p=.023$; time by group by gender for Interpersonal Relationships, $F(1,19)=6.568$, $p=.012$; time by group by gender for Social Role, $F(1,19)=4.372$, $p=.040$; and time by gender for Subjective Distress.

Table 2

Results of Analysis of Variance for Treatment and Control Groups by Occasions

Source	Measure	df	Mean Square	F	Sig. of F
Intercept	SD	1	100955.111	408.780	.001
	IR	1	13803.178	244.624	.001
	SR	1	16829.139	681.371	.001
	TOTAL	1	319166.737	484.443	.001
GROUP	SD	1	491.924	1.992	.162
	IR	1	200.475	3.553	.063
	SR	1	65.441	2.650	.108
	TOTAL	1	1973.837	2.996	.088
GENDER	SD	1	76.311	.309	.580
	IR	1	227.323	4.029	.048
	SR	1	85.161	3.448	.067
	TOTAL	1	1091.715	1.657	.202
GROUP*GENDER					
	SD	1	178.591	.723	.398
	IR	1	4.934	.087	.768
	SR	1	75.934	3.074	.084
	TOTAL	1	590.441	.896	.347
Error	SD	74	246.967		
	IR	74	56.426		
	SR	74	24.699		
	TOTAL	74	658.832		

Note. SD = Subjective Distress, IR = Interpersonal Relations, SR = Social Role

Sample Means Compared

Students t tests measured whether the sample means differed from the normative means and the results are included in Table 3. There were no differences found between the normative means for normals and the sample means.

Table 3

Results of t Tests Comparing Sample Means with Normative Means from the OQ-45.1[1]

Measure	Normative Mean	Sample Mean	t	Significance
Symptom Distress	23.08	25.15	1.648	NS
Interpersonal Relations	8.95	9.09	.208	NS
Social Role	10.37	9.95	.976	NS
Total	42.33	44.19	.887	NS

Chapter 4

Discussion

In general, the results of this analog study of treatment effects do not support the hypothesis that Subjective Well-Being scores of the treatment group would be significantly higher than those of the control group on the mid and post tests (Hypothesis 1). There was no significant group effect when the treatment group was compared to the control group at the pre-therapy and post-therapy testings and no significant treatment effects across administrations of the OQ-45.1 1. Symptoms were found to be unchanged at the end of the testing or post administration for all the participants. It is unknown what accounts for these effects. One cause may have been the semester that the student participants were in. They may have been affected by the spring break that took place near the mid-test. The end of the semester may have also increased their feelings of subjective distress as finals were soon to be taken.

Furthermore, both the treatment and control subjects were taken from an analog sample. The scores of the treatment and control subjects were all normal, and this may have reduced the amount of possible treatment effects before the independent variable, psychotherapy, could be administered. It seems that this study needed a clinical sample to administer the psychotherapy to for treatment and control groups.

Hypothesis 2 was not supported by the results either. Subjective Well-Being scores were not higher for the treatment group subjects tested after five, and ten sessions of individual psychotherapy than the scores of the same subjects on the pretest. A 2 X 3 multivariate analysis

of variance with repeated measures revealed no significant treatment effects. Again, this may have been a result of using a non-clinical analog sample for the treatment group. The treatment groups' symptoms were not very high to begin with (pretest symptoms) and so clinically significant change was difficult to attain.

The results of this study do not support hypothesis 3 that Subjective Well-Being scores will be higher for the treatment group subjects tested after ten sessions than the scores of the same subjects after five sessions. An analysis of variance with repeated measures again revealed no significant treatment effects across administrations of the OQ-45.1 1. Time was found to not be a significant variable as there were no overall simple linear effects.

Gender was also found to have no effect on the outcome within the treatment group. A 2 X 3 multivariate analysis of variance with repeated measures revealed that the participants' gender did not predict outcome. However, when time was compared to group and gender, there were interaction effects. It is not clear what may have caused this. Interestingly, there was a quadratic effect on the Interpersonal Relationships scale and a quadratic effect was found, indicating a time by group by gender interaction on the Social Role Performance scale.

