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Linda Pilzer Erlich

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2010

ABSTRACT

The Effect of Encounters Between Medical Gatekeepers and Patients on the Doctor-Patient Relationship

by

Linda Pilzer Erlich

M. A., West Chester University, 1985
B. A., The College of New Jersey, 1983
A. A, Bucks County Community College, 1981

Dissertation Submitted in Partial Fulfillment
of the Requirements of the Degree of
Doctor of Philosophy
Psychology

Walden University
May 2010

ABSTRACT

Research currently indicates patient perceptions of the doctor-patient relationship are central to health outcomes. Theoretically, the current study is grounded in two literatures: the placebo effect and the broader literature examining empirically tested predictors of the doctor-patient relationship. Two factors not yet studied relative to patient perceptions of the doctor-patient relationship include the direct effect of medical gatekeeper characteristics along with the interaction between gatekeeper characteristics and existing healthcare attitudes/behaviors. This quantitative archival study utilized a MultiCare Survey dataset of 10, 579 participants who were general practitioner patients in northwestern United States. This study first examined the individual impact of healthcare attitudes/ behaviors as measured by the Health Matters scale and gatekeeper characteristics as measured by the Front Office scale on patient perceptions of the doctor-patient relationship assessed by the Provider and Education scales. Second, this study assessed the interaction of these variables in predicting doctor-patient perceptions. Regression analyses revealed that both healthcare attitudes/behaviors and gatekeeper characteristics individually predicted and interacted to predict doctor-patient perceptions. Findings from the study contribute to social change by identifying the importance of training those individuals who first engage the patient as part of establishing a holistic approach to positive patient relationships.

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DEDICATION

This dissertation is lovingly dedicated to my wonderful family.

To my husband: Lou

To my children: Rob, Sheri, and her husband Mike

To my grandchildren: Ryan and Emily

And

To my parents: Joseph and Lillian Pilzer whom I wish were here to see my accomplishment

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

Over the course of an individual's life there are many everyday experiences that may either enhance or diminish the quality of that person's existence. This study is about one of those everyday experiences that, while commonplace and ordinary, is worthy of examination because it may affect a basic human need. This need, to trust and benefit from those who are dedicated to the health and well-being of our bodies and minds – doctors. Researchers have been studying the relationship between doctors and patients for decades. Their intense interest in this topic has resulted in a discovery that a high quality positive relationship between doctors and patients will have beneficial effects for the patient (Thom, Hall, & Pawson, 2004). Throughout the course of history healers have been known for healing powers that, at times, went beyond their surgical or pharmacological skills. Until recently, mainstream Western medicine has primarily focused on the biomedical model. The placebo effect, the power to heal or impact health and well-being was seen as psychological manipulation that depended on patients' confidence in the ability of doctors to heal rather than any actual healing ability. While one of the most common usages of the placebo effect has been in research as a control or no effect variable in clinical trials this is not the way the term is being used in this study. In this study, the term placebo effect is an inert substance or belief that evokes healing or beneficial effects

(Gordon, 1996). This aspect of healing has been known as shamanism, alternative medicine, or the placebo effect. While many people availed themselves of the services of these practitioners, mainstream medicine considered them to be irrelevant or even fake due to a lack of empirical evidence. They are now considered to be legitimate (Sachs, 2006). The field of psychosomatic medicine, the only source of research into the placebo effect, was considered to be an illegitimate source of empirical evidence because it failed to present a coherent causal framework for its theories. Practitioners were accused of using sweeping generalities and abstract statements to describe their work (Mizrachi, 2001). Kandel (1998) discovered the empirical evidence that legitimized the placebo effect when he found the processes whereby thoughts became biological and discovered that learning is a process that produces biochemical changes throughout the body.

Competent and successful doctors use the placebo effect to boost the effect of treatment methodologies of their patients. Doctors use their relationship with patients to build trust and to help the patient feel valued, accepted, and understood. When patients trust their doctors they tend to comply with treatment recommended by the doctor and continue to use that doctor for their medical needs (Thom, Hall, & Pawson, 2004). A strong, positive therapeutic relationship with doctors will also have a placebo effect. According to Gordon (1996) in his article on the history of the placebo effect, the placebo effect

activates the neurochemical and immune system responses through the endocrine complex.

Gatekeepers, receptionists, secretaries and other members of the non-professional office staff, and others are an important part of the treatment team. They are the face of the practice as they are the first people the patient will encounter when making an appointment or coming in for a visit. They are often required to gather pertinent information, triage, and listen to patients without judgment or personal involvement. Gatekeepers can play a large role in contributing to the patient's initial impression of the doctor and the practice in general (Robbins, 2003, pp 48-51)

The model for my study proposed two independent variables to investigate the relationship between patients, doctors, and medical gatekeepers. An important factor is how these variables impact and alter patients with preexisting attitudes toward healthcare, as they enter into encounters with medical gatekeepers, who have their own set of attitudes and behaviors, and how they relate to one another. I also proposed to examine how the result of this encounter between patients and medical gatekeepers impacted patients in their relationship with their doctors. The first independent variable was patient attitudes and behaviors toward healthcare. These are general attitudes and behaviors regarding healthcare that people bring with them to the doctor's office and are based on individuals' life experiences, cultures, and lifestyles. I looked at how

these attitudes and behaviors affected the patient's encounter with medical gatekeeper characteristics (Navarro, 1990). The second independent variable was gatekeeper characteristics. I examined how patient attitudes and behaviors and behaviors toward healthcare and gatekeeper characteristics interacted with each other and how the interactions of both of impacted the doctor patient relationship, particularly regarding factors such as trust, caring, and other factors that contribute to the doctor's ability to use the placebo effect to boost treatment effects. Medical gatekeeper characteristics are the attitudes and behaviors of medical gatekeepers, receptionists and medical secretaries, while performing their jobs (Robbins, 2003). The dependent variable in this study was the special relationship between doctor and patient, a one-way relationship whereby one person works for the benefit of the other. This relationship is characterized by trust, caring, good communication, willingness of the patient to disclose intimate details that he or she would not normally disclose to a stranger, the patient's willingness to entrust the doctor with his or her health, well-being, or even life, and belief that the doctor has his or her best interest in mind. It is a relationship in which the patient allows him or herself to be vulnerable to the doctor and the doctor, who is imbued with power and trust, uses his or her skills and knowledge to heal the patient (Kaba & Sooriakumararan, 2007). This constellation of factors has never been studied in this way.

Problem Statement

The doctor-patient relationship has been shown to be an important element in both maintaining the health of patients and facilitating healing through the activation of neurochemical and immune system responses (Gordon, 2003). Patients place their lives in the hands of their doctors and higher levels of trust between patients and doctors are positively related to more positive health outcomes including compliance and continuity with healthcare providers. Patients tend to trust doctors, whom they perceive as being caring, honest, willing to communicate, and have a partnership attitude. Other factors in the doctor-patient relationship include perceived mutual interests, clear communication, a history of trustworthiness, perception of equality of power, non-judgmental acceptance of personal disclosure, and the expectation of a long-term relationship (Thom, Hall, & Pawson, 2004).

My study focused on external factors that change the doctor-patient relationship. These factors are specific and may at first seem unrelated. They occur in a relationship that is ancillary to the doctor-patient relationship. It was first proposed that factors within the relationship between medical gatekeepers and patients may have an impact on the doctor-patient relationship.

Second, patients approach each encounter with healthcare providers with specific attitudes toward doctors and healthcare in general (Navarro, 1990). These attitudes toward healthcare influence the way they behave and feel when

relating to medical gatekeepers and doctors. Patients initiate their relationship with doctors for many reasons. They may be ill or injured, or they may be seeking routine supportive care. When they initiate this relationship the person they first encounter will most likely be a gatekeeper. This person will serve as the face of the practice and can either facilitate or impede the patient's access to the doctor (Robbins, 2003, pp 41-56). It is the dynamics of this relationship, between patient and gatekeeper that are of interest to this study. Problems in this relationship may be due to gatekeeper characteristics related to their attitudes and behaviors. My study examined the influence of the individuals' healthcare attitudes and behaviors as they encounter gatekeeper characteristics. Third, the interaction between healthcare attitudes and behaviors and gatekeeper characteristics affects the doctor-patient relationship. The doctor-patient relationship is complex. It is powerful and based on trust, respect, deep caring, and requires nurturing on the part of the doctor. It was hypothesized that patient's attitudes and feelings toward doctors may be influenced by their encounters with medical gatekeepers. Since the gatekeeper acts as an agent for the doctor and is the point of patient access to the doctor, patients may displace their feeling about the gatekeeper on to the doctor, resulting in either a more positive or negative relationship. If the relationship between medical gatekeepers and patients does influence patient health, well-being, and the

doctor-patient relationship, there are important implications for the healthcare outcomes of millions of people.

Purpose of Study

The purpose of this study is to examine the relationship between medical gatekeepers (e.g. receptionists and other office staff) and patients. The study will examine the attitudes toward healthcare that patients bring with them when they visit the doctor and the gatekeeper characteristics they encounter to determine if the attitudes and characteristics have a significant effect on patient satisfaction. The study looked at the effect of both patient attitudes and behavior toward healthcare and the gatekeeper characteristics. Healthcare attitudes and behaviors have been shown to impact how people utilize the healthcare system and how they feel about doctors and other healthcare professionals in general. These attitudes impact the way they manage their healthcare needs and approach people who work in the healthcare system (Navarro, 1990). The purpose of this study was also to examine the relationship between medical gatekeepers and patients to determine if medical gatekeepers, through their relationship with patients, can influence the doctor-patient relationship. It is possible that gatekeepers who directly interact with patients and serve as agents for healthcare professionals are seen as an extension of the doctor. The majority of people in our society will experience this type of relationship during the course of their lives (Robbins, 2003, 25-26). The implications of this study have

the potential for affecting most members of our society and increasing positive health outcomes by facilitating a more positive doctor-patient relationship.

It is well documented in the literature that doctor-patient relationship is an important element in both maintaining the health of patients and facilitating healing through the activation of neurochemical and immune system response (Gordon, 1996). The doctor-patient relationship is of enormous value in the treatment of illness and disease. When patients have a strong, positive relationship with their doctors they are more likely to cooperate with treatment recommendations, return for follow-up care, and be open to non-specific treatment benefits such as the placebo effect (Kaba & Sooriakumararan, 2007). While the doctor-patient relationship has been well documented, factors such as the effect of medical gatekeepers on that relationship have not.

One factor that may influence this relationship is the interaction between medical gatekeepers and patients. This study examined the attitudes toward healthcare that patients develop during the course of a lifetime and how those attitudes influence their experience with medical gatekeepers and then how the outcome of that encounter impacts the doctor-patient relationship.

Nature of Study

This study utilized data gleaned from an archival database. The data was collected almost ten years ago by MultiCare Health Systems to determine patient satisfaction with healthcare. It was also used by Navarro (1990) to validate his

theories on patient utilization of healthcare options. The database well suited for this study because it provides the necessary data has excellent psychometrics and includes a large number of respondents.

Data was analyzed using version 17.0 of the Statistical Package for the Social Sciences (SPSS). A review of the literature has identified two independent variables and one dependent variable. The two independent variables are patient attitudes and behaviors toward healthcare and gatekeeper characteristics. The dependent variable is the doctor-patient relationship. These will be discussed in detail in chapter two.

Research Questions and Hypotheses

Based on the review of the literature the research questions and hypotheses for this study are:

Research Question One: Are patient attitudes and behaviors toward healthcare linearly related to patient perceptions of the doctor-patient relationship?

Null Hypothesis One: There will be a zero correlation coefficient between each of the 15 items on the patient attitudes and behaviors toward healthcare scale and the patient perceptions of the doctor-patient relationship scale.

Alternate Hypothesis One: There will not be a zero correlation coefficient between each of the 15 items on the patient attitudes and behaviors toward healthcare scale and the patient perceptions of the doctor-patient relationship.

Research Question Two: Are gatekeeper characteristics linearly related to patient perceptions of the doctor-patient relationship?

Null Hypothesis Two: There will be a zero correlation between gatekeeper characteristics and patient perceptions of the doctor patient relationship.

Alternate Hypothesis Two: There will not be a zero correlation between gatekeeper characteristics and patient perceptions of the doctor patient relationship.

Research Question Three: Are gatekeeper characteristics and patient attitudes and behaviors toward healthcare in their interaction linearly related to the doctors-patient relationship?

Null Hypothesis Three: There will be a zero correlation between the interaction of gatekeeper characteristics and each of the 15 items on the patient attitudes and behaviors toward healthcare scale and patient perceptions of the doctor-patient relationship.

Alternate Hypothesis Three There will not be a zero correlation between the interaction of gatekeeper characteristics and each of the 15 items on the patient attitudes and behaviors toward healthcare scale and patient perceptions of the doctor-patient relationship.

Research Question Four: Is the score on question 13 on the subscale *Patient Attitudes Toward Health Matters,* "Most Doctors and nurses are not as good…"

and the score on the scale gatekeeper characteristics linearly related to the score on the scale patient perceptions of the doctor-patient relationship?

Null Hypothesis Four: There will be a zero correlation between the two predictor variables, question 13 on the subscale *Patient Attitudes Toward Health Matters,* "Most doctors and nurses are not as good…" and gatekeeper characteristics and patient perceptions of the doctor-patient relationship.

Alternate Hypothesis Four: There will not be a zero correlation between the two predictor variables, question 13 on the subscale *Patient Attitudes Toward Health Matters,* "Most doctors and nurses are not as good…" and gatekeeper characteristics and patient perceptions of the doctor-patient relationship.

Theoretical Base

The theoretical bedrock of this study can be found in the annals of antiquity in the writings of Aristotle and Plato who considered the connection between the mind and body and the healing powers of the mind (Smith, 1992). The subject of healing and the power of the mind to heal the body continued to fascinate scholars throughout the ages. Discussions about relationship between the mind and body exist in among others the writings of Descartes (Descartes and Cress 1993), Leibnitz (Downey, 2003), Adams and Jefferson (Robinson, 2003).

Contemporary scholars have used the epistemology developed by ancient scholars to develop theories regarding the mind and body and the placebo effect and how these factors contribute to health and well-being, or sickness (Ray,

2004). The doctor-patient relationship is, in our society, the primary source of care and healing for most people when they are in pain or are ill. Through the doctor-patient relationship the placebo effect is actualized as a medical technique and healing and well-being occur (Kaba & Sooriakumaran, 2007).

Medical gatekeepers play a pivotal role in the day-to-day life of a medical practice. They act as agents for the doctor and are responsible for all communications and arrangements between doctor and patient apart from the actual time directly between doctor and patient (Robbins, 2006). The gatekeeper is often responsible for insuring that important messages are delivered to the doctor regarding medication requests, physical complaints such as pain or symptoms of illness, or even patient requests to speak to the doctor. Patients often feel dependent on receptionists or secretaries and blame them for perceived difficulties in getting responses to their requests (Brock, 1995).

Definition of Key Terms

1. Medical gatekeepers: The term gatekeeper has been used for many years to describe a person who controls access to information or services. A gatekeeper also controls a person's access to another person. For this study, these are people who literally control access to the doctor. When patients or other people seek access to a doctor they must first get permission from the gatekeeper before they can carry out whatever business they have with the doctor. Gatekeepers work as receptionists or secretaries, answering the phone,

scheduling appointments, and controlling access to the doctor at the front office. I defined this term, for the purpose of this study. It does not appear in the literature.

2. *Patient*: An adult over the age of 18 years.

3. *Doctor:* A person who is a graduate of a medical school who holds a current state license to practice medicine in the United States of America.

4. *Placebo effect*: An intrinsically inert substance or belief that evokes beneficial effects (Gordon, 1996).

5: *Mind-body problem*: A classic problem in philosophy and psychology. The debate has been over the existential relationship between the mind and body regarding whether or not they exist as one entity or as two, with the mind exercising control over the body (Smith, 1992). In modern practice the mind is used as a tool to enhance the treatment of the body, the placebo effect (Orbrach, 2004). Since this study recognizes the power of the placebo effect, I also recognize the dualism of the mind and body.

6. *Healthcare attitudes and behaviors:* Behaviors, attitudes, and emotional states that patients have regarding medical personnel and healthcare.

7. *Gatekeeper characteristics:* Behaviors, attitudes, and emotional states that medical gatekeepers have toward patients, medical personnel, and healthcare (Robbins, 2006).

8. *Doctor-Patient Relationship:* The doctor-patient relationship is essentially a one-way relationship where one partner, the doctor, uses all of his or her skills and knowledge for the benefit of the other person, the patient, without any expectation of reciprocity. Unlike most relationships of this type, the doctor-patient relationship is an intimate one in that the patient allows him or herself to be vulnerable and weak and endows the doctor with enormous amounts of trust. They reveal details of their lives that they would ordinarily not reveal to others with the hope that the doctor will provide relief for their suffering and pain (Kaba & Sooriakumaran, 2007).

9. *Psychographically:* An adverb tense for the word psychographic, which is defined as "market research or statistics classifying population groups according to psychological variables (as attitudes, values, or fears); also variables or trends identified through such research" (Mish, 2004).

10. *Triage:* The sorting of patients and setting priorities for their treatment (Venes, Biderman, Adler, Venes, Biderman, Adler, Fenton, & Enright, & Venes, Biderman, Adler, Fenton, Enright, 2005, p. 2232)

Assumptions

The database for the information used to obtain the results of this study is a secondary source. Therefore, I do not have direct knowledge of the way the data was collected. Since a professional marketing firm, Market Strategies, collected the data, it is assumed that the data was collected in a professional

manner and that protocols were followed to prevent any contamination or error as a result of data collection.

It is assumed that people experience encounters with medical gatekeepers on a regular basis when visiting their doctor's office. It is also assumed that most medical practitioners employ support staff to act in the gatekeeper role to manage day-to-day office procedures such as answering the telephone, checking in patients, scheduling appointments, and other non-medically related tasks in the practice.

Limitations of Study

The scope of this study is limited to a very small part of the larger collection of factors that impact the doctor-patient relationship. It is well known within the scientific and medical communities that the doctor-patient relationship is a powerful component of the healing process and that doctors can maximize the effects of their treatment by using this relationship to activate the placebo effect for the benefit of their patients (Thom, Hall, & Pawson, 2004). This study is limited to the impact that one group of ancillary personnel working with doctors, medical gatekeepers, may have on the doctor-patient relationship. There are many other groups of people working in other medical settings who may also have an impact on the doctor-patient relationship when they encounter patients in the course of their workday. These groups include answering service operators, back of the office staff, nurses, and medical technicians.

Another limitation of this study is that the survey was limited to patients of doctors in general practice, Even though the pool of participants was large, 10,000, they were only asked about their experiences with general practitioners. Therefore it is not possible to generalize the findings to the doctor-patient relationship existing in other types of practice.

This study was quantitative and therefore has provided interesting information regarding the relationship between the variables: patient characteristics, gatekeeper characteristics and the way they both influence the doctor patient relationship. A future qualitative study examining the details of these factors would be helpful in understanding them more fully.

The data source used for this study is secondary and secondary data is typically used unless there are compelling reasons. It is important that the data in question not be used simply because it is convenient. It must be used because it is superior to any other sources of data. In this study, the MultiCare database is superior to other sources because it has high reliability and validity coefficients, has a very high number of respondents (10,000) and addresses all of the research questions proposed in the study (Navarro, 1999). The other instruments available were less precise. Also, while there were instruments available for two of the items, doctor-patient and patient characteristics, there was no psychometrically sound instrument available for the variable gatekeeper characteristic. Therefore it was best to use the MultiCare database.

Another limitation of the study can be directly attributed to the decision to use the MultiCare database. The respondents have all been de-identified and while this makes the results of the study powerful due to the randomization of participants and the limitation of bias, it does mean that much of the demographic information has been lost. The only demographic information available in the database is gender and age. It is known that all participants are residents of California and are over the age of 18.

Another major limitation that is an artifact of the method chosen by MultiCare to collect the data is that the data was collected by mail by this researcher. Further, I cannot be certain that the survey was actually filled in by the intended participant. Evidence for this was discovered when examination of the data set revealed an age range of 0 to 101. A major limitation of the MultiCare database is that it contained no socioeconomic information on the participants. Therefore covariates will be limited to age and gender. Any impact of socioeconomic status on the healthcare attitudes and behaviors and medical gatekeeper encounters on the doctor-patient relationship will have to be studied at another time.

Significance of the Study

With the exception of the bonds of one's family, there are few relationships that are as important as the one between doctor and patient. This relationship is unique among all of the other relationships. People entrust

doctors with their well-being, health, and their lives. It is a relationship that transcends time and culture in that people have been seeking comfort and healing from persons they perceive as having special gifts of healing since ancient times (Smith, 1992). The elements of the doctor-patient relationship that strengthen the bond between the participants include trust, willingness to listen, caring, genuine understanding, empathy, and by being non-judgmental (Huggard, 2003; Rogers, 1980). The doctor-patient relationship is an important element in the healing process and is used by doctors to boost their treatment and facilitate health and well-being (Olesen & Barefod, 2001).

This study was designed to identify factors that may influence the doctor-patient relationship. Given the importance of the doctor-patient relationship to the health benefits of patients who utilize the services of doctors and the fact that large portions of the population utilize these services, the study's implications for social change is quite high.

There is a healthcare crisis in the United States. Escalating costs and increasing numbers of citizens with no or inadequate healthcare insurance have been a problem that has been addressed by the federal government since the administration of Theodore Roosevelt. President Clinton failed to achieve his sweeping healthcare reforms and the problem remains unsolved until this day. President Obama is working on resolving the healthcare issues that still remain one of the major problems facing the citizens of the United States. Among the

major concerns are cost containment and quality of care. There is no doubt that the quality of care directly affects healthcare costs in many ways including over utilization due to poor outcomes (Levitsky, 2008). With this in mind, any positive change to the dynamics of the relationship between doctor and patient that will enhance treatment outcomes will benefit not only the patients themselves but also society in general. While the benefit to individual patients is obvious, each practice where these encounters between patient, gatekeeper, and doctors occur is in effect, a microcosm representative of encounters in the larger world of healthcare.

