3-1-2013

The Perceptions of Behavioral Health Psychology Held by Medical Personnel in Oregon

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by

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Presented to the Faculty of the

Graduate Department of Clinical Psychology

George Fox University

in partial fulfillment

of the requirements for the degree of

Doctor of Psychology

in Clinical Psychology

Newberg, Oregon

March 2013

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has been approved

by the

Graduate School of Clinical Psychology

George Fox University

as a dissertation for the Psy.D. degree

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Date: Feb. 19, 2013

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Abstract

The purpose of the current research was to obtain medical personnel perceptions about the role of behavioral health psychology within their medical care practices in Oregon. Four hypotheses were explored. *Hypothesis 1* asserted that medical personnel from urban, suburban, and rural locations would hold significantly different views; *Hypothesis 2* suggested that the sample would more likely refer the more acute patients; *Hypothesis 3* posited that medical personnel would make more referrals if they knew a mental health provider; *Hypothesis 4* stated that there would be significant differences between the perceptions and practices of female and male members of this sample.

A 26-item questionnaire was sent to a multi-stage probability random sample of 509 medical personnel, representing 4.1% of those holding licenses from the Oregon Board of Medical Examiners as of April 10, 2011. Of the 509 questionnaires originally mailed, 69 were returned and usable (14.9% of the sample).

The questionnaire collected nominal, interval, and ratio data to explore four working hypotheses. The four hypotheses were explored via analyses of variance and correlations between various factors. Results indicate that (H1a) where the medical personnel practiced did not impact the acuity levels they assigned to patient symptoms or the use of behavioral health referral services; (H1b) those practicing in urban and suburban locales who wanted to refer to externally located behavioral health specialists preferred referring to psychiatrists; (H1c) practice locations did not impact either the perceived need for or actual referrals made; (H1d) practice locations also did not impact the type of professionals to whom referrals were made; (H2) respondents were expecting to refer both lower *and* higher acuity level patients for behavioral health services; (H3) knowing a specific behavioral health specialist did not significantly affect the referral process; (H4) more female medical professionals believed their patients from last year would have benefitted from a behavioral health referral. The results are discussed with reference to the impact on establishing a behavioral health practice in Oregon.

Dedication

This dissertation is dedicated to the three most important women in my life: Jean, Sandy, and Connie.

Connie and I have shared a faith-enriched journey as friends, lovers, and partners for nearly four decades. Connie's love for our children and grand-children clearly reflects the impact of her mother, Elva. Her joyous service of the brethren, neighbors, and complete strangers is characteristic of her father, Homer, who never met a stranger. While Connie's passion to serve elderly men used to bother me, I have since grown to enjoy the fruits of this passion as I now enter my sixties. Connie, your Christian witness shines brightly and I am blessed by your friendship!

Sandy, my sister in the flesh, became my mother in the faith more than forty years ago. She (and her husband, Al Slater, Jr.) provided me with the only viable shelter (Jesus!) within which to grow and mature. You have both provided abundant love and support, and words will never express my gratitude for God's provisions through both of you. Sis, you are a gem (just like Mom!). Thanks for making memories.

Jean, my mother in the flesh, later became my sister in the Spirit, and now resides with the Lord in heaven (March 15, 1926 – January 2, 2003). Mom taught me to love people, excel at reading and learning, and then teased me about becoming a "professional student" (though I always preferred lifespan learner)☺. Mom, your abundant love is the primary reason none of your children ended up in prison or in an early grave. God still uses you mightily in so many lives because death ends a physical life but it can never end a relationship!

Acknowledgments

Because no text is the product of one person, I am indebted to many family, friends, co-workers, mentors, and academic colleagues. Without the challenges, support, and empowerment of so many, the learning experience leading to this dissertation would have been a superficial, hoop-jumping exercise at best.

I am indebted to the entire Graduate School of Clinical Psychology faculty and staff at George Fox University. Your sacrificial service to all your students, for which you are poorly paid and often overlooked, makes the PsyD Program a powerful academic, personal, and spiritual experience. Each of you played very distinctive roles in both my on-going education and in modeling what professional psychology really entails.

I am particularly indebted to Dr. Kathleen Gathercoal, my committee Chair, for empowering my personal choices over the years and for uniquely radiating the genuine Spirit of the Quaker (Friends) journey as well as modeling inclusive Feminism. God's inner light is certainly alive and well within your every pore. You have blessed me beyond measure over the years. Your genius, creativity, and gracious manner will impact the rest of my lifespan.

I also want to say a very special thanks to Dr. Mary Peterson, Chair of the Graduate School of Psychology at George Fox University, and Dr. Bill Buhrow, Dean of Student Services and Director of Health and Counseling Services at George Fox University. Each of you expressed ready willingness to serve as committee members, a gracious process which has deeply blessed and humbled me. You each brought great knowledge of Health Psychology to this process and your tireless energies are what make this university shine. Servant hearts, like yours, not only manifest His Logos but model what integrative psychology really means.

I also want to thank Dr. Linda Samek, Dean of the School of Education, for creating a "modified sabbatical experience" over the past year which allowed me the time to complete the pre-doctoral internship. Your grace and creativity in this process are gratefully received! You manage the largest School in this university and still take the time to make each of us feel unique and special. What a gift you are!

Last, but certainly not least, I wanted to share a special, heart-felt, thank you to my clinical supervisors whose trust empowered me to explore many varied theories, models, and skills while serving patient needs.

- Dr. David Collier, PsyD, who supervised me at the Salem Veteran's Center for 18 months (along with a very skilled team of master-level and doctoral-level clinicians), gave me new skills and a renewed awareness of how valuable self-care must be when serving people. I also love how you love US Veterans!
- Dr. Bill Buhrow, PsyD, a member of my dissertation committee, who also served as my pre-internship supervisor at the university Health and Counseling Center, always provided clear and direct feedback, honed my report-writing skills, and treated me always as a colleague.
- Dr. Joel Gregor, PsyD, Director of the Behavioral Health Clinic in Newberg, for providing insights, wisdom, and much-needed grace surrounding all things MAC☺ during my internship. Your love empowered me.
- Dr. Heidi Joshi, PsyD (Along with her servant buddy, Polly, and side-kick, Lina Garcia), who supervised me during my internship at PMG Scholls and PMG Gateway, thanks for sharing your rich passion for all things behavioral health. Your "walk about" supervision

style, candid questions, delightful shadowing experiences, and rich sense of health humor will impact all those I serve in the future.

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Chapter 1

Introduction

Purpose

Cummings and VandenBos (1981) shocked the medical community when they published the results of a landmark longitudinal study conducted by Kaiser Permanente physicians over a 20-year period, revealing that 60% of all patients did not have physical needs but were being seen for mental health concerns. These findings have been echoed by hundreds of other researchers over the past 30 years (APA, 1976; Pruitt (1998). In spite of these data, the vast majority of diagnosable psychological problems are treated by primary care physicians who have limited mental health training (Kessler, 2009b). Because the primary care sector serves as a *de facto mental health system* (Regier et al., 1993), most health care insurance companies spend no more than 6% of their annual budget for identified psychological needs (Walker & Collins, 2009). These staggering needs are further complicated by growing shortages of physicians and other medical specialists in most states.

Many hoped the advent of health psychology would help address these issues and take some pressure off physicians and the medical system, while better serving patients' needs. The hope was medical professionals would see the need and create staffing positions for or streamline referrals to health psychologists (Bruns, 1998; Malcolm, 2001; Matthews, 1993; Mori, LoCastro, Grace & Costello, 1999). But has this really happened? Gatchel and Oordt (2004) asserted that an increasing interest and support for behavioral health care providers to integrate their practices into the primary care setting (p. xi). However, Kessler (2009a), Walker and Collins (2009), along

with many others, argued that there was little evidence for the acceptance of health psychology within medicine, particularly within primary care medicine. Which assertion is shared by Oregon physicians, physician assistants, and other health practitioners?

The purpose of the current research was to obtain medical personnel perceptions about the role of behavioral health psychology within their medical care practices in Oregon. If these medical personnel are willing to refer their patients to health psychologists, for what services and under what conditions would these Oregon medical personnel utilize behavioral health psychology services? How do the gender, medical specialty, number of years in practice, the location of practice, and other factors impact the referral practices of these medical personnel when they deal with their patients' behavioral health psychology needs?

Important questions like these are not easy to definitively answer. However, these kinds of questions and the responses by Oregon medical personnel make far more sense once some of the historical developments within behavioral health psychology and the goals of earlier researchers regarding referral and utilization preferences are scrutinized.

A Brief History and Definition of Health Psychology

Because definitions are contextualized within the cultures and histories of the groups promoting them, a brief socio-cultural and historical overview of behavioral health psychology is important. Wallston's (1997) article summarized the developmental history of health psychology (Division 38 of the American Psychological Association), characterizing it as a "gestational process".

Wallston (1997) argued that every aspect of psychology has been concerned with various aspects of health. This makes perfect sense once we realize that the earliest pioneers (e.g., Freud,

Jung, Helmholtz, James, and Wundt, to name a few) were trained in medicine. In spite of this commonality, much of psychological research and application over time has focused on mental health, not physical health. This nuance may reflect reliance upon Cartesian dualism more than anything else, especially before interactionist and holistic approaches were embraced within mainstream psychology in the 1960s. Wallston noted that psychologists began focusing on "phenomena other than strictly mental health concerns" after World War II. for example, by exploring the conditioning effects of physiological processes which led to technologies such as biofeedback. The Health Belief Model, which was first conceptualized in the 1950s (Rosenstock, 1966, 1974; Rosenstock, Streder, & Becker, 1989), explored and summarized the reasons people were not becoming vaccinated against tuberculosis, empowering the U.S. Public Health Service to positively impact the health needs of untold thousands.

As more psychologists found positions within Schools of Medicine, Nursing schools, Public Health programs, and the various services of the Veterans Administration, a wide variety of theories, models, and methods were brought to bear upon patient needs (Wallston, 1997). These work environments also promoted the interdisciplinary perspective which fosters information sharing and research. By the mid-1970s the bio-psycho-social model, the brain-child of Hankins (1964) which was first described in the *Journal of Clinical Psychology* (Guze, Matarazzo, & Saslow) in 1953, was popularized by physician George Engel in 1977.

Schofield's (1969) article on the role of psychology in health delivery systems caught the imaginations of the American Psychological Association's Board of Scientific Affairs (BSA) when members of one BSA committee, the Committee on Newly Emerging Areas of Research (NEAR), accepted Schofield's challenge to more directly research the impact and potential for

psychologists to serve within health and medical fields. A formal recommendation was made in 1973 and in 1975 this new field was recognized by the American Psychological Association (Wallston, 1997).

At first, health psychology organized as the Section of Health Research (Section 2) within Division 18 (Psychologists in Public Service). Division 18 had inaugurated the use of Sections, beginning with the Section of Criminal Justice, thus providing an administrative umbrella under which to launch new areas of research and service. By 1976 members of Section 2 began petitioning the American Psychological Association to create a separate Division for Health Psychology. The timing was right because Stephen Weiss, the new head of Behavioral Medicine at the National Institute of Heart, Lung, and Blood, was elected as the chairperson of the American Psychological Association (Wallston, 1997).

Weiss quickly enlisted the support of his mentor, Joseph Matarazzo (1980) who had launched the first truly autonomous Department of Medical Psychology at the University of Oregon Health Sciences Center. Division 38 was approved in August, 1978 but Section 2 of Division 18 was not officially dissolved until 1980 (Wallston, 1997).

Division 38 set course by formalizing these purposes:

> To advance contributions of psychology as a discipline to the understanding of health and illness through basic and clinical research and by encouraging the integration of biomedical information about health and illness with current psychological knowledge; to promote education and services in the psychology of health and illness; and to inform the psychological and biomedical community, and the general public, on the results of current research and service activities in this area. (Matarazzo, 1979)

Wallston (1997) emphasized that these purpose statements embraced the two-tract focus of the American Psychological Association: Research and Practice. With these purposes now established, various members of Division 38 sought to frame a working definition for health psychology which would reflect these very purpose statements.

In 1980 Matarazzo created the following definition of health psychology:

> Health psychology is the aggregate of the specific educational, scientific and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, and the identification of etiologic and diagnostic correlates of health, illness and related dysfunction (p.815).

Within a year this definition was amended to include the phrase "and to the analysis and improvement of the health care systems and health policy formation." Robison (1981, p. 6) reported this full definition was embraced and ratified by Division 38 members in 1980. This definition was created to serve as an intra-disciplinary mechanism through which psychology's role as a science and profession would be more easily communicated to other professions and the public. But what happens when health psychologists rub shoulders with medical personnel who are not aware of or may not appreciate this intra-disciplinary definition?

As commonly occurs within human history, parallel processes were afoot within the medical community (Wallston, 1997). The 1977 Yale Conference on Behavioral Medicine (Schwartz & Weiss, 1978) prepared this definition for their own inter-disciplinary movement:

> Behavioral medicine is the field concerned with the development of behavioral science knowledge and techniques relevant to the understanding of physical health and illness and the application of this knowledge and the techniques to prevention, diagnosis,

> treatment and rehabilitation. Psychosis, neurosis, and substance abuse are included only insofar as they contribute to physical disorders as an end point (p.7).

This definition of behavioral medicine reflected how health psychologists served when working with those outside of psychology. In such roles, health psychologists would often be perceived as engaging in behavioral medicine. When working with other psychologists, however, they mutually acknowledged their roles as health psychologists (Wallston, 1997). These distinct definitions must be kept in mind when dealing with the medical community and when addressing the general public. Barriers often arise when sensitivity to these definitional and practice differences is lacking.

Barriers and Bridges Experienced by Health Psychologists

Are there certain reasons medical personnel do (i.e., bridges) or do not (i.e., barriers) refer their patients to behavioral health specialists? If there are barriers, can these be addressed as a way to enhance referrals? If there are bridges, what can be done to strengthen these? The health psychology literature has been exploring predictors of bridges and barriers for nearly 25 years, a few examples of which are mentioned next.

The Physician Referral Study conducted by the University of Washington in Seattle discovered the following predictors for physician referrals to mental health specialists (Grembowski et al., 2002):

- The severity of patient symptoms (the more severe, the more likely the referral).
- Patients who had previously used mental health services were often referred.
- Patients with higher education would be referred more frequently.
- Younger patients were referred more frequently.

- Female patients were referred more often than male patients.
- Salaried physicians referred 10% more patients than managed care physicians.

Overall, 23% (191) of the 832 patients were referred by their physicians to mental health specialists but only 38% (72) of these used their referrals. 13% (25) were referred to psychiatrists but only 17% (4) made appointments. Data for the other referrals were not provided.

In another 2009 publication, Earls, Andrews, and Hay explored the longitudinal screening and referral practices of physicians as part of North Carolina's Assuring Better Child Health and Development initiative. While this research focused upon infants and children, the factors influencing physician referrals might be appropriate for any age. Consider the following factors:

- Patient age
- Domain at risk (physical, linguistic, emotional, social, academic, home environment, or multiple domains)
- Family concerns about behaviors, changes, symptoms
- Socioeconomic status of the family
- Availability of specific services needed
- Waiting list for services needed
- Chronic nature of needs
- Negative feedback from other patients previously referred

While each of these factors is applicable to this current investigation, these beg the question, *How do medical providers identify the mental health needs of their patients?* Exploring for which problems physicians make referrals and what screening processes are used to

determine these problems might help health psychologists develop better bridges within the medical community.