Treatment Groups Compared

The results of this study do not support differences between participants in the treatment group who completed the OQ-45.1 1 all three times and those who did not. Chi-square analyses were performed and the Interpersonal Relationships scale approached significance. Although there were no significant group effects found when the two treatment groups were compared, there were three quadratic effects and interaction effects found.

One interesting finding was that the participants in the study indicated a very similar response to item #17, "I have an unfulfilling sex life." While the majority of the participants

marked "Never" as their response, many of them wrote a note next to the item that indicated they do not participate in sexual behavior. As most all the participants are not married, this common response seems to point to the behavioral health of the sample. Perhaps this sample is not only non-clinical, it may be considerably healthy. The treatment group was pulled from this sample and their self-report symptoms were quite low as they began the psychotherapy. Reducing symptoms a significant amount in persons that are already in a healthy range is very difficult.

Comparison of Normative and Sample Means

When a Student's t-test was used to compare the means of the normative sample of undergraduates to this sample at pretest on the four scales no differences were found. This may be a result of comparing one relatively healthy group to another. It is likely that both of these undergraduate samples represent groups of people with very few clinical symptoms.

Limitations

Although this current investigation attempted to understand the significance of dose-effect relationships in psychotherapy, several limitations of this study should be considered. The graduate student conducting the research served as a direct supervisor of the first-year doctoral students and his participation in the research may have affected psychotherapy outcomes in the college students. In addition, the first-year doctoral students' psychotherapy experience was varied and so may have had an unknown effect on the outcomes.

Perhaps the most significant limitation in the present study was the sample. Specifically, the treatment group was an analog sample of mostly healthy college students. This might have had the effect of limiting the amount of symptoms that could be reduced. For treatment effects to be demonstrated a significant amount of change is necessary; the normal pre-treatment scores of this sample made it difficult to measure any effects of the independent variable, psychotherapy.

Another limitation of this study might be in its specificity. The sample of undergraduate general psychology students at George Fox University may not represent the young-adult population as a whole. Participants in this study were largely Caucasian. Given the religious nature of the institution, we can assume that the majority of the participants were Christians. Due to their faith, many of the participants may not engage in substance abuse, sexual indiscretions, or have thoughts of ending their life. All three of these issues appear on the OQ-45.1 1 (five times) and can affect one's overall score of symptoms.

These results apply to self-referred college students who had been offered class credit for their participation in the study. Results might differ in outpatient clinics, hospitals or other non-academic settings. Finally, this study pertains only to the dose-effect relationship in adult psychotherapy, and the results may not generalize to child psychotherapy.

Suggestions for Future Research

Treatment outcome studies are essential to clinical decision making and guaranteeing cost-effective care (Mirin & Namerow, 1991). The issue of treatment duration and optimal length has become a central focus recently. The present study attempted to address this issue, but the power of the study was diminished by the sample. Future dose-effect studies may benefit from taking their treatment group from a clinical sample. Using a more diverse sample would also be a better representative of the greater population. A larger sample would increase the power of the statistical tests.

Many studies described their favorite length of therapy and could cite much research to substantiate their views. For example, some have used the Consumer Reports study to make a case for a longer duration of treatment (Gurin, 1995). It seems as though treatment duration has become political and the studies being done are to back up ones' views and not to find what is best

treatment. It would be best if those who conduct dose-effect studies would be open to more or less therapy for any particular problem and would avoid seeking to prove a particular treatment duration is optimal.

Conclusion

Although this study did not support the hypotheses that were established, it did provide valuable insights on how and how not to conduct a dose-effect study. The study reminds us of the value of a sample and how a analog sample can limit the possibility of clinically significant change. It is difficult and time-consuming to conduct treatment outcome studies. I hope that this study will encourage others to pursue treatment outcomes. As a result, mental health professionals will be better equipped to make treatment decisions in a professional manner.

It is recommended that future studies use a larger sample. Having the first-year students in the doctoral clinical psychology program counsel three or four college student volunteers per week would make that possible. It is also recommended that the study examine whether the analog therapy experience contributes to increased reporting of symptoms. The final recommendation is that the participants be split into a group of normals and clinicals at the outset of the study.