If there is to be a significant impact and medical gatekeeper-patient encounters do impact the doctor-patient relationship, it will be necessary to identify traits and behaviors for medical gatekeepers that will achieve maximum positive benefits in their relationship with patients. Medical gatekeepers will have to be trained to insure that patients have a positive experience when they are relating to medical gatekeepers so that the impact on the doctor-patient relationship will be positive. Medical gatekeepers will become a more important part of the healthcare team. Their role will be redefined as a therapeutic one, not just a clerical one. If medical gatekeepers are better trained and seen as part of the therapeutic team, there will be less friction and tension in the medical office and it is possible that patient health outcomes and satisfaction will improve.

Implications for Social Change

The implications for positive social change articulated in this study emerge from the claim that if the impact of medical gatekeeper characteristics change the patient's relationship with the doctor then their characteristics, behaviors, and attitudes will have to be further scrutinized so that medical gatekeepers can contribute to the best health outcome for patients. This scrutiny and possible retraining will minimize and even eliminate any negative effect that medical gatekeepers will have on the doctor-patient relationship. The natural outcome of eliminating negative effects on the doctor-patient relationship will reduce pain and suffering for patients and eliminate any possible harm that patients may suffer as a result of their encounters with medical gatekeepers.

Summary

In life, the simplest, most common experiences can have profound effects on a person's overall well-being and ability to function. An ordinary, brief encounter with a veritable stranger can create a domino effect that will spiral into a series of experiences, based on a person's perceptions of that encounter that may, in some cases, have life altering effects. It is possible that patient perceptions of gatekeeper characteristics may have profound implications for the doctor-patient relationship that may even affect that patient's health status and therefore their quality of life or life itself.

Chapter one introduced the concepts of medical gatekeepers and patient characteristics as they are defined in this study. Other important concepts such as the doctor-patient relationship, placebo effect, and mind-body problem were also defined along with their significance to this study. An introduction to the methodology was provided. Chapter one provides an opportunity to introduce the reader to the significance and purpose of this study and its importance regarding social change opportunities to all persons who ever have to experience encounters with medical gatekeepers in the course of their visits with doctors.

Chapter two will provide a review of the literature from antiquity to the present. It will be necessary to delve into the deep past in order to understand the origins of all of the elements of this study including the mind-body problem and the placebo effect. These two elements have been studied by ancient scholars as well as modern ones and provide a firm platform for modern studies. Chapter two traces the research from the past into the present including the doctor-patient relationship from its origins until today. The literature review includes an analysis of all other elements of the study including medical gatekeepers, the doctor-patient relationship from the perspective of the doctor, the doctor-patient relationship from the perspective of the patient, factors that undermine the doctor-patient relationship, factors that enhance the doctor-

patient relationship, patient attitudes and behaviors, toward healthcare and a literature review of the methods.

Chapter three will consist of a thorough presentation of the methodology used in this study including a discussion of the MultiCare database and plans for analysis of the data. Chapter four will present the results of the analysis of the data and Chapter five will discuss those results and postulate possible applications and implications of the findings

CHAPTER 2: LITERATURE REVIEW

Organization of the Chapter

The relationship between those who heal and those whom they heal has always been special (Smith, 1992). In contemporary American culture others who serve as agents of the healer, the gatekeepers mediate this relationship. This paper addresses the relationship between the gatekeepers and those who seek healing. The current literature does not seem to contain any information that directly addresses the relationship between medical gatekeepers and the patients with whom they come into contact. Furthermore there is no research on the effect these encounters could have on the doctor-patient relationship. Therefore, in order to address this issue it is necessary to explore the underlying factors, including the relationship between the mind and body, the placebo effect, the doctor-patient relationship, and the training and job experience of medical gatekeepers, all of which support the theory that these encounters have relevance and are worthy of investigation. With that in mind, the four factors that will be explored in this review are: the relationship between the mind and body, the placebo effect, the doctor-patient relationship, and the training, job description, and experiences of medical gatekeepers. It is my intention to explore a true gap in the existing literature. Of the four factors that form the bedrock of this study three have been well researched. A large body of scholarly information on the mind-body relationship, the placebo effect, and the doctor-patient relationship is

available in numerous databases. These factors have been studied and documented by philosophers and scientists since antiquity. The forth factor, the training, job description, and experiences of medical gatekeepers has not been as well documented or researched. It is a relatively new profession and scholars have had less time to study it. It is an important factor in this study and one of the purposes of this study is to find out how influential medical gatekeepers are in relation to the sources of well-being of patients.

The relationship between mind and body forms the foundation for understanding how simple encounters between people can have complex meanings and outcomes. Tracing the quest to understand this relationship from the time of the ancient philosophers to modern scientists will build a foundation for the next step in understanding the role of gatekeepers in patients' relationship with their doctors.

The next logical step is to understand the placebo effect. The placebo effect is an application of the relationship between the mind and body that has been used for millennia in medicine, religion, and research. It continues to be used today both deliberately and casually. It is a critical component of the doctor-patient relationship, which is the third component of this review.

The doctor-patient relationship has been well researched and is an essential component of this study. It will be explored from both the point of

view of the patient and the doctor. Furthermore, factors that enhance or diminish the relationship will be discussed.

Finally the job of medical gatekeeper will be explored. In order to understand how gatekeepers relate to patients it is necessary to understand the duties and responsibilities inherent in their jobs. It is also important to understand how gatekeepers are trained.

Basis for Research

The research for this study began with anecdotal evidence gathered from personal experience and over a decade with clients and personal acquaintances, discussion with Walden faculty and a search of the literature using EBSCO host databases including PsycINFO, PsycArticles, Academic Search Premier, Medline, and SocINDEX as well as ProQuest and JAMA databases revealed that there were no studies that directly addressed the issue of medical gatekeepers as defined by this study. Therefore scholarly research was begun using these same databases into the related topics addressed by this literature review in order to create the necessary theoretical grounding for this inquiry into a gap in the literature. The databases cited above were continually and consistently consulted for updates and additional information was provided from my library collection of original source materials. In addition to researching the topic of medical gatekeepers, a search of the literature on the efficacy of the collection of

data on the Internet was conducted. The results of that search are also included in this literature review.

The Relationship between the Mind and Body

Introduction

The ability to ponder our own existence is the singular ability of the human species. This existential dilemma has brought humans joy and anxiety, exhilaration and pain. Humans have the extraordinary distinction, among all species on this planet, to wonder who they are, how they fit in the universe, and to possess the knowledge that their corporeal existence on this planet is finite. The relationship between the mind and the body has fascinated humans for millennia and has been the subject of the ancient scholarly works of Socrates, Aristotle, and other unnamed Egyptian, Mesopotamian, and Chinese philosophers (Smith, 1992). Ultimately, the study of the relationship between mind and body is the study of the nature of reality. The relationship between mind and body continued to fascinate scholars throughout the ages influencing the development of religion, civilization, and scientific study. The relationship between mind and body is a fundamental issue for psychology and has been a source of contention since the inception of the profession.

Ancient Thinkers

Hunter-Gatherers. A study of the anthropological literature reveals that hunter-gatherer societies had animistic beliefs. They extrapolated from their

observations of living and non-living things and drew conclusions based on those observations. Observations of non-living things such as fire and wind led to extrapolations in the form of spirits or gods to explain what they could not observe. There is no evidence of a concept of a non-corporeal soul. There is some evidence that hunter-gatherers had the concept of death or final breath (Smith, 1992).

Native American and Australian Aborigine cultures both have strong animistic reciprocal relationships with nature. Nature in these cultures is strong and vibrant and has qualities that Western civilizations would associate with humans. This type of animistic thought process seems to be associated with preliterate societies (Poletti, 2002). Eastern Philosophy. According to Yu (2007) in ancient Chinese philosophy the heart is the primary organ for cognition, behavior, and emotion. Linguistically the heart and mind are the same. Existentially the heart dominates the body. Since the heart lies within the body as an organ it is not separate. According to Chinese philosophers the key metaphor explaining the relationship between the heart and the body is: The heart is the ruler of the body. This is clarified by the belief that man and the universe are a unified whole and as such they correspond to each other as microcosm and macrocosm. Therefore, the heart and body are of the same substance and not separate as in Western dualistic thought. According to Guorong (2008) humans have greater value than other things because they have

sentience. The ancient Egyptians and Mesopotamians also believed that the heart was the locus of control of cognition, behavior and emotion (Smith, 1992).

Ancient Greece. Heraclitus, a pre-Socratic thinker conceived the idea of *psuche* a metaphysical term that describes stuff in the world that manifests as physical and mental functions. For Heraclitus both air and water qualify as *psuche*. *Psuche* can manifest as a range of physical properties along a wet-dry axis accounting for the fact that souls show different intellectual and ethical properties. Therefore, according to Heraclitus, life and death are the transmutation of the *psuche* from one property to another (Betegh, 2007).

According to Poletti (2002) it was the invention of the alphabet that made interior awareness possible and it was the Greeks, and Plato in particular, who were responsible for refining this skill through the invention of written vowels. The written word and interior awareness leads to a sense of autonomy and individuality. There is less reliance on auditory memory and aural tradition as stories are written down. Vision becomes the primary sense over hearing, which leads to a greater degree of personal autonomy. As personal autonomy increases there is a separation of subject and object and humans are able to develop individual egos (Poletti). In Plato's world the mind is separate from the body. It is in fact a prisoner of the body that can only be released by death. The work of Plato is pivotal in the discussion of the mind-body relationship because thinkers

that came before him, including Socrates, the Hebrews, and all others, relied on the oral tradition. It is Plato who changed the zeitgeist (Poletti).

The Enlightenment

The seminal thinker of The Enlightenment was Descartes who in his introspective proof of the dualism of the mind and body provided the theoretical grounding for centuries of research and philosophical thought regarding the human condition (Descartes & Cress, 1993). Essentially, according to Descartes, the human mind, a thinking thing, exists separately and distinctly from the human body, an extended thing. God has intimately brought them together; they actually exist apart from one another. Descartes does not address how they are brought together or how they function together. He is, sure of the intimacy of their relationship and of their separateness. He is also sure of the differences in their nature. The body is corporeal and the mind incorporeal (Dutton, 2003).

Descartes's arguments have always been very controversial. Those who support his arguments believe that he has provided *a priori* proof not only for the dualistic nature of the mind and body, but also for the existence of God. Descartes's Ontological proof has power today with those who use it to support their own agendas even in the twenty-first century (Abbruzzese, 2007). The chief opponent of Descartes's argument for dualism was Leibniz who believed, with a fervor equal to Descartes, that the mind and body were one, inseparable,

and corporeal in nature. Leibniz challenged Descartes's belief that the mind can exist without the body (Downey, 2003).

The intellectual heirs of Descartes, Hume and Kant reasoned that the mind has direct access to reality and that application of reason could be used to understand the nature of the human mind. Hume concluded that the human mind is limited to what it perceives, immediately, through its senses. Therefore knowledge of the real existence of objects or attributes of the external world is ultimately arbitrary and inferred by the observing mind (Deary, 2005). Kant found both Hume's disconnected and arbitrary sensory explanations and Descartes's dualism unacceptable. He believed that human knowledge of the nature of the mind is *a priori*. Space, time, and causality are not found in nature or through sensory awareness or observation. They are an essential part of the human experience. Because they are an essential part of human existence, humans can never have unmediated access to understanding of the world and human experience because humans are too enmeshed in the object being studied (Deary).

During the early 19th century a discussion of the nature of the relationship between the mind and body was part of the ongoing correspondence between two of the Founding Fathers of The United States of America. Starting in 1820 John Adams and Thomas Jefferson exchanged a series of letters on the subject of the philosophical consequences of the relationship between the mind and body.

Jefferson, a deist, scientist, and materialist argued the case for monism, the mind and body were one. Adams, citing the perfection of God, was a believer in dualism; the mind and body are separate (Robinson, 2003). Their arguments were based in their metaphysical beliefs. Like Descartes, Adams was a religious person who placed God into the equation skewing the argument toward dualism. Jefferson, a deist and a materialist did not have that limitation in his thought processes, giving him the option of eliminating an external creator and afterlife. His mind was open to more possibilities than was Adams.

Modern Thinkers

Many early psychologists used the dualist, the Cartesian model of the mind. The two earliest schools, functionalism and sensationalism used methods such as introspection, observation, and psychophysics to study human consciousness (Hilgard, 1980). Some functionalists traced their philosophical roots back to Aristotle. Aristotle was a dualist with radical ideas regarding the relationship between the mind and body. He proposed that the mind (*psuche*) could be transported from one body to another (Green, 1998).

Behaviorism was born in the early 20th century when psychology moved across the Atlantic from the laboratories of Europe to the United States. J. B. Watson, the founder of behaviorism, and his followers spurned the study of the unconscious. Determined to turn psychology into a "real" science, they preferred empirical methods. Behaviorists considered the mind to be irrelevant

to the study of psychology concentrating on stimulus-response connections (Hilgard, 1980). Their theoretical grounding was based in the work of Pavlov, a monist, who rejected the idea of dualism (Windholtz, 1997). The eminent radical behaviorist, B. F. Skinner devoted his distinctive and eminent career to proving the validity of the behaviorist paradigm. Skinner published an essay 40 years after he first proposed his theories. He remained true to them even though many of his colleagues had moved on. He expressed his hope that they would see the error of their ways and return to the fold of behaviorism (Skinner, 1990).

Psychoanalysis, a school of psychology that has its origins in psychiatry and the treatment of mental disorders, began in Germany in the late 19th century. Psychoanalysts work with patients to access the contents of their unconscious and bring these feelings and thoughts into consciousness. They believe this process is curative. Freud, the founder of psychoanalysis was a dualist who had a Kantian view of the mind-body problem (Dalton, 1999). Langdon (2000) explores the relationship between the mind and the body using the difference between reality and perceptual reality as an example. He explains that reality is solid and static, whereas, perceptual reality is constantly changing as an individual incorporates new information. As for Freud, he provided people with a vocabulary and an explanation of the structures of the mind that was easily understood. The debate became part of everyone's conversation, no longer restricted to the arena of intellectuals (Bevir, 2004).

Around the middle of the 20th century the mind was reintroduced into American psychology. Abraham Mazlow established the American Association of Humanistic Psychology in 1961 and the third force in psychology was born. Humanistic psychology was the first American brand of psychology to hold a dualistic view of the mind and body (Hilgard, 1980). Humanistic psychology emphasized holism over reductionism, human as opposed to non-human research, and dualism of the mind, establishing the tenets of humanism (Delprato, 2003). The mid-20th century was also a time of change for behaviorism. A group of behaviorists including George Miller, John Dollard, and Neal Miller believed that behaviorism was inadequate in its study of human behavior. It did not address the essential issues of human psychology. They brought the mind and consciousness back into the study of psychology and created the cognitive movement. It was a revolution in the profession (Mandler, 2002).

Current theories of the relationship between the mind and the body are explained in terms of physiological and biochemical processes in concert with social or environmental stressors. It is now known that psychological influences such as cognition, emotion, and motivation, cause physiological changes in the human nervous and immune systems that directly affect an individual's health and general well being. In addition, signals from the immune system have a profound effect on the psychological state of an individual and cause changes in

mood, metabolism, motivation, and cognition. There appears to be an interactive relationship between the immune system and emotional states (Lekander, 2002). The latest models that have been developed regarding the duality or singularity of the mind and body seem to be leaning toward a singular model. Researchers are currently doing their work based on the assumption that the mind and body are one entity. The brain seems to have executive function and control; however, the assumption that researchers use is that the mind and body are one. It is important to recognize that this is an assumption, not a fact (Kandel, 2005, p. 40-41). According to the Lazarus Model (Lazarus & Folkman, 1984), it is not the stressor that determines the effect an event will have on the welfare of an individual but the appraisal of that stressor. The cognitive and emotional processing of a stressor is critical to the effect that a stressor will have on an individual's life. People perceive and process stressful events differently from one another and it is these differences that determine a person's stress reaction.

The Placebo Effect

History of the Placebo Effect

A summary of the information provided by Gordon (1996) of the history of the placebo effect informs us that a placebo, once an epithet for a sham treatment knowingly prescribed out of convenience or desperation, is now known to be an intrinsically inert substance or treatment that is capable of

evoking psychophysiological effects that are beneficial. This effect has been shown to depend on interrelationships in which the recipients have strong beliefs vested in the authority of the practitioner who offers a symbol of therapeutic potency. Recently the term placebo has been used to designate a control substance in random, double blind experiments, wherein the purpose of the placebo is to measure the psychological effect of the substance being tested (Gordon, 1996). For the purpose of this study, placebo will be defined as in the first definition stated above. The antithesis, the nocebo effect occurs when the result of the intervention is harmful rather than beneficial. Specific negative outcomes that are caused by physicians that are either physiological or psychophysiological in etiology are called iatrogenic. The factors that tie all three of these effects to each other are that they are all dependent on the relationship between practitioner and recipient and they all require that the recipient invest the provider with power and authority (Bootzin & Bailey, 2005).

While the origin of the word placebo is obscure, the concept the use of a trusted relationship, charms, or amulets as cures for disease or other ailments is not. Prescriptions for these remedies can be found in the writings of Hippocrates and in the writings of Roman scholars and physicians. In Medieval times, prayer and religious imagery came to the forefront, but the process was the same. Illness was seen as divine displeasure and cures were obtained through penance and health was a divine gift. In the late 18th century, placebos were thought to

have curative power. Although more educated people understood that the curative power lay within the patient rather than within the medication, prescribing a pill that pleased the patient seemed to work (Gordon, 1996).

Until very recently, Western medicine viewed the placebo effect as psychological manipulation; a tool used by primitive healers such a shamans who depended on the belief of their patients in their power to heal more than any actual healing ability. Practitioners literally pleased their patients into health. The actual mechanisms were unknown, but thought to lie in the realm of the relationship between the mind and body. It was postulated that the active ingredient in the treatment was the doctor and that the more efficacious, believable, and trustworthy the doctor, the more potent the treatment. It seems that a patient's belief in the power of the healer, whether supported by a supernatural being or science was potent enough to have curative effects (Sachs, 2006).

Current Research and Understanding of the Placebo Effect

The psychosomatic medical movement arose in the United States in the 1920s by doctors who sought to reintegrate the mind into the study of somatic medicine. They established their own journal, *Psychosomatic Medicine* in 1939, but were by and large ignored by the biomedical community for most of the twentieth century. At first, there was some support for psychosomatic medicine in the psychiatric community, but the decline of psychoanalysis as a treatment

method put an end to that. The field of psychosomatic medicine suffered from a failure to present a coherent causal framework for their theories. They were said to be guilty of making broad abstract statements, sweeping generalizations, and trivial arguments. Their methodologies were questioned (Mizrachi, 2001). Now, with a change in focus, and the biopsychosocial model of medicine, psychosomatic medicine has become relevant and meaningful. Their research is correlational rather than causal and is therefore more valid and meaningful (Mizrachi).

In the twenty-first century medical practice has evolved from a biomedical model whereby the physical well-being of individuals was the only concern of the medical community to a biopsychosocial model, a holistic approach that addresses the needs of the entire individual. This transformation in the way medicine is practiced in the United States has revolutionized the way the medical and scientific communities view the mind-body relationship, health and well-being, and disease outcomes and models. The cause, development, and outcome of disease and illness are determined by interaction among physical, psychological, social, and cultural factors along with physiology and biochemistry. The mind and body are one. The mind/brain functions along with other body systems, interacting in a way that that is critical for health, illness and well-being (Ray, 2004). There is now evidence that beliefs and

expectations not only contribute to sickness and death, but to healing (Hahn, 1987).

While there is no doubt that the advances in biomedicine have been responsible for increased positive health outcomes, particularly over the past 60 years, it is also indisputable that the mind, nervous, endocrine, and immune systems are fundamentally involved in the maintenance of health and well-being. These systems interact to ensure health, fight disease, and delay death (Ray, 2004). According to Kandel (1998) there is a general process within the brain whereby thoughts become biological. Learning is a process that produces changes in the biochemistry of the body and all bodily functions, including those of the brain are influenced by social factors.

Given that research into the effect of stress on health outcomes has revealed evidence that psychological factors such as the appraisal of the stressor and an individual's perceived ability to cope with the stressor are of greater importance in determining the outcome of the event than the stressor itself (Lazarus & Folkman, 1984), there can be great variability in individual reactions to stressful situations. According to Ray (2004) healthcare situations are particularly stressful because there is a greater degree of unknown variables in those situations than in most. Healthcare situations also have the potential for life changing consequences. The more a person is able to feel a sense of control and mastery over a situation, the better that person will be able to cope with it.

Knowledge is empowering and information gives an individual a sense that the world is a friendly, understandable place (Ray). This is where the placebo effect becomes a potent and important element of patient care – within the relationship between doctor and patient (Sachs, 2006).

Patient Attitudes and Behaviors Toward Healthcare

Patient attitudes, behaviors and expectations have changed over the past several decades. In years past people looked to health professionals to provide information and guidance when it came to their health and well-being. The doctor assumed the role of a parent, telling the patient what was best and assuming the responsibility for care. It was even accepted that doctors would only tell patients what they deemed necessary for them to know. Patients blithely signed consent forms and agreed to procedures without expecting full disclosure of all of the details, confident that the doctor knew best. They were satisfied when they left the doctor's office with a prescription and a heavy dose of reassurance. While there are still some people who have this attitude, most people prefer a more collaborative relationship with their doctors. Many people come to their appointments with a sheaf of paper containing the research they have prepared about their possible diagnoses, treatment alternatives and possible side effects or adverse effects of those treatments. Patients want hard facts. They are not only patients; they are consumers as well (Blennerhassett, 2007)

Patients tend to appreciate doctors who take a patient-centered approach to communication. The patient-center approach requires doctors to ascertain patient's expectations, feelings and beliefs regarding their illness. Studies have found that this approach increases compliance with treatment, increases patient satisfaction, and decreases the potential for malpractice claims (Swenson et al., 2004).