While these medical factors must be considered, Langley, Merkin, and Till (1997) explored non-medical factors impacting physician referrals in Nova Scotia. The results included the age of the physician, the number years the physician had been in practice, whether the physician's practice was solo or within a group, and whether the practice was located in rural or urban environments. Overall, these researchers found that rural physicians made 50% fewer referrals than urban physicians. Three non-medical factors seemed to impact this difference: (a) *Access* to specialists, (b) geographically developed *styles of practice* and how these impact the policies and procedures used to make referrals, and (c) if the physicians had a personal or working *relationship* with a specialist.

In addition to barriers specific to physician perceptions, Muehrer, Salovey, Afifi, Coyne, Kring, Merson, and Rozensky (2002) as well as Pepin, Segal, and Coolidge (2009) explored patient barriers to utilizing mental health services. They discovered six intrinsic and six extrinsic barriers. Observe Table 1 below.

Table 1

Patient Barriers

Intrinsic Barriers	Extrinsic Barriers
Attitudes about help seeking	Concerns over therapist qualifications
Social stigma	Concerns over insurance matters
Knowledge about psychotherapy	Physician referrals
Fears about psychotherapy	Concerns over transportation
Concerns over finding a therapist	Concerns over payment abilities
Beliefs that symptoms are normal	Concerns over ageism

In summary, males expressed greater stigma concerns than females but females had greater concerns than males over finding a proper therapist. Younger patients (< 40 years) had greater fears over therapy itself than did older patients, while older patients had the greatest concerns over their insurance covering mental health services. What wasn't touched upon here is how these patient barriers may or may not impact their physicians who actually control the referral process. Do patient concerns and perceptions impact physician perceptions and referral practices as well?

Back to the Purpose

This survey research project sought to obtain medical personnel perceptions about the role of behavioral health psychology within their medical care practices in Oregon. The questionnaire created to collect these data included specific items by which to ascertain referral types and preferences for various medical personnel licensed to practice in Oregon. Specific demographics for the sample were also used to explore possible correlations.

Several hypotheses were explored via this data collection instrument.

Hypothesis 1 asserted that medical personnel from urban, suburban, and rural locations (independent variables in Q-25) would hold significantly different views of (a) which patient acuity levels warrant referral to behavioral health psychology clinicians (dependent variables in Q-3), (b) which patient treatment needs (dependent variables in Q-8 and Q-9) warrant referral to behavioral health psychology professionals, (c) what percentage of patients were perceived as needing behavioral health psychology services and what percentage were referred for these services (dependent variables in Q-24a and 24b), and (d) which behavioral health specialists would be used for referral needs. Hypothesis 1 focused upon *location* variables.

Hypothesis 2 suggested that the sample would more likely refer the more acute patient needs to behavioral health psychology specialists. This was the *acuity* hypothesis.

Hypothesis 3 posited that medical personnel would make significantly more behavioral health psychology referrals if they personally knew someone who provides health psychology services. This hypothesis focused upon *relationship factors*.

Hypothesis 4 stated that there would be significant differences between the perceptions and practices of female and male members of this sample regarding (a) the need for behavioral health psychology services, (b) the concerns expressed over using behavioral health psychology services, and (c) the actual number of referrals made during the past year to behavioral health psychology services. Hypothesis 4 focused upon gender factors.

Chapter 2

Methods

Participants

As of April 10, 2011, the Oregon Board of Medical Examiners identified 10,591 licensed medical doctors, 792 doctors of osteopathy, 152 doctors of podiatric medicine, and 960 physician assistants working in Oregon. The sample for this research consisted of 424 medical doctors, 32 doctors of osteopathy, 15 doctors of podiatric medicine, and 38 physician assistants, randomly selected from the Oregon Board of Medical Examiners' membership list published in April 2011. Using a multi-stage probability process (Davis, Smith, & Marsden, 1999) ensured the sample included various types of medical professionals (i.e., MDs, DOs, DPMs and PAs) who worked in a variety of practice settings (i.e., urban, suburban, and rural settings) within the 36 Oregon counties. This multi-stage probability sampling process reflected demographic data, for example, from the following:

- Multnomah County, where the state's largest city, Portland, is located, boasted an urban population of more than one million persons at the time of this research.
- Marion County, where the state's capital, Salem, is located had a suburban population of about 150,000 at the time of this research.
- Yamhill County consisted of many rural communities ranging from 1,000 to 30,000 souls at the time of this research.

Many definitions have been used to distinguish urban, suburban, and rural populations but no definition or classification schema fits all research or political uses of these terms. While

most definitions describe civil jurisdictions, population densities, land uses, or economic notions, the U.S. Census Bureau (2011) argued that any selected definition is but the "best suited" for specific groups when used for specific interests or research purposes; that is, each investigator stipulates *operational definitions* to be used in each research process. For this specific research, *urban* was defined as a population density of at least 1,500 people per square mile, with a combined population of at least 100,000 people (U.S. Census Bureau, 2011). S*uburban* was defined as a population between 501-1,499 people per square mile and a population between 25,000 and 99,999 people. *Rural* was defined as 500 or fewer people per square mile with a combined population of less than 25,000 people (see *usplaces.com*; Oregon population by county/total residents). The website http://paweb2.com/zip.htm was then used to generate alphabetic and numeric lists of all Oregon zip codes. The zip codes identified for this sample were then entered into the *population finder* link of the U.S. Census Bureau website to determine whether each zip code reflected the above operational definition for urban, suburban, or rural areas.

A sample of 509 Oregon medical personnel were randomly selected from the Oregon Board of Medical Examiners' published membership list. The entire membership list of Oregon medical personnel was clustered by mailing addresses and then zip codes were randomly selected for a sample of 424 (4%) medical doctors, 32 (4%) doctors of osteopathy, 15 (10%) doctors of podiatric medicine, and 38 (4%) physician assistants. The larger 10% sample of doctors of podiatric medicine was selected due to the small number of DPMs licensed in Oregon. The percentages for each medical specialist were small (4% and 10%) to keep the research costs below $3,000.

Instrument

A 26-item questionnaire which collected 126 data sets was developed by this author with input from committee members that incorporated perspectives from various journal articles about behavioral health psychology and the results from a 2006 pilot survey completed by this author. The questionnaire collected 126 sets of data reflecting specific demographic and various perceptions held by the sample. The questionnaire collected nominal data via 19 questions, interval data through 102 questions, and ratio data using 5 questions. A copy of this questionnaire is in Appendix A.

Procedures

The 26-item questionnaire was constructed using Dillman's model (Dillman et al., 2007) as a means to ensure higher return rates for such a long questionnaire (5 double-sided pages). The questionnaires were then mailed to a random sample of health practitioners licensed by the Oregon Board of Medical Examiners as of April, 2011. The membership list, from which the sample was randomly generated, was purchased from the Oregon Board of Medical Examiners for $250. The costs for envelopes, stamps, and stapled copies were $1,669.52 to mail 509 sets to this sample. The cost to lease IBM's SPSS Statistics, version 20, was $150.

An online random number generator (http://www.randomizer.org) was used to arrive at the random sample (n = 509). This sample included 456 Physicians (424 MDs and 32 DOs), 38 Physician Assistants (PAs), and 15 Doctors of Podiatry (DPMs) whose offices were located in specific urban, suburban and rural settings in Oregon.

A cover letter (see Appendix B) and stamped, self-addressed return envelope were included in each mailing. 27 questionnaires (or 5.3% of the sample) were returned due to

inaccurate addresses. 92 of the 482 delivered questionnaires were returned as requested, providing a return rate of 19.1%. However, 23 of these were either totally or partially incomplete; thus reducing the usable return rate to 15.0%. This response rate barely met expectations (15-25%) established by Dillman, Smyth, and Christian (2009). No follow up reminders were sent to this sample and no participation incentives were offered. IBM's SPSS Statistics (20.0) software was used to analyze all data.

Hypotheses

Several research hypotheses were explored via this data collection instrument: *Hypothesis 1* asserted that medical personnel from urban, suburban, and rural locations (independent variables in Q-25) would hold significantly different views of (a) which patient acuity levels warrant referral to behavioral health psychology clinicians (dependent variables in Q-3), (b) which patient treatment needs (dependent variables in Q-8 and Q-9) warrant referral to behavioral health psychology professionals, (c) what percentage of patients were perceived as needing behavioral health psychology services and what percentage were referred for these services (dependent variables in Q-24a and 24b), and (d) which behavioral health specialists would be used for referral needs. Hypothesis 1 focused upon *location* variables.

Hypothesis 2 suggested that the sample would more likely refer the more acute patient needs to behavioral health psychology specialists. This was the *acuity* hypothesis.

Hypothesis 3 posited that medical personnel would make significantly more behavioral health psychology referrals if they personally knew someone who provides health psychology services. This hypothesis focused upon *relationship factors*.

Hypothesis 4 stated that there would be significant differences between the perceptions and practices of female and male members of this sample regarding (a) the need for behavioral health psychology services, (b) the concerns expressed over using behavioral health psychology services, and (c) the actual number of referrals made during the past year to behavioral health psychology services. Hypothesis 4 focused upon *gender* factors.

Chapter 3

Results

Demographics

Of the 509 questionnaires originally mailed, 27 (5.3%) were returned to sender because the addressees had moved with no forwarding addresses on file. Of the remaining 482 questionnaires which reached their destinations, 92 (19.1%) were returned as requested. 23 of these 92 returns were either blank or so incomplete they were of little value, leaving 69 usable returned questionnaires (14.9% of the sample). Table 2 describes key demographics for the random sample mailed a questionnaire and those who returned a usable questionnaire.

Other demographic variables relevant to this research project are included in Tables 13-23 in Appendix C.

Hypotheses

The data collected as a means to explore each of the hypotheses were analyzed using IBM's SPSS Statistics, version 20.0, software. An alpha level of .05 was used for all statistical tests.

Hypothesis 1 results. *Hypothesis 1* asserted that medical personnel from urban, suburban, and rural locations (independent variables in Q-25) would hold significantly different views of (a) which patient acuity levels warrant referral to behavioral health psychology clinicians (dependent variables in Q-3), (b) which patient treatment needs (dependent variables in Q-8 and Q-9) warrant referral to behavioral health psychology professionals, (c) what percentage of patients were perceived as

Table 2

Sample by Role, Gender, and Location – Sent and Returned

Roles (*n*)	Gender Location	Total Sent	% Sent	Roles (*n*)	Total Returned	% Returned
MD (415)	Female	149	35.9%	MD (55)	17	30.9%
	Male	266	64.1%		38	69.1%
	Urban	192	46.3%		17	30.9%
	Suburban	82	19.6%		9	16.4%
	Rural	141	34.0%		29	52.7%
DO (32)	Female	10	31.3%	DO (3)	1	33.3%
	Male	22	68.8%		2	66.7%
	Urban	9	28.2%		0	00.0%
	Suburban	4	12.5%		1	33.3%
	Rural	19	59.4%		2	66.7%
DPM (15)	Female	3	20.0%			
	Male	12	80.0%			
	Urban	4	26.7%			
	Suburban	5	33.3%			
	Rural	6	40.0%			
PA (38)	Female	24	63.2%	PA (11)	7	63.6%
	Male	14	36.8%		4	36.4%
	Urban	15	39.5%		3	27.3%
	Suburban	7	18.4%		2	18.2%
	Rural	16	42.1%		6	54.6%

MD = Medical Doctor; DO = Doctor of Osteopathy; DPM = Doctor of Podiatric Medicine; PA = Physician Assistant

needing behavioral health psychology services and what percentage were referred for these services (dependent variables in Q-24a and 24b), and (d) which behavioral health specialists would be used for referral needs. Hypothesis 1 focused upon *location* variables.

Hypothesis 1(a): Locations by conditions warranting referral (Q-25 by Q-3). A 3 by 3 ANOVA (Urdan, 2010, p. 105, 129) was used to explore effects of professional practice locations (Q-25 postal zip numbers recoded as nominal data for locations, where 1, 2, and 3 = urban, suburban, and rural locations, respectively) and the acuity levels (Q-3 ratio data for mild, moderate, and severe acuity levels) required before referrals to behavioral health specialists

would occur. The nominal codes for the three locations served as independent variables (IV) while the patient ratio data entered by participants served as dependent variables (DV). Table 3 below summarizes the results of this ANOVA.

Table 3

Locations (3) by Acuity (3) ANOVA Results

Descriptive Statistics

IV	Acuity	N	Mean	*SD*	S Error	95% CI for Mean
Urban	Mild	19	40.53	27.18	6.24	27.43-53.63
Suburban		11	37.73	21.02	6.34	23.61-51.85
Rural		33	52.81	24.46	4.43	43.15-61.21
Urban	Moderate	19	35.58	24.00	5.51	24.01-47.15
Suburban		11	25.64	16.20	4.89	14.75-36.52
Rural		33	24.46	14.08	2.45	19.46-29.45
Urban	Severe	19	13.00	10.72	2.50	7.83-18.17
Suburban		11	20.18	24.03	7.25	4.04-36.32
Rural		33	9.11	10.77	1.87	5.29-12.92

ANOVA Results

Acuity	Source	Sum of Squares	*df*	Mean Square	F	Sig.	Levene Homogeneity
Mild	Between	2581.89	2	1290.94	2.014	.142	.639
	Within	38455.83	60	640.93			
Moderate	Between	1567.63	2	783.81	2.43	.096	2.94
	Within	19331.36	60	322.19			
Severe	Between	1028.84	2	514.42	2.67	.077	1.51
	Within	11550.52	60	192.51			

Given these results, none of the three locations (Q-25) were significantly related to the acuity levels (Q-3) as described by this sample.

Several other analyses were run to ensure these results. The Welch and the Brown-Forsythe robust tests of the equality of the means were used to explore the three acuity levels. None of these results were significant either. Both the Tukey HSD and Bonferroni post hoc tests were also used. When the Tukey post hoc analysis was completed, the only variable close to a significant difference was for the *severe acuity over the past year* ($p = .057$). Because Tukey's HSD cannot guarantee Type I error levels, a second analysis using Bonferroni adjustments was run. This analysis revealed no significant differences between location and acuity variables. Because Bonferroni adjustments limit Type I errors, it is safe to say that where the medical personnel practiced did not impact the acuity levels they assigned to patient symptoms or the use of behavioral health referral services. Hypothesis 1(a) was rejected.

Hypothesis 1(b): Locations by treatment needs warranting referral (Q-25 by Q-8). A 3 by 3 ANOVA (Urban, 2010, p. 105, 129) was used to explore the acuity levels needed for 20 distinct treatment needs before referrals are made. The recoded nominal data for the three locations (Q-25 postal zip codes, representing urban, suburban, and rural locations) served as independent variables (IV) while the three acuity levels (Q-8 interval data choices of mild, moderate, or severe) assigned by participants for each of the 20 unique treatment needs served as dependent variables (DV).