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Appendix A

Informed Consent

Informed Consent for Participation

I _____ understand that I am participating in a research project for the training of a graduate student in clinical psychology. As a participant, I will be given the Outcome Questionnaire (OQ.45.11) three times. In addition I will be given several survey questions that ask about my attitudes and beliefs related to social and religious beliefs and behaviors. I understand that I may discontinue my involvement in the research at any time. I also understand that all data will be kept confidential and only the graduate student conducting the research (Brian Whitehall) and the faculty members involved in the research, Dr. Rodger Bufford and Dr. Kathryn Ecklund will have access to my research data. I understand that there will be **no** reference to my name on any of the testing material. I will be assigned a number by the graduate student conducting the research who will protect my evaluation data from being attached to my name at all times.

Signature of participant: _____ Date:_____

Participant Identification Number (to be placed on participant forms) _____

Appendix B

Data Code

Data Code

Identification: columns 1-3

Sex: column 4 - Male - 1, Female - 2, Missing data - 9

Group: column 5 - Treatment - 1, Control - 2

column 6 & 7 - leave blank

Scores: columns 8-33

SD1 - column 8&9
IR1 - column 10&11
SR1 - column 12&13
Total1 - column 14&15

Blank column 16

SD2 - column 17 & 18
IR2 - column 19 & 20
SR2 - column 21 & 22
Total2 - column 23 & 24

Blank column 25

SD3 - column 26 & 27
IR3 - column 28 & 29
SR3 - column 30 & 31
Total3 - column 32 & 33

The model is a repeated measures design and all data for a given participant are entered in a single string (one row) and you do not need to duplicate demographic information or ID#s.

Appendix C

Raw Data

Raw Data

25291 99999999 21141247 29131557
10711 13070323 99999999 23040835
14411 23111246 27101249 31051349
21411 12041026 17051436 17102047
17611 14020521 14050726 11030519
18121 22091041 16050728 26081145
20711 49261287 49301392 55231795
21821 08020616 10030720 99999999
30221 39091159 43101265 29061348
16821 21090939 17040930 17071135
16921 09030517 11030519 99999999
05421 11040520 17101138 99999999
09511 54181688 41251581 55281396
14911 26031140 15020926 99999999
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12511 15080932 22101143 18090936
05121 29050943 22060836 99999999
18221 23031440 25041140 99999999
09821 39091664 37071155 40141468
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18721 32170958 28150548 28190855
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10212 38211978 41211880 99999999
11322 21080938 20050833 24100842
04112 45211783 99999999 42181474
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21122 38151366 37111159 40101161
21222 18041032 99999999 19060833
21522 24060939 16040727 15040928
21022 35041756 30061652 28091148
12822 17050628 99999999 99999999
13122 20061036 17031030 99999999
07712 12030722 12031328 99999999
07622 18090835 11050521 06030110
04822 25110945 26090944 22120943
07822 22101244 99999999 31141055
08712 33181263 27191056 99999999
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05522 14080931 99999999 99999999
08912 39131264 43151674 41131266
08512 28041244 20040731 27050840
05612 12060725 17110836 99999999
05212 19030628 21040934 99999999
09212 22050532 23040835 25080841
10022 24100943 24091144 23081142
08422 28070843 99999999 99999999
09722 13040926 99999999 28100846
08222 53161180 99999999 99999999
09112 14040725 99999999 99999999
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20822 15030422 09020516 10010415
22022 24050837 19090836 21070634
12612 17090834 99999999 99999999
11612 24061141 22111043 27081348
14712 20050833 28050942 19031133
14222 26101349 26071447 27070741
11812 14061030 12091031 15110632
09412 33161059 99999999 99999999