Patient attitudes and behaviors are varied and personal. Some patients continue to want their doctors to take on a paternalistic role, while others want the doctor to be a partner. Other factors such as active seeking of healthcare information, receptivity to advertising, cost consciousness, propensity to self-care, propensity to avoid healthcare, and involvement in family healthcare decisions are all attitudes that will act as a filter when a person visits the doctor (Navarro, 1990).

The Doctor Patient Relationship

The relationship between doctor and patient is one that is essentially one-way in that one partner, the doctor, uses all of the skills and knowledge at his or her disposal to benefit the other, the patient without any expectation of reciprocity. And yet unlike many other non-reciprocal relationships, it is intimate. The patient allows him or herself to be vulnerable and weak and endows the doctor with enormous amounts of trust. Patients disclose intimate details of their lives that they would not discuss with other persons in hope that

the doctor will provide relief and help. The patient expects that the doctor will provide a safe environment where healing can take place and they will suffer no additional unnecessary pain (Kaba & Sooriakumaran, 2007).

The doctor patient relationship evolved from the priest supplicant relationship and has many of the same qualities. Until very recently, the doctor has been a parental authoritarian figure who diagnoses and treats a passive patient. This mode first manifested itself in Egypt where healers were of a priestly caste and served as doctors who utilized magic to cure their patients. The Ancient Greeks modified the model relying more on natural observation than mysticism and magic. They altered the relationship to reflect their more democratic society making the doctor patient relationship more egalitarian using methods that involved mutual cooperation and to some extent mutual participation. They relied on trial and error methods rather than magic to treat their patients. The Hippocratic Oath provided a code of ethics for physicians and a bill of rights for patients. Upon graduating from medical school, modern doctors swear to abide by this centuries old oath (Kaba & Sooriakumaran, 2007).

During the middle ages the doctor patient relationship regressed back to the early Egyptian model as beliefs in magic and mysticism resurged. These beliefs were now cloaked in Christianity. Doctors were given a high rank in society and patients were seen as passive, helpless, infantilized individuals. The pendulum swung back due to the influence of the principles of the French

Revolution and for a while the relationship changed back to a guidance-cooperation model (Kaba & Sooriakumaran, 2007).

The biomedical model resulted from improved medical knowledge, as the causes of illness became known. Doctors now focused on symptoms, realizing that they were not the actual illness but indicators of a specific problem. Medical education changed dramatically with doctors studying anatomy and physiology. They became more dependent on their specialized knowledge causing the patient to take a more passive role. Doctors became more paternalistic, working in the best interest of the good patient who remained submissive and compliant (Kaba & Sooriakumaran, 2007).

The Relationship from the Patient's Perspective

The doctor patient relationship is currently in a state of flux, evolving from doctor-centered wherein the doctor is a paternalistic expert caregiver and the patient a passive recipient of care to a more egalitarian, collaborative type of relationship (Krupat, Yeager, & Putnam, 2000). Even with these changes in the power gradient, the patient enters treatment feeling vulnerable, ill, and often in pain. The central issues of the relationship, from the perspective of the patient, are trust and alleviation of suffering. Patients literally place their lives in the hands of their doctors. They tend to trust doctors whom they perceive as being caring, honest, and willing to communicate, and have an egalitarian, partnership attitude. Trust is also elevated when patients feel that their doctors share their

interests, communicate clearly and accept personal disclosure in a nonjudgmental way. Trust builds as the patient experiences a history of the doctor's trustworthiness and senses the doctor's expectation of a long-term relationship. Trust is essential if patients are to feel satisfied with their doctors and build a continuing long-term relationship (Thom, Hall, & Pawson, 2004).

Trust is an essential element of the patient's relationship with a doctor. It is recognized by both patients and doctors as fundamentally necessary for any meaningful treatment to occur. The level of trust a patient experiences of a doctor is predictive of instrumental variables such as the use of preventative services, adherence to treatment, and the quality of the therapeutic relationship. The attributes that doctors posses that have been identified as engendering trust can be divided into three groups: 1) technical competency, 2) interpersonal competency, and 3) agency (fidelity, loyalty, and fiduciary duty). Of these agency is the most relevant to the development and maintenance of trust. Patients interpret this as putting their interests first. When patients sense that doctors are placing the welfare of the patient ahead of all other concerns, i.e. financial, personal convenience, or comfort, they have increased trust for that doctor. There is also evidence that trust can impact the therapeutic response in two ways. The first is through better adherence to treatment and the second is through the placebo (Hall, 2004).

Patients understand that doctors have a limited amount of time they can spend with them. They do expect that when they are with the doctor they will have the doctor's full attention. They also expect the doctor to be sensitive to their needs and interested in them as an individual. Patients expect doctors to be respectful, knowledgeable, and clear in their communication. They expect the doctor to use language that will be easily understood by a layperson and aware of helpful resources (Houle, Harwood, Watkins, & Baum, 2007). Doctors who are rushed, inattentive, or unfamiliar with a patient's history are perceived as uncaring. Patients get frustrated when extremes of communication occur, such as when doctors express an opinion and are not open to listening to the opinions and thoughts of the patient. Doctors who give no definitive information and then tell them they must make a decision on their own cause their patients to feel frustration (Hvas, Reventlow, & Maiterud, 2004). When there is no clear cause or diagnosis for their condition or symptoms they are experiencing and doctors are vague in their communication many patients feel rejected, ignored, belittled, and blamed for their condition. In these situations doctors unintentionally contribute to or exacerbate patient's feelings of guilt, shame and hopelessness making them more ill rather than helping them. People become fearful of their doctors and struggle with feelings of vulnerability and emotional strain. They begin to see the doctor as the enemy and holder of all power, while they become increasingly

powerless and marginalized. Women, who are typically characterized as weak and hysterical are more vulnerable to this experience (Werner & Maiterud, 2005).

The Relationship from the Doctor's Perspective

Since the 1980s and the advent of managed care, doctors and the other healthcare professionals have faced changes in the paradigm of the healthcare delivery system that have altered the relationships of all participants. The status of doctors has changed dramatically. They have gone from being strictly providers of service, relying on their own skill and professional judgment to gatekeepers who allocate services that may be overruled by others who do not even know the patient first hand (Wright & Carrese, 2001).

Doctors, because of their chosen profession, are exposed to the vulnerability and pain of their fellow human beings on a regular basis. This secondary or vicarious traumatization has been described in various ways including, secondary traumatization, emotional contagion, counter-transference, burnout, and compassion fatigue. These phenomena raise the question of where the role of empathy fits in to the doctor patient relationship. Empathy is a complex and multidimensional construct that has emotional, moral, and behavioral components (Huggard, 2003). Rogers (1980) asserts that empathetic understanding is one of the key components of any helping relationship. He believes that unless the helper enters the world of the client or patient with genuineness, empathetic understanding, and in a non-judgmental manner

healing will be impossible. Huggard extends Rogers teaching to include compassion. He says that compassion and empathy are both necessary for quality of care and both are often lacking.

The essential question is why are these important elements of care lacking in treatment situations? Halpern (2001) suggests that doctors detach themselves from their patients in order to protect themselves from burnout. They rationalize that detachment helps them manage their time, improves their concentration, helps them maintain impartiality, and protects patients from a doctor's subjective, emotionally based decisions. Studies have shown that these beliefs are fallacious, especially when it comes to protection from burnout. Emotional detachment actually exacerbates and contributes to burnout and compassion fatigue. Burnout is actually linked to other stressors such as organizational issues that prevent the clinician from developing a solid doctor patient relationship. The answer to prevention of burnout and solving the problem of caretaker compassion fatigue is to encourage doctors to approach their patients with empathy and compassion, lessen their administrative burdens and allow them to return to their previous role as caregiver. They must also maintain a professional support network and a healthy work environment and culture that are supportive of them and their staff (Huggard, 2003).

Doctors report increased frustration and discomfort with low socioeconomic patients than high socioeconomic patients. Patients from higher

socioeconomic groups receive more information, and more time from doctors even though patients from lower socioeconomic groups may desire the same amount. Doctors tend to discuss diet and exercise with high socioeconomic group patients and smoking cessation with lower socioeconomic group patients. This is particularly problematic in mental health practices. Therapy is a cognitive and verbal process and is tailored for the middle and upper classes. Practitioners also tend to prefer treating middle class patients and tend to assign them more optimistic diagnoses (Magnus & Mick, 2002).

Vegni, Visioli, and Moja (2005) used qualitative methods to examine the effect of doctor's "inner life" on the quality of care and their emotional responses to the emotions and needs of patients. One hundred and fifty six doctors were asked to write a story of a consultation in which he or she perceived a relationship difficulty. They were given 20 minutes to write their story on a blank sheet of paper. No further instructions were given. The study was conducted within the context of a CME conference and the stories were then given to the participants who were given the opportunity to discuss the experiences from their internal perspective regarding the medical visit. The stories were then interpreted from a hermeneutics perspective. Analysis of the results led to the identification of two major scenarios: a personal scenario and a professional scenario. In the personal scenarios experiences in which human and emotional dimensions enter overwhelmingly into the doctor patient relationship

and are projected into the patient doctors find it difficult to manage their emotions, maintain a professional rather than a social relationship, or maintain a sense of professional detachment. In the professional scenario there is a sense of "another person" in the relationship who is responsible for difficulties. This is problematic because the doctor does not take responsibility for his or her own actions or mistakes. Problems are blamed someone else: the resistant patient, another doctor, and a member of the doctor's staff, the family. The researchers conclude that it is important for doctors to examine their own emotions and inner conflicts. That to remain unaware of one's own "inner life" is perilous for treatment outcomes and ones relationship with patients.

Doctors are becoming increasingly aware of the importance of patient satisfaction as a factor in keeping their practices viable. As the paradigm shifts away from the doctor as an authoritarian all-knowing parental figure to a more consultative model patient's expectations and therefore their criteria for satisfaction are changing. According to Coulter (2006) doctors and policy makers see patients as having unrealistic expectations about services. In the current healthcare climate resources are dwindling and the demand for services are escalating and the result is that patients are finding that they are less satisfied with the medical care they are receiving. As a result doctors are relying more on lower cost treatments such as exercise, lifestyle changes and on the placebo effect to enhance their usual treatment modalities and increase patient satisfaction.

According to Stewert and McMillen (2008) people become habituated to their surroundings in that they fail to notice signs of neglect and irritation in their surroundings that can cause a person who is seeing the space for the first time or on an occasional basis to make assumptions about the person to whom the space belongs. They generalize this phenomenon to the doctor's waiting room and office. Stewert and McMillen claim that patients will make assumptions regarding their satisfaction with their doctor based on the quality of the office and waiting room. They suggest that doctors occasionally walk through their offices and check for signs of worn furniture or carpets, messy or outdated magazines, a preponderance of outdated literature, or loud music. The window that is present in many practices separating the waiting room from the receptionist can be seen as a barrier by many patients. Many staff members tend to look annoyed when having to open it. This adds additional stress to the staff and the patient. Staff should leave the window open to reduce stress and negative feelings. Desktop clutter, loud conversations among staff in the presence of patients can also negatively affect patients. Stewert and McMillen suggest that doctors spend time in their waiting rooms to understand the perspective of their patients.

Factors that Undermine the Doctor-Patient Relationship

According to a survey taken of doctors attending the 2001 annual meeting of the Royal College of Physicians of Canada the most common complaint

against physicians by patients is rudeness (Kondro, 2001). Patients expect their doctors to treat them with a sense of equality. It is no longer acceptable for a doctor to dole out diagnoses and treatments from on high with little or no explanation. Patients are intolerant of doctors who misuse power and seem to think of themselves as paternalistic authority figures who are entitled to blind obedience and automatic respect and deference (Allen, Petrisek, & Laliberte, 2001).

The doctors attending the annual meeting also noted that medical school curricula and continuing education courses paid little attention to ethical instruction. Younger doctors frequently witness their older supervisors behaving in an arrogant, abusive manner, which they learn to emulate. Elder, senior doctors are seen to be short tempered and use derogatory language toward patients. Their behavior is rude. Doctors are becoming increasingly less tolerant of patients who disagree with their diagnosis or treatment recommendations. These behaviors are being passed on to new generations of doctors and this is of great concern to medical ethicists in Canada (Kondro, 2001).

There is clear evidence that one of the factors that undermine trust in the doctor patient relationship is a pattern of lying on the part of both doctors and patients. For doctors, lying usually takes the form of withholding information regarding the patient's diagnosis or condition. Patients lie about the severity of their symptoms or compliance with treatment. Both rationalize their falsehood

and feel justified in lying. They do not realize the dynamics of power in the relationship or the undermining of trust that is occurring leading to the impairment of healing (Fanzing, 2002).

Managed care has created barriers to quality care for modern doctors who are under tremendous pressure to contain costs, increase the number of patients they see, and decrease the amount of time they spend with each patient. This places them in a bind where they seem to be forced to substitute quantity for quality. They are also seeing an increased number of malpractice suits and patient dissatisfaction. This situation makes it more difficult for doctors to develop high quality relationships with their patients diminishing their ability to use the placebo effect (Meryn, 1998).

In 1986 the House Select Committee on Aging defined "quack" as "anyone who promotes medical schemes or remedies known to be false, or which are unproven, for a profit" (House Select Committee On Aging & Subcommittee On Health And Long Term Care, 1984). Quackery has been around for a very long time and has influenced the doctor patient relationship in many ways. Quackery is the illegitimate practice of false healing by people who are motivated by greed to fool others that their fake cures and medicines are of curative value. In the past, these people would sell patent medicines that contained high levels of alcohol or used the power of suggestion, the placebo effect, to achieve their cure. They promoted themselves as champions of free enterprise and anti-regulatory

agents. More recently, people who are promoting unrecognized, unregulated cures that may be considered harmful are prosecuted for practicing medicine without a license. There are many people eager to take a person's money in exchange for a useless pseudo-cure. The major concerns regarding quackery are that it is deceptive in nature and that it physically and emotionally harms people. Quacks also undermine the ability of people to discern the difference between pseudo and legitimate practitioners, potentially undermining the trust necessary for a true therapeutic relationship (Mehlman, 2005).

Factors that Enhance the Doctor-Patient Relationship

It is interesting to note that the factors that enhance the doctor patient relationship: trust, empathetic understanding, respect, empathy, caring, and willingness to listen and communicate (Houle, Harwood, Watkins, & Baum, 2007; Thom, Hall, & Pawlson, 2004; Rogers, 1961), are similar to the factors that also cause the placebo effect to occur, whereby doctors are affecting cures through their relationships with patients (Gordon, 1996).

Doctors are aware of the placebo effect and use the term to refer to non-specific elements of a therapeutic encounter or things that occur that cannot be accounted for by definable actions on the part of doctor or patient. These include the therapeutic effect of the encounter between doctor and patient and the symbolic effect of treatment (Olesen & Barefod, 2001). While the pharmaceutical industry would have people believe that the cure for all ills lies in their products,

this is not true. There is a broad range of pharmacological effects that cannot be explained except by individual differences. There are individual responses not only in patients but also in cohorts of patients whose only connection is that they see the same doctor. The literature is filled with anecdotal data about cures where the only common element is the same practitioner (Nuland, 2003).

The current managed care environment with its business driven model has eroded the public trust in the medical profession in general causing patients to go doctor shopping seeking a doctor who will meet their psychological as well as their physical needs (Federman et al., 2001). If doctors are to maximize their ability to help their patients using the placebo effect they must build their relationship in order to utilize the placebo effect for the benefit of the patient. This means doctors must hone their communication skills and their ability to connect with their patients quickly and effectively. They must work to reestablish the level of trust that their patients once had that allowed the therapeutic alliance to flourish (Thom, Hall, & Pawson, 2004).

Widdershoven (1999) describes a relationship between doctor and patient based on care theory. According to Widdershoven, care is essential to human existence. It is a "species activity that includes everything we do to maintain, continue, and repair our world so that we can continue to live in it as well as possible (p.1165)." There are four phases of care: 1) caring about, becoming aware that a person is in need of care; 2) taking care of, taking responsibility for

meeting a person's needs; 3) care giving, concrete actions in response to the needs of the person; and 4) care receiving, the response of the recipient of care. This is an interactional model, which encourages the doctor and patients to communicate openly as collaborators working together for the benefit of the patient. In order for the model to work, doctors must learn to actively engage and listen to their patients. They must incorporate the information provided by patients into their treatment decisions. Patients must keep the doctor informed about their symptoms and the effectiveness of treatment. The active engagement of the doctor results in a deepening of the doctor patient relationship, enhancing trust and activating the placebo effect. (Widdershoven).

One issue that has been shown to be critical regarding the success of the doctor-patient relationship is that the doctor and patient match on the understanding of the power gradient in the relationship. This power gradient can be observed and measured by examining the communication styles between doctors and their patients as they relate to each other in the course of their time together. Patient preferences fall into two categories: doctor controlled and shared control. Patients who preferred a doctor controlled style of communication tended to prefer a more traditional type of doctor-patient relationship, asked fewer questions, and tended to be less assertive. Patients who preferred a shared control asked more questions, were more assertive, and engaged in partnership building conversations with their doctors. While male

doctors tended to engage their male patients in a shared control relationship, gender was not significant as a covariate in the study. Shared control and the reciprocal relationship that is the result of this type of orientation increase patient satisfaction and trust. It also creates a more solid doctor-patient relationship and is therefore more beneficial to patients, in general (Street, Krupat, Bell, & Haidet, 2003)

Medical Gatekeepers

For the purpose of this study, medical gatekeepers are defined as people working as support staff in a medical office. These people include staff that has direct contact with patients as part of their job description. The term is limited to include non-professional staff. Professional staff, such as nurses, is excluded except in their capacity as gatekeepers if they perform tasks such as answering the phone, scheduling appointments or perform duties that would in any way control a patient's access to a doctor. Any member of the staff who performs the duties of gatekeeper will be included in the study.

Job Description

Robbins (2006) in a handbook written for the National Health Service (NHS) in the United Kingdom provides the most comprehensive job description for receptionists and secretaries. Medical receptionists and secretaries are described as an important part of the healthcare team. They are the first point of contact a patient has with a practice therefore their attitude, degree of empathy,

and efficiency are important. Since they can facilitate a patient's access to the system of medical care, gatekeepers should strive to make the patient feel comfortable and welcome (p. 46). Robbins advises medical gatekeepers to greet patients pleasantly, make eye contact, address patients by name, give them one's full attention, and to be respectful, helpful, confident, efficient, and caring. She cautions gatekeepers against behaving rudely, avoiding eye contact, appearing bored, distant and using terms like dear or honey to address patients. She also warns gatekeepers not to criticize other members of the healthcare team, or to behave uncooperatively (p. 48).

Robbins (2006) stresses that the relationship between the gatekeeper and patient is an important piece of the treatment of the whole individual. Gatekeepers are often called upon to make triage decisions and must therefore be able to gather pertinent information regarding the state of health and general condition of the patient. They must listen carefully to what the patient says without judgment or personal involvement. They must make it clear to the patient that they are interested and actively listening by not allowing any interruption of the patient's narrative due to distractions. Gatekeepers must be trained in techniques of active listening including techniques such as body language, i.e. posture or facial expression, proximity, the use of eye contact, appropriate body contact, tone of voice, and gestures (pp. 48 – 52).

Robbins (2006) clearly instructs all members of the healthcare team to remember that patients are human beings with problems that bring them to the office. She stresses the importance of the staff person's ability to put their own personal problems and negative emotions aside so that they can help patients who are anxious, frightened or in distress. Robbins stresses that patient's needs must be put first. Office staff can best accomplish this by making eye contact, greeting the patient in a pleasant manner, giving the patient one's full attention, being respectful, efficient, positive, and caring, and by smiling. Staff should never be rude, avoidant, uncooperative, distant, or talk with another colleague when a patient is in need of attention (pp. 44-48).

Robbins (2006) also instructs receptionists and secretaries in the attitudes that can be barriers to communication. Negative attitudes on the part of staff that will impede communication include: being unresponsive or rude, not giving patients your undivided attention, appearing critical or demonstrating a superior attitude, avoiding eye contact, appearing too busy, or feeling irritated and under stress. An understanding of possible reasons for patient attitudes and behaviors can help staff members be more responsive to their needs and communicate more effectively. Some possible feelings patients may be experiencing are: feeling stress over the experience of having to see a mental health professional, fear of appearing stupid or inferior to the receptionist or secretary, or embarrassed by their situation (p. 89).

In the United States, medical gatekeepers working in private practice offices usually do not have the luxury of just doing one job at a time. They are usually asked to multitask: greeting patients, answering the phone, scheduling new appointments, and collecting fees. Front line gatekeepers may also be required to pull patient charts from the files. While this is not an optimal situation, it is not always possible in a small practice to have each member of the staff do one job. This is the optimal method (Capo, 2006, pp. 8-11).

According to Brock (1995) patients are no longer satisfied with just receiving quality medical care. They are looking for convenience and courteousness as well. The gatekeeper has become an important element in this new paradigm. The number one complaint voiced by patients is the length of time spent in the waiting room before seeing the doctor. Medical gatekeepers are viewed by patients as being the key member of the staff responsible for this long wait time. They are the person sitting at the desk handling the situation and dealing with unhappy patients. Rude or abrupt behavior by the receptionist is also a major complaint. Patients also become upset when they call and are put on hold for what they perceive as a lengthy time. When gatekeepers place a caller on hold in an abrupt manner without first triaging the call patients become annoyed. This is particularly egregious when people factor in the possibility that the call may be an emergency. Brock emphasizes that the perceived attitude of

the gatekeeper is paramount. If patients feel patronized or that the gatekeeper is condescending they will react in a negative way.

Brock (1995) also found that patients react negatively to the perception that the office staff is too busy to help them. If they sense that the staff is harried, they will conclude that they do not have the time or ability to focus on patient welfare or give the patient their undivided attention. This also reinforces the idea that the doctor is too busy or difficult to reach. The service provided feels less personalized and therefore more uncomfortable.