SPSS summarized the results of these many analyses in 395 pages of information. There were no significant relationships between any of the locations and any of the 20 treatment needs.

In order to display these results, more manageable summaries of the 20 specific items were created by recoding the 20 items into the following six groupings:

(1) Endocrinology (including diabetes, hypertension, obesity, and gastrointestinal disorders),

(2) Cardio-Lung (including cardiovascular and asthma),

(3) Chronic (including chronic pain, chronic illness, and terminal illness),

(4) Anxiety (including insomnia and sleep disorders),

(5) Drug (including tobacco, drug addiction, and substance-related), and

(6) Psychological (including high utilizing, psychotic, mood, anxiety, eating, and personality disorders).

Table 4 (below) provides a brief snap shot of the results for these recoded categories.

Because none of the comparisons reached the .05 level of significance, Hypothesis 1(b) was also rejected.

Hypothesis 1(c): Locations by perceived and actual referrals (Q-25 by Q-24a and Q-24b). A 3 by 3 ANOVA (Urban, 2010, p. 129) was used to explore the impact of professional location upon perceived needs (Q-24a) and actual referrals (Q-24b). The nominal codes for the 3 locations (Q-25 postal zip numbers recoded as nominal data for locations: 1, 2, 3 = urban vs. suburban vs. rural, respectively) served as independent variables (IV) while the percentages entered as raw data (Q-24a and Q-24b encoded as ratio data) by participants for their own practices served as dependent variables (DV). Table 5 (below) summarizes the analyses of these data.

The results in Table 5 (below) indicate that participants perceived a real need to refer patients to behavioral health specialists but urban and suburban practitioners made fewer actual

Table 4

ANOVA Results for Locations (3) by Acuity (3) for 6 Recoded Treatment Need Categories

Descriptive Statistics: Recoded Categories (Q-8)

Categories (Combined Locations)	*N*	Mean	*SD*
Endocrinology Needs	60	2.794	.965
Cardiopulmonary Needs	60	2.633	1.001
Chronic Diseases	60	2.617	1.092
Anxiety Disorders	60	2.713	.875
Drug Dependence	60	2.541	1.668
Psychological Needs	60	2.292	.923

ANOVA Results: Combined Locations

Recoded Categories	Source	Sum of Squares	*df*	Mean Square	F	Sig.
Endocrinology	Between	1.512	2	.756	.738	.562
	Within	57.423	57	1.007		
Cardiopulmonary	Between	1.071	2	.536	.546	.635
	Within	58.046	57	1.018		
Chronic Diseases	Between	.782	2	.391	.434	.686
	Within	62.023	57	1.088		
Anxiety	Between	.500	2	.250	.337	.726
	Within	44.790	57	.786		
Drug Dependence	Between	2.889	2	1.445	1.308	.397
	Within	57.503	57	.998		
Psychological	Between	.247	2	.124	.152	.872
	Within	51.099	58	.885		

Table 5

ANOVA Results for Locations (3) by Perceived Needs and Actual Referrals

Descriptive Statistics: Perceived Needs

IV	*N*	Mean	*SD*	S Error	95% CI for Mean
Urban	17	35.00	25.37	6.15	21.96-48.05
Suburban	11	36.36	26.37	7.95	18.65-54.08
Rural	35	14.63	10.52	1.78	11.02-18.24

Descriptive Statistics: Actual Referrals

IV	*N*	Mean	*SD*	S Error	95% CI for Mean
Urban	17	24.77	28.29	6.86	10.22-39.31
Suburban	11	28.00	30.41	9.17	7.57-48.43
Rural	35	16.57	20.78	3.51	9.44-23.71

ANOVA Results

	Source	Sum of Squares	*df*	Mean Square	F	Sig.
Perceived Need:	Between	6811.89	2	731.63	9.72	.000
	Within	21015.22	60	640.93		
Actually Referred:	Between	1463.26	2	731.63	1.20	.310
	Within	36727.13	60	612.12		

referrals even though the need was recognized for such. Only those practicing in rural locations referred more patients than they perceived having a need for such. However, the actual referrals made by all three locations were not significantly different. Thus, hypothesis 1(c) was also rejected.

Hypothesis 1(d): Locations by referrals to types of behavioral health specialists (Q-25 by Q-10, Q-11, and Q-12). A 3 by 4 ANOVA was used to examine the impact of professional

practice locations (Q-25: urban vs. suburban vs. rural) and preferences for specific behavioral health specialists (Q-10, 11, and 12: psychiatrist vs. mental health nurse vs. psychologist vs. master prepared). The nominal data depicting the three locations served as independent variables (IV) while interval ratings (1-6 in Q-10, 11, and 12) served as dependent variables (DV; Urdan, 2010, p.129). Table 6 (below) briefly summarizes the statistical analyses.

Table 6

ANOVA of Locations (Q-25) by Referral and Behavioral Health Specialist Types (Q-10, 11, 12)

Specialist Types	Locations	Mean	SD	SE	F	Sig.
Referral Type: External						
Psychiatrist	Urban	4.400	1.595	.412	2.083	.136
	Suburban	5.300	.675	.213		.118
	Rural	4.846	.834	.164		.423
MHNP	Urban	4.667	1.113	.287	1.427	.250
	Suburban	4.600	.699	.221		.986
	Rural	1.084	1.084	.213		.285
Psychologist	Urban	5.133	.917	.236	2.305	.111
	Suburban	4.400	.966	.306		.133
	Rural	4.615	.898	.176		.200
Master Trained	Urban	4.133	1.187	.307	.788	.461
	Suburban	3.600	.843	.267		.427
	Rural	3.923	1.017	.199		.808
Referral Type: Co-Location						
Psychiatrist	Urban	4.357	1.692	.452	1.716	.191
	Suburban	5.250	.886	.313		.295
	Rural	4.269	1.219	.239		.978

Table 6 (continued)

Specialist Types	Locations	Mean	SD	SE	F	Sig.
MHNP	Urban	4.500	1.092	.292	1.652	.203
	Suburban	4.625	.916	.324		.961
	Rural	4.000	1.058	.208		.329
Psychologist	Urban	4.786	1.188	.318	.909	.410
	Suburban	4.625	.916	.324		.932
	Rural	4.346	.936	.184		.397
Master Trained	Urban	3.786	1.188	.318	1.989	.149
	Suburban	3.500	.926	.327		.800
	Rural	4.240	.926	.185		.371
Referral Type: Integrated						
Psychiatrist	Urban	4.385	1.660	.461	1.015	.371
	Suburban	4.875	1.356	.480		.742
	Rural	4.023	1.401	.299		.764
MHNP	Urban	4.539	1.198	.332	1.386	.262
	Suburban	4.750	.707	.250		.885
	Rural	4.136	.941	.201		.484
Psychologist	Urban	4.923	.862	.239	1.175	.319
	Suburban	4.375	.916	.324		.323
	Rural	4.591	.796	.170		.500
Master Trained	Urban	4.077	1.115	.309	1.018	.370
	Suburban	3.625	.744	.263		.545
	Rural	4.182	.907	.193		.947

The above analyses revealed no significant effects. When the Welch and Brown-Forsythe robust tests of the equality of the means were used, no significance was found. This was also true

when post-hoc tests (i.e., Tukey HSD, Scheffe, and Bonferroni) were used. Thus, hypothesis 1(d) was rejected as well.

Hypothesis 2 results. *Hypothesis 2* suggested that the sample would more likely refer the more acute patient needs to behavioral health psychology specialists. This was the acuity hypothesis.

Q-3 asked each participant to identify the percentage of last year's patients who had mild, moderate, and severe acuity levels. One-way analyses of variance found no significance when these three acuity levels (ratio data, serving as the IV here) were compared with the gender of the participant (Q-23, nominal data serving as DVs), their professional role (Q-17, nominal data serving as DVs), their practice type (Q-18, nominal data serving as DVs), or the location of their practice (Q-25, nominal data serving as DVs).

Table 7 below reflects the descriptive statistics for Q-3 wherein participants were asked to write a raw number (ratio data) indicating the percentage of their 2012 patients who presented mild, moderate, and severe levels of acuity.

Table 7

Acuity Levels Perceived for 2012 Patients (Q-3)

Acuity Level	Mean	*SD*	SE (mean)	SE (sd)	95% CI (mean)
Mild	46.14	25.73	3.24	1.61	39.89-52.76
Moderate	28.02	18.36	2.15	2.04	23.73-32.52
Severe	12.21	14.24	1.79	3.45	8.96-16.06

n = 63

The results in Table 7 (above) reflect normative expectations, wherein most patients present with mild acuity symptoms and far fewer present with severe acuity symptoms. Typically, however, the more severe patients require more time and greater expertise when treating their needs.

Table 8 below records the results of a dependent (i.e., matched or paired) samples t-test used to compare Q-8 (current referrals based upon acuity levels) and Q-9 (referrals that would be made in 2013 based on the same acuity levels). The medical personnel rated the acuity level needed (i.e., mild, moderate, severe) for each of 20 different diagnostic categories (e.g., diabetes, hypertension, etc.) before they would refer their patients to behavioral health services in 2012 compared to expected referral practices in 2013.

The *t*-test results (above) indicated *significant* increased referral rates for 11 of the 20 diagnostic categories would occur in 2013. While the other 9 diagnostic categories did not reach significant levels, 3 of these 9 were approaching significant levels. Decreased means from "current (2012)" to "2013" referrals, indicate that referrals made in 2013 would include patients with even *lower* acuity levels than in 2012. Less acute patients would be referred to behavioral health services in 2013, thus increasing the number of referrals made.

Overall, respondents were already referring patients to behavioral health specialists *and* expecting to refer a greater number of patients, regardless of higher and lower acuity levels, to behavioral health services in 2013. These analyses affirm Hypothesis 2.

Q-24(a) asked the respondents to identify what percentage of last year's patients would have benefitted from a behavioral health referral and then Q-24(b) asked what percentage of

Table 8

Comparative Referral Rates: Paired Differences for 20 Diagnostic Categories in 2012 and 2013

Paired (2012-13) Diagnostic Categories	Difference Means	Difference sd	SEM	t	sig (2-tailed)
Diabetes	.086	.506	.066	1.299	.199
Hypertension	.069	.413	.054	1.272	.209
Cardiovascular	.076	.372	.049	1.587	.118
Asthma	.138	.395	.052	2.659	.010**
Chronic Pain	.138	.606	.080	1.735	.088
Insomnia	.293	.676	.089	3.304	.002**
Obesity	.362	.742	.098	3.715	.000**
Gastrointestinal	.086	.431	.057	1.525	.133
Chronic Tobacco	.379	.933	.123	3.095	.003**
Chronic Drug	.207	.720	.095	2.190	.033**
Chronic Illness	.155	.670	.088	2.190	.033**
Terminal Illness	.190	.606	.080	2.385	.020**
High-Utilizing	.293	.817	.107	2.733	.008**
Substance-Related	.207	.669	.088	2.355	.022**
Psychotic	.069	.645	.085	.814	.419
Mood Disorders	.172	.776	.102	1.693	.096
Anxiety Disorders	.138	.736	.097	1.427	.159
Eating Disorders	.155	.616	.081	1.920	.060
Sleep Disorders	.172	.653	.086	2.012	.049**
Personality Disorders	.207	.695	.091	2.268	.027**

df = 57 for all
** significant at or below .05

those needing referral were actually referred to behavioral health services. See Table 9 below for the results of the paired samples *t*-tests.

Thus, a small (r = .348) but significant (.005) number of patients needing referrals actually received those referrals (r^2 = 12%). These results provide more support for Hypothesis 2.

Table 9

Paired Samples Results for Patients Needing and Receiving Referral (Q-24a and Q-24b)

Pairing	Mean	Sd	SEM	r	sig.	*t*	*df*	sig. (2-tailed)
Q-24(a) Needing Referral	23.92	21.19	2.67					
Q-24(b) Actually Referred	20.78	24.82	3.13					
Paired Differences	3.14	26.43	3.33	.348	.005	.944	62	.349

Note. $N = 63$; 95% Confidence

Hypothesis 3 results. *Hypothesis 3* posited that medical personnel would make significantly more behavioral health psychology referrals if they personally knew someone who provides behavioral health services. This hypothesis focused upon *relationship factors*. Table 10 (below) summarizes how many respondents personally knew one or more of the four types of mental health specialists listed (see Q-13a). One goal here was to find a way of answering the question, *Would you refer to behavioral health specialists you know?*

Table 10 below reflects the Phi coefficient, a specialized version of the Pearson r (Urdan, 2010, p. 89), which was used to determine if the dichotomous variables in Q-13(a) and Q-13(b) were correlated. Q-13(a) asked each respondent if they personally knew a specific type of behavioral health specialist (collecting YES/NO or nominal data responses) and Q-13(b) asked each respondent if they would refer their patients to these same specific behavioral health specialists (YES/NO again).

Table 10

Phi Coefficient: Correlations between Personally Knowing and Referring to Mental Health Specialists (Q-13a and Q-13b)

BH Specialist	Personally Know	Would Refer			
	YES (NO)	YES (NO)	Eta	Eta-Squared	Sig. (Phi)
Psychiatrist	40 (25)	59 (3)	.145	.021	.258
MHNP	24 (40)	49 (10)	.250	.063	.057
Psychologist	36 (27)	55 (2)	.176	.031	.416
Master Trained	36 (27)	51 (8)	.407	.166	.006

According to Urdan (2010, p. 70) and Holcomb (2010, p. 59) effect sizes are used to control for the impact of sample size upon calculating statistical significance. To date, however, there are no universally-accepted definitions for what are small, moderate, or large effect sizes. Note Table 11 below, reflecting how Urdan and Holcomb define these differences.

Table 11

Comparative Limits for Effect Sizes

	Effect Sizes		
Researcher	Small	Moderate	Large
Urdan	< .20	.25 - .75	> .80
Holcomb	< .30	.30 - .50	> .50

**For the purposes of this research, Urdan's effect sizes have been used.

Urdan (2010) also discusses various ways effect size can be calculated based upon what statistical processes are being used (p. 68, 70, 73, 111, 113, 127, etc.). Several points of interest impact this research. According to Urdan, (a) Eta-squared = r-squared, (b) Eta-squared reflects the impact of d (effect size) but is not equal to d, and (c) effect size should be calculated and/or considered whenever significance testing appears.

The relevance of these points for this research can be noted when comparing the significance values in Table 10 (above) for MHNP (.057) and Master Trained clinicians (.006). If these values are considered in isolation, it might appear that the sample for this study would more likely refer patients to MHNPs and Master Trained clinicians. However, if Eta-squared values are considered as one indicator for the impact of effect size (Urdan, 2010, p. 127), these values could likely impact the Phi coefficient for both the master trained and nurse practitioners. Thus, neither may be as significant as the numbers appear at first glance (also noting, of course, that .057 is not actually significant here).