05712 16091237 19131446 99999999
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07322 39171672 39111464 27101249
09912 23201154 99999999 99999999
21922 42131772 99999999 33131965
06222 27091450 28091249 25091549
05922 19030426 13050220 15040625
12022 41181372 43191476 99999999
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06722 35171062 99999999 43191072
06812 04010611 99999999 03050715
06912 33171363 35031351 30111455
06412 40111364 32091354 26081044
20412 13191345 13150937 24091548
10422 11040419 99999999 99999999
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04922 14001024 16021028 14050928
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16722 27141152 99999999 21051036
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16012 34180860 99999999 30120951
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18812 24071041 23081243 39241780
13822 15030523 24050837 28070944
14322 05020411 05010410 99999999
14522 34071253 31111153 99999999
17822 20081038 22080838 28081248
04022 28121353 24110843 18090835
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21792 99999999 99999999 25120946
05192 99999999 99999999 29100645
05092 99999999 99999999 14040927
03792 99999999 99999999 38211574

Appendix D

Vita

Vita

Brian J. Whitehall

5881 Batterman rd.
East Wenatchee, WA 98802
Home: (509) 884-4572
sllahetihw@aol.com

Education

1996-1999 Graduate School of Clinical Psychology: APA Accredited
George Fox University, Newberg, Oregon
Student in clinical psychology Psy.D. program

1994-1996 Graduate School of Clinical Psychology
George Fox University, Newberg, Oregon
M.A. in Clinical Psychology

1989-1993 Western Baptist College
Salem, Oregon
B.S. Psychology

Supervised Clinical Experience

7/99-6/00 **Clinical Internship**
Northeastern Ohio Universities College of Medicine: APA Accredited

1/00-6/00 Portage Path Behavioral Health, Akron, OH.
Population: Adults
Duties: Individual Therapy and Intake Interviews. Co-facilitated a Dialectical Behavior Therapy group, a Partial-Hospitalization group, and a Transitional Support group. Developed treatment plans and worked with a multi-disciplinary treatment team. Comprehensive assessments of adults (Cognitive/IQ, Personality, and Characterological).
Supervisor: Jim Mullen, Ph.D.

7/99-12/99 Massillon Psychiatric Center, Massillon, OH.
Population: Chronically Mentally ill Adults
Duties: Interviewed new patients and wrote evaluations. Individual Therapy. Led a Stress-Management group and co-facilitated a Dialectical Behavior Therapy group. Provided recommendations to multi-disciplinary treatment team. Wrote treatment plans for patients with the psychiatrist.
Supervisors: David Aronson, Ph.D., ABPP and Phil Seibel, Ph.D.

9/98-4/99 **Practicum III** (Total Hours: 400)
Lutheran Family Service, McMinnville, OR.
Population: Adults, families, children
Duties: Individual and Family Therapy. Co-facilitated two violence prevention groups for men. Conducted intakes, provided treatment recommendations and consulted with agency psychiatrist. Personality assessment and therapy for low-income children and adolescents in an outpatient setting.
Supervisor: Susan Means, Ph.D.

9/96-6/97 **Practicum II** (Total Hours: 533)
Oregon State Hospital, Salem, OR.
Population: Chronically Mentally ill Adults
Duties: Comprehensive assessments of inpatient adults with emphasis on neuropsychological assessment (Cognitive/IQ, Psychosocial, Characterological, and Neuropsychological). Individual and Group Therapy (Drug and Alcohol, Symptoms Management with emphasis on psychiatric rehabilitation). Risk assessment and screening process for a forensic, minimum custody unit.
Provided recommendations to multi-disciplinary treatment team.
Supervisor: Brett Rogers, Ph.D.

9/95-5/96 **Practicum I** (Total Hours: 642)
Linn County Child and Family Services, Albany, OR
Population: Adults, families, children
Duties: Individual and Family Therapy. Co-facilitated anger management group for adolescents and their families in an outpatient mental health clinic. Comprehensive psychological assessments of children and adolescents primarily presenting with ADHD, Conduct Disorder, or Sexual Abuse at intake.
Supervisor: Paul Stoltzfus, Psy.D.

9/94-5/95 **Prepracticum** (Total Hours: 75)
George Fox University, Newberg, OR.
Population: Adults
Duties: Provided counseling to two undergraduate students.
Received clinical training including: clinical skills, psychosocial assessment/history, mental status exam, intake interview, treatment plans, anger management, and critical incident response.
Supervisor: Wayne Colwell, Ph.D.