Training

There are two different models for the training of medical gatekeepers. Some attend career and technical schools, and others train on the job. Career and technical schools typically offer a certificate or diploma for completing a one-year program and an associate's degree for completing a two-year program. Typical courses include keyboarding, public relations, ethics, record keeping, insurance processing, and accounting (Medical Assistant, 2006). One program offered by Bucks County Community College (2009) is an 18-month certificate program designed to train medical assistants with a specialty in clinical work. Graduates are trained to work in a diverse number of medical specialties and are given employment counseling upon graduation. One required course is Medical Law and Ethics where students are trained in topics such as medical record keeping, informed consent, privacy, HIPAA, liability, and malpractice. This

specialized training is important because the skills needed to work in a medical setting are different from those necessary for working in other settings (Aglow, 2009).

Others working as support staff in healthcare offices have not had formal training in the field. Many were high school or college students who started their career as a healthcare support staffer in order to earn some extra money. Many of them worked on a part time basis around their class schedules and started out as file clerks or part-time receptionists. These people were trained on the job and learned to work within that particular practice. Some used the position to bolster their resume and moved on while others stayed with the practice and made it their career (Capko, 2006, pp. 95-99).

Literature Review of Methods

Finding the Right Instruments

The decision of how to best research the impact of patient satisfaction, gatekeeper characteristics, and the doctor-patient relationship was difficult because these factors have never been studied in this way before. Therefore there were no existing instruments that measured these relationships in the manner that were the target of this study. There were, however instruments that measured individual variables.

The most promising instrument that was discovered for measuring the doctor-patient relationship was a survey developed by Baker (1990). This was an

18 item self-administered survey based on a Likert-type scale. It was field tested on 239 participants and was psychometrically sound with Chronbach's alpha of 0.91 for the complete questionnaire and 0.87 for the factor professional care, 0.83 for the factor depth of relationship, 0.83 for perceived time, and 0.67 for general satisfaction. Content validity was established by comparing the factors identified in this survey to factors identified in other surveys known to measure the same factors. Spearman correlation coefficients were determined in order to measure construct validity and found to be sufficient. An e-mail correspondence with Baker confirmed his permission to use the survey to collect data for this study (R. Baker, personal communication, May 28, 2008).

Identifying an instrument for measuring patient characteristics and satisfaction was more difficult. The goal was not to simply identify whether or not patients were consciously satisfied with the service they received from their doctors but to identify factors within the patient that influenced that satisfaction. This meant looking at psychological factors that were empirically known to have an effect on health outcomes and to be psychometrically sound. The instrument that seemed to best fit the requirement was the Brief Battery for Health Improvement 2 (BBH-2) (Disorbio & Bruins, 2002). The BBH-2 is a self-administered 63-item test that was developed to assess pain, functioning, somatization, depression, anxiety, and other factors relative to rehabilitation and recovery of patients undergoing rehabilitation for injuries. It is specifically

designed to measure perceived pain levels, perceived level of functioning and specific well-being. It requires a sixth grade education level and can be completed in less than 10 minutes. The validity of this instrument is based mostly on the developer's clinical experience. According to the manual the best evidence for validity is the degree of change after clinical intervention. Validity was also assessed by correlating the scales of the BBHI 2 with the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) and the Millon Clinical Multiaxial Inventory-III (MCMI-III) for affective measures and with both the McGill Pain Questionnaire and the Scored Pain Drawing for physical symptoms. Somatic complaints and pain measures were correlated with the MMPI-2 and McGill; coefficients ranged from .59 to .73 on measures including Hypochondriasis, Hysteria, Anxiety, Depression, and Psychasthenia. For functional complaints and affective scales the correlations were .53 to .91.It is suggested that the BBH-2 be administered at intervals during treatment to assess a patient's progress. Internal reliability scores are between .72 and .86 with no overall reliability scores reported. The test was normed on a sample of 250 patients and 527 individuals who did not exhibit any symptoms. The items are scored on a Likert-like scale ranging from 4-11 items (Disorbio & Bruins). I ordered and received a sample pack from Pearson, the copyright holder of the test.

Finding an instrument to measure gatekeeper characteristics proved to be more difficult than finding an instrument to measure either of the other two

factors. While there were many instruments measuring customer satisfaction in the literature, these surveys did not cover the characteristics that were of interest to me. A thorough review revealed books written on the subject of the management of medical offices. The authors of these books discussed the optimal characteristics of people staffing the front office of medical practices. (Capo, 2006; Robbins, 2006). Capo (2006) mentions a survey that can be used to assess the characteristics of receptionists in practices. I contacted her for permission to use her survey and information regarding the psychometrics of the instrument. Capo generously granted permission, however informed me that there were no psychometrics available, as she had developed the survey based on anecdotal information (J. Capo, personal communication, January, 18, 2009). The most detailed source of information about medical receptionists was the manual written by Robbins (2006) for use by the National Health Service in the UK. While there was no survey included in the book, there were detailed instructions regarding the behaviors and attitudes of medical receptionists. Unfortunately Robbins had based the information in her book on anecdotal information (M. Robbins, personal communication, March 19, 2009).

During the Walden University residency held at the National Conference Center in Lansdowne, VA, March 18-22, 2009, I took advantage of the opportunity to meet with Denise DeZolt, Ph.D., Chief Academic Officer for Walden University, for an advising session. The topic of the advising session

was this dissertation. DeZolt was interested in the topic and the potential social change inherent in it (D. DeZolt, personal communication, March 19, 2009). The following day, during the lunch break, DeZolt approached me and arranged a meeting with F. Navarro, who owned a database containing all of the data necessary to complete the required research for this study (D. DeZolt, personal communication, March 20, 2009).

Navarro (1990) began developing this database while he was working on his master's degree in 1990. He used it as the basis of his master's thesis and later used the information to develop and create his business as a consultant to the healthcare industry. He used a professional marketing company, Market Strategies, that conducted a survey by mail to collect the data. The questionnaire contains items that cover all aspects of this dissertation including doctor-patient relationship, gatekeeper characteristics, and patient attitudes and behaviors that contribute to patient satisfaction. The database contains 10,000 participants. The psychometrics are excellent with Chronbach's alphas of 0.85-.0.90. Statistical analysis shows good convergent validity as well as discriminant validity. The questionnaire is broken down into nine sections. All sections are scored on a Likert-like scale and cover areas that include: overall satisfaction, satisfaction with front office staff, satisfaction with back office staff, getting in to see the provider, satisfaction with the provider, and general attitudes toward healthcare (patient characteristics and satisfaction).

MultiCare's database seemed to be an ideal choice for the purpose of answering the research questions proposed in this study. All three of the factors were covered by the questions in the survey. The survey has excellent psychometrics and the large number of de-identified respondents would give the study a great deal of statistical power. The major limitation of Navarro's data is that it is a secondary source.

The Use of Archival Data

Archival data are data that have been gathered to address different research questions from the ones for which they are currently being used. The first step in considering whether or not to use this data is to verify that the data set appropriately measures the variables required to answer the research questions. Once this has been established the reliability and validity of the instrument are of great importance in order to reduce the probability of error. This is particularly important in healthcare and social science research since many of the variables studied are theoretical constructs and are abstract rather than concrete (Kimberlin & Winterstein, 2008).

After addressing these concerns I concluded that MultiCare's database was the best choice for use in this study. The variables are all addressed and the information that has been collected addresses all of the research questions. The doctor-patient variable and patient satisfaction variable are covered in a more direct and complete manner than in either the Baker survey or the BBH-2.

Navarro's survey and database also cover the gatekeeper characteristic variable in a manner that is psychometrically sound. The limitation is that the survey covers other areas and therefore contains segments that will not be used. This means that the data will be manipulated statistically. However, whole segments will be used, therefore the questions will not be cherry picked.

After examining all of the factors including the content and psychometrics of the instruments, the decision was made to use Navarro's survey and database. The psychometrics were very sound and strong. The database contained data collected from 10,000 de-identified respondents, giving the results a great deal of power. This is a level of power that is generally beyond that of a doctoral candidate. All other instruments were sound, but not perfect. There were no existing instruments to measure gatekeeper characteristics. The most logical step was to use the MultiCare database.

Covariates

The literature is mixed as to the importance of patient demographic and social factors in determining patient satisfaction. Most available data is anecdotal and based on patient experiences and one-time encounters rather than long-term studies over time. It is also clear from a survey of the literature that the survey questions are not based on quality of care issues. The questions are geared more toward patient expectations before the visit, the extent to which those expectations were met, including their perceived feelings regarding the

resolution of the problem that brought them to the doctor's office in the first place. Therefore while patient satisfaction is an important measure, it is not necessarily a true indicator of the quality of performance of the doctor (Thiedke, 2007).

Gender is a covariate described in the literature. Werner and Malterud (2005) report that it is believed that women are more subject to the effects of the placebo effect. Studies on the effect of gender have been mixed. Some studies show that women tend to be less satisfied than men and others show the opposite (Thiedke, 2007). This study will contribute to body of extant knowledge with the added factor of the impact of gender on gatekeeper characteristics, patient attitudes and behaviors, and the doctor-patient relationship.

Another patient variable described in the literature that is relevant to patient satisfaction is age. Of all of the indicators of patient satisfaction, age appears to be the most stable, with older patients tending to be more satisfied than younger ones (Thiedke, 2007). This study will use age as a covariate to examine its impact on patient satisfaction as it relates to gatekeeper characteristics, patient attitudes and behaviors, and the doctor-patient relationship.

Research Questions and Research Model

Research Questions

Based on the review of the literature the research questions for this study were:

1. Are patient attitudes and behaviors toward healthcare linearly related to patient perceptions of the doctor-patient relationship?
2. Are gatekeeper characteristics linearly related to patient perceptions of the doctor-patient relationship?
3. Are gatekeeper characteristics and patient attitudes and behaviors toward healthcare in their interaction linearly related to the doctors-patient relationship?
4. Is the score on question 13, "Most Doctors and nurses are not as good…" on the questions under Patient Attitudes about Health Matters and the score on the scale gatekeeper characteristics linearly related to the score on the scale patient perceptions of the doctor-patient relationship

Research Model

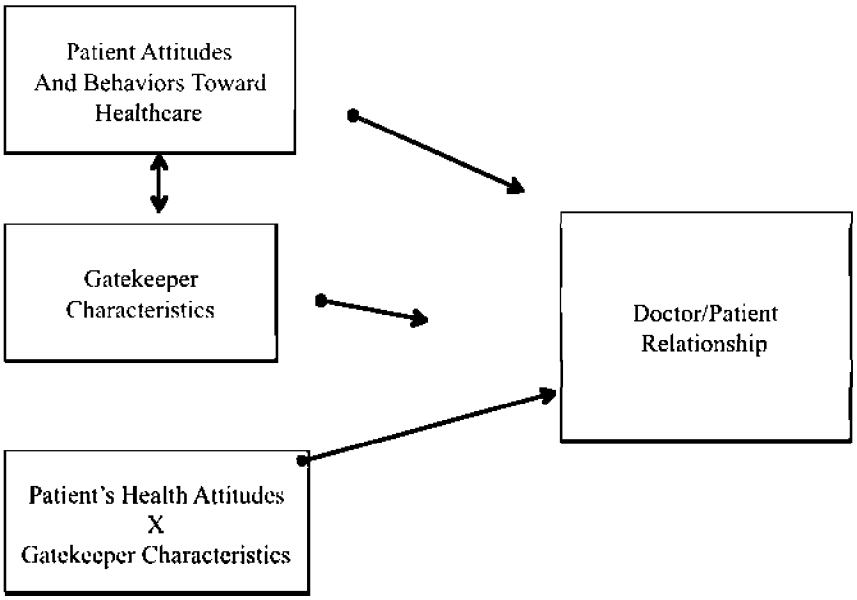

Figure 1 **The overall model for this study hypothesizes that patients visiting their doctor's officefor a medical appointment first encounter a medical gatekeeper. It is hypothesized that both patient's health attitudes and gatekeeper characteristics are individually linearly related to the doctor-patient relationship. It is also hypothesized that the interaction between gatekeeper characteristics and health attitudes and behaviors are linearly related to the doctor-patient relationship. Finally it is hypothesized that the scores on question 13 of the MultiCare Patient Heath Survey subscale Attitudes Toward Health Matters is linearly related to to the score on the scale patient perceptions of the doctor-patient relationship.**

Summary

The discussion in this chapter has summarized all of the elements of this study described. Patients come to a doctor's office because they are in a state of need, which will act as a filter for the experience. As discussed above, the doctor has the power in this relationship and therefore also bears the responsibility for the outcome. As has been explained, in addition to pharmacological and technological treatments, doctors also have the power of the placebo to use in the service of their patients. The placebo effect is a natural outcome of the doctor-patient relationship.

In most modern medical practices the patient does not have direct access to the doctor. There are gatekeepers who moderate that access and as such can be viewed as existing between doctor and patient. The purpose of this study is to examine the dynamics of gatekeeper behavior and how this behavior influences the relationship between doctor and patient. It is further hypothesized that if the gatekeeper can influence the doctor-patient relationship because the same dynamics are inherent in the relationship, gatekeepers can also influence the placebo effect either directly through their own contacts with patients or indirectly by their influence on the doctor-patient relationship.

The proposed model for this study provided a plan to study a true gap in the literature. I have been observing and collecting anecdotal information about

this topic for decades. The experience as it is described resonates with every person who has ever been a patient in a private practice office or clinic, and yet it has not been studied. I opened the door with the hope that once it is unlocked, real change will occur and the lives of millions of patients will improve. With an understanding of why it is important to do this work, I now move on to a discussion of my methods.

CHAPTER 3: METHODS

Introduction

The simple, common, almost mundane experience of going to the doctor should be life enhancing from the moment a person schedules an appointment until the conclusion of the encounter. The importance and meaning of the doctor-patient relationship to the health and well-being of human beings has been well documented in chapter two. The purpose of this study, as stated in chapter one, was to examine the impact of certain factors that may contribute to the potency of the doctor-patient relationship in terms of its ability to aid the doctor to promote healing, well-being, and health.

I evaluated the impact of patient attitudes and behaviors toward healthcare and medical gatekeeper characteristics on the doctor-patient relationship. I also evaluated the impact of the interaction of patient attitudes and behaviors toward healthcare and medical gatekeeper characteristics on the doctor-patient relationship.

This chapter focuses on the method was used for testing the effect of patient attitudes and behavior toward healthcare and medical gatekeeper characteristics on the doctor-patient relationship. The data used to test the hypotheses proposed in this study was from a MultiCare database. Therefore, no new data was collected for this study. This chapter presents the focus on the research design, the role of the researcher, a full description of the origins of the

secondary set from which this study's data will be drawn, the details of the MultiCare database including sampling methodology, data collection and study measures, participants and contents, and the analysis of the data for this study.

Research Design

This study used quantitative methods to analyze data that were obtained from a MultiCare database. After careful consideration of several options including conducting surveys via doctor's offices and over the Internet I decided that MultiCare secondary database was the best choice for answering the research questions in this study.

The data used for this study is from an archival database given to me by Fredrick H. Navarro of Fontana, California. Navarro used this database to validate his theory of psychosegmentation of attitudes toward healthcare in the general population of the United States. This was the subject of his master's thesis and formed the theoretical basis of his business, The Path Institute Corporation (Navarro, 1990). MultiCare Health Systems, a non-profit Tacoma, WA based healthcare organization dedicated to providing healthcare services to the community, created the database. They offer a full range of services at four hospitals in the Tacoma area. MultiCare also sponsors a great deal of medical research under the supervision of its Institutional Review Board (IRB) (MultiCare, 2007).

Initial Data Collection Options

After a thorough search of the literature including a search into methods used by other researchers to study similar research questions, it was decided that a survey was the best method for collecting data for this study (Baker, 1990; Creswell, 2003, p.154). I then searched for existing surveys with sound psychometric properties that would measure all of the concepts (patient attitudes and behaviors toward healthcare, medical gatekeeper characteristics, and doctor-patient relationship). Finding the right instruments was difficult because these relationships (e.g. the effect of gatekeeper encounters with patients on the doctor-patient relationship or the effect of gatekeeper encounters with patients on health outcomes) had never been studied in this manner before now. Therefore I searched for instruments that measured the concepts individually.

The survey developed by Baker (1990) was the most promising for measuring the doctor-patient relationship. Baker's instrument was an 18-item self-administered survey based on a Likert-like scale. It was psychometrically sound. Baker used two methods to test the reliability of his survey, internal consistency (Chronbach's Alpha) and a test-retest method. Chronbach's Alpha's ranged from 0.88 – 0. 95 and test-retest coefficients ranged from 0.82 – 0.93 (Baker). Construct validity was measured using the factor comparing patients leaving the practice when changing their home address against patients leaving the practice without changing their home address for a minimum of two years.

Patients who leave a practice without changing their home address are known to be less satisfied with their care than patients who leave a practice when changing their home address (Baker). Scores for the two groups, those who left when changing their home address and those who left when they did not change their home address were significantly different across all subscales on the survey supporting the validity of the questionnaire (Baker). Identifying an instrument to measure patient attitudes and behaviors toward healthcare was more difficult. Since the goal was not simply to measure patient satisfaction, but to measure psychological factors that were empirically related to health outcomes a search of the database Mental Measurements Yearbook seemed to be the best avenue of investigation. Instruments found in this database would also have psychometric data enumerated. The instrument that seemed to best meet the requirements for this study was the Brief Battery for Health Improvement 2 (BBH-2) (Disorbio & Bruins, 2002), a self-administered 63 item test developed to assess pain, functioning, somatization, depression, anxiety, and other factors relative to rehabilitation and recovery of patients undergoing rehabilitation for injuries (Disorbio & Bruins).

Finding an instrument to measure gatekeeper characteristics was more difficult. After a thorough search it became clear that there were no instruments with sound psychometric properties that measured the characteristics that were of interest to me. There were many patient satisfaction surveys, but none met the

criteria for this study. One survey developed by Capo (2006) came close. However the instrument had not been tested.

MultiCare database

During the March 2009 Walden University residency, I was presented with the opportunity to use the MultiCare Health Systems survey (Navarro, 1990). The database contained the answers to a survey developed in 1990 by Navarro and administered by MultiCare Health Care Systems.

This database was based on a sample size of 10, 579 de-identified participants drawn from hospital and medical center medical records in the Western half of the United States (F. Navarro, personal conversation, July 26, 2009). The survey consisted of 61 statements broken down into 9 sections. With the exception of the last section on patient attitudes and behaviors, all items were expressed via sub-scales. All data were continuous and scored on a Likert-like scale. The items on the survey covered all of the concepts of interest in this study and all of the research questions could be answered using the data in this database (Navarro, 1990). The MultiCare survey also has excellent psychometric properties, which will be described below in the section Instrumentation and Materials.

Decision

The MultiCare database is more than just a method of convenience. It is superior to the alternative method of using the Baker survey, BBHI-2, and Capo

surveys. The survey is psychometrically sound and covers all of the concepts required for this study. The database contains the responses of over 10,000 participants giving the study tremendous power. The size of the sample would clearly yield an unquestionably significant result (Gravetter & Wallnau, 2004, p. 268). The size of the sample does, however, risk the possibility of Type II error, or a relatively small effect that erroneously is interpreted as more meaningful than it actually is, leading to a false positive. According to (Gravetter & Wallnau, p. 243), a Type II error is not as serious as a Type I error. I needed to be aware of this possibility when analyzing the data and measuring the effect size. Therefore I decided to choose the MultiCare survey and database as the method for answering the research questions in this study.

Research Questions and Hypotheses

The doctor-patient relationship is essentially a one-way relationship wherein the doctor uses all of his or her skills for the benefit of the other, the patient. It is a relationship where the patient allows him or herself to be vulnerable and weak and endows the doctor with enormous amounts of trust (Kaba & Sooriakumararan, 2007). Patients tend to trust doctors whom they perceive as being caring, honest, and willing to communicate (Thom, Hall, & Pawson, 2004). Medical gatekeepers work for doctors and are the people who control a patient's access to the doctor. They can either facilitate or hinder that access (Robbins, 2003). They are often called upon to make triage decisions.

(Robbins), whereby they sort patients according to the severity of their presenting symptoms. All of the key variables of interest were discussed in the literature. The question of how the encounter between patients and gatekeepers might affect the doctor-patient relationship as posited by me was not found in the literature. It was a true gap. Further research led to the identification of three key variables: patient attitudes and behaviors toward healthcare, medical gatekeeper characteristics, and the doctor-patient relationship. A research model was developed along with four research questions. A quantitative approach was chosen to study these questions because I was interested in determining whether or not there is a relationship between the variables, patient attitudes and behaviors and behaviors toward healthcare, gatekeeper characteristics, and the doctor-patient relationship. According to Baker (1990) the best, most reliable method for measuring patient satisfaction with the doctor-patient relationship is the survey. The survey allows for a quick, efficient measure that is empirically sound. Quantitative methods in general, specifically surveys, are used to collect data and measure the relationships that are of interest to me at this time in much the same way that McKinnon, Crofts, Edwards, Campion, and Edwards (1998) used a similar survey and quantitative analysis to measure patient satisfaction with the services provided in hospitals in the UK. For the purpose of this study the following items in the MultiCare Medical Group Patient Survey were used to measure the variables:

1. Patient Attitudes and Behaviors Toward Healthcare
    a. General Attitudes Toward Health Matters: Questions 1 -15.
2. Medical Gatekeeper Characteristics.
    a. The sum of questions under the heading: Front Office Staff
3. Doctor-Patient Relationship
    a. The sum of questions under the heading: The Provider You Saw During Your Visit.

Research Questions

Research Question One: Are patient attitudes and behaviors toward healthcare linearly related to patient perceptions of the doctor-patient relationship?

Research Question Two: Are gatekeeper characteristics linearly related to patient perceptions of the doctor-patient relationship?