However, Cross-tabs and Chi-squares were also used to compare Q-13a and Q-13b. When the sample knew a master trained clinician they would refer to them (significance = .050). No other comparisons generated significant scores. There are several ways this specific finding can be explained. For one example, in many rural communities, doctorate-trained clinicians are hard to find because small rural populations make it difficult for clinicians to make a living. Medical specialists, then, may have fewer options as referral sites. Master-level training programs across many licensure groups also tend to train larger numbers of students when compared to those training psychiatrists, nurse practitioners, and psychologists. Thus, there are many more master-trained clinicians available in the general population to serve others' needs.

Many of those making referrals may have also had concerns over treatment expenses for patients with little or no mental health insurance.

Despite these nuances just discussed, the hypothesis was rejected when Q-13(a) and Q-13(b) were compared, thus indicating that personally knowing a specific behavioral health specialist did not significantly affect the referral process, with the exception of master-trained clinicians. However, while Hypothesis 3 was rejected overall, these data make it clear that this research sample already referred patients to behavioral health specialists, and plan to do so in the future.

Hypothesis 4 results. *Hypothesis 4* stated that there would be significant differences between the perceptions and practices of female and male members of this sample regarding (a) the need for behavioral health psychology services, (b) the actual number of referrals made during the past year to behavioral health psychology services, and (c) any concerns expressed over using behavioral health psychology services. Hypothesis 4 focused upon *gender* factors.

Hypothesis 4(a) results. A chi-square analysis was performed to determine whether both females and males (Q-23) thought their patients from last year would have benefitted from a referral to behavioral health professionals (Q-24a). An Independent Samples Mann-Whitney U Test resulted in a significance of .007. More female medical professionals believed their patients from 2012 would have benefitted from a behavioral health referral. Thus, Hypothesis 4(a) was accepted because there were significant differences between female and male responses (Urdan, 2010, p. 166). Females perceived their patient needs for referrals differently when compared to the perceptions of males.

Hypothesis 4(b) results. *Paradoxically, when gender (Q-23) of the respondents was compared to the number of patients actually referred in 2012 (Q-24b), there were no significant differences (.246) between female and male medical professional responses. Thus, Hypothesis 4(b) was rejected.*

Hypothesis 4(c) results. Participants were asked to rate (1-6) their concerns over 16 practice domains while considering three different behavioral health practice options (i.e., integrated, co-located, or external). These data were collected by Q-5, Q-6, and Q-7, while participant gender was obtained from Q-23. See Table 12 below.

Table 12

Concerns over Practice Options by Practice Domains

Behavioral Health Practice Options		Significant Domains	F	p
Integrated	(Female)	Style	5.06	.030
	(Female)	24/7 Access	5.06	.030
Co-Located	(Female)	Style	8.32	.006
	(Male)	Pace	7.18	.010
External	(Female)	Style	5.26	.026

Statistical analyses included the Independent Samples *t*-test, the Independent Samples Mann-Whitney U Test, and the One-Way ANOVA, with nearly identical results. Every test compared how each respondent by gender (nominal data, IV) rated (1-6) their concerns with 16 practice domains (interval data, DV) while thinking of three different behavioral health practice options. The only statistically significant concerns are noted in Table 12 above. Female

respondents were significantly more concerned over practice *style* across all three practice options. Male respondents were significantly more concerned over the *pace* of practice within a co-located practice. Females were also significantly more concerned over patients having 24-hour *access* to services.

Only 5 variables of 48 were significantly different based on the gender of the respondent. Thus, Hypothesis 4(c) was rejected, with the above exceptions noted.

Appendix D records two types of verbatim post-coded qualitative responses (see page 84). Type I (p. 85) narrative responses to Q-14, a specific open-ended question regarding reasons respondents would not refer patients to mental health professionals, records 19 verbatim responses. Type II (p. 86) responses reflect 15 spontaneous margin comments.

Chapter 4

Discussion

Introduction

Data analyses surrounding four research hypotheses were presented in the previous chapter. Discussion of research findings and implications, along with limitations and recommendations for future study follow below.

Hypotheses Findings and Implications

The following summarizes the results for each hypothesis.

Hypothesis 1 asserted that medical personnel from urban, suburban, and rural locations (independent variables in Q-25) would hold significantly different views of (a) which patient acuity levels warrant referral to behavioral health psychology clinicians (dependent variables in Q-3), (b) which patient treatment needs (dependent variables in Q-8 and Q-9) warrant referral to behavioral health psychology professionals, (c) what percentage of patients were perceived as needing behavioral health psychology services and what percentage were referred for these services (dependent variables in Q-24a and 24b), and (d) which behavioral health specialists would be used for referral needs. Hypothesis 1 focused upon *location* variables. Hypothesis 1(a), 1(b), 1(c), and 1(d) were all rejected.

Hypothesis 2 suggested that the sample would more likely refer the more acute patient needs to behavioral health psychology specialists. This was the *acuity* hypothesis. The data generally affirmed this hypothesis

Hypothesis 3 posited that medical personnel would make significantly more behavioral health psychology referrals if they personally knew someone who provides health psychology services. This hypothesis focused upon *relationship factors*. The data did not support this hypothesis, with the exception of referrals made to master-trained clinicians.

Hypothesis 4 stated that there would be significant differences between the perceptions and practices of female and male members of this sample regarding (a) the need for behavioral health psychology services, (b) the concerns expressed over using behavioral health psychology services, and (c) the actual number of referrals made during the past year to behavioral health psychology services. Hypothesis 4 focused upon *gender* factors. While the data affirmed Hypothesis 4(a), the data did not affirm Hypothesis 4(b) or 4(c).

Discussion of Hypotheses

Location variables. Physicians and Physician Assistants complete rigorous standardized training processes before they are permitted to take licensure exams. Thus, these medical professionals share a common knowledge and similar treatment philosophies to a large degree. These commonalities may have outweighed other influences derived from where each respondent practiced medicine. Where the medical professional practiced may not have been as important as where the medical professional was trained and if training curricula were similar.

It would make sense, then, for rural practitioners to have similar perceptions of their patients' needs for behavioral health referral sources as do their suburban and urban counterparts. However, there are likely far fewer rural referral sources to which these medical professionals can locally refer. Here, then, the standardized training may account for more than one's location may.

Acuity variables. Respondents perceived high levels of acuity for the patients they served in 2012 and expected higher acuity in 2013. Respondents also noted that they would refer more patients in 2013 than in 2012 for behavioral health assistance and that these referrals would be made for patients with even lower levels of acuity. This may imply anticipated or actual increasing numbers of patients as well as increasing levels of acuity. While the vast majority of respondents (77%) stated they did not know how the Affordable Care Act would impact them in 2013, they did realize greater numbers of their patients may have behavioral health referral needs.

Referral variables. While the lack of correlation between personally knowing a referral source and using that referral source, with the exception of master-trained clinicians, may be surprising, there are likely explanations for such. To begin with, those academic programs which train psychiatrists, mental health nurse practitioners, and psychologists graduate far fewer professionals than do those programs training terminal degree master-level clinicians. Given debt load from advanced training and those specialty skills developed, it may be easier for master-trained clinicians to work in certain locations with generalist skills.

Another factor here comes from two female physicians who penned side-bar notes, stating they do not refer to psychiatrists because their patients are dissatisfied with the bed-side manner provided by psychiatrists. While both respondents knew psychiatrists, they decided—based on patient feedback—not to refer to these psychiatrists. Thus, knowing or befriending another professional may not automatically lead to a referral. Because integrated behavioral health consultants also work at such a fast pace, patients may not much like these consultants either; however, if the consultation meets the patient's needs, then some level of satisfaction

would be obtained. There is likely a range for bed-side manner within which patients will thrive; at least this would be an interesting research question!

From another angle, the emphasis upon medical knowledge, skills, and technology may over-ride any natural tendency to refer patients to those we know, simply because we know them. Psychology, for instance, has long debated the long-term value of paying for a therapist who serves more as a "professional friend" than an expert consultant. The friendship connection may be essential at first, but if patients do not receive the help they need, few will continue to pay for a professional friend.

Another reason to not refer patients to those we know comes from case law in which a Florida general practitioner MD referred his patient to a cardiologist with whom he shared a close friendship. As luck would have it, the cardiologist made a mistake and the patient died. His family thereafter sued the cardiologist for malpractice, and then sued the general practitioner for a negligent direct referral. The chilling effect here raises questions regarding ever directly referring to those we know, or at least know too well.

Medical specialists may not refer to behavioral health specialists because they lack a understanding about how behavioral health specialists can assist with medical referral patient needs. Table 8 and Table 9 (above) may reflect this lack of knowledge. For example, the nine specific treatment needs generally not referred by this sample, are common reasons for referral in some environments. For instance, behavioral health specialists routinely work with patients who have diabetes, hypertension, cardiovascular problems, chronic pain, gastrointestinal diagnoses, anxiety, mood disorders, eating disorders, and psychosis. Depending upon the referral question stipulated by the patient's primary care provider, didactic education, coaching and skills

development, empowerment and motivation, etc. would all be common interventions with these patient needs. This referral problem is a perceptual issue which can be navigated by brief summary sheets which review specific services behavioral health specialists can provide given these specific patient needs.

One final point must be made here. Despite how the sample responded to the questions related to this hypothesis, the data make it clear that medical specialists are already referring patients regardless if they have a personal relationship with a behavioral health specialist or not.

Gender variables. While beyond the scope of Hypothesis 4, other *significant* response differences between female and male participants were reflected for (1) the year the professionals graduated from medical school (or training) (Q-1) and (2) their total number of years in practice (Q-19). Significance here were .001 and .004, respectively, reflecting the wide range of graduation and practice years for this sample. However, if the graduation dates and the number of years in practice were recoded or collapsed into 5-10 year ranges, these differences became less influential. For example, a near equal number of females and males graduated during several range categories. Cumulative historical and cultural changes which empower women to pursue careers in any given profession likely impact these changes, especially after the 1980s. These genders variables may also reflect standardized training program curricula.

Overall, female respondents (a) perceived greater patient referral needs, (b) were more concerned that referred patients have 24-hour access to the behavior health specialist, and (c) that their referrals be treated with respect and positive bed-side manner. Male respondents were most concerned that behavioral health specialists match the pace of medical practice. Apart from these few differences, gender did not impact patient care or referral processes.

Limitations and Recommendations

While the response rate (15%) fell within Dillman et al.'s (2009) survey research expectations (15-25%), a larger response rate may have provided important data. While Dillman et al. recommends the use of incentives and follow up mailings in survey research, neither were used in this project due to budget constraints. Design, methodological and funding changes might help address this limitation in future research.

The number of "return to sender" mailings reflected the out-of-date data base purchased from the Oregon Board of Medical Examiners. Evidently, many medical personnel licensed within Oregon had moved without providing this Board with current contact information and the US Postal Service did not forward these items. Because membership data bases are primarily updated at the time of license renewal, obtaining a data base closer to renewal dates might address some of these issues. However, some states use member birth dates or the month of original licensure to update demographic data, thus making it impossible to actually maintain current data for all members. This is a design issue.

Using online technology through which to distribute the questionnaire may also be a way to increase response rates. However, the Oregon Board of Medical Examiners' current policy does not permit the release of phone numbers or email addresses, essentially eliminating a targeted digital survey. While posting a questionnaire on some other digital service (e.g., Facebook, Website, OBME Home Page, etc.) may reach some medical personnel, these digital services would have to be tailored for specific use by physicians and physician assistants. Perhaps purchasing advertisement space in the Oregon Board of Medical Examiners' membership journals, alerting readers of an electronic link to the questionnaire, might garner

wider interest and response. While response rates to online surveys vary widely, this may not increase the amount of data collected. There are also financial repercussions but data submitted electronically by the sample would reduce data entry requirements. Distribution to a random sample may also be nearly impossible without careful planning.

The 10-page questionnaire may have been long enough to deter a larger response rate. Previous mailed survey research using a 20-page instrument with a sample of medical specialists obtained a 40% response rate (Glasser & Lloyd, 1996), perhaps because the bio-ethics topic appealed to these medical personnel. People rarely respond to inquiries about which they have little knowledge or interest. This may have been another design limitation for this research.

This research questionnaire imbedded 126 data sets within 26 labeled questions. The questionnaire was designed (a) to collect data sufficient to address the four hypotheses for this project and (b) to provide data for numerous other research publications unrelated to this dissertation. This may have also negatively impacted the participation of the targeted sample.

While the services provided by behavioral health psychologists may be more widely recognized today than even ten years ago, no one knows (yet) how well known or how widely received behavioral health psychologists or their services actually are among various medical professionals or their working environments. Some anecdotal opinions exist but future research might wish to determine if physicians can actually identify the key services behavioral health psychologists provide and how these psychologists can assist physicians in their professional mission. Operational definitions, such as those offered within Q-2 and Q-4, were used as one attempt to ensure respondents understood some of these nuances. However, these definitions were quite brief and assumed the reader would have some context in which to grasp these

nuances. The use of said definitions may have had little clarifying impact, particularly if the respondents had limited experiential or professional contact with behavioral health services.

While medical personnel are typically aware of the professional services provided by psychiatrists and, perhaps, mental health nurse practitioners, many may have limited understanding of the professional nuances associated with psychologists and/or master-prepared clinicians (e.g., LCSW, LMFT, LPC, etc.), especially regarding how these professionals seek to serve the behavioral health needs of the physician's patients. Future research should include a question regarding previous experience working with integrated, co-located, and/or external behavioral health specialists.

Even when physicians can recognize the professional titles or roles of psychiatrists, mental health nurse practitioners, psychologists, and/or master-level prepared clinicians, this does not mean that these same physicians comprehend the unique ways each profession is trained or actually serves various patient needs. Name recognition, by itself, is not enough. One way to address this problem could be using a pre-survey cover page which describes behavioral health nuances, thereafter providing a few questions to assure respondent comprehension before exploring the actual questionnaire. While this may improve comprehension and clarity, this approach would also enlarge the questionnaire and increase the time required to complete the questions. These are design issues to wrestle with.

Some questions may have been poorly written and/or understood. Other questions may have required responses too complex to easily or quickly process (e.g., Q-5, Q-6, and Q-7). Some questions, such as Q-13, imbedded two distinct questions within four identification layers. Questions like these require multi-tasking, concentration, and genuine interest during the

response process. While imbedded questions collect a lot of data in a small amount of space, some respondents may misunderstand or avoid answering such. These problems could be addressed by first distributing the questionnaire to willing physicians who have had various types and degrees of interaction with behavioral health psychologists. This pilot study could help address definitions, questionnaire complexity, etc. An earlier survey (Lloyd, 1996) provided this type of pilot study feedback but the current questionnaire was 40% longer than the 1996 pilot.

Concluding Thoughts

As with any new discipline or specialty, great time and energy are expended forming the roles, rules, and boundaries within which professionals serve. Behavioral health psychology has come a long way in a relatively short period of time. The integration of behavioral health services within the medical community requires sufficient change within the philosophies and visions of all interested providers. Changes like these are rarely easy or immediately pervasive. It takes both time and repeated exposure for new ideas to be embraced and become normative. The growth of behavioral health psychology has required facing several barriers as well as building many bridges. This project sought medical personnel perceptions of behavioral health services as a way to assess the current "state of the union" between medical and behavioral health providers. This document reflects but one baby step in an on-going system review; may future research go far beyond this meager project.