Other Work Experience

7/97-8/98 Mental Health Therapist Technician (Total Hours: 1,464)
Oregon State Hospital, Salem, OR.
Population: Adolescents, children
Duties: Paid Position. Counseled and assisted children and adolescents with major mental illnesses. Documented on the treatment and progress of patients. Problem-solved with co-workers regarding treatment decisions and milieu management.
Supervisor: Emma Alstott R.N.

Research Experience

10/97-present Dissertation
Title: Dose-effect relations in simulated psychotherapy as measured by the outcome questionnaire-45.11.
Description: A treatment outcome study, this research examines the efficacy of psychotherapy under varying doses, on the subjective well-being of University students.
Chair: Rodger Bufford, Ph.D.
Status: Final Oral completed. Making final changes.
Anticipated date of completion: 3/01

2/98-5/98 Program Development
Assisted with development, implementation and consulting report assessing faculty student relationships at George Fox University.

Teaching Experience

9/97-4/98 Graduate Assistant (Total Hours: 227.5)
Wayne Colwell, Ph.D.
PSY 530 Prepracticum Didactic
Duties: Paid Position. Assisted in the training of fourteen graduate students. Taught basic assessment and counseling skills, ethics, and self-awareness. Led two supervision groups, provided feedback and evaluations to trainees.
PSY 531 Prepracticum Didactic
Duties: Paid Position. Provided supervision to seven graduate student counselors providing individual therapy to undergraduate students. Taught continuing development of counseling skills, interventions, referrals, case conceptualization, and termination. Provided feedback and evaluations to trainees.

Professional Affiliations

American Psychological Association (Student Affiliate) 1994-present

Professional Seminars

10/98 Using The 16PF In Clinical Practice
Michael Karson, Ph.D., ABPP

5/98 Race And Racism In Psychotherapy
Alice Chang, Ph.D. & Nelson de Jesus, Ph.D.

4/98 Explicit, Implicit, Intentional Clinical Integration: Galileo and Wesley: Two old, but ever-new integration models.
Newton Malony, Ph.D., ABPP

1/97 REBT
Albert Ellis, Ph.D.

10/96 False Memory
L. Polanski, Ph.D.

4/96 Brief Therapy: Object Relations
Greggory, Hamilton, M.D.

4/96 Narcissistic Disorders
Ralph Klein, M.D.

References

David Aronson, Ph.D., ABPP (330) 833-3135
Massillon Psychiatric Center
3000 Erie Street, South
Massillon, OH 44648

Phil Seibel, Ph.D. (330) 833-3135
Massillon Psychiatric Center
3000 Erie Street, South
Massillon, OH 44648

Jim Mullen, Ph.D. (330) 253-4118
Portage Path Behavioral Health
340 S. Broadway
Akron, OH 44308

Rodger Bufford, Ph.D. (503) 554-2750
George Fox University
414 N. Meridian, #6146
Newberg, OR 97132

Relevant Coursework

Core Courses:
Personality Theory
Childhood Development
Adolescence, Adulthood, and Aging
Learning
Legal, Ethical, and Professional Issues
History and Systems of Psychology
Social Psychology
Statistical Methods
Research Design
Outcome Evaluation
Systems of Psychotherapy
Community Mental Health
Abnormal Psychology

Clinical Theory and Practice:
Psychodynamic Psychotherapy
Cognitive Behavioral Psychotherapy
Family Therapy
Object Relations
Cross-Cultural Psychotherapy
Therapeutic Communication
Religious Issues in Psychotherapy
Substance Abuse
Psychology of Emotions
Professional Issues
Human Sexuality/Sexual Dysfunction
Psychopharmacology/Psychoneurology
Therapy with Women
Forensic Psychology
Group Dynamics
Child/Adolescent Therapy
Geropsychology
Psychodynamic Integration Seminar

Clinical Assessment
Personality Assessment
Cognitive and Intellectual Assessment
Projective Assessment
Neuropsychological Assessment
Comprehensive Psychological Assessment