Research Question Three: Are gatekeeper characteristics and healthcare attitudes and behaviors in their interaction linearly related to the doctors-patient relationship?

Research Question Four: Are the score on question 13 on the scale patient attitudes and behaviors toward healthcare and the score on the scale gatekeeper characteristics linearly related to the score on the scale patient perceptions of the doctor-patient relationship?

The hypotheses are listed below in the Data Analysis section.

Origin of Data

I was granted permission from MultiCare Health Systems to use the database. An exemption from overview by MultiCare's IRB has also been granted (APPENDIX A). The original letter with the original signature is in my files. The study was reviewed by MultiCare's IRB co-chair and deemed as qualified for this exemption under 45 CFR 46.101 (b) (4) from all 45 CFR part 46 requirements according to the Human Subjects Regulations Decision Charts (OHRP, September 24, 2004) (APPENDIX A).

Secondary data is defined as data that has been originally collected for another purpose that can be re-analyzed (Reed, 1992). Problems associated with the use of secondary data include lack of direct knowledge of how and in what context the data were collected (Reed). Fortunately, as far as this particular database is concerned, there is information available concerning how these data were collected.

The questionnaire that was used to collect these data consisted of 61 questions divided into nine categories with the headings:

1. General satisfaction visit
2. Returning to and telling others about your provider
3. Getting in to see the provider
4. Front office staff
5. Back office staff

6. The provider you saw during your visit

7. Information and education

8. Problems

9. General attitudes toward health matters

All questions are scored on a Likert-like scale and the scales are all continuous (Navarro, 1990). Permission to use the survey was granted by Navarro, the owner of the survey (APPENDIX B). The original contract with original signatures is my files.

Setting and Sample of Original MultiCare Study

Twenty five hospitals and medical practices were selected in geographically diverse areas as sponsors and interviews were conducted in each of their respective service areas in order to increase the probability that that identified healthcare attitude/behavior segments would be applicable to the majority of US markets. Since the goal of the original study for which the database was created was for marketing purposes, probability sampling was not used (Navarro, 1990).

Data was collected using Market Strategies, a professional marketing firm (Marketing Strategies Inc, 2009). The data were collected by mail. Market Strategies contacted approximately 90,000 possible participants by telephone. Of those 70% responded they would be interested in participating in the survey. Surveys were mailed to these people and approximately 30% of those survey

forms were returned. Since this survey was conducted before HIPAA participant names were drawn from hospital records. Each potential participant was assigned a patient barcode number, which was entered on their patient record and their survey form. When the survey was returned to Market Strategies, the barcode number on the survey form was matched to the barcode number on the patient chart and the age and gender of the participant was entered into the database. No identifying information such as name, address, or social security number was collected (F. Navarro, personal conversation, July 26, 2009).

The sample in the MultiCare database consists of over 10,000 deidentified participants. The size of this sample far exceeds any estimation of minimal sample size. This will result in a study with high power and sensitivity, increasing the statistical significance. The only demographic data that exists in the database is age and gender. The sample consists of 7,103 females, 3,475 males and one of undisclosed gender ranging from age 0 to 101 (APPENDIX C). The sample was drawn from a population of existing medical records, randomly selected by computer. The method is described above.

A power analysis using Soper's (2004-2009) *A-priori* sample size calculator for multiple regression, considering an effect size of .15, two predictors, an alpha level of .05, and a power level of 0.80 suggested a minimum sample size of 67.

Contents of Database for Proposed Study Use

The database used for the proposed study is based on collection of data from 10,579 de-identified participants. The variables included in the original database are study number, month that the data was collected, barcode number, barcode new, zip code, county, service date, location number, facility, physician name, physician number, age of participant, gender of participant, all of the questions in the MultiCare survey. The variables barcode, barcode new, service date, facility, physician name, age, and gender are all nominal data. The other variables are all continuous and scored on an interval scale.

Instrumentation and Materials

Data was collected using the MultiCare Medical Group Patient Survey (Navarro, 1990). This survey consists of 61 questions broken down into 9 sections. Answers are scored on a Likert-like scale. The sections: back office staff, information and education, and problems were excluded from this study. These are whole subscales and the contents are not the focus of the proposed study. Their removal did not affect the psychometrics of the study because no scales are being altered in any way (Gregory, 2007, p. 148).

In order to address the four research questions each of the three key constructs (patients attitudes and behaviors toward healthcare, medical gatekeeper characteristics, and doctor-patient relationship) had to be operationalized by assigning questions in the MultiCare questionnaire to each variable. The variable

patient attitudes and behaviors toward healthcare was operationalized by the 15 questions under the heading *General Attitudes Toward Heath Matters.* Initially these questions were operationalized as patient attitudes toward healthcare, however upon further examination of the content of the questions and discussion with Navarro it was decided that patient attitudes and behavior was a better descriptor of the question (F. Navarro, personal communication, July 17, 2009). Navarro (1990) initially developed these questions in order to validate his PATH type model of patient attitudes and behaviors toward healthcare. He used this information to identify distinct psychographically defined consumer segments and validate their existence across and within geographic markets. It was his goal to identify and classify segments of the population in order to predict their usage of healthcare services (Navarro).

Patient Attitudes and Behaviors Toward Healthcare

Navarro used several sources to validate his questions when he developed the measure. These included a review of several studies where the intent was to segment the population in ways that were similar to Navarro's intended study (Navarro, 1990).

Studies that Navarro used to validate his theories include work by Harrel and Fors (1985) who identified four dimensions of Patient attitudes and behaviors toward healthcare using qualitative methods. These were health concern, frequency of health service use, self-confidence in decision-making, and

propensity to experiment (shop) for healthcare services. Price sensitivity and quality of care were identified as dimensions of patient attitudes and behavior by Blendon and Altman (1984). Blendon and Altman also discussed the growing problem of cynicism and lack of faith in doctors. A decrease in trust in doctors is a result of this trend. According to Blendon and Altman the questions that measure patient trust are important when measuring patient attitude toward doctors. Navarro's work is supported by the literature review conducted by this researcher for this study. The factors that enhance the doctor patient relationship: trust, empathetic understanding, respect, empathy, caring, and willingness to listen and communicate are essential to a positive and strong doctor-patient relationship (Houle, Harwood, Watkins, & Baum, 2007; Rogers, 1961Thom, Hall, & Pawson, 2004).

Navarro (1990), in his study *Profiles of Attitudes toward Healthcare: Psychographic Segmentation, PATH Type Validation Paper,* used the results of his literature review to develop 11 dimensions from which he created his statements. Initially he created 41 statements, each was measured on a five point Likert-like scale. The statements were validated in a study consisting of 2000 participants. The participants were 986 adult males and 1014 adult females who were randomly selected by random digit dialing of telephone numbers generated by prefix according to the number of households in each prefix. The survey was conducted by telephone by a professional marketing firm. In addition to the 41

statements the survey included additional healthcare measure assessment questions and demographic information. Navarro used Wilks's lambda to analyze the variance between his statements. He converted his scores into an approximation of a Chi Square test to allow for comparison between standard statistical tables. Navarro concluded that the variance was significant between his questions. Navarro also used split half comparisons and cross-validated his statements across all of the markets he surveyed, (e.g. Denver, CO; Dallas, TX; Manchester, NH, Louisville, KY; Columbus OH, Southern CA; Pittsburg, PA; Indianapolis, IN; Seattle, WA; and Jacksonville, FL.). All were significant p = .001(Navarro).

Navarro selected 15 questions for inclusion in the MultiCare Medical Health Care System Survey. This is the survey used to collect the data for the database used in this study. According to Navarro, each of these statements stands alone and must be treated individually (F. Navarro, personal communication, July 27, 2009).

Medical Gatekeeper Characteristics

The variable medical gatekeeper characteristics was operationalized by the questions under the headings *Front Office Staff.* Statements used to elicit answers on the MultiCare Health Systems Survey are standard statements used in many surveys designed to measure customer satisfaction in a medical setting such as Capo's patient satisfaction survey, which includes statements such as "Length of

time waiting at the office" and "Friendliness of our business and reception staff" (Capo, 2006, p172). Capo's survey is a freestanding patient satisfaction questionnaire consisting of 13 statements scored on a four point Likert-like scale. According to Capo there is no psychometric data available for this survey. She does say that the data is "reliable as long as it is a rambling sample that is returned to a third party rather than the practice/physician". Capo says she generally gets a 30 – 40% response rate. She said that she chose the four point scale to force the respondent to think about their answer rather than to "play it safe" and just select the middle response of a five point survey (J. Capo, personal communication, January 18, 2009).

Doctor-Patient Relationship

` The variable doctor-patient relationship was operationalized by the questions under the headings *The Provider You Saw During Your Visit.* Statements used to elicit answers on the MultiCare Systems Health Systems Survey are standard statements designed to measure patient satisfaction with their doctors. An example of these statements can be found in the survey developed by Baker (1990) in his Consultation Satisfaction Questionnaire, which included questions such as "I am totally satisfied with my visit to this doctor" and "I though this doctor took notice of me as a person." Baker's survey is a freestanding satisfaction questionnaire consisting of 18 statements scored on a five point Likert-like scale. All items are continuous and form a scale. Baker tested the

internal consistency of the survey using split-half methods and test-retest method. Both tests resulted in satisfactory internal consistency for the survey (Baker). The survey was also tested for content, construct, and criterion validity, which were all found to be satisfactory. The survey has not been validated for use with persons who are not proficient in English (Baker).

Data Analysis

Descriptive Analysis

All participants in the MultiCare database both male and female over the age of 18 were included in the study. They were selected by using the SPSS program, eliminating all participants who do not meet these criteria. This eliminated 386 participants from the database. Therefore the sample size for this study was 10,193 participants.

In a discussion with Navarro regarding the questions under the heading *Patent Attitudes Toward Healthcare,* in the MultiCare Health Systems Survey, I asked him if any one question could be singled out to encompass all of the factors of patient perceptions of the doctor-patient relationship. Navarro responded that given his statistical analysis of the questions, including factor analysis, the one question that met this requirement was question 13, "Most doctors and nurses are not as good…" (personal communication, May 14, 2009). As a result of this discussion with Navarro it was decided to use this question as a variable in order to test Research Question four.

The first step in the descriptive analysis portion of the study was to analyze the descriptive statistics and determine the means, standard deviations for continuous study variables, frequencies for categorical variables, means and standard deviations for covariates and range for the independent variables (patient attitudes and behaviors toward healthcare, gatekeeper characteristics) and the dependent variable (doctor-patient relationship).

The next step was to run a zero order correlation to determine if either of the covariates, age and gender, are significantly related to the outcomes, the effect of patient attitudes and behavior and gatekeeper characteristics on the doctor-patient relationship. The final step was to run Chronbach's alphas for the variables gatekeeper characteristics and doctor-patient relationship. These are scales and therefore their reliability can be tested in this manner (Gregory, 2007, p. 106). Patient attitudes and behavior is not a scale. The statements in that portion of the survey are all independent on one another.

Inferential Analysis

Data was analyzed using regression statistics. The (number of) subscales scales for gatekeeper characteristics and doctor-patient relationship were each respectively collapsed resulting in two scales, one for medical gatekeepers and one for doctor-patient relationship. Converting them to z scores standardized the scores. Since these are summative scales, collapsing them resulted in scales that have more variance and higher reliability (Gregory, 2007, p. 148). The scores for

the scale Patient attitudes and behaviors toward healthcare are not summative and could not be collapsed. However, the m posterior probabilities are normally distributed around each types centroid therefore they can be treated as standard scores. A zero order correlation was run for the covariates, age and gender, to determine if either are significantly related to the outcomes, the effect of patient attitudes and behaviors toward healthcare and gatekeeper characteristics on the doctor-patient relationship. Since age was found to be significant it was entered along with all other variables as a block, the default SPSS regression, into SPSS for analysis.

Research Question One: Are patient attitudes and behaviors toward healthcare linearly related to patient perceptions of the doctor-patient relationship?

H1o: There will be a zero correlation coefficient between each of the 15 items on the patient attitudes and behaviors toward healthcare scale and the patient perceptions of the doctor-patient relationship scale.

$H1_1$: There will not be a zero correlation coefficient between each of the 15 items on the patient attitudes and behaviors toward healthcare scale and the patient perceptions of the doctor-patient relationship.

The implied, underlying distribution of the variables are both continuous, interval scales scored on a Likert-like scale.

Research Question Two: Are gatekeeper characteristics linearly related to patient perceptions of the doctor-patient relationship.

$H2_o$: There will be a zero correlation between gatekeeper characteristics and patient perceptions of the doctor patient relationship.

$H2_1$: There will not be a zero correlation between gatekeeper characteristics and patient perceptions of the doctor patient relationship.

The implied, underlying distribution of the variables are all continuous, interval scales scored on Likert-like scales.

Research Question Three: Are gatekeeper characteristics and patient attitudes and behaviors toward healthcare in their interaction linearly related to the doctors-patient relationship?

$H3_o$: There will be a zero correlation between the interaction of gatekeeper characteristics and each of the 15 items on the patient attitudes and behaviors toward healthcare scale and patient perceptions of the doctor-patient relationship.

$H3_1$: There will not be a zero correlation between the interaction of gatekeeper characteristics and each of the 15 items on the patient attitudes and behaviors toward healthcare scale and patient perceptions of the doctor-patient relationship.

Research Question Four: Is the score on question 13, "Most Doctors and nurses are not as good…" on the questions under Patient Attitudes about Health Matters and the score on the scale gatekeeper characteristics linearly related to the score on the scale patient perceptions of the doctor-patient relationship?

The implied, underlying distribution of the variables are all continuous, interval scales scored on Likert-like scales.

$H4_o$: There will be a zero correlation between the two predictor variables, question 13 on the subscale *Patient Attitudes Toward Health Matters*, "Most doctors and nurses are not as good…" and gatekeeper characteristics and patient perceptions of the doctor-patient relationship.

$H4_1$: There will not be a zero correlation between the two predictor variables, the question 13 on the subscale *Patient Attitudes Toward Health Matters*, "Most doctors and nurses are not as good…" and gatekeeper characteristics and patient perceptions of the doctor-patient relationship.

The implied, underlying distribution of the variables are all continuous, interval scales scored on Likert-like scales.

Protection of Participants

The participants were all deidentified when I received the database. Since no additional data was collected and there were no actual participants in this study, it was not necessary to take any precautions to protect any actual participants from harm in this study.

All data that exist as a result of this study were stored electronically on flash drives. I plan to keep several back up copies to protect against technical failures. These are stored in a bank safety deposit box for security. Working copies were stored on my computer and are password protected. Backup copies were on flash drives and are protected for security purposes.

Ethical Considerations

I have made a concerted effort to research and understand all of the ethical responsibilities inherent in conducting a study that involves factors that may impact the lives of human beings. While there were no actual participants involved in this study, it was deemed appropriate by me to include a discussion of the relevant ethical guidelines that were critical to doing research for and with human beings.

The American Psychological Association (2002) is clear in its instructions to psychologists who are engaged in research. Psychologists are required to work under the supervision of an Institutional Review Board (IRB) to provide accurate information and to work in accordance with approved research protocols. When conducting research with human participants they must obtain informed consent. This consent must be specific and include the purpose of the research, duration, the right to decline or withdraw, any prospective benefits or adverse effects, incentives, and means for contacting researchers. The researcher must debrief participants and only use deception when it is unavoidable. There is a

caveat against dual relationships or excessive inducements to participate in any research study.

In accordance with the rules and regulations of Walden University all students and faculty who are conducting research of any scope involving collection or analysis of data from living persons must submit an IRB application to the university. Students are required to have faculty approval and supervision for their projects and may not begin collecting data or recruiting participants until explicit IRB approval has been granted. Any work begun before IRB approval has been received will not qualify for academic credit and students who collect data before receiving IRB approval may be expelled from the university. Doctoral students submit the IRB application after the proposal has been approved by the University Research Reviewer, the proposal oral conference has been held, and the Office of Research Support has approved the proposal. Researchers are advised that the review will take a minimum of 4-6 weeks and that revisions may be necessary. Any changes in research procedures once IRB approval has been obtained must be resubmitted to the IRB for approval. Expedited approval can be expected unless there is an increase in the level of risk. As a researcher using an archival database as a source for a study the IRB application requirements allow that sections on data collection, description of research participants, and informed consent may be left blank (Walden University, 2009).

I qualified for an IRB exemption from full IRB review from MultiCare Health Systems, the entity that owned the archival database being used for the study. An exemption was granted after a review of the study by the co-chairperson of the IRB because the study does not involve the collection of any data or contact with any participants. Therefore all requirements of MultiCare's ethical standards are met.

CHAPTER 4:RESULTS

Introduction

The purpose of this study was to determine if there was an effect on the doctor-patient relationship when patients encountered medical gatekeepers. According to the research questions:

1. Patient attitudes and behaviors toward healthcare and patient perceptions of the doctor patient-relationship are linearly related.
2. Gatekeeper characteristics and patient perceptions of the doctor-patient relationship are linearly related,
3. Patient attitudes and behaviors toward healthcare and gatekeeper characteristics in their interaction are linearly related to patient perceptions of the doctor-patient relationship,
4. The predictor variables, gatekeeper characteristics and question 13 on the subscale Patient Attitudes Toward Health Matters, "Most Doctors and Nurses are not as good…" is linearly related to patient perceptions of the doctor-patient relationship.

The hypotheses chosen to test these research questions were all correlation analyses using regression statistics. For the purpose of this study there were two independent variables and one dependent variable:

1. Independent variables
    a. Patient attitudes and behaviors toward healthcare
    b. Gatekeeper characteristics

2. Dependent variable

c. Doctor-patient relationship

On December 8, 2009, the Institutional Review Board (IRB) of Walden University issued approval of the application for this study, *The Effect of Gatekeeper and Patient Encounters on the Doctor-Patient Relationship*. The approval number is 12-08-09-0005147 (APPENDIX D). The actual research began on December 12, 2009.

This chapter will serve several purposes. It will describe changes made to the original databases and the reasons for those changes. It will also describe and explain the analysis of the dataset so that the reader will understand how the dataset was used to answer the research questions by testing the hypotheses. Finally, it will also report the results of the data analysis so that they can be discussed in chapter 5.

Preparation of Database

When the database was received it consisted of 10,579 participants. The participants ranged in age between 0 and 101 years and there were 7,103 females, 3,475 males and one of undisclosed gender (APPENDIX C). The participants in the database were all patients of general practitioners in the area surrounding Tacoma, WA. Since this study operationally defines patients as adults, over the age of 18, all participants under the age of 18 had to be eliminated from the database before any analysis could begin.

Manually deleting all participants under the age of 18 and eliminating 386 participants resulting in a total of 10,193 participants in the final database accomplished this. For the purpose of this study, this database will be called the Master database.

Descriptive Analysis

Patient Behaviors and Attitudes toward Healthcare

The Master database contained 10,193 participants ranging in age from 18 to 101 years old with a mean age of 58. 36. The sample consisted of 6,928 females, 3,264 males and one of undisclosed gender (APPENDIX E). There is no other demographic data available on these participants. They were all de-identified at the time the data was first collected.

The independent variable, patient attitudes and behaviors toward healthcare, is defined by items 1 to 15 under the category Patient Attitudes Toward Health Matters on the MultiCare Medical Group Patient Survey (Navarro, 1990). These items are discrete. They are individual items and therefore cannot be statistically manipulated. Therefore there are no data to report on these items, such as means and standard deviations (Gravetter & Wallnau, 2004, p. 18).

Gatekeeper Characteristics

The independent variable, gatekeeper characteristics, was defined by questions 1, 2, 3, and 4 on the subscale Front Office Staff on the MultiCare Medical Group Patient Survey (Navarro, 1990. Respondents were asked to rate

their satisfaction with front office staff on the following items using a five point Likert-like scale with points ranging from "very satisfied" to very dissatisfied".

Question 1 Your overall satisfaction…

Question 2. Answering your…

Question 3 Keeping you informed…

Question 4. Treating you with courtesy…

Means and Standard Deviations are reported in Table 1. In the analysis 9653 (94.7%) cases were included and 540 (5.3%) were excluded. Listwise deletion was based on all variables in the procedure.

Table 1

Gatekeeper Means and Standard Deviations

	Mean	*SD*	*N*
Question 1	4.56	.843	9653
Question 2	4.37	1.188	9653
Question 3	3.80	1.722	9653
Question 4	4.66	.776	9653

Questions are drawn from subscale *Front Office Staff*

Chronbach's alpha was run on the items in this variable to determine reliability. The results were a Chronbach's alpha of .760 (*N*=4). Descriptive statistics for the combined items were mean 4.347, variance .148 (*N*=4).

The Significance of Age and Gender

The first step in determining the significance of age and gender in their relationship to the outcomes of the effect of patient attitudes and behavior and gatekeeper characteristics on the doctor-patient relationship was to convert the variable patient gender to a nominal scale (female =1, male =0) so that it could be statistically manipulated. Zero order correlation of these two variables in relation to the other variables revealed that gender was not significant. However, age is a significant variable that shows that as people age their dissatisfaction with medical gatekeepers increases (r= .254, p = .01). Therefore age was included as a covariate in the final analysis.

According to indicators in the literature, age appears to be the most stable indicator of patient satisfaction. Thiedke (2007) found that as people aged their satisfaction with their doctors increased. Although, Thiedke did qualify these results by stating that the data on this measure was mostly anecdotal and based on one time encounters. Therefore it is not necessarily a true indicator of the quality of performance of the doctor.

Age was entered as a covariate and shown to be a factor in the relationship between patient attitudes and behaviors and patient perceptions of the doctor-patient relationship. Results of the Spearman Rho test showed that age had a significant effect on the doctor-patient relationship, gatekeeper characteristics and on most of the responses to the 15 questions in the subscale

General Attitudes Toward Healthcare. The results of the Spearman Rho test are summarized in Table 4. These results will be discussed in detail in chapter five.