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Appendix A

Behavioral and Mental Health Care: Survey Questionnaire

Behavioral and Mental Health Care: Questionnaire

Working Definition: Behavioral Health Care Specialists are "mental health practitioners who are specially trained to treat bio-psycho-social and emotional needs of medical patients diagnosed with various conditions like diabetes, hypertension, cardiovascular disease, insomnia, pain conditions, obesity, addictions of all kinds, chronic and terminal illnesses, etc." This questionnaire uses **Behavioral & Mental Health Professionals**.

Instructions: There is no right or wrong answer. Please provide your candid responses to the questions below. Your responses remain anonymous.

Q-1 I completed medical school/training in _____(year).

Q-2 I currently serve my patients' behavioral and mental health needs reflected by the model identified below (Please circle A, B, C, or D):

A. Co-location Model: An independent specialist shares my office space, using 45-minute sessions over 2-10 weeks to treat behavioral and mental health needs of my patients.

B. Integrated Care Model: A behavioral and mental health specialist is employed by my group and uses brief 10-15 minute sessions over 2-6 weeks.

C. External Referral Model: Longer term (6-10 sessions) 45-minute sessions are provided at another location by an independent behavioral and mental health specialist.

D. I currently treat the behavioral and mental health needs of my own patients.

Q-3 The levels of acuity over the past year for my patients with behavioral and mental health needs would reflect those I've listed below (Please write a % on each line):

Level of Acuity	**Percentage**
Mild	_____ %
Moderate	_____ %
Severe	_____ %

Q-4 By 2013 I would like to provide for my patients' behavioral and mental health needs by using the model identified below (Please circle A, B, C, or D below):

A. Co-location Model: An independent specialist shares my office space, using 45-minute sessions over 2-10 weeks to treat behavioral and mental health needs of my patients.

B. Integrated Care Model: A behavioral and mental health specialist is employed by my group and uses brief 10-15 minute sessions over 2-6 weeks.

Please continue on the next page.

Q-4 continued

C. External Referral Model: Longer term (6-10 sessions) 45-minute sessions are provided at another location by an independent behavioral and mental health specialist.

D. I currently treat the behavioral and mental health needs of my own patients.

Q-5 If I used the Co-location Model (above) to meet the needs of my patients, I would be **concerned** about the following (Please circle a number for each item below):

Very un-concerned	**Un-concerned**	**Somewhat un-concerned**	**Somewhat concerned**	**Concerned**	**Very concerned**
1	**2**	**3**	**4**	**5**	**6**

Matching my practice style.	1	2	3	4	5	6
Matching my practice schedule/pace.	1	2	3	4	5	6
Treating my patients with respect.	1	2	3	4	5	6
Having 24-hour access to care.	1	2	3	4	5	6
Patient satisfaction with services.	1	2	3	4	5	6
Patient resistance to services.	1	2	3	4	5	6
My satisfaction with services.	1	2	3	4	5	6
My communication with this professional.	1	2	3	4	5	6
This professional's communication with me.	1	2	3	4	5	6
My patients seen soon after I refer them.	1	2	3	4	5	6
Ethical issues surrounding mental health confidentiality and my need to know about my patients' treatment.	1	2	3	4	5	6
This professional's collaboration with my other team members.	1	2	3	4	5	6
Lack of feedback about my patients' status.	1	2	3	4	5	6
Brief feedback about my patients.	1	2	3	4	5	6
Accurate feedback about my patients.	1	2	3	4	5	6
This professional's support of my medical treatment plans for those I refer.	1	2	3	4	5	6

Please continue on the back side of this page.

Q-6 If I used the Integrated Care Model (above) to meet the behavioral and mental health needs of my patients, I would be **concerned** about the following (Please circle a number for each item below):

Very un-concerned	**Un-concerned**	**Somewhat un-concerned**	**Somewhat concerned**	**Concerned**	**Very concerned**
1	**2**	**3**	**4**	**5**	**6**

Matching my practice style.	1	2	3	4	5	6
Matching my practice schedule/pace.	1	2	3	4	5	6
Treating my patients with respect.	1	2	3	4	5	6
Having 24-hour access to care.	1	2	3	4	5	6
Patient satisfaction with services.	1	2	3	4	5	6
Patient resistance to services.	1	2	3	4	5	6
My satisfaction with services.	1	2	3	4	5	6
My communication with this professional.	1	2	3	4	5	6
This professional's communication with me.	1	2	3	4	5	6
My patients seen soon after I refer them.	1	2	3	4	5	6
Ethical issues surrounding mental health confidentiality and my need to know about my patients' treatment.	1	2	3	4	5	6
This professional's collaboration with my other team members.	1	2	3	4	5	6
Lack of feedback about my patients' status.	1	2	3	4	5	6
Brief feedback about my patients.	1	2	3	4	5	6
Accurate feedback about my patients.	1	2	3	4	5	6
This professional's support of my medical treatment plans for those I refer.	1	2	3	4	5	6

Please continue on the next page.

Q-7 If I used the External Referral Model to meet the behavioral and mental health needs of my patients, I would be **concerned** about the following (Please circle a number for each item below):

Very un-concerned	**Un-concerned**	**Somewhat un-concerned**	**Somewhat concerned**	**Concerned**	**Very concerned**
1	**2**	**3**	**4**	**5**	**6**

Matching my practice style.	1	2	3	4	5	6
Matching my practice schedule/pace.	1	2	3	4	5	6
Treating my patients with respect.	1	2	3	4	5	6
Having 24-hour access to care.	1	2	3	4	5	6
Patient satisfaction with services.	1	2	3	4	5	6
Patient resistance to services.	1	2	3	4	5	6
My satisfaction with services.	1	2	3	4	5	6
My communication with this professional.	1	2	3	4	5	6
This professional's communication with me.	1	2	3	4	5	6
My patients seen soon after I refer them.	1	2	3	4	5	6
Ethical issues surrounding mental health confidentiality and my need to know about my patients' treatment.	1	2	3	4	5	6
This professional's collaboration with my other team members.	1	2	3	4	5	6
Lack of feedback about my patients' status.	1	2	3	4	5	6
Brief feedback about my patients.	1	2	3	4	5	6
Accurate feedback about my patients.	1	2	3	4	5	6
This professional's support of my medical treatment plans for those I refer.	1	2	3	4	5	6

Please continue on the back side of this page.

Q-8 I currently refer patients for the following treatment needs when their acuity levels reach the levels noted below (Please circle a number for each treatment need listed):

KEY:	**Mild Acuity**	**Moderate Acuity**	**Severe Acuity**	**I Do Not Refer**
	1	**2**	**3**	**4**
Diabetes	1	2	3	4
Hypertension	1	2	3	4
Cardiovascular Disease	1	2	3	4
Asthma	1	2	3	4
Chronic Pain Conditions	1	2	3	4
Insomnia	1	2	3	4
Obesity	1	2	3	4
Gastrointestinal Disorders	1	2	3	4
Chronic Tobacco Use	1	2	3	4
Chronic Drug/Alcohol Use	1	2	3	4
Chronic Illnesses	1	2	3	4
Terminal Illnesses	1	2	3	4
High-Utilizing Patients	1	2	3	4
Substance-Related Disorders	1	2	3	4
Psychotic Disorders	1	2	3	4
Mood Disorders	1	2	3	4
Anxiety Disorders	1	2	3	4
Eating Disorders	1	2	3	4
Sleep Disorders	1	2	3	4
Personality Disorders	1	2	3	4

Please continue on the next page.

Q-9 By 2013 I would like to refer the following treatment needs when their acuity levels reach the levels noted below (Please circle a number for each treatment need listed):

KEY:	**Mild Acuity**	**Moderate Acuity**	**Severe Acuity**	**I Do Not Refer**
	1	**2**	**3**	**4**
Diabetes	1	2	3	4
Hypertension	1	2	3	4
Cardiovascular Disease	1	2	3	4
Asthma	1	2	3	4
Chronic Pain Conditions	1	2	3	4
Insomnia	1	2	3	4
Obesity	1	2	3	4
Gastrointestinal Disorders	1	2	3	4
Chronic Tobacco Use	1	2	3	4
Chronic Drug/Alcohol Use	1	2	3	4
Chronic Illnesses	1	2	3	4
Terminal Illnesses	1	2	3	4
High-Utilizing Patients	1	2	3	4
Substance-Related Disorders	1	2	3	4
Psychotic Disorders	1	2	3	4
Mood Disorders	1	2	3	4
Anxiety Disorders	1	2	3	4
Eating Disorders	1	2	3	4
Sleep Disorders	1	2	3	4
Personality Disorders	1	2	3	4

Please continue on the back side of this page.

Q-10 If I used the Co-location Model I would prefer working with the following professionals. Please circle a number **for each** professional role listed.

Strongly Not Prefer	**Not Prefer**	**Somewhat Not Prefer**	**Somewhat Prefer**	**Prefer**	**Strongly Prefer**
1	**2**	**3**	**4**	**5**	**6**
Board Certified Psychiatrist (MD)	1	2	3	4	5	6
Licensed Mental Health Nurse Practitioner	1	2	3	4	5	6
Licensed Clinical Psychologist (PhD/PsyD)	1	2	3	4	5	6
Master's Prepared Clinician (e.g., LCSW, LMFT, LPC)	1	2	3	4	5	6

Q-11 If I used the Integrated Care Model I would prefer working with the following professionals. Please circle a number **for each** professional role listed.

Strongly Not Prefer	**Not Prefer**	**Somewhat Not Prefer**	**Somewhat Prefer**	**Prefer**	**Strongly Prefer**
1	**2**	**3**	**4**	**5**	**6**
Board Certified Psychiatrist (MD)	1	2	3	4	5	6
Licensed Mental Health Nurse Practitioner	1	2	3	4	5	6
Licensed Clinical Psychologist (PhD/PsyD)	1	2	3	4	5	6
Master's Prepared Clinician (e.g., LCSW, LMFT, LPC)	1	2	3	4	5	6

Q-12 If I used the External Referral Model I would prefer working with the following professionals. Please circle a number **for each** professional role listed.

Strongly Not Prefer	**Not Prefer**	**Somewhat Not Prefer**	**Somewhat Prefer**	**Prefer**	**Strongly Prefer**
1	**2**	**3**	**4**	**5**	**6**
Board Certified Psychiatrist (MD)	1	2	3	4	5	6
Licensed Mental Health Nurse Practitioner	1	2	3	4	5	6
Licensed Clinical Psychologist (PhD/PsyD)	1	2	3	4	5	6
Master's Prepared Clinician (e.g., LCSW, LMFT, LPC)	1	2	3	4	5	6

Please continue on the next page.

Q-13 Currently I **personally know** the following behavioral health specialists in my community **and** I would (would not) **refer to them**. Please circle YES or NO **for both questions** for each professional role listed.

	I Personally Know?		**I Would Refer?**	
Board Certified Psychiatrist (MD)	YES	NO	YES	NO
Licensed Mental Health Nurse Practitioner	YES	NO	YES	NO
Licensed Clinical Psychologist (PhD/PsyD)	YES	NO	YES	NO
Master's Prepared Clinician (e.g. LCSW, LMFT, LPC)	YES	NO	YES	NO

Q-14 The reasons I would **not** refer to the specialist(s) noted in Q-13 are:

_____

_____

_____

Q-15 Please respond to this statement: "I currently prefer to manage the behavioral and mental health needs of my patients on my own." (Please circle one number below.)

Strongly Disagree	**Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Agree**	**Strongly Agree**
1	**2**	**3**	**4**	**5**	**6**

Q-16 Please respond to this statement: "By 2013 I will prefer to manage the behavioral and mental health needs of my patients on my own." (Please circle one number below.)

Strongly Disagree	**Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Agree**	**Strongly Agree**
1	**2**	**3**	**4**	**5**	**6**

Q-17 My current professional role is noted below (Please circle one number):

1. Physician (Please ALSO circle if **MD**, **DO**, **DPM**)
2. Physician Assistant
3. Other (Please specify): _____

Q-18 Please circle your response: In my current practice I am **employed**, **independent**, or **group/LLC**?

Q-19 I have been in practice for (Please note number) _____years.

Q-20 My medical practice specialty is (Please note here): _____

Please continue on the back side of this page.

Q-21 The State and Country in which I completed medical training: _____

Q-22 While in medical training I did (did not) complete a psychiatric services rotation (Please circle response):

YES/DID NO/DID NOT

Q-23 My gender is (Please circle one): FEMALE MALE

Q-24 Thinking of my last year of practice, the percentage of my patients who might have benefitted from a referral to behavioral and mental health care services was _%.

Of these patients what percentage did you refer to behavioral and mental health care specialists? Please note % here: _____%

Q-25 What is your office mailing zip code? _____

(**NOTE**: Your zip code is used only to determine if your office is located in a rural, suburban, or urban setting. Your responses remain anonymous.)

Q-26 Please circle your response to this statement: I know of how the Affordable Care Act will impact my practice in 2013.

YES **NO**

Thank you for sharing your perceptions!

Please use the enclosed stamped, self-addressed envelope to return this questionnaire.

If you would like to receive results from this survey please enclose a note in the return envelope or send a separate note or email clloyd@georgefox.edu

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Carl Lloyd
915 Vermillion Street
Newberg, OR 97132

Appendix B

Survey Cover Letter

DATE: January 10, 2012

TO: Oregon Medical Care Personnel

FROM: Dr. Carl Lloyd (H: 503-538-6674)
clloyd@georgefox.edu

RE: Behavioral and Mental Health Questionnaire

Will you please make the time to share your perceptions **with a student**?

I've attached a 26-item questionnaire about your professional perceptions. Research suggests that up to 70% of medical appointments are for problems stemming from behavioral and mental health issues. How do you perceive and meet these needs?

I know you are very busy. Feel free to communicate your perceptions to your staff, asking them to complete and return the attached questionnaire on your behalf.

Your name was *randomly selected* from those listed by the Oregon Board of Medical Examiners. Only 4% from this list were sent this questionnaire, thus your feedback is crucial! **Please make time to share your perceptions with a begging student☺.**

Your responses are anonymous. No follow-up contacts will be made to you or your office (unless you request a copy of the research results).

Please return your completed questionnaire in the stamped and self-addressed envelope on or before January 30, 2012.

If you have questions regarding this questionnaire, feel free to contact either Dr. Gathercoal or Dr. Lloyd:

Dr. Kathleen Gathercoal, Professor of Psychology
George Fox University
414 N. Meridian Street
Newberg, OR 97132
503-554-2376
kgathercoal@georgefox.edu

OR

Dr. Carl Lloyd, Professor of Management
George Fox University
915 Vermillion Street
Newberg, OR 97132
503-538-6674
clloyd@georgefox.edu

Thank you for sharing your perceptions!

The questions begin on the back side of this page.