Comparison of scores in tests run with and without the inclusion of age as a covariate revealed that age was responsible for about 5% of the variance that was observed during the analysis of the variables. For example: the regression score for research question one when age was included in the equation was r_s = .302, $p < 0.01$. The regression score for the research question one with age left out of the analysis was r_s =. 275 p = < 0.01. The difference between the two regression scores is .05. Therefore while age is a factor, it does not account for all of the variance and therefore it can be concluded that if controlled for the effects of the other independent variables are not spurious.

Table 2.

Summary of the results of Spearman Rho Test Effect of the Covariate Age and Gatekeeper Characteristics, Doctor-Patient Relationship, and The 15 Questions on the Subscale General Attitudes Toward Healthcare

	Z score (Age) Correlation Coefficient	Sig (2-tailed)	*N*
Z score (D/P)+	.172**	.000	9193
Z score (G/P)++	.254**	.000	9653
Z score (q1)	-.159**	.000	9300
Z score (q2)	-.051**	.000	9413
Z score (q3)	.056**	.000	9455
Z score (q4)	.009	.408	9382
Z score (q5)	-.097**	.000	9295
Z score (q6)	177**	.000	9285
Z score (q7)	-.054**	.000	9373
Z score (q8)	-.024*	.000	9393
Z score (q9)	.209**	.000	9216
Z score (q10)	-.003	.740	9414
Z score (q11)	.002	.868	9382
Z score (q12)	-.028**	.007	9438
Z score (q13)	-.037**	.000	9381
Z score (q14)	.041**	.000	9354
Z score (q15)	.168**	.000	9300

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0,05 level (two tailed). +(D/P) Doctor/Patient Relationship, ++(GK) Gatekeeper Characteristics

Doctor-Patient Relationship

The dependent variable, doctor-patient relationship, is defined by questions, 1, 2, 3, 4, 5, and 6 on the subscale The Provider You Saw During Your Visit and questions 1, 2, 3, and 4 on the subscale Information and Education on the MultiCare Medical Group Patient Survey (Navarro, 1990). The questions drawn from the subscale The Provider You Saw During Your Visit will be designated as questions 1a, 2a, 3a, 4a, 5a, and 6a. The questions drawn from the subscale Education and Information will be designated 1b, 2b, 3b, and 4b. Respondents were asked to rate their satisfaction with the provider they saw during their visit on the following items using a five point Likert-like scale ranging from "very satisfied" to "very dissatisfied".

Question 1a. Your overall satisfaction…

Question 2a. The provider respecting…

Question 3a. The provider showing interest…

Question 4a. The provider taking time…

Question 5a. The provider's medical skills…

Question 6a. The provider treating you…

Question 1b. The adequacy of information…

Question 2b. The provider's explanation of treatment…

Question 3b. The provider's explanation…

Question 4b. When you asked questions of your provider, how satisfied were…

Means and Standard Deviations are reported in Table 3. In the analysis 9193 (90.2%) cases were included and 1000 (9.8%) were excluded. Listwise deletion was based on all variables in the procedure.

Table 3

Doctor-Patient Means and Standard Deviations

	Mean	*SD*	*N*
Question 1a*	4.75	.682	9193
Question 2a*	4.76	.855	9193
Question 3a*	4.75	.712	9193
Question 4a*	4.72	.730	9193
Question 5a*	4.78	.660	9193
Question 6a*	4.82	.597	9193
Question 1b**	4.47	1.064	9193
Question 2b**	4.43	1.200	9193
Question 3b**	4.31	1.392	9193
Question 4b**	4.60	.909	9193

*Question is drawn from subscale *Provider You Saw During Your Visit.* ** Question is drawn from subscale *Information and Education.*

Chronbach's alpha was run on the items in this variable to determine reliability. The results were a Chronbach's alpha of .903 (N=10) and a Chronbach's alpha based on standardized items of .926 (N-10). Descriptive statistics for the combined items were mean 4.460 and variance .031 (N=10).

Other Preliminary Analyses

The subscales for the variables gatekeeper characteristics and doctor-patient relationship were each collapsed to form two new variables each containing their respective subscales. This resulted in scales with more variance and higher reliability (Gregory, 2007). The new gatekeeper characteristic scale contained all four subscales collapsed into one and the new doctor-patient relationship scale contained all 10 subscales collapsed into one. Tests for kurtosis and skewness of these two variables revealed that they did not meet the standards for normality required for the use of parametric measures. The results were:

Table 4

Normality of Gatekeeper Characteristics and Doctor-Patient Relationship

	Skewness	Kurtosis
Gatekeeper Characteristics	-1.659	2.871
Doctor-Patient Relationship	-2.710	8.422

Based on the research questions and hypotheses, I decided that the appropriate statistics to analyze the data for this study would be linear regression. Linear regression would establish whether or not there was a linear relationship between the variables as required by the research questions and hypotheses. In order to clarify the appropriateness of using both the Spearman Rho statistic for the descriptive portion of the analysis and linear regression for the inferential analysis, I consulted with Dr. Trunk who gave his approval for the use of these methods (personal communication, B. Trunk, December 21, 2009) (APPENDIX E).

All scores in the database that were to be analyzed (e.g. independent and dependent variables and covariates) were then converted to z scores so that they could be compared across scales. The independent variable gatekeeper characteristics was defined as the collapsed scores of questions 13 -16 on the MultiCare Patient Health Care Survey (Navarro, 1990), which have been converted to z scores. The independent, variable patient behaviors and attitudes toward healthcare, was defined as questions 1 -15 on the subscale General Attitudes Toward Health Matters on the MultiCare Patient Health Care Survey (Navarro), which have been converted to z scores. The dependent variable doctor-patient relationship was defined as the collapsed scores on the questions 24 -29 and 33 – 36 on the MultiCare Patient Health Care Survey (Navarro), which have been converted to z scores.

Inferential Analysis

All variables, independent, dependent, and the covariate age were entered into SPSS as a block for analysis (SPSS, Inc, 2008). Two tailed Spearman Rho correlations were run and pairwise comparisons were made. Linear regressions were also performed to test each of the four research questions and hypotheses. Spearman Rho was chosen because of the kurtosis and skewness of the variables, gatekeeper characteristics and doctor-patient relationship. Spearman Rho and linear regression were used to completely answer the research questions in consultation with Dr. Trunk (personal communication, B. Trunk, December 21, 2009) (APPENDIX E).

Research Question One

The first research question to be addressed was: Are patient attitudes and behaviors toward healthcare linearly related to patient perceptions of the doctor-patient relationship?

$H1_0$: There will be a zero correlation coefficient between each of the 15 items on the patient attitudes and behaviors toward healthcare scale and the patient perceptions of the doctor-patient relationship scale.

$H1_1$: There will not be a zero correlation coefficient between each of the 15 items on the patient attitudes and behaviors toward healthcare scale and the patient perceptions of the doctor-patient relationship.

Linear regression was run with all variables using the default method in SPSS of enter for analysis (SPSS, Inc, 2008). The results showed that the variables

patient attitudes and behaviors toward healthcare and patient perceptions the doctor-patient relationship, were linearly related (r (9993)= .276, $p > 0.01$).

The covariate age was also highly correlated (r (9193) = .172, $p > 0.01$) indicating that age is a factor in patient perceptions of the doctor patient relationship.

Research Question Two

The second research question was: Are gatekeeper characteristics linearly related to patient perceptions of the doctor-patient relationship.

$H2_o$: There will be a zero correlation between gatekeeper characteristics and patient perceptions of the doctor patient relationship.

$H2_1$: There will not be a zero correlation between gatekeeper characteristics and patient perceptions of the doctor patient relationship.

Linear regression was run with all variables using the default method in SPSS of enter for analysis. The results showed that the variables, gatekeeper characteristics and patient perceptions of the doctor-patient relationship, were linearly related (r (9334)= 336. $p > 0.01$).

Research Question Three

The third research question was: Are gatekeeper characteristics and patient attitudes and behaviors toward healthcare in their interaction linearly related to the doctors-patient relationship?

$H3_o$: There will be a zero correlation between the interaction of gatekeeper characteristics and each of the 15 items on the patient attitudes and behaviors toward healthcare scale and patient perceptions of the doctor-patient relationship.

$H3_1$: There will not be a zero correlation between the interaction of gatekeeper characteristics and each of the 15 items on the patient attitudes and behaviors toward healthcare scale and patient perceptions of the doctor-patient relationship.

Linear regression was run with all variables using the default method in SPSS of enter for analysis. The results showed that the variables, gatekeeper characteristics in their interaction with patient attitudes and behaviors toward healthcare, were linearly related to patient perceptions of the doctor-patient relationship (r (9773) = .348 $p > 0.01$).

Research Question Four

The fourth and final research question was: Is the score on question 13, "Most Doctors and nurses are not as good…" on the questions under Patient Attitudes about Health Matters and the score on the scale gatekeeper characteristics linearly related to the score on the scale patient perceptions of the doctor-patient relationship?

$H4_o$: There will not be a zero correlation between the two predictor variables, question 13 on the subscale Patient Attitudes Toward Health Matters, "Most doctors and nurses are not as good …" and gatekeeper characteristics and patient perceptions of the doctor-patient relationship.

$H4_1$: There will be a zero correlation between the two predictor variables, the question 13 on the subscale Patient Attitudes Toward Health Matters, "Most doctors and nurses are not as good…" and gatekeeper characteristics and patient perceptions of the doctor-patient relationship.

Linear regression was run with all variables using the default method in SPSS of enter for analysis. The results showed that the two predictors, gatekeeper characteristics and question 13 on the subscale Patient Attitudes Toward healthcare were linearly related to patient perceptions of the doctor-patient relationship (r= (9999) .395. $p > 0.01$).

Summary

Chapter four provided the opportunity to carefully lay out the results of the various analyses proposed to answer the research questions that were designed to solve the problem presented in the greater problem stated as the main purpose of this dissertation. It was the intention of chapter four to be a cut and dried presentation of the facts of the analysis. On the other hand, chapter five will provide an opportunity to expand on these formulaic explanations and provide further details and interesting comments. Additionally, chapter five will

also provide an opportunity to gaze into the future and dream about what the next steps may be, given the findings of this study and the door that it has opened into the world of improving the doctor-patient relationship and the role of gatekeepers in the medical profession.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to examine the relationships between healthcare attitudes and behaviors, medical gatekeeper characteristics, and the doctor-patient relationship. I was specifically interested in the interactions between patients and medical gatekeepers and the effect these interactions have on the doctor-patient relationship. In his review of the history of the placebo effect, Gordon (1996) argued that the relationship between patients and medical gatekeepers, while ancillary to the doctor-patient relationship, not only affected the doctor-patient relationship, but affected health outcomes as well through the mechanism of the placebo effect. The placebo effect, an intrinsically inert substance or treatment that is capable of evoking psychophysiological effects that are beneficial, is an important component of the doctor-patient relationship. The placebo effect in the doctor-patient relationship involves elements such as trust, caring, and valuing that have been shown to heighten the benefits of treatment (Thom, Hall, & Pawson, 2004). Placebo interventions also activate neurochemical and immune system responses through the endocrine complex activating the HPA axis (Gordon). Therefore, it was my assumption that if the interaction between patients and medical gatekeepers affected the relationship between patients and doctors, health outcomes would be affected as well.

The results of this study should be viewed in light of the fact that the sample size used for the study was very large. Large sample sizes can affect the

results of a study, possibly exaggerating the effects. While this is not necessary true regarding my results, it needs to be noted when interpreting the results.

Interpretation of Findings

This research study was designed to look at patient attitudes and behaviors toward healthcare and gatekeeper characteristics (the individual independent variables) that were of interest and compare them to the doctor-patient relationship (the dependent variable) to see if they were linearly related as individual variables. The next step was to combine the independent variables to see if they were linearly related when combined to the dependent variable. Analysis of all of the combinations of the variables using both linear regression and the Spearman Rho test revealed significant relationships between all of the variables resulting in new findings that have implications for medical practice.

During the initial phase of the analysis it was discovered that the covariate age was significant at the zero order in relation to patient attitudes and behaviors toward healthcare and gatekeeper characteristics and then again between patient attitudes and behavior toward healthcare and gatekeeper characteristics and their effect on the doctor-patient relationship. The effect of gender was also tested to see if it was significant at the zero order in relation to these variables; it was not. Therefore, during the second, inferential stage of the analysis, age was included as a covariate and gender was not. A comparison of analyses of tests run with and without age revealed that age was responsible for 5% of the

variance in the relationship between patient attitudes and behaviors toward healthcare and gatekeeper characteristics and their effect on the doctor-patient relationship. Age is one of the most stable factors affecting patent satisfaction in that as patients grow older they tend to be more satisfied with their doctors, however, since most of the data collected to measure the effect of age on satisfaction is anecdotal and based on one encounter it is not considered to be a valid measure of the competence of doctors (Thiedke, 2007). It was important to include age as a covariate because although it does have an effect on the relationship between gatekeeper characteristics and patient attitudes and behaviors toward healthcare and their effect on the doctor-patient relationship it does not account for all of the variance.

The first research question to be tested was the relationship between patient attitudes and behaviors toward healthcare and the doctor-patient relationship. Although the doctor-patient relationship has been well documented in the literature (Thom, Hall, & Pawson, 2004), it was important to evaluate the relationship between patient attitudes and behaviors toward healthcare as defined in this study and the doctor-patient relationship. The relationship was found to be strong, with a significant linear relationship as predicted. The results of this study show that there is a relationship between the encounters between patients and gatekeepers and patient perceptions of the doctor-patient relationship. As predicted by Navarro (personal communication, May 14, 2009), question 13 had the strongest correlation, r (8709) = -.259 $p < 0.01$.

These findings are supported by reports of patient attitudes and behaviors toward the doctor-patient relationship in the literature. Kaba and Sooriakumararan (2007) describe the doctor-patient relationship as a non-reciprocal one wherein the patient allows him or herself to be vulnerable while endowing the doctor with enormous amounts of trust. Thom, Hall, and Pawson (2004) inform us that the central issues for the patient are trust, and alleviation of suffering. Patients trust doctors whom they perceive as caring, honest, and willing to communicate. Trust is also strengthened when patients perceive their doctors to have an egalitarian, partnership attitude. This power gradient is an important factor. According to Werner and Malterud (2005) when patients perceive the doctor as the holder of all power they begin to feel marginalized and fearful. In these situations doctors may unintentionally contribute to or exacerbate a patient's feelings of guilt, shame, or hopelessness, making them feel rejected, ignored, blamed for their condition and exacerbating their illness.

The next two variables to be compared were the independent variable gatekeeper characteristics and the dependent variable doctor-patient relationship. These were also found to have a strong linear relationship r (9334) = .336 $p < 0.01$. The significance of this finding was that both independent variables (patient attitudes toward and behaviors toward healthcare and gatekeeper characteristics) in the study had strong linear relationships with the dependent variable (the doctor-patient relationship.

According to Brock (1995) patients are more interested in the quality of care than they were previously. They are paying more attention to the quality of the relationship of not only the doctor, but of the support staff. Medical gatekeepers are key members of the support staff since they are the people who are the face of the practice. Brock emphasizes that when patients are dissatisfied with the gatekeepers, they will tend to be dissatisfied with the practice in general. He says that incidents such as long wait times, rude behavior on the part of the gatekeeper, or being placed on hold for a long time during a telephone call will all cause negative reactions on the part of the patient.

The most relevant finding of this study, and the main purpose of this dissertation was to discover if the interaction between patients and gatekeepers had an effect on the doctor-patient relationship. The linear relationship between gatekeeper characteristics in their interaction with patient attitudes and behaviors toward healthcare with patient perceptions of the doctor-patient relationship means that the encounters between patients and gatekeepers are significant to the doctor-patient relationship r (9773) = .348 $p < 0.01$. The lower magnitude of this correlation may be due to the influence of the covariate, age. This research question addressed the gap in he literature that I was most interested in researching. Although it was difficult to find research that directly supported my findings, it is interesting to note that there are similarities in the literature that support factors that strengthen the doctor-patient relationship and factors that also have an important positive effect on the gatekeeper-patient

relationship. As previously noted, trust, willingness to communicate, caring, and honesty all tend to strengthen the doctor-patient relationship (Thom, Hall, & Pawson, 2004). According to Robbins (2003) these same factors facilitate a positive gatekeeper/patient relationship. The results of this test build on the results of the previous tests. It is my conclusion, given the results of this study, that since the factors that strengthen both relationships, doctor-patient and gatekeeper-patient, are the same, the dynamic of the relationships are similar and that that may be why they affect one another. This, of course, would have to be studied in a future research project.

The second most important finding of this study was that the when medical gatekeepers and patients encounter each other in a medical setting the results of their encounter is linearly related to the patient's perception of the doctor-patient relationship. This conclusion was drawn from the results of final research question of the study, which involved the relationship between gatekeeper characteristics and item 13 on the scale Patient Attitudes Toward Health Matters on the scale patient perceptions of the doctor-patient relationship. Item 13 was "Most doctors and nurses are not as good…"(Navarro, 1990). According to Navarro, his statistical analysis of the questions, including factor analysis showed that this question encompassed all of the factors of patient perceptions of the doctor-patient relationship (Navarro, personal communication, May 14, 2009).

According to Navarro (personal communication, May 14, 2009) this question factored heavily on trust. According to Hall (2004) trust is an essential factor of the doctor-patient relationship and is recognized by both doctors and patients as necessary for any meaningful treatment to occur. Trust can impact treatment by influencing the patient's compliance with the doctor's recommendations and also by influencing the placebo effect (Hall).

These results all add up to the possibility of the need for significant changes in the way medical offices are managed and structured in the United States. The role of the gatekeeper/receptionist has been underrated and undervalued. They are usually expected to do more than one job at a time, tending to patient needs, pulling charts, and doing other clerical work (Capo, 2006, p. 8-11). As a result, negative attitudes on the part of the gatekeeper will impede communication leading to a stressful encounter for both gatekeeper and patient (Robbins, 2006, p. 89). The relationship demonstrated in this study shows that the gatekeeper is a key member of the medical team. The health and welfare of patients is affected not only in their time spent with medical providers, but with ancillary staff as well.

Implications for Social Change

The implications for positive social change in this study are compelling. Given the importance of the doctor-patient relationship and the association between the doctor-patient relationship and health outcomes, any ancillary factors that impact that relationship must be seriously considered for any

positive or negative effects. Since this study has shown that there is a relationship between healthcare attitudes and behaviors, gatekeeper characteristics and the doctor-patient relationship the possibility for healthcare behaviors and gatekeeper characteristics having an effect on health outcomes is possible and must be examined. Since there is also a relationship between the interaction of patients and medical gatekeepers on the doctor-patient relationship, this may also have an effect on health outcomes and must be examined.

Studying the factors healthcare attitudes and behavior, gatekeeper characteristics, and the interaction between patients and medical gatekeepers in order to eliminate any aspects that may negatively impact the doctor-patient relationship and maximize those that will reduce pain and suffering, eliminate any possible harm patients may suffer as a result of their encounters with medical gatekeepers, and maximize the positive medical outcomes for people, more positive health outcomes and a healthier populace will result in a more cost effective healthcare system.

This model for caring is like the one proposed by Wittershoven (1999) based on care theory. This is a collaborative model whereby everything done within the practice is geared toward the benefit of the patient. There is an awareness of the patient's needs, a taking of responsibility for meeting those needs, taking concrete actions for meeting those needs, and communicating caring receiving a response from the recipient of care. Although Wittershoven

addresses his concerns to the doctor-patient relationship, my study indicates that these measure need to be expanded to include the responses of the gatekeepers to patients as well.

Winstanley (2005) studied aggressive acts of patients toward medical staffs. Triggers for patient aggression were patient characteristics (26%), treatment regime (19.2%), interaction with others (17.5%), and refusal of a request by a patient (19.3%). Winstanley reports that the behavior of the staff may contribute to aggressive behavior in three ways: coercion, power, and dominance. Retraining of gatekeepers will bring about positive social change by reducing aggressive acts in medical settings. If gatekeepers are trained to be sensitive to patient needs and to respond in a therapeutic manner as defined by theorists such as Rogers (1961) who promote a client/patient centered approach to people there will be a general improvement in healthcare by reducing aggressive incidents, improving the general quality of care, and increasing patient satisfaction and compliance with treatment.

According to Levant, House, May, and Smith (2006) the current healthcare crisis in the United States requires that all stakeholders, the government, practitioners, insurance companies, etc, work to find ways to contain and control the cost of healthcare in the country. They suggest that one major contribution to this effort would be to explore the psychological factors of physical illnesses and create interventions that address those problems both on the level of individual patients and on an institutional level. This study addresses the psychological

factors, such as the effect of gatekeeper characteristics and patient attitudes and behaviors toward healthcare on the doctor-patient relationship that impact health outcomes. According to Levant et al. addressing this problem, retraining gatekeepers to be more aware of patient needs and to assume a more therapeutic role, could reduce costs by ultimately addressing the psychological factors of medical illness and thus increase positive health outcomes.

Recommendations for Actions

The best way to implement the changes required to guarantee the best possible outcome for patients in their encounters with medical gatekeepers is to categorize and retrain medical gatekeepers as part of the clinical staff. Currently medical support staffs are trained in programs that emphasize medical record keeping, privacy laws, and HIPAA (Aglow, 2009) or were trained informally on the job (Capo, 2006). Medical gatekeepers need to be given training in basic clinical skills such as rapport building and active listening. They would benefit from training in basic Rogerian principles such as unconditional positive regard, empathetic understanding, and non-judgmentalness (Rogers, 1980).

The training of medical gatekeepers can no longer be left to chance or be taken for granted. Doctors must be made aware of the effect their gatekeepers have on the relationship these staff have on patients and the doctor-patient relationship as well as on health outcomes. Medical training must include an awareness of how the training and characteristics of the support staff they

employ impact their patients. Doctors must understand they do not work in a vacuum. They need to understand that everyone who comes into contact with their patients will impact the doctor-patient relationship and health outcomes. Doctors need to take responsibility for whatever their patients experience from the moment of first contact with their practice. They must insure that patients have a continuous, positive therapeutic experience that will promote positive health outcomes.

Recommendations for Further Study

This study has opened a new door into an area of inquiry that has never been examined. As such, there is a great deal of work to be done. This study was limited to encounters that took place in general practice. The next logical step would be to replicate the study in the practices of different specialties to discern whether or not the medical gatekeeper effect is valid and reliable in those settings.

It would also be of great benefit to study the placebo effect as a mechanism for healing and maintenance of health. Doctors use the placebo effect to benefit their patients by using the power of suggestion, or other elements inherent in the symbolic power of the healer (Sachs, 2006). They are able to harness the power of rituals, similar to those of a shaman. According to Gordon (1996) in his history of the placebo effect, these rituals, the taking of blood pressure and other

vital signs, the symbols of power such as a white coat and stethoscope are all elements of the placebo effect in modern medical practice today. Doctors can use these modern rituals and symbols to build trust and give their patients a sense that they care about them and are willing to take the time to understand their illness. When doctors take time with a patient, the patient feels accepted and valued. Higher rates of trust, i.e. the belief that the provider will act in one's best interest given the vulnerability inherent in the situation, have been shown to improve compliance rates by 62%, and improve continuity of care in that only 3% of patients studied changed doctors after six months (Thom, Hall, & Pawlson, 2004). In modern medical practice, doctors using the model of subject (patient) – agent (doctor) – authority (ritual or treatment modality), use the placebo effect to heighten the effect of their treatment. The placebo interventions activate neurochemical and immune system responses through the endocrine complex (Gordon, 1996). The neuroendrocrine response system has direct impact on long-term health outcomes. It involves activation of the hypothalamic- pitituitary-adrenal (HPA) axis, which occurs in response to both physical and psychological stress. Activation of the HPA axis causes the release of corticotropin releasing hormone to release cortisol into the bloodstream, which acts as a regulator for many bodily functions, i.e. mobilization of energy sources, induction of vasoconstriction, heart rate, and many other critical physiological processes. Negative biological consequences are associated with prolonged HPA activation

including inhibition of the immune system, decreased lymphocyte proliferation and cytokine production. Prolonged or chronic activation is also associated with stress related chronic diseases such as cardiovascular disorders and diabetes (Dickerson & Kemeny, 2004). The placebo effect acts as a stress reducer, preventing or ameliorating the activation of the HPA axis and the resultant damage of prolonged or chronic activation (Gordon, 2004). Since gatekeepers in their encounters with patients may have a positive or negative effect on the doctor-patient relationship, they may also affect the placebo effect and thereby indirectly cause changes in health outcomes. If the mechanisms of the placebo effect were better understood, the role of all participants would be enhanced.

This study established the relationship between encounters between medical gatekeepers and patients on the doctor-patient relationship. Now that this has been established, it is important to understand the dynamics of these relationships. This can only be done through further research, both qualitative and quantitative. It would be helpful to interview members of all three groups eliciting their experiences of the interactions and relationships involved to further understand how they feel about each other and what the triggers are for positive and negative experiences. It has been my experience that people have very strong opinions and feelings about this subject. An understanding of the perspectives of all of the people who fill these rolls could lead to creative

solutions to the problems people encounter when they meet with each other in these settings. It would not only enhance their subjective experience, but also increase their sense of well-being and mental and physical health. Further research using quantitative methods would uncover the causes of these relationships. Over the years I have developed theories regarding the psychological mechanisms that may underlie them. I have thought about the concept of referred power, whereby the gatekeeper feels empowered by his or her position as a representative of the doctor. This gives the gatekeeper a sense of superiority over the patient and may affect the way he or she behaves during the encounter. I have also considered the gatekeeper as a person caught between trying to serve the needs of people who may have conflicting goals. The patients who are in need of getting through to the doctor, and the doctor who has limited time and resources are all looking to the gatekeeper to resolve their issues and needs. The gatekeeper is responsible for satisfying all within a limited amount of time, under the pressure of doing a job that requires a great deal of multitasking.

In the course of professional life I have listened to people complain that gatekeepers are incompetent, rude, and uncaring. Gatekeepers tell me they are overwhelmed, frustrated, and overworked. Doctors want to avoid the situation and just practice their profession. In my experience everyone feels as if they are powerless in this situation and that all other participants in the encounters have all of the power. Future research needs to sort all of these elements out and build

a paradigm that works so that our medical system can work for all who are involved.

Conclusion

The problem addressed by this study is so pervasive in our society that it has resonated with every person I have ever encountered. Whenever I have been asked about my dissertation and told people the topic or the title they have had an immediate visceral response and eagerly relate several stories about their experiences while visiting their doctors. I have heard stories from both patients and gatekeepers. However, the most interesting reactions are from doctors. Invariably, they get a semi-panicky look in their eyes and ask me for some sort of reassurance that their gatekeepers are doing a good job.

Given the pervasiveness and interest in this topic, I was very surprised to learn that no one had formally researched it. When I realized I had found a true gap in the literature I knew I had found a dissertation topic that I could research with passion and one that had the potential of facilitating enormous positive social change in our society. Healthcare in the United States is in a state of crisis and any positive change is welcome at this juncture in our history as a nation. Reducing the stress that people experience when they visit their doctors and enhancing the doctor-patient relationship will make us all healthier. Reducing job stress for medical personnel and creating a happier and healthier work environment will benefit all who are involved.

I have always seen my work as a gift to the clients for whom I work. That is why I always allocate a portion of my work as pro bono. I believe that as professional psychologists we are privileged to have the education we have been given. Therefore, I see this dissertation and the work I have done, the results of this research, as a gift to all people who are engaged in these relationships. It is my hope that I have opened a door to healthier relationships in the practice of medicine, healthier work environments, and more positive health outcomes.

REFERENCES

Abbruzzese, J. E. (2007). The structure of Descartes's ontological proof. *British Journal for the History of Philosophy, 15*(2), 253-282.

Aglow, M. (2009). *Course outline for medical law and ethics.* Newtown, PA: Bucks County Community College.

Allen, S. M., Petrisecek, A. C., & Laliberte, L. L. (2001). Problems in doctor-patient communications: The case of younger women with breast cancer. *Critical Public Health , 11*(1), 39-58.

American Psychological Association (2002). Ethical principles of psychologists and code of conduct. *American Psychologist, 57,* 1060-1073.

Baker, R. (1990). Development of a questionnaire to assess patients' satisfaction with consultants in general practice. *British Journal of General Practice, 40,* 487-490.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.

Betegh, G. (2007). On the physical aspect of Heraclitus' psychology. *Phronesis, 52,* 3-32.

Bevir, M. (2004). The unconscious in social explanation. *Philosophical Psychology, 17,* 181-207.

Blendon, R. J., & Altman, D. E. (1984). Public attitudes towards healthcare costs. *The New England Journal of Medicine, 311,* 613-616.

Blennerhassett, M. (2007). Challenges for primary care in the age of the autonomous patient. *Quality in Primary Care, 15,* 201-206.

Bootzin, R. R., & Bailey, E. T. (2005). Understanding the placebo, nocebo, and iatrogenic effects. *Journal of Clinical Psychology, 61*(5), 871-880.

Brock, P. (1995). 10 ways to chase off patients. *Ophthalmology Times, 20*(31), 6-7.

Bucks County Community College (2009). *College catalog: Medical assistant: Clinical*. Retrieved March 8, 2009, from http://www.bucks.edu/catog/3149.html

Capo, J. (2006). *Secrets of the best known practices.* Phoenix, MD: Greenbranch Publishing.

Coulter, A. (2006). Examining health expectations. *Health Expectations, 9*, 1-2.

Creswell, J. W. (2003). *Research design: Quantitative, qualitative, and mixed method approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Dalton, S. (1999). Bodies of experience and bodies of thought: Freud and Kant on excessively intense ideas. *Angelak: Journal of the Theoretical Humanities, 4*(3), 93-101.

Deary, V. (2005). Explaining the unexplained? Overcoming the distortions of dualist understanding of medically unexplained illness. *Journal of Mental Health, 14*(3), 213-221.

Delprato, D. J. (2003). Kantor's interbehavioral psychology and humanism. *The Psychological Record, 53*, 3-14.

Descartes, R., & Cress, D. (trans) (1993). *Meditations on the first philosophy* (3rd ed.). Indianapolis, IN: Hackett Publishing Company.

Dickerson, S. S., & Kemerry, M. F. (2004). Acute stressors and cortisol responses: A theoretical integration and synthesis of laboratory research. *Psychological Bulletin, 130*(3), 355-391.

Disorbio, J. M., & Bruins, D. (2002). *Brief battery for health improvement 2*. Retrieved February 20, 2009, from Mental Measurements Yearbook http://web.ebscohost.com.ezp.waldenulibrary.org/ehost/detail?vid=6&hid=105&sid=16f0aaec-fd9f-4773-8427-3e82700fba27%40sessionmgr102&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl - db=loh&AN=17123200

Downey, J. P. (2003). Leibnitz's opinion of Descartes's argument that he is not a body. *British Journal of the History of Philosophy, 11*(3), 493-498.

Dutton, B. D. (2003). Descartes's dualism and the one principle attribute rule. *British Journal of the History of Philosophy, 11*(3), 493-415.

Fanzing, S. (2002). Lying, secrecy, and power within the doctor-patient relationship. *Anthropology of Medicine, 9*(2), 117-113.

Federman , A. D., Cook, E. F., Phillips, R. S., Puopulo, A. L., Haas, J. S., Brennen, T. A., et al. (2001). Intention to discontinue care among primary care physicians: Influence of physician behavior and process of care. *Journal of Internal Medicine, 16*, 665-671.

Gordon, E. E. (1996). The placebo: An insight into mind-body interaction. *Headache Quarterly, 7*(2), 117-125.

Gravetter, F. J., & Wallnau, L. B. (2004). *Statistics for the behavioral sciences* (6th ed.). Belmont, CA: Wadsworth/Thompson.

Green, C. (1998). Thoroughly modern Aristotle: Was he really a functionalist? *History of Psychology, 1*, 8-20.

Gregory, R. J. (2007). *Psychological testing: History, principles, and applications* (5th ed.). Boston: Pearson Education, Inc.

Guorong, Y. (2008). Being and value: From the perspective of Chinese-Western comparative philosophy. *Philosophy East & West, 58*(2), 267-282.

Hahn, R. (1987). *Sickness and healing: An anthropological perspective.* New Haven, CT: Yale University Press.

Hall, M. (2004). Measuring trust. *Health Affairs, 23*(14), 123-132.

Halpern, J. (2001). *From detached concern to empathy: Humanizing medical practice.* New York, NY: Oxford University Press.

Harrel, G. D., & Fors, M. F. (1985). Marketing ambulatory care to women: A segmentation approach. *Journal of Health Care Marketing, 5*(2), 19-28.

Hilgard, E. R. (1980). Consciousness in contemporary psychology. *Annual Review of Psychology, 31*, 1-26.

Houle, C., Harwood, E., Watkins, A., & Baum, K. D. (2007). What women want from their physicians: a qualitative analysis. *Journal of Women's Health,*

16(4), 543-550.

House Select Committee On Aging And Long Term Care (1984). *Quackery: A $10 billion scandal (H. R. DOC. NO. 98-262, at 4 (1984).* Washington, DC: US Government Printing Office.

Huggard, P. (2003). Compassion fatigue: How much can I give? *Medical Education, 37*, 163-164.

Hvas, L., Reventlow, S., & Maiterud, K. (2004). Women's needs and wants when seeing a GP in relation to menopausal issues. *Scandinavian Journal of Primary Public Health, 22*, 118-121.

Kaba, R., & Sooriakumararan, P. (2007). The evolution of the doctor-patient relationship. *International Journal of Surgery, 5*, 57-65.

Kandel, E. R (1998). A new intellectual framework for psychiatry. *American Journal of Psychiatry, 155*, 457-469.

Kandel, E. R. (2005). *Psychiatry, psychoanalysis, and a new biology of the mind.* Washington, DC: American Psychiatric Association.

Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-Systems Pharmacists, 65*, 2276-2284.

Kondro, W. (2001). Are physicians too rude? *Journal of the American Medical Association, 165*(10), 1376-1376.

Krupat, E., Yeager, C. M., & Putman, S. (2000). Patient role orientation, doctor-patient fit, and visit satisfaction. *Psychology and Health, 15*, 707-719.

Langdon, R. (2000). Someplace in mind. *International Forum of Psychoanalysis, 9*, 69-75.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York, NY: Springer Publishing Company.

Lekander, M. (2002). Ecological immunity: The role of the immune system in psychology and neuroscience. *European Psychology, 7*(2), 98-105.

Levant, R. F., House, A. T., May, S., & Smith, R. (2006). Cost offset: Past, present,

and future. *Psychological Services, 3*(3), 195-207.

Levitsky, S. R. (2008). "What rights?" The construction of political claims to American health care entitlements. *Law & Society, 42*(3), 551-590.

Magus, S. A., & Mick, S. S. (2002). Medical schools, affirmative action, and the neglected role of social class. *American Journal of Public Health, 90*, 1197-1201.

Mandler, G. (2002). Origins of the cognitive (r)evolution. *Journal of the History of the Behavioral Sciences, 38*, 339-353.

Marketing Strategies International (2009). *Marketing Strategies International*. Retrieved August 7, 2009, from http://www.marketstrategies.com/

McKinnon, K., Crofts, P. D., Edwards, R., Campion, P. D., & Edwards, R. H. (1998). The outpatient experience: Results of a patient feedback experience. *International Journal of Health Care Quality Assurance, 11*(5), 156-160.

Medical Assistant (2006). Medical assistant. *Techniques: Continuing Education and Careers, 81*(1), 46-47.

Mehlman, M. J. (2005). Quackery. *American Journal of Law and Marriage, 31*, 349-363.

Meryn, S. (1998). Improving communication skills: Carrying coals to Newcastle. *Medical Teacher, 20*(4), 331-336.

Mish, F. C. (Ed.). (2004). *Merriam-Webster's 11th collegiate dictionary* (11th ed.). Springfield, MA: Merriam-Webster, Inc.

Mizrachi, N. (2001). From causation to correlation: The story of psychosomatic medicine: 1939 - 1979. *Culture, Medicine, and Psychiatry, 25*, 317-343.

MultiCare (2007). *About us*. Retrieved June 14, 2009, from MultiCare Health Systems http://www.multicare.org/home/about-us/

Navarro, F. H (1990). *MultiCare medical group survey*. Fontana, CA: PATH Institute Corporation.

Navarro, F. H. (1990). *Profiles of attitudes toward healthcare: Psychographic segmentation, PATH type validation paper.* Fontana, CA: PATH Institute Corporation.

Nuland, S. B. (2003). The uncertain art. *American Scholar, 72*(1), 121-126.

Olesen, F., & Barefod, T. (2001). The concept of placebo in general practice: Is it time to avoid the word placebo? *Scandinavian Journal of Primary Health Care, 19*(3), 204-205.

Poletti, F. E. (2002). Plato's vowels: How alphabet influenced the evolution of consciousness. *World Futures, 58*, 101-116.

Ray, O. (2004). How the mind hurts and heals the body. *American Psychologist, 59*, 29-40.

Reed, J. (1992). Secondary data in nursing research. *Journal of advanced nursing, 17*, 877-883.

Robbins, M. (2003). *Medical receptionists and secretaries handbook* (4th ed.). Oxon, UK: Radcliffe Publishing Ltd.

Robinson, D. N. (2003). Jefferson and Adams on the mind and body problem. *History of Philosophy, 6*(3), 227-238.

Rogers, C. R. (1980). *A way of being.* Boston, MA: Houghton Mifflin.

SPSS Inc (2008). *SPSS Statistics Graduate Pack for Mac (Version 17)* [DVD]. United States: SPSS.

Sachs, L. (2006). Effects of magic come in from the cold: Pictorial evidence of the placebo effect. *Scandinavian Journal of Public Health, 45*, 1206-1210.

Skinner, B. F. (1990). Can psychology be a science of the mind. *American Psychologist, 45*, 1206-1210.

Smith, N. W. (1992). The distant past and its relationship to current psychology: A tour of psychophysical dualism and non-dualism. *ManKind Quarterly, 32*(3), 261-273.

Soper, D. (2004-2009). *Statistics calculators*. Retrieved October 8, 2009, from A-priori sample size calculator for multiple regression http://www.danielsoper.com/statcalc/calc01.aspx

Stewert, E. E., & McMillen, M. (2008, June). *How to see your practice through your patient's eyes*. Retrieved December 16, 2008, from Family Practice Management http://www.aafp.org/fpm

Street, E. E., Krupat, E., Bell, R. A., Kravitz, R. L., & Haidet, P. (2003). Beliefs about control in the physician-patient relationship: Effect of communication in medical encounters. *Journal of General Internal Medicine, 18*, 609-616.

Swenson, S. L., Buell, S., Zettler, P., White, M., Ruston, D. C., & Lo, B. (2004). Patient -centered communication. *Journal of General Internal Medicine, 19*, 1069-1079.

Thiedke, C. C. (2007). What do we really know about patient satisfaction? *American Academy of Family Physicians, 14*(1), 33-37.

Thom, D. H., Hall, M. A., & Pawson, L. G. (2004). Measuring patient's trust in physicians when assessing quality of care. *Health Affairs, 23*(4), 124-132.

Vegni, E., Visioli, S., & Moja, E. A. (2005). When talking to the patient is difficult: The patient's perspective. *Communication & Medicine, 2*(1), 69-76.

Venes, D., Biderman, A., Adler, E., Fenton, B. G., & Enright, A. D. (Eds.). (2005). *Taber's cyclopedic medical dictionary* (20 ed.). Philadelphia, PA: F. A. Davis Company.

Werner, A., & Malterud, K. (2005). "The pain isn't as disabling as it used to be": How can the patient experience empowerment instead of vulnerability in the consultation? *Scandinavian Journal of Public Health, 33*(66), 41-46.

Windholtz, G. (1997). Pavlov and his mind-body problem. *Integrative Psychological and Behavioral Science, 32*(3), 149-159.

Winstanley, S. (2005). Cognitive model of patient aggression towards healthcare staff: The patient's perspective. *Work and Stress, 19*(4), 340-350.

Wittershoven, G. A. (1999). Care, cure, and interpersonal understanding. *Journal of Advanced Nursing, 29*(5), 1163-1169.

Wright, S. M., & Carrese, J. A. (2001). Ethical issues in the managed care setting:

A new curriculum for primary care physicians. *Medical Teachers, 23*(1), 71-75.

Yu, N. (2007). Heart and cognition in ancient Chinese philosophy. *Journal of Cognition and Culture, 7*, 27-47.

APPENDIX A: AGREEMENT WITH MULTICARE HEALTH SYSTEMS TO USE DATABASE

IRB Notification Exempt Status Granted

Wednesday, July 15, 2009

Linda P. Erlich, M.A. The Offices at Oxford Crossing 333 N. Oxford Valley Road, Suite 202 Fairless Hills, PA 19030

RE: The Effect of Encounters of Medical Gatekeepers and Patients on the Doctor-Patient Relationship

Dear Mrs. Erlich,

Your application for exemption status for the study listed above was reviewed by the co-chair of the MultiCare Health System Institutional Review Board (MHS IRB).

Your project qualifies for exemption status under 45 CFR 46.101 (b) (4) from all 45 CFR part 46 requirements according to the Human Subjects Regulations Decision Charts (OHRP, September 24, 2004). As a condition of this exemption your project must be carried out as described in the exemption checklist and outline submitted to the MHS IRB. Any changes to your project should be cleared through the MHS IRB to assure the project still meets the requirement for an IRB exemption.

As a stipulation of this status, all materials obtained from the MultiCare Patient Satisfaction Survey of 2000-2001 data must be de-identified. No patient health information should be present.

Please provide the board with the final report as we are interested in your publication.

Contact the IRB Coordinator at (253) 403-3877 or Kristina.O'Brien@multicare.org if you have any questions or require further information.

Sincerely,

Charlotte Mehegan, PharmD MultiCare Health Systems

APPENDIX B: AGREEMENT WITH PATH INSTITUTE TO USE MULTICARE SURVEY

PATH Type® License Agreement – Linda Erlich

1. DEFINITIONS

When used in this Agreement, the following terms have the following meanings:

1.1. PATH Institute Corporation, 11321 Jacaranda Circle, Suite A, Fontana, California 92337 is the "Licensor" under this Agreement and _Linda Erlich_____, at, __333 N. Oxford Valley Road, Suite 202, Fairless Hills, PA 19030_____ is the "Licensee".

1.2. "PATH" refers to the "Profiles of Activities and Attitudes Toward Healthcare (PATH)" model, previously referred to as the "Profiles of Attitudes Toward Healthcare (PATH)" model developed by Frederick H. Navarro, the registered ® trademark, "path type" for "psychological assessment services", as well as the collection of guides, manuals, algorithms, processes, procedures, classifications and classification software, marketing materials, and proprietary trade names, trademarks, service marks, logotypes, and copyrighted materials that are owned by Licensor and used by Licensor in connection with the PATH Type® Questionnaire, PATH Type® questions, the PATH Type® Classification software ("PATH Software"), and the PATH Type® Model.

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4.1 Representations. Licensor represents and warrants that it has full power and authority to enter into this Agreement, to carry out its obligations under this Agreement, and to grant the rights granted in this Agreement. Licensor shall comply, and shall ensure that its employees and agents providing services under this Agreement comply with all applicable federal, state and local laws, regulations, and ordinances, including 18 U.S.C. 1033 in its performance of its obligations hereunder.

4.2 Warranty Exclusion. EXCEPT AS SET FORTH IN THIS AGREEMENT, LICENSOR MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THE PATH QUESTIONS, THE LICENSED CLASSIFICAITON SYSTEM, THE PATH MODEL, AND PATH. LICENSOR EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHETHER ARISING IN LAW, CUSTOM, CONDUCT, OR OTHERWISE. NO PERSON IS AUTHORIZED TO MAKE WARRANTY OR REPRESENTATION CONCERNING THE PERFORMANCE OF THE PATH SOFTWARE. LICENSEE AGREES THAT IT WILL MAKE NO WARRANTY, EXPRESS OR IMPLIED, ON BEHALF OF LICENSOR.