Appendix C

Related Tables

Table C13

Medical School Completion by Decade and Gender

Decade	Female	Male
1960-1970	0	7
1971-1980	1	10
1981-1990	9	12
1991-2000	11	7
2001-2009	8	7

Table C14

Medical Practice Specialty by Gender

Specialty	Female	Male	Totals (%)
Pediatrics	2	5	7 (10.2)
Internal Medicine	7	8	15 (21.7)
Family Medicine	8	7	15 (21.7)
Emergency	1	2	3 (4.3)
Urology	0	3	3 (4.3)
OBGYN	3	0	3 (4.3)
Anesthesiology	0	3	3 (4.3)
Orthopedics	0	3	3 (4.3)
Psychiatry	1	2	3 (4.3)
Cardiology	0	1	1 (1.5)
Gastro	0	2	2 (3.0)
PM&R	0	1	1 (1.5)
Oncology	0	2	2 (3.0)
Otolaryngology	2	0	2 (3.0)
Ophthalmology	0	1	1 (1.5)
Surgery	0	1	1 (1.5)
Hospitalist	0	1	1 (1.5)
Radiologist	1	1	2 (3.0)
General Practice	0	1	1 (1.5)
Totals	25 (36.2%)	44 (63.8%)	69

Table C15

Years in Practice by Gender

Years (R = 2-42)	Female	Male	Totals (%)
2-10	11	10	21 (30.4)
11-20	10	10	20 (29.0)
21-30	3	12	15 (21.7)
31-42	1	12	13 (18.8)
Totals	25 (36.2%)	44 (63.8%)	69

Table C16

Practice Location by Gender

Location	Female	Male	Totals (%)
Urban	9	11	20 (29.0%)
Suburban	5	7	12 (17.4%)
Rural	11	26	37 (53.6%)
Totals	25 (36.2%)	44 (63.8%)	69

Table C17

Professional Role by Gender

Role	Female	Male	Totals (%)
MD	17	38	55 (79.7%)
DO	1	2	3 (4.3%)
PA	7	4	11 (16.0%)
Totals	25	44	69

Table C18

Current Practice by Gender

Practice	Female	Male	Totals (%)
Employed	12	24	36 (54.5%)
Independent	4	9	13 (19.7%)
Group/LLC	9	8	17 (25.8%)
Totals	25	41	66

Table C19

Current and Future Behavioral Health Models by Gender

Models		Female	Male	Totals (%)
Current	Co-Location	1	0	1
	Integrated	2	3	5
	External	18	30	48
	Treat Own	4	7	11
Totals		25	40	65
By 2013	Co-Location	6	7	13
	Integrated	6	9	15
	External	8	19	27
	Treat Own	3	4	7
Totals		23	39	62

Table C20

Current and Future Treat Own Patients by Gender

Prefer to Treat Own	Female	Male	Totals (%)
Currently			
Strongly Disagree	4	6	10
Disagree	7	10	17
Somewhat Disagree	5	12	17
Somewhat Agree	5	6	11
Agree	3	5	8
Strongly Agree	1	3	4
Totals	25	42	67
By 2013			
Strongly Disagree	3	8	11
Disagree	10	9	19
Somewhat Disagree	3	12	15
Somewhat Agree	4	6	10
Agree	3	4	7
Strongly Agree	1	3	4
Totals	24	42	66

Table C21

Medical Training Location by Gender

State/Country	Female	Male	Totals
OR	10	10	20
WA	0	2	2
CA	0	5	5
CO	0	1	1
AZ	1	0	1
UT	0	1	1
TX	2	2	4
NC	2	1	3
MI	4	0	4
OH	2	2	4
IL	0	2	2
NE	0	3	3
PA	1	1	2
MD	0	2	2
NY	1	2	3
MA	0	2	2
MD	0	2	2
NH	1	0	1
RI	1	0	1
United Kingdom	0	1	1
India	0	1	1
Totals	25	40	65

Table C22

Completing Psychiatric Rotation in Medical Training by Gender

PSY Rotation	Female	Male	Totals
YES	22	37	59
NO	3	6	9
Totals	25	43	68

Table C23

How Affordable Care Act Will Impact Practice by Gender

Know Impact for 2013	Female	Male	Totals
YES	4	11	15
NO	21	29	50
Totals	25	40	65

Appendix D

Post-Coded Qualitative Responses

Type I Narrative Responses: Specified Open-Ended Question

Q-14 The reasons I would **not** refer to the specialist(s) noted in Q-13 are:

Respondent #	Verbatim Response
6	No Availability; Rural Family Practice
13	In my experience, pts. have not had good interactions or outcomes utilizing an LCSW—or at least I have heard more bad outcomes with them –vs-counseling via a psychologist.
16	Unsure of level of competency (NP)
17	Not available
24	Do not know professional's competence (NP)
25	I do refer to all 4 specialties (Although there are only a few Licensed Mental Health NP…mild to moderate)
27	Lack of confidence (NP)
30	I do bone marrow transplants inpatient with multi-organ failure—patients need psychotherapy integrated with psychotropic drug therapy. Drug therapy with no family counseling (is) not helpful.
31	Competency unknown (NP)
37	There are none readily available for referrals in this rural area.
41	I refer patients to their PCP for evaluation. (all NO for Q-13b)
49	Don't know many (NPs and Master's Prepared)
52	I don't know any in my area---fairly new to the area.
53	Not available (LCPsy and Master's Prepared)
55	Psychiatrists often tend to be more clinical (less "warm and fuzzy")..less warm and I don't usually send unless pt prefers or they need more complicated medication management..but less adept at relationship building and behavioral tx.
56	I was pretty badly treated by SW level people in RBH. Not impressed. Don't know a Nurse Practitioner counselor. Actually, there is one in town who I've heard of who does a good job.
58	If I knew them and was not happy with their style of care. (I would not refer them)
62	All 3 of these (Psychiatrist, NP, and Master's Prepared) work in our integrated care model. (Does not include Psychologist)
67	As a surgeon I treat patients for brief episodes or acute care…not appropriate for me to refer.

Respondents	Thematic Responses (frequency)
19	None available (5) No need (refer back to PCP) (4) Don't know these professionals (4) Question competency (4) Distrust NPs (2) Distrust SWK (3)

Type II Narrative Responses: Spontaneous Marginal Comment Notes

Respondent #	Verbatim Response
1	Hope this helps! Thanks!
7	If the ACA is found to be constitutional I will retire.
8	I am a retired developmental pediatrician formerly at the Child Devel Rehab Cntr at Dornbecker Children's Hospital. I have been retired 10 yr. but still consult with SSA's Children's SSI program.
13	Most Psych don't see Medicare pts.
25	Q-4 Note—I am retiring in 11/12. If I was still working in 2013—my answer would be the same as Q-2. Q-24b Note—I offered the referral to most if not all—but most refused it.
26	Way too long.
28	Q-24b Sent to PCP.
29	FYI: I am a board-certified orthopedic surgeon but have been practicing occupational orthopedics for 20+ years. "Occupational Orthopedics" = doing IMEs. I have a small direct patient care practice with consists primarily of managing injured workers who have developed chronic pain problems.
33	I am a board certified psychiatrist and this form seems to be aimed at PCPs. This questionnaire does not fit me well. I am a board certified psychiatrist to whom others refer.
42	My patients are either on involuntary hold or released to outpt care. Emergency board certified 47,000 pts/yr
47	I work at Roseburg VAH (Q-3)
55	(For Q-2 and Q-4) Depends entirely upon the condition, not the model! (For Q-8, 9, 10) I am an OB-GYN & do not treat most of these. When pregnant or GYN related, I do treat. (For Q-24b) I usually encourage if I identify problems.
56	Ophthalmologist (not treating much mental health!). (For Q-24b) Sent to their primary care Doc's and asked to Tx them for depression. Most are old cataract patients & depression in the elderly is what I see.
62	(For Q-17) Co-treat. My desire to treat is only because of limited access to psychiatric prescribing (in 97205 zip code)
63	(For Q-3) % of total patients or only those with MH issues?

Appendix E

Curriculum Vitae

Carl Lloyd, MA, MS, MSSW, MA, PhD
915 Vermillion Street
Newberg, OR 97132
clloyd@georgefox.edu
H: 503-538-6674

Education

May 2013 — **Doctoral Student in Clinical Psychology Program (PsyD)**
Graduate School of Clinical Psychology (APA Accredited)
George Fox University, Newberg, Oregon 97132
Anticipated date of graduation: May 2013
Dissertation: *The perceptions of behavioral health psychology held by medical personnel in Oregon*

August 2010 — **Master of Arts in Clinical Psychology (MA)**
Graduate School of Clinical Psychology (APA Accredited)
George Fox University, Newberg, Oregon 97132

June 1993 — **Master of Science in Clinical Social Work (MSSW)**
Graduate School of Social Work (CSWE Accredited)
University of Texas at Arlington
Arlington, Texas

December 1989 — **Doctorate in Social Work (PhD)**
Graduate School of Social Work (GADE Accredited)
University of Texas at Arlington
Arlington, Texas
Dissertation: *The impact of role-expectation cognitions upon test-taking.*

June 1982 — **Master of Science in Clinical Counseling (MS)**
Graduate School of Education (CACREP Accredited)
Oregon State University
Corvallis, Oregon

June 1978 — **Master of Arts in Religious Studies (MA)**
Graduate School of Religion
Eastern New Mexico University
Portales, New Mexico

Miscellaneous Education

June 1980 **School Counselor Certificate** (Renewable, New York)
Graduate School of Education
State University of New York at Cortland
Cortland, New York

Community Colleges: 1972 Southwestern Michigan Community College, Dowagiac, MI
1978 Chemeketa Community College, Salem, OR
1985 Mountain View Community College, Dallas, TX

Military Training: 1969 Basic Training, San Diego, CA
1969 Electronics-A School, Virginia Beach, VA (Dam Neck USN)
1970 Electronics-C School, Virginia Beach, VA (Dam Neck USN)
1970 Submarine School, Groton, CN
1970-72 Ongoing In-service Trainings, Rota, Spain Sub Base

Supervised Clinical Psychology Experiences

8/2012 – 8/2013 **Internship (APPIC):** George Fox University Behavioral Health Center (BHC),
Newberg, OR 97132 (1-2 days/week) and Providence Medical Group, Behavioral Health Services (BHS) at PMG Gateway, Portland, OR (2 days/week) and PMG Scholls, Beaverton, OR (2 days/week). 2000 hours with 800+ patient hours anticipated.

Duties:

- Integrated Behavioral Health interventions for host of medical needs (e.g. anxiety, panic attacks, stress, diabetes, cancer, weight, memory, ADD/ADHD, addictions, relationships (i.e., couples, parents), asthma, chronic pain, depression, eating disorders, etc.)
- Brief and short-term solution focused, motivational interviewing skills
- Functional assessments leading to pragmatic skills training
- Assessments for ADD/ADHD (child & adult), memory, etc.
- Multidisciplinary treatment team management of patient needs
- Medical record management using the Providence EPIC system
- Weekly two-hour didactic trainings
- Weekly one-hour supervision of practicum students
- Weekly two-hour face-to-face supervision by Licensed Psychologists
- Monthly in-service and continuing education experiences
- Grant proposal writing for BHC needs

Intern Supervisors: Joel Gregor, Psy.D., Licensed Psychologist, Director of GFU/BHC.

Heidi Joshi, Psy.D., Licensed Psychologist, Director of PMG Gateway BHS.

Rick Cohen, M.D., Licensed Psychiatrist, Director of Providence Oregon BHS.

8/2011- 6/2012 **Pre-Intern (APA):** George Fox University Heath and Counseling Center, Newberg, OR 97132 (400+ hours anticipated)

Duties:

- Short-term solution focused therapy models
- Comprehensive Learning Disability Assessments and Report Writing
- Need-Based Assessments and Report Writing
- Individuals and couples
- Dictated intake assessments
- DSM-IV-TR 5-Axes diagnoses
- Formal treatment planning using hard-copy medical records
- Outreach and program development
- Weekly peer training presentations
- Weekly in-service trainings and Group supervision
- Weekly one-on-one supervision
- Specific foci on anxiety, depression, eating disorders, adjustment disorders, LD, ADHD, and developmental needs of undergraduate and graduate students from diverse backgrounds in private university setting

Field Supervisor: William Buhrow Jr., Psy.D., Licensed Psychologist

GFU Clinical Team Supervisor: Kris Kays, Psy.D., Licensed Psychologist

6/2010-Present **Practicum I and Practicum II (APA):** Salem Vet Center, Readjustment Counseling Services, 2645 Portland Road, NE, Suite 250, Salem, OR 97301 (1200+ hours completed to date)

Duties:

- Short-term Solution Focused therapy models
- Longer-term need-based interventions
- Individuals, couples, families, children, adolescents, and groups
- Comprehensive assessment and integrated report writing for the purpose of determining clinical treatment needs (e.g., PTSD, TBI, MST, Neuro-psychological screens, Memory assessments, Addictions, etc.)
- Full intake assessments using 6-10 assessment batteries (based on need)
- DSM-IV-TR 5-Axes diagnoses
- Formal treatment planning using on-line medical records
- Medical and Mental Health/Addictions referrals to providers both within and outside the VA system

- Continuing Care and After Care Planning
- Diverse military veteran setting and population
- Specific focus on anxiety, depression, addictions, ADHD, memory, TBI, PTSD, couple and family needs, etc.

Field Supervisors: Ellen Mink, Ph.D. and David E. Collier, Psy.D.; both Licensed Psychologists
GFU Clinical Team Supervisor: William Buhrow, Jr., Psy.D., Licensed Psychologist

9/2008- 5/2009 **Pre-practicum (APA)**: George Fox University, Newberg, OR

Duties:

- Individual psychotherapy with university undergraduate students
- EBT treatment planning
- SOAP progress notes
- Video tape reviews of clinical skills in small groups and one-on-one

Supervisor: Mary Peterson, Ph.D., Licensed Psychologist
GFU Clinical Team Supervisor: Kurt Free, Ph.D., Licensed Psychologist

Previous Supervised Clinical Experiences
In Social Work and Counseling

9/1987-9/1988 **Doctoral Internship (CSWE, GADE)** (for Ph.D. in Social Work): Children's Medical Center, Dallas, TX; Pediatric Oncology Unit (1500+ hours)

Duties:

- Intake assessments and case management for children diagnosed with various forms of cancer
- Review of client cases and treatment planning with supervisor
- Medical Grand Rounds with weekly case presentations
- Weekly in-service training sessions
- Individual work with patients and/or sibling(s)
- Couple work with parental pairs
- Family and Group work (Psycho-education and Process)
- Facilitated appropriate referrals and advocated within larger community
- Liaison between various medical groups, chaplain offices, child life therapists, psychiatric clinic, testing psychologists, and emergency department

Supervisors: Sharon Fitch, MSW, ACSW; Katherine Lipsky, MSW, ACSW
UTA Clinical Supervisor: Nazneen Mayadas, Ph.D., ACSW

9/1986-6/1987 **Doctoral Practicum (CSWE, GADE)** (for Ph.D. in Social Work): The University Affiliated Center of Dallas, TX (750+ hours)
Duties:
Intake social histories and case management for children with various developmental disabilities
Serve as member of a multi-disciplinary treatment team tasked with diagnoses, treatment, and referral needs of children (newborn through 18)
Supervisor: Barry Boreland, MSW, Ph.D., ACSW
UTA Clinical Supervisor: Paul Glasser, Ph.D., ACSW

9/1981-6/1982 **Graduate Practicum (CACREP)** (for MS in Counseling): Educational Service District, Albany, OR (600+ hours)
Duties:
Intake assessments, treatment planning, and treatment of Emotionally Disturbed (ED) and Severely Emotionally Disturbed (SED) children (5-18 years).
Weekly case reviews with supervisor, including audio tapes
Treatment interventions with each child, their parent(s), and siblings
Liaison between Educational Services District, the child's family, and their respective school personnel
Facilitated case transitions, terminations, and referrals
Supervisor: Susan Wilde, Ph.D., Licensed Psychologist
OSU Clinical Supervisor: Glenn Clark, Ph.D., Licensed Professional Counselor

Recent Research Experience
(While in George Fox University's PSYD Program)

December 2012 **Doctoral Dissertation**
The perceptions of behavioral health psychology held by medical personnel in Oregon. Newberg, OR: George Fox University.
Committee chair: Kathleen Gathercoal, Ph.D.
Committee members: Mary Petersen, Ph.D., William Buhrow, Jr., Psy.D.