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IN NO EVENT WILL EITHER PARTY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING LOSS OF PROFITS AND LOSS OF USE, ARISING UNDER THIS AGREEMENT, EVEN IF THE OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL ANY AMOUNTS PAYABLE BY LICENSOR EXCEED IN THE AGGREGATE, AN AMOUNT EQUAL TO THE TOTAL AMOUNT OF PAYMENTS ACTUALLY

RECEIVED BY LICENSOR FROM LICENSEE UNDER THIS AGREEMENT

FOR THE PATH SOFTWARE RELATED TO THE LIABILITY.

6 TERMS

6.1 Licensee: Linda Erlich, Licensed Psychologist, residing at 333 N Oxford Valley Drive Road, Suite 202, Fairless Hills, PA 19030_____ _____hereby is the Licensee and/or purchaser of the goods and services described in this Agreement.

6.2 Application Description: Use PATH Type® Questionnaire for dissertation research.

6.3 Agreement Period: June 1, 2009 to March 31, 2050 unless terminated under the provisions of this Agreement.

6.4 PATH Type® Questionnaire Copyright License fee: $10.00

7 GOVERNING LAW AND VENUE

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of California applicable to contracts made and to be performed wholly within such state (without giving effect to principles of conflicts of law). The parties agree that any dispute or claim

arising from this Agreement shall be heard in the appropriate state or federal court in the San Bernardino, California, and the parties hereby irrevocably submit to the jurisdiction of such courts.

8 NOTICES

All notices, requests, demands and other communications provided for herein shall be in writing, shall be delivered by hand, mailed by registered or certified first-class mail, return receipt requested, postage prepaid or by telecopier or overnight courier (with proof of delivery requested), shall be deemed given when received and shall be addressed to the parties hereto at their respective address listed above or to such other persons or addresses as the relevant party shall designate as to itself from time to time in writing delivered in like manner.

9 SURVIVAL

Sections 2, 3, 5, 6, 7, 8 and this Section 9 shall survive any termination or expiration of this Agreement.

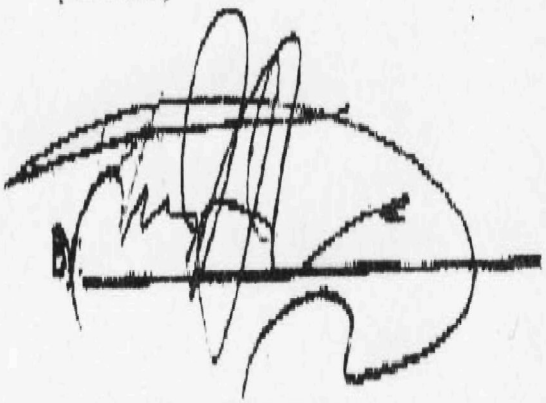
IN WITNESS WHEREOF, the Licensee has caused this Agreement to be executed by a duly authorized representative

PATH Institute Corporation **Linda Erlich**

("Licensor") ("Licensee")By:_____

_____ By:_

PATH Institute Corporation
("Licensor")

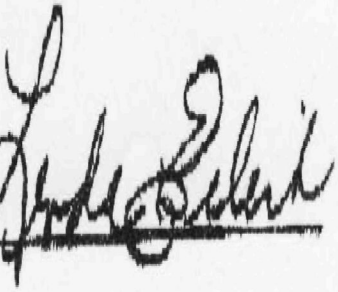
By: 

Name: Frederick H. Navarro

Title: President

Date: 7/17/2009

Linda Erlich
("Licensee")

By: 

Name: Linda Erlich

Title: Licensed Psychologist

Date: 7/17/2009

Name: Frederick H. Navarro

Name: Linda Erlich

APPENDIX C: GENDER AND AGE TABLES IN ARCHIVAL DATABASE

Table C1.

Gender of participants in archival database

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
F	7103	67.1	67.1	67.1
M	3475	32.8	32.8	100.0
U	1	.0	.0	100.0
Total	10579	100.0	100.0	

Table C 2

Age of participants in archival database

Age	Frequency	Percent	Valid Percent	Cumulative Percent
0	31	.3	.3	.3
1	52	.5	.5	.8
2	70	.7	.7	1.4
3	17	.2	.2	1.6
4	19	.2	.2	1.8
5	28	.3	.3	2.1
6	18	.2	.2	2.2
7	21	.2	.2	2.4
8	18	.2	.2	2.6
9	18	.2	.2	2.8
10	12	.1	.1	2.9
11	19	.2	.2	3.1
12	16	.2	.2	3.2
13	14	.1	.1	3.3
14	16	.2	.2	3.5
15	4	.0	.0	3.5
16	9	.1	.1	3.6
17	4	.0	.0	3.6
18	3	.0	.0	3.7
19	41	.4	.4	4.1
20	42	.4	.4	4.5
21	44	.4	.4	4.9
22	42	.4	.4	5.3
23	39	.4	.4	5.6

(table continues)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
24	45	.4	.4	6.1
25	60	.6	.6	6.6
26	64	.6	.6	7.2
27	67	.6	.6	7.9
28	63	.6	.6	8.5
29	83	.8	.8	9.3
30	101	1.0	1.0	10.2
32	85	.8	.8	11.8
33	99	.9	.9	12.7
34	87	.8	.8	13.6
35	108	1.0	1.0	14.6
36	127	1.2	1.2	15.8
37	129	1.2	1.2	17.0
38	110	1.0	1.0	18.0
39	125	1.2	1.2	19.2
40	129	1.2	1.2	20.4
41	121	1.1	1.1	21.6
42	150	1.4	1.4	23.0
43	180	1.7	1.7	24.7
44	160	1.5	1.5	26.2
45	167	1.6	1.6	27.8
46	176	1.7	1.7	29.5
47	178	1.7	1.7	31.1
48	189	1.8	1.8	32.9
49	185	1.7	1.7	34.7

(table continues)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
50	165	1.6	1.6	36.2
51	223	2.1	2.1	38.3
52	200	1.9	1.9	40.2
53	203	1.9	1.9	42.1
54	199	1.9	1.9	44.0
55	162	1.5	1.5	45.6
56	197	1.9	1.9	47.4
57	241	2.3	2.3	49.7
58	194	1.8	1.8	51.5
59	184	1.7	1.7	53.3
60	171	1.6	1.6	54.9
61	188	1.8	1.8	56.7
62	180	1.7	1.7	58.4
63	163	1.5	1.5	59.9
64	186	1.8	1.8	61.7
65	199	1.9	1.9	63.6
66	181	1.7	1.7	65.3
67	176	1.7	1.7	66.9
68	175	1.7	1.7	68.6
69	158	1.5	1.5	70.1
70	208	2.0	2.0	72.0
71	200	1.9	1.9	73.9
72	163	1.5	1.5	75.5
73	205	1.9	1.9	77.4
74	211	2.0	2.0	79.4
75	180	1.8	1.8	81.1

(table continues)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
76	180	1.7	1.8	82.8
77	194	1.8	1.8	84.6
78	187	1.8	1.8	86.4
79	220	2.1	2.1	88.5
80	165	1.6	1.6	90.1
81	166	1.6	1.6	91.6
82	128	1.2	1.2	92.8
83	106	1.0	1.0	93.8
84	131	1.2	1.2	95.1
85	91	.9	.9	95.9
86	75	.7	.7	96.6
87	72	.7	.7	97.3
88	65	.6	.6	97.9
89	62	.6	.6	98.5
90	36	.3	.3	98.9
91	29	.3	.3	99.1
92	30	.3	.3	99.4
93	20	.2	.2	99.6
94	18	.2	.2	99.8
95	11	.1	.1	99.9
96	3	.0	.0	99.9
97	4	.0	.0	99.9
99	2	.0	.0	100.0
101	2	.0	.0	100.0
Total	10576		100.0	100.0

APPENDIX D: IRB APPROVAL TO CONDUCT RESEARCH

Dear Ms. Erlich,

This email is to notify you that the Institutional Review Board (IRB) has approved your application for the study entitled, "The Effect of Gatekeeper and Patient Encounters on the Doctor-Patient Relationship."

Your approval # is 12-08-09-0005147. You will need to reference this number in your dissertation and in any future funding or publication submissions.

Your IRB approval expires on December 7, 2010. One month before this expiration date, you will be sent a Continuing Review Form, which must be submitted if you wish to collect data beyond the approval expiration date.

Your IRB approval is contingent upon your adherence to the exact procedures described in the final version of the IRB application document that has been submitted as of this date. If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive an IRB approval status update within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB application, you a made commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the IRB section of the Walden web site or by emailing irb@waldenu.edu:

http://inside.waldenu.edu/c/Student_Faculty/StudentFaculty_4274.htm

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Please note that this letter indicates that the IRB has approved your research. You may not begin the research phase of your dissertation, however, until you have received the **Notification of Approval to Conduct Research** (which indicates that your committee and Program Chair have also approved your research proposal). Once you have received this notification by email, you may begin your data collection.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:
http://www.surveymonkey.com/s.aspx?sm=qHBJzkJMUx43pZegKImdiQ_3d_3d

Sincerely,
Jenny Sherer, M.Ed.
Operations Manger
Office of Research Integrity and Compliance
Email: irb@waldenu.edu
Fax: 626-605-0472
Tollfree : 800-925-3368 ext. 1341
Office address for Walden University:

155 5TH

APPENDIX E:

GENDER AND AGE TABLES: MASTER DATABASE

Table E1

Gender of Participants in Master Database

	Frequency	Percent	Valid Percent	Cumulative Percent
F	6928	68.0	68.0	68.0
M	3264	32.0	100.0	100.0
U	1	.0	100.0	100.0
Total	10191	100.0	100.0	

Table E 2

Age of Participants Master Database

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18	3	.0	.0	.0
19	41	.4	.4	.4
20	42	.4	.4	.8
21	44	.4	.4	1.3
22	42	.4	.4	1.7
23	39	.4	.4	2.1
24	45	.4	.4	2.5
25	60	.6	.6	3.1
26	64	.6	.6	3.7
27	67	.7	.7	4.4
28	63	.6	.6	5.0
29	83	.8	.8	5.8
30	101	1.0	1.0	6.8
31	83	.8	.8	7.6
32	85	.8	.8	8.5
33	99	1.0	1.0	9.4
34	87	.9	.9	10.3

(table continues)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
35	108	1.1	1.1	11.3
36	127	1.2	1.2	12.6
37	129	1.3	1.3	13.9
38	110	1.1	1.1	14.9
39	125	1.2	1.2	16.2
40	129	1.3	1.3	17.4
41	121	1.2	1.2	18.6
42	150	1.5	1.5	20.1
43	180	1.8	1.8	21.8
44	160	1.6	1.6	23.4
45	167	1.6	1.6	25.1
46	176	1.7	1.7	26.8
47	178	1.7	1.7	28.5
48	189	1.9	1.9	30.4
49	185	1.8	1.8	32.2
50	165	1.6	1.6	33.8
51	223	2.2	2.2	36.0
52	200	2.0	2.0	38.0
53	203	2.0	2.0	40.0

(table continues)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
54	199	2.0	2.0	41.9
55	162	1.6	1.6	43.5
56	197	1.9	1.9	45.4
57	241	2.4	2.4	47.8
58	194	1.9	1.9	49.7
59	184	1.8	1.8	51.5
60	171	1.7	1.7	53.2
61	188	1.8	1.8	55.0
62	180	1.81	1.8	56.8
63	163	1.6	1.6	58.4
64	186	1.8	1.8	60.2
65	199	2.0	2.0	62.2
66	181	1.8	1.8	63.9
67	176	1.7	1.7	65.7
68	175	1.7	1.7	67.5
69	158	1.6	1.6	68.9
70	208	2.0	2.0	71.0
71	200	2.0	2.0	72.9
72	163	1.6	1.6	74.5

(table continues)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
73	205	2.0	2.0	76.6
74	211	2.1	2.1	78.6
75	180	1.8	1.8	80.4
76	180	1.8	1.8	82.2
77	194	1.9	1.9	84.1
78	187	1.8	1.8	85.9
79	220	2.2	2.2	88.1
80	165	1.6	1.6	89.7
81	166	1.6	1.6	91.3
82	128	1.3	1.3	92.6
83	106	1.0	1.0	93.6
84	131	1.3	1.3	94.9
85	91	.9	.9	95.8
86	75	.7	.7	96.5
87	72	.7	.7	97.2
88	65	.6	.6	97.9
89	62	.6	.6	98.5
90	36	.4	.4	98.8
91	29	.3	.3	99.1
92	30	.3	.3	99.4

(table continues)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
93	20	.2	.2	99.6
94	18	.2	.2	99.8
95	11	.1	.1	99.9
96	3	.0	.0	99.9
97	4	.0	.0	99.9
98	2	.0	.0	100.0
99	2	.0	.0	100.0
101	2	.0	.0	100.0
Total	10193	100.0	100.0	

APPENDIX F:

CORRESPONDANCE WITH DR. TRUNK

Subject:	Re: Dissertation-changes to analysis method
Date :	Mon, Dec 21, 2009 12:35 PM CST
From :	Barry Trunk <barry.trunk@waldenu.edu>
To :	Barry Trunk <barry.trunk@waldenu.edu>, Linda Erlich <linda.erlich@waldenu.edu>
Reply To :	Barry Trunk <barry.trunk@waldenu.edu>
CC :	Amy Sickel <amy.sickel@waldenu.edu>... more

Sounds reasonable. Let's do it. Thanks and happy holidays Linda.

Barry

Original E-mail
From: Linda Erlich <linda.erlich@waldenu.edu>
Date: 12/21/2009 09:35 AM
To: Barry Trunk <barry.trunk@waldenu.edu>
Subject: Dissertation-changes to analysis method

Good Morning Barry,

Initially I ram my stats using Spearman rho because the data on dr/pt and gatekeeper did not meet the requirements for kurtosis and skewness. However I was not able to use this statistic in analyzing a problem with 2 predictors.

I met with Fred this afternoon and this is the plan we devised.

We will start over and analyze each RQ in the following way:

All scores have been converted to z scores. All items

will be entered as a block into SPSS.

RQ1

Use linear regression to analyze the linear relationship scores on the 15 questions (scores have been converted to z scores (IV) to the converted score doctor-patient relationship (DP). To see if there is a linear relationship. This will generate a table with each question compared (IV) to the (DP), a regression table (all over R, and an F value (ANOVA).

RQ2

Use linear regression to analyze the linear relationship between converted z scores on gatekeeper characteristics (IV) and converted z scores on Dr-Patient relationship (DP). This will yield an R score and an F score for these variables.

RQ3

Create 15 new variables PT attitudes questions X Gatekeeper characteristics.

Use Linear regression to analyze each of these new variables (IV) (all have been converted to z scores before new variables were created) to discern linear relationship with DR-PT relationship (DV)

This will yield R scores and F score.

Also run Spearman Rho to compare the new interaction variables to DR-PT variable for significance.

RQ 4

Use linear regression to analyze relationship between the interaction between gatekeeper characteristics (z) and question #13 in survey (z)

(both IV's) to doctor-patient relationship (DV).

This will yield R statistic and F statistic.

How does this sound to you? It does stand true to the Research questions. I hope it "gels" With the hypotheses.

I spoke with Amy and she is deferring to you for approval on this matter.

I would like to move on with this asap.

Thank you for your support and patience with me.

Linda

Linda P. Erlich, M.A.
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Health Psychology, Ph.D. Candidate
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CURRICULUM VITAE

NAME:	Linda Pilzer Erlich
DATE OF BIRTH:	March 1,1948
PLACE OF BIRTH:	Philadelphia, Pennsylvania
MARITAL STATUS:	Married, 2 Children
EDUCATION:	Walden University PhD Health Psychology (Candidate), 2010 Dissertation Title: The Effects of Encounters Between Medical Gatekeepers and Patients on the Doctor-Patient Relationship Doctoral Committee: Amy E. Sickel, PhD, Chair; Carol Baroody Corcoran, PhD; Barry Trunk, PhD. West Chester University M.A. Clinical Psychology, 1985 Trenton State College (College of New Jersey) B.A. Psychology, 1983 Bucks County Community College A.A. Psychology, 1981
LICENSE:	Pennsylvania, Psychologist, # PS007100-L, 1993.

Certification: National Institutes of Health Web based Training course

"Protecting Human Research Participants" 03/08/2008 Certificate # 5296

TRAINING:

Graduate Clinical Practicum
People Acting To Help (PATH)
Philadelphia, PA
Kathryn M. Woods, Ph.D. Clinical Supervisor, 1984-1985

Internship
Good Friends, Inc
Morrisville, PA
John Mulroney, M.Ed. Clinical Supervisor, 1983

Internship
Huntington Hospital
Willow Grove, PA
J. Zipes, Ph.D. Clinical Supervisor, 1982

Internship
Carrier Foundation
Belle Meade, NJ
Alan Waterman, Ph.D. Clinical Supervisor, 1982

WORK EXPERIENCE:

The Counseling Center
Holland PA 18966
Licensed Psychologist, Supervising Psychologist
September 2009 – present

Provide Clinical Supervision

Northampton Psychotherapy Associates
Holland, PA 18966
Licensed Psychologist, Partner

March, 2008 – present

Provide Clinical Supervision

Fairless Hills Psychological Associates
Fairless Hills, PA
Licensed Psychologist, Partner
November, 1993-present

Provide Supportive and Insight Oriented Individual Psychotherapy to Adults
Specialties include, Women's Issues, Depression, Anxiety,
Dissociative Identity Disorder, Survivors of
Child Abuse and Pain Management.
Provide Couples Counseling Case Management, record keeping, and consultation with professionals,:
Psychiatrists, Hospitals,
Medical Doctors, Lawyers and Government Agencies.
Financial Manager for Practice (Business portion only,
incorporated as Oxford Crossing Psychological
Associates)

Fairless Hills Psychological Associates
Fairless Hills, PA
Psychotherapist
June, 1990- November, 1993

Provide Supportive and Insight Oriented Individual
Psychotherapy to Adults
Specialties include, Women's Issues, Depression, Anxiety,
Dissociative Identity Disorder, Survivors of

Child Abuse and Pain Management.
Provide Couples Counseling
Case Management, record keeping and consultation with professionals: Psychiatrists, Hospitals, Lawyers, Medical Doctors and Government Agencies.

People Acting To Help (PATH)
Philadelphia, PA
Psychotherapist/Case Manager
December, 1985- June, 1988*

Provide Individual Supportive and Insight Oriented Psychotherapy to Recovering Alcoholics and Provided Individual Supportive and Insight Oriented Psychotherapy to Co-Dependent populations.
Case Management for the above populations
Supervision of student interns

PROFESSIONAL SOCIETIES:

American Psychological Association, 1985-present

Pennsylvania Psychological Association, 1989-present

Eastern Psychological Association, 1983-1996, 2008- present

ACADEMIC HONORS:

Phi Theta Kappa, Honor Society
Bucks County Community College, 1981

Phi Kappa Phi, Honor Society
Trenton State College, 1983

Psi Chi, Psychology Honor Society
Trenton State College, 1983
Walden University, 2006

Magna Cum Laude
Trenton State College, 1983

OTHER HONERS

Who's Who in the East, 1999-2000
Manchester Who's Who, 2006-2007

COMMUNITY AFFAIRS:

Member, Board of Directors, Good Friends,
Halfway House for Recovering Alcoholics, 1984-1992

Community Education Speaker
School District of Philadelphia 1984-1993

Community Education Speaker
Ohev Shalom Synagogue
Richboro, PA

Judge, Pennsylvania Junior Academy of Science, 1984-1985

Judge, Delaware Valley Senior Science Fair, 1987

President, Board of Directors, Legacy Oaks at
Northampton Condominium Association, 2000-2003

Vice President, Board of Directors, Legacy Oaks at Northampton Condominium Association, 2004-2007

CONTINUING EDUCATION:

Albert Einstein Medical Center

Lecture, Victor Frankl, October 11, 1985

Warminster General Hospital
Anxiety Disorders, November 13, 1985

Guidelines for Performing a Denialectomy, July 9, 1986
Eating Disorders, November 4, 1987
AIDS Workshop, November 4, 1987

People Acting To Help (PATH)
Training in Family Therapy provided by Philadelphia Child Guidance (Weekly Seminars) 1986-1987

Biofeedback Training, January 16, 1986

Borderline and Sociopathic Personality Disorders, January 22, 1987
Stress Management, June 25, 1987

Eugenia Hospital
Conference, Cocaine Addiction, September 17, 1986

Horsham Clinic
Lecture, R.D. Laing, October 16, 1986
Bipolar Disorder, Amish Studies, May 4, 1987
Love Sickness, December 10, 1987
Awakening Intuition, February 19, 1988
Multiple Personality, March 10, 1988
Genetic Basis of Psychiatric Disorders, March 24, 1988

Association for Advanced Training in Psychology
September 9-12, 1993

Margolis and Shrier, Health Psychology Assoc., P.C. Beginning Hypnosis, May 15-17, 1998.

Institute for the Study of Human Knowledge
Brain Function and Psychotropic Drugs, May 17, 1996

Psychotherapist's Guide to Psychopharmacology,
October 15, 2001

Learned Optimism, October 23, 2001

DSMIV Made Easy: A Clinician's Guide to Diagnosis, September 10, 2003

Touch in Psychotherapy: Theory, Research and
Practice, September 10, 2003

Boundary Wars: Intimacy and Distance in Healing Relationships. September 19, 2003

The Seven Sins of Memory: How the Mind Forgets And Remembers, August 10, 2005

Ethical Reasoning in the Mental Health Professions September 6, 2005

Therapeutic Communication: Knowing What to Say and When, September 6, 2005

Emotions Revealed: Recognizing Faces and Feelings to Improve Communication and
Emotional Life, September 26, 2005