2009 **Survey Research**
Mueller, R., Gathercoal, K., McConnell, C., Lloyd, C., Morgan, D., & Schemeck, A. (2009). *The Glass Ceiling: Women's perceived and actual upward mobility in academia.* Poster presentation with American Psychological Association (APA).

2008 **Consultation & Evaluation**
Student satisfaction perceptions of the George Fox University doctoral psychology program: An APA accreditation committee's analyses.
Supervisor: Mark McMinn, Ph.D.

2008- 2012 **Research Vertical Team**
Working member of a research team consisting of graduate clinical psychology students at George Fox University who participate in collaborative research projects and empower mutual-fulfillment of dissertation research. Team made up of 1st – 4th year PSYD students. Team completes research and develops poster sessions and/or presentations for various professional meetings.
Supervisor: Kathleen Gathercoal, Ph.D.

Select Research Experiences and Publication Efforts

2006 *Family violence: Reporting practices of Oregon's LPCs and MFTs.* A random sample (n=300) of 1200 Oregon LPCs and MFTs. Article submitted to the American Association of Marriage and Family Therapists.

2005 *Characteristics of employee motivation.* A convenience sample of 400 managers responding to a 127-item questionnaire. Articles submitted to the American Management Association and the National Association of Social Workers.

2003 Murundi, W., Gathercoal, K., Buckler, B., & Lloyd, C. (2003). *The relationship between social support and self-esteem in non-traditional and traditional undergraduate college students.* This was a poster session of Dr. Murundi's PSYD dissertation results, presented at Fall Human Development Conference in Portland, Oregon.

2003 *Assessment and referral.* A 250-page adjunctive text for non-traditional social science majors. Limited release agreement with George Fox University for use in their Social and Behavioral Studies major.

2002 *Grant proposal writing: A handbook.* A 120-page guidebook for limited release agreement with George Fox University for use in their Social and Behavioral Studies major.

2001 *The impact of biofeedback on juvenile diabetes: A 15-year follow-up*. This article reflected the results of a single-subject design while working with a female client since 1986.

2001 Penned 6-page *Forward* to Hall, L.M., Bodenhamer, B., Bolstad, R., & Hamblett, M. (2001). *The structuring of personality*. United Kingdom: Crown House Publishers.

2001 *Bioethics: End-of-life decision making*. Markus, E., Ribner, D., & Lloyd, C. We completed an international pilot study in 1998, collecting data from 1000 participants from 7 countries. We submitted our grant proposal to NIH in 1998 and NIH requested 2 revisions. NIH ultimately denied funding ($1M request) because my sponsoring university had no track record with such a large research grant. I stepped away from the project so my Israeli co-authors could resubmit the proposal to Greenwall Foundation. They moved forward with another colleague in a different state.

1998 *Forward* penned for Hall, L.M. & Bodenhamer, B. (1998). *Patterns for renewing the mind.* United Kingdom: Crown House Publishers.

1995 *Dancing with paradigms: Intentional thought and practice.* This text evolved from a series of professional continuing education workshops I presented in 6 cities in Texas (summer, 1995). I submitted the text for consideration but it is yet unpublished.

1994 Hall, L.M. & Lloyd, C. (1994). *Neuro-Linguistic Programming and the New Age Movement.* Grand Junction, CO: Empowering Press.

1992 *Overcoming Loneliness.* A 35-minute training video released world-wide by Billy Graham Foundation. Recorded in Houston, TX in April 1992.

1991 *Regional brain metabolism in the schizophrenic patient as measured by positron emission tomography (PET): A reliability study of Hypo-frontal Pattern Hypothesis.* While this article was never published, I did submit it to the Physiologic Psychology Department at the University of Texas at Arlington while seeking admission to their Ph.D. program. I was admitted to the program but needed to follow a job to Denver after completing one course.

1991 Overcoming depression: How to put some ups in your downs. *Counsel and Care, 1 (2)*, 1-2.

1989 *The impact of role-expectation cognitions upon test-taking.* This was my dissertation for the Ph.D. at UTA which used random assignment of 450 participants to experimental and control groups. Each group completed the Taylor-Johnson Temperament Analysis (TJTA) five times (every 30 days). The experimental group was assigned roles to consider while repeating the measures.
Committee chair: Colleen Shannon, Ph.D.
Committee members: Roosevelt Wright, Jr., Ph.D., Donald Granvold, Ph.D., Nazneen Mayadas, Ph.D., and John McNeil, Ph.D.

1988	How to get over perfectionism. *Metamorphosis Journal, 8* (7), 3-4.
1987	*The impact of communication skills training upon parental pairs who have a child diagnosed with cancer*. Research completed in the Oncology Department at Children's Medical Center of Dallas, TX. The American Cancer Society sponsored and disseminated the research.
1987	*The emotional shockwave and the genogram: A systemic study of the shockwave across six generations of OCD*. Metamorphosis Journal, 7 (3), 3-8.
1986	*The impact of biofeedback upon juvenile diabetes: A single-subject design.* I submitted this article to *Biofeedback*.
1979	*Renewal groups: Do they work?* Part I: The sociology of religious renewal groups (August 1979). Part II: The psychology of religious renewal groups (October 1979). *Mission Magazine.*
NOTE:	I have 26 other publications between 1986 – 1982 in addition to several books for which I served as editor and/or editorial consultant. I also conduct routine research in classroom and business management areas.

Select Professional Presentations

1978 – Present

I have presented more than 250 workshops and seminars on wide range of topics for organizations including, but not limited to, the following:

- USPS Post-Masters of Dallas, TX: *Diversity and Management*
- Intel Corporation, Portland, OR and Boise, ID: *Diversity Trainings, Empowering People, Psychology of Leadership*
- Micron Corporation, Boise, ID: *Managing Post-modern Employees*
- H-P Corporation, Corvallis and Portland, OR and Boise, ID: *Culturally Diverse Workplaces*
- Oregon Health Sciences University, Portland, OR; Chemeketa Community College, Salem, OR; Mt. Hood Community College, Portland, OR; Palm Desert Community College (CA): *Anthrogogy's Role in Trans-generational Classrooms*
- Children's Medical Center of Dallas (TX): *Nurse Preceptor Workshops, Stress Management Workshops*
- Fort Worth (TX) Fire Department: *Critical Incident Debriefings*
- Various churches in OR, WA, NM, NY, TX, KY and MO: *Psychological health and spiritual renewal; Life Problems Seminars*, etc.

Select Grant Proposal Experience

1982 – Present Since 1982 I have penned >300 grant proposals designed to generate funding for various non-profit agencies. The largest grant awarded was $3M and smallest award was $500.

The largest research proposal was submitted to NIH for $1M in 1995. NIH requested two revisions (as great sign of interest) but once they discovered my employing university had no track record of managing such a large grant, my request was denied.

I also provide pro bono community grant proposal writing workshops every 12-18 months for local non-profit agencies.

List of all proposals provided upon request.

Relevant Work Experience

1978 – Present I have been "privileged" by nine hospitals and medical centers during this time frame:

- Providence Gateway and Providence Scholls, Portland, OR (2012)
- Portland VA Hospital, Portland, OR (2011)
- Providence Newberg Hospital, Newberg, OR (1995)
- Arlington Medical Center, Arlington, TX (1990)
- DFW Medical Center, Grand Prairie, TX (1988)
- Willowbrook Psychiatric Hospital, Waxahachie, TX (1987)
- Children's Medical Center of Dallas, TX (1985)
- Albany General Hospital, Albany, OR (1978)

1978 – 1979 Emergency Room Family Services (Albany General Hospital). I developed, launched, supervised, and helped staff intervention services for families whose relatives were receiving emergency services.

1985 – 1989 Medical Social Worker (Children's Medical Center of Dallas, TX). I served one year in pediatric oncology unit before transferring to the emergency services department. In addition to working with the children and their families, I provided nurse preceptor workshops, debriefed staff when children died, and conducted stress management workshops and seminars for all medical staff. I worked FTE for 3.5 years and PTE thereafter, serving needs in ED, IMCU, and ICU.

1987 – 1988 In-patient Therapist (Willowbrook Hospital, Waxahachie, TX). Over this 12-month period, I served psychiatric needs of adults, adolescents, and children. I

also served as the Interim Director twice. This Psychiatric Institutes of America hospital was closed by the Texas Attorney General in 1993.

1988 – 1990 Clinical Director (DFW Medical Center, Grand Prairie, TX) for large in-patient psychiatric and addictions unit (3-N). I created milieu, supervised staff therapists, nurses, and psychiatrists, while carrying a caseload of 1-3 patients (depending on EPOB policies).

1990 – 1993 Program and Clinical Director (Arlington Medical Center, Arlington, TX) for a large adult in-patient psychiatric and addictions unit (1-E). I was the lead on-site administrator and clinical director, supervising therapists, nurses, and psychiatrists while carrying a case load of 1-2 patients (depending on EPOB policies). I also navigated JCAHO, HCFA, OSHA, and Hospital site visits.

1995 – 2007 I filled several roles within Providence Newberg Hospital, including but not limited to the following: Bioethics Committee Member (11 years), Home Health Nursing Committee member (6 years) and Chair of Home Health Nursing Committee (2 years), Volunteer Chaplain (on-call coverage for 3 years), etc.

2011 – One practicum supervisor at the Salem VA Center encouraged me to seek privileges so I could provide voluntary services as an independent therapist once the practicum was complete. Privileges were granted in July 2011 and I am now developing group interventions for veterans at the Salem site.

Supervision Experience

Academic Supervision--Dissertations

Hall, M. L. (1997). *The linguistics of psychotherapy: Languaging clients as art and science.* Cincinnati, OH: Union Graduate School of Psychology.

Randall, B. K. (2002). *Substance abuse and psychiatric diagnosis in a metropolitan county jail*. Newberg, OR: George Fox University, Graduate School of Clinical Psychology.

Murindi, Wanjau (2003). *The relationship between social support and self-esteem in non-traditional and traditional undergraduate college students*. Newberg, OR: George Fox University, Graduate School of Clinical Psychology.

Oldenburg, C. S. (2006). *Experiential formations: Influences of apprenticeship, mentoring, and intentional community on spiritual formation.* Portland, OR: George Fox Evangelical Seminary, Graduate School of Religious Studies.

Spotts, D. H. (2006). *Training volunteers to effectively make disciples of troubled youth in the emerging postmodern culture*. Portland, OR: George Fox Evangelical Seminary, Graduate School of Religious Studies.

Academic Supervision--Theses

Since 1995, I have supervised more than 250 graduate and senior thesis projects and publications. List provided upon request.

Professional Supervision: Workplace Leadership, Management and Supervision

2003 – Present	Content Specialist. Since creating the curriculum for a new academic major in 2003, I have served as a mentor for adjunct faculty who teach courses in this Social and Behavioral Studies major (a hybrid degree consisting of core psychology, sociology, social work, and project management courses). Adult Degree Programs, School of Education, George Fox University, Newberg, OR.
1994 – 1999	Department Chair. Served five years as the Sociology & Social Work Department chairperson, managing curriculum, supervising faculty, adjunct faculty, and staff, etc. George Fox University, Newberg, OR.
1994 – 1999	Social Work Director. Revised and managed social work curriculum to obtain social work professional accreditation from the Council on Social Work Education (CSWE). Supervised faculty, adjuncts, and staff. George Fox University, Newberg, OR.
1993 – 1994	Psychology Department Chair. Created "Theory & Research" and "Applied Psychology" two-tract major for Colorado Christian University in Denver.
1990 – 1993	Program Director and Clinical Director. Served in both official roles within a large adult in-patient psychiatric and addictions unit (1-E) at Arlington Medical Center, Arlington, TX. Supervised 10 mental health therapists, 2 psychologists, 6 health techs, 20+ nursing staff, and 3 psychiatrists. Also responsible for therapeutic milieu, all fiscal management, significant marketing (frequent speaker, national radio programs, etc.).
1989 – 1990	Clinical Director. Created and maintained clinical milieu, supervised 6 mental health therapists, 2 psychologists, 4 health techs, 15+ nursing staff, and 2 psychiatrists within a large in-patient adolescent psychiatric and addictions treatment unit (3-N). DFW Medical Center, Grand Prairie, TX.

1988 – 1989 Interim Director. While serving as a mental health therapist for children, adolescents, adults, and geriatric patients at a large free-standing in-patient psychiatric hospital, I was also appointed the interim director twice due to high turnover and/or promotion rates of directors. Willowbrook Hospital (PIA), Waxahachie, TX.

1984 – 1988 School Superintendent. Served as the lead administrator for a K4-12 private school in Dallas, TX which enrolled 350-400 students. Direct supervision of 24-30 teachers, 2 principals, 5 support staff, and all students. Fiscal management of >$1M budget, fundraising and marketing, curriculum development, chair of school board, and taught elective courses in computer science, religion, and psychology. Led the school to full accreditation by the Southern Association of Colleges and Schools.

NOTE: Other leadership roles would include management roles in several factories while in college, others while in the US Navy, and as a high school athlete.

Select Volunteer Experience

Empowering Systems, Inc. Have provided 8-10 hours *pro bono* counseling for those without mental health insurance. Mondays since 1976.

House Menders. A pro bono repair and remodeling service for those who cannot afford such. Since 1984 I have solicited volunteers to help me provide this assistance to several home owners each year.

Newberg High School. Volunteered in several roles from 1995-2003 (e.g., chaperone for school trips to OMSI, etc.; judge for speech competitions; facilitator for annual ethical decision making conference; interviewer for senior career-day requirements; grant proposal writer for Senior Grad Night; etc.).

Providence Newberg Hospital. New parent workshops, bioethics committee member, bioethics trainer, member and chair of home health nursing committee, on-call chaplain, etc. 1995-2007.

Family Law Advisory Council. Appointed by District Judge, John Collins, to serve on outcome research committee, grant/funding committee, and diversity committee. Also served on local and state FLAC committees. (1999-2003).

Portland Habilitation, Inc. Board member (2005-2007) with 3rd largest non-profit in Portland, OR which works with developmentally delayed, physically and mentally handicapped persons of all ages.

Teaching Experience

1994 – Present **George Fox University**, Newberg, OR
- (Full) Professor; tenured in social work and management
- Teach undergraduate psychology, religion, sociology, social work, business management, and general education courses
- Exhaustive list of courses provided upon request

1994 – 1996 **Union Graduate Institute**, Cincinnati, OH
- Associate Professor, Graduate Psychology Program, Adjunct
- Developed and taught 19 hybrid courses (some on-line) for doctoral students in psychology
- Exhaustive list of courses provided upon request

1993 – 1994 **Colorado Christian University**, Denver, CO
- Associate Professor, Chair of Psychology Department
- Added courses in Addictions, Biological Psychology, Crisis Intervention, and Family Violence to standard undergraduate psychology program
- Exhaustive list of courses provided upon request

1993 – 1994 **Regis University**, Denver, CO
- Associate Professor, Dept. of Graduate Counseling, Adjunct
- Facilitated 12 courses for those seeking LPC or LMFT in CO
- Exhaustive list of courses provided upon request

1989 – 1993 **Dallas Baptist University**, Dallas, TX
- Assistant Professor of Counseling
- Helped develop and launch a graduate program in counseling
- Taught 7 core courses each year in the evenings (administrated an in-patient psychiatric and addictions unit during the days); e.g., Abnormal Psychology, Human Growth & Development, Marriage & Family, Career Counseling, Chemical Dependency, Crisis Intervention, and Graduate Internship Supervision

1991 – 1993 **SW Baptist Theological Seminary**, Ft. Worth, TX
- Assistant Professor, Adjunct, Graduate Social Work Program
- Internship Supervisor (SOCW 535, 536, 537)

1991 – 1993 **University of Texas at Austin**, Austin, TX
- Assistant Professor, Adjunct, Graduate School of Social Work
- Internship Supervisor (GSSW 6451, 6452, 6453)

1978 – 1979 **Columbia Christian College**, Portland, OR
- Assistant Professor, Adjunct
- Taught two Greek courses (GR 101, GR 102)

Academic, Professional, and Management Awards

October 1999 Lifetime Fellow Award. Society for Neuro-Semantics. Granted as recognition for my writing, editing, and training contributions to NS.

April 1998 Teaching Excellence Award. George Fox University. Can receive this award only once per lifetime but have been nominated 11 years.

June 1990 Manager of the Quarter. HCA Arlington Medical Center. Presented for creative supervision contributions to the medical center.

June 1988 Barnabus Service Award. Life Schools of Dallas, TX for volunteer services provided June 1987 – June 1988.

June 1982 Midnight Oil Award. Presented by Glenn Clark, Ph.D., for maintaining 4.0 GPA in OSU graduate program will working full-time, etc.

June 1975 Young Historian Award. Presented by Tim Tucker, Ph.D., at Columbia Christian College, Portland, OR for senior thesis.

1973 – 1975 Presidential Scholar. Awarded by J. P. Sanders, Ph.D., President Columbia Christian College, based on GPA.

NOTE: Many other awards from high school and USN (Submarine Service). List provided upon request.

Licenses, Certifications, Memberships and Professional Affiliations

1984 – Present Licensed Professional Counselor (TX/LPC #9276)
1985 – Present Licensed Master Social Worker (TX/LMSW #16271)
1986 – Present Licensed Marriage & Family Therapist (TX/LMFT #580-000574)
1987 – Present Certified as Biofeedback Practitioner (TX)
1988 – Present Certified in Hypnosis (TX)
1989 – Present Licensed Chemical Dependency Counselor (TX/LCDC #619)
1989 – Present American Association of Marriage & Family Therapists (AAMFT, Clinical)

1990 – Present	National Association of Alcohol & Drug Abuse (NAADAC)
1990 – Present	Certified in EMDR (TX)
1991 – Present	Certified Chemical Dependency Specialist (TX/CCDS #0961-0991)
1991 – Present	Certified: Critical Incidence Stress Management (CISM)
1991 – Present	Certified: Critical Incidence Stress Debriefings/Defusings (CISD)
1995 – Present	Certified Practitioner: Neuro-Linguistics Programming (NLP)
1996 – Present	Certified Master Practitioner: NLP
1999 – Present	Lifetime Fellow, Neuro-Semantics Association (Awarded 09/1999)
2000 – Present	Advanced Addictions Counselor (TX/AAC #1189-0800)
2006 – Present	Substance Abuse Professional (USDOT/SAP #12909)
2007 – Present	Evergreen Gambling Association, Clinical Member
2008 – Present	American Psychological Association, Student Affiliate

Previous Memberships: National Association of Social Workers (NASW), American Association of Counseling and Development (AACD), National Council on Sexual Addiction & Compulsivity (NCSAC), National Organization for Victim Assistance (NOVA), International Society for General Semantics (ISGS), Oregon Criminal Defense Attorneys Association (OCDLA), Southwest Conference for CISM, and Denver Conference for CISD.

Relevant PSYD Coursework

Multicultural and Diversity Issues

Gender Issues in Psychotherapy	Spiritual and Religious Diversity in Psychology
Integrative Psychotherapy	Multicultural Approaches to Treatment
Human Sexuality and Sexual Dysfunction	

Theory and Practice

Human Development	Theories of Personality and Psychotherapy
Psychodynamic Therapy & Object Relations	Behavioral Interventions
Learning, Cognition, and Emotion	Group Psychotherapy
Cognitive Behavioral Psychotherapy	Social Psychology
Family/Couples Psychotherapy	History and Systems of Psychotherapy
Biological Basis of Behavior	Advanced Couples Therapy
Substance Abuse	Psychopharmacology

Assessment

Psychopathology	Personality Assessment
Psychometrics	Research and Statistics
Child/Adolescent Psychopathology	Intellectual and Cognitive Assessment
Neuropsychological Assessment	

Professional/Ethical

Ethics for Psychologists	Clinical Foundations to Treatment
Consultation, Education, and Program Evaluation	Issues in Psychology

Research	
Statistics	Research Methods and Design
Research Vertical Teams (RVTs)	Dissertation Research Sequence

Assessment Experience as of December 01, 2012
Administered, Scored, and Interpreted (total completed are in parentheses)

Cognitive

- Wechsler Adult Intelligence Scale – IV (WAIS-IV) (13)
- Wechsler Intelligence Scale of Children- IV (WISC-IV) (02)
- Wide Range Intelligence Test (WRIT) (03)
- Woodcock-Johnson III, Tests of Cognitive Ability (WJ-III, Cognitive) (02)

Memory

- Wide Range Assessment of Memory and Learning, 2nd ed. (WRAML2) (14)
- Wechsler Memory Scale-III (WMS-IV) (04)

Emotional / Personality

- Minnesota Multiphasic Personality Inventory, 2nd ed. (MMPI-2) (12)
- 16-PF, 5th ed. (09)
- Millon Clinical Multiaxial Inventory- III (MCMI-III) (12)
- Personality Assessment Inventory (PAI) (15)
- Adult Manifest Anxiety Scale (AMAS) (04)
- Beck Depression Inventory (BDI) (80)
- Beck Anxiety Inventory (BAI) (22)

Academic

- Gray Oral Reading Test (GORT) (02)
- Woodcock-Johnson III, Tests of Achievement (WJ-III, Achievement) (05)
- Wide Range Achievement Test- IV (WRAT-IV) (05)
- Peabody Picture Vocabulary Test- III (PPVT-III) (02)

Neuropsychological (NOTE: Completed 04 of each below except where indicated as n=#)

Executive Functioning

- Tactile Performance Test (TPT)
- Booklet Category Test
- Trail Making Test (Trails A & B) (n=15)
- DKEFS-Trail Making
- Color Trails Test 1 & 2
- Wisconsin Card Sorting Test
- Controlled Oral Word Association (COWA)

- DKEFS- Color Word
- Stroop Color and Word Test (n=18)
- Smell Test (n=08)

- Integrated Visual and Auditory (IVA)
- Continuous Performance Test (CPT)

Language

- Boston Naming Test- Revised
- Reitan-Indiana Aphasia Screening
- Speech-Sounds Perception Test

Somatosensory

- Finger Recognition
- Finger-Tip Number Writing
- Bilateral Simultaneous Sensory Processing
- Tactile Finger Recognition
- Seashore Rhythm

Visual-Spatial/ Constructive

- Rey Complex Figure Test (RCFT)
- Hooper Visual Organization Test
- Benton Line Orientation Test

Motor

- Finger-Tapping Oscillation Test
- Grip Strength
- Grooved Pegboard
- Purdue Pegboard

Behavior/ Symptom

- Mini Mental Status Exam (MMSE) (85)
- Trauma Symptom Checklist (TSC) (05)
- Symptom Checklist-90-Revised (SCL-90-R) (12)
- Brown Attention-Deficit Scales (Brown ADD Scales) (02)
- Adult-Attention Deficit Disorders Evaluation Scale (A-ADDES) Self and Home Versions (02)
- Vanderbilt (ADD/ADHD assessments for children (12)
- Adult (12 YO +) ADD/ADHD Interview (DIVA 2.0) (42)
- Symptom Assessment (SA-45) (92)
- Patient Attitude Measures (PAM) (70)
- Post-Traumatic Stress Checklist, Military Version (PCL-M) (78)
- Post-Traumatic Stress Checklist, Civilian Version (PCL-C) (14)
- Detailed Assessment of PTSD (DAPS) (78)
- Mississippi Scale for Combat-Related PTSD, Revised (78)
- Brief Religious Coping Scale (RCOPE and JCOPE) (78)
- Taylor-Johnson Temperament Analysis (TJTA) (>575)
- Myers-Briggs Type Indicator (MBTI) (162)
- Substance Abuse Subtle Screening Inventory (SASSI) (>120)
- Michigan Alcohol Screening Test (MAST) (>120)
- Various drug, gambling, sex addiction screening tools (>75)

Projective

- Thematic Apperception Test (TAT) (04)
- Rorschach (Exner, 3rd ed.) (05)

Selected Additional PSYD Professional Trainings

October 2011 — Motivational Interviewing: A work in progress
George Fox University, Newberg, OR
Presenter: Michael Fulop, Psy.D.

March 2011 — Neurobiological Effects of Trauma
George Fox University, Newberg, OR
Presenter: Anna Berardi, Ph.D.

February 2011 — Child Custody Evaluations; Not for Everyone
George Fox University, Newberg, OR
Wendy Bourg Ransford, Ph.D.

October 2010 — Best Practices in Multi-Cultural Assessments
George Fox University, Newberg, OR
Presenter: Elanor Gil-Kashiwabara, Ph.D.

October 2010 — Primary Care Behavioral Health: Where Body, Mind, and Spirit Meet
George Fox University
Presenter: Neftali Serrano, Ph.D.

June 2010 — Outcome Measures, Reimbursement, And the Future of Psychology
Annual Assessment Conference, George Fox University, Newberg, OR
Presenter: Jeb Brown, Ph.D.

June 2010 — The Wechsler Memory Scale-4th Edition
Annual Assessment Conference, George Fox University, Newberg, OR
Presenter: James A. Holdnack, Ph.D.

March 2010 — Psychotherapy with Gay, Lesbian and Bisexual Clients: Guidelines
George Fox University, Newberg, OR
Presenter: Carol A. Carver, Ph.D.

February 2010 — Integrative and Clinical Dimensions of Gratitude
George Fox University, Newberg, OR
Presenter: Phil Watkins, Ph.D.

November 2009 — Consultation and Treatment of Psychiatric Patients in the ER

George Fox University, Newberg, OR
Presenter: John Mitchell, M.D.

October 2009 — Cultural Competence in Clinical Practice
George Fox University, Newberg, OR
Presenter: Winston Seegobin, Ph.D.

October 2009 — Balancing Professional and Personal Life
George Fox University, Newberg, OR
Presenter: Elizabeth Hamilton, Ph.D.

September 2009 — Identity Development from a Multi-Cultural Perspective
George Fox University, Newberg, OR
Presenter: Carlos Taloyo, Ph.D.

September 2009 — The Psychological Care of Missionaries
George Fox University, Newberg, OR
Presenter: Steve Allison, Ph.D.

June 2009 — The MMPI-2 RF
George Fox University, Newberg, OR
Presenter: Yosef Ben-Porah, Ph.D.

April 2009 — Treatment and Education of Autistic and Communications-Handicapped Children (TEACCH)
George Fox University, Newberg, OR
Presenter: Gary Mesibov, Ph.D.

February 2009 — Battling the Ghosts of War
George Fox University, Newberg, OR
Presenter: David Kinzie, M.D.

December 2008 — Mindfulness in Acceptance and Commitment Therapy
Oregon Psychological Association, Lake Oswego, OR
Presenter: Stephen Hayes, Ph.D.

November 2008 — Making Behavioral Health Primary: Primary Care Psychology
George Fox University, Newberg, OR
Presenter: Julie Oyemaja, Psy.D.

October 2008 — Towards a Global Christian Psychology: Re-considering Culture and Context
George Fox University, Newberg, OR
Presenter: J. Derek McNeil, Ph.D.

September 2008 — Assessment of ADHD in Children, Teens, and Adults
George Fox University, Newberg, OR
Presenter: Bruce Bracken, Ph.D.

April 2008 — Christian, Hindu and Muslim Children's Spirituality: Implications for Psychotherapy
George Fox University, Newberg, OR
Presenter: Winston Seegobin, Ph.D.

February 2008 — APA Writing Style Workshop
George Fox University, Newberg, OR
Presenter: Jill Kelly, Ph.D.

February 2008 — The Psychology of Forgiveness in Clinical Practice: The Benefits and Pitfalls of Helping Clients Forgive
George Fox University, Newberg, OR
Presenter: Nathaniel Wade, Ph.D.

January 2008 — Integrative Approaches to Sexual Abuse Recovery
George Fox University, Newberg, OR
Presenter: William Buhrow Jr., Psy.D.

NOTE: I additionally complete 50-100 CEU clock hours of training each year to maintain various mental health licenses (noted above). Exhaustive list provided upon request.

APPIC References
(Alphabetical Order)

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Previous Clinical References: Copies of Letters Upon Request
(Alphabetical Order)

Robert Bain, M.D. Licensed Psychiatrist Dallas, TX	Bob was the lead psychiatrist when I administrated the Arlington Medical Center's in-patient unit (1991-1993). Bob now works for the VA hospital system in Texas.
Don Ennis, Ph.D. Licensed Psychologist, Retired Dallas, TX	I have known Don since 1988. He provided supervision in several hospitals as well as psychological assessments for many patients in psychiatric units where I worked.
Michael Hall, Ph.D. Psychologist, Trainer, Author Clifton, CO	I have known Michael since 1975. We have provided many workshops, etc. together over the years. I served on his Master's thesis and Doctoral dissertation committees as well.
Diane Holloway-Cheney, Ph.D. Licensed Psychologist Sun City West, AZ	Diane was my direct supervisor in 1988 at Willowbrook Hospital and we have stayed in touch since then.