PHYSICAL THERAPISTS' PERCEPTION OF RISK OF VIOLATING LAWS AND RULES GOVERNING THE PRACTICE OF PHYSICAL THERAPY AND/OR THEIR PERSONAL MORAL AND ETHICAL VALUES WHEN FAILING TO PROVIDE TREATMENT FOR AN UNINSURED OR UNDERINSURED PATIENT

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There will be times when physical therapists will be asked to treat patients who cannot afford needed services. Under such circumstances, physical therapists are at serious risk of violating the laws and rules governing their profession and also, perhaps, at risk of violating their personal moral or ethical values if they fail to treat, or arrange alternative treatment for, these patients.

The purpose of this study was to examine the relationship between two independent variables, (1) Professional role of the physical therapist (clinician, administrator, or educator), and (2) APTA membership status, and two dependent variables, (1) perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the patient in a case dilemma, and (2) perceived risk of violating personal moral or ethical values in the same situation. This study utilized a questionnaire that asked respondents to rate perception of risk of violating the dependent variables in each of four defined resolutions to the dilemma of treating an uninsured or underinsured patient. These resolutions were (A) fail to provide, or arrange for, treatment, (B) refer the patient to a safety-net provider, (C) provide some, but not all, necessary treatments or, (D) make illegal adjustment(s) to billing.

APTA members reported a higher perceived risk than non-APTA members of being out of compliance with the laws and rules governing physical therapy in Ohio if they resolved the dilemma by providing some forms of treatment, which were more affordable or were covered by the patient's insurance plan, not providing other services, which although needed, are
un-reimbursable (Resolution C). Educators reported a higher perceived risk than administrators of violating personal moral or ethical values if they utilized this same resolution. APTA members also displayed a significantly greater perception of risk than non-APTA of violating laws and rules across all four resolutions and when comparing combined dependent variables.

The results of this study indicate that there is room for growth in the perception of risk across all resolutions and among all respondents and presents challenges on three fronts: the need for expanded provision of services to uninsured and underinsured patients; the need for revision of the laws and rules governing physical therapy in Ohio; and the need to educate physical therapists in the discrepancies in the laws and rules governing the profession that are putting them at risk. The role(s) each physical therapist might play in meeting these challenges are discussed.
This dissertation is dedicated to primary caregivers.
ACKNOWLEDGMENTS

"Whereas once there was a relative paucity, now there is a veritable plethora!"
-- Homer Simpson

Homer was speaking of pancakes. But since he was expressing amazement and gratitude for his good fortune, I'll use his words as the final reference in this paper, and on this journey, as I attempt to do the same. I believe that this dissertation is a success. Whereas once there was a relative paucity of words and ideas, now there is a veritable plethora of both. My doctoral journey has been filled with discovery and, very generally, with success. Now, with just a few pages to write I sense impending failure. This is the place in this document where I will attempt to thank all of those who assisted and inspired me along the way. This is an impossible task. There were so many people who provided so many ideas, so many experiences, and so many services and examples that they cannot possibly all be identified, much less thanked. I have been the recipient of such a plethora of goodwill, friendship, and love that I can only wonder at it all and do my humble best to communicate my gratitude.

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Thanks Jenny for meaning it when you said that you would stay with me in good times and in bad. Thanks for meaning it when you said that we would stay together regardless of
sickness or health. Thanks for meaning it when you said that you would stay with me in times of richness and poorness. We have had a chance to experience each of these. You are my best friend and the loveliest person I have ever met. Let’s stay together until death parts us, just like we said we would.

Thanks Emily, Colin, and Caleb for being my inspiration for every single thing that I have done as an adult. Thanks for your love. It makes every part of my life worth living. You are my heroes. My goal in life is to become just like you. Thanks for your energy and enthusiasm. If I had similar amounts of both I would have finished this dissertation months ago.

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CHAPTER I. INTRODUCTION

Statement of the Problem

According to the American College of Emergency Physicians, the United States currently has a population of 41 million individuals who are without health insurance, and many others who may be considered to be underinsured (American College of Emergency Physicians, 2006). When financial matters become entwined with medical necessity, a breeding ground for ethical dilemmas is created for healthcare professionals. When a patient reports that he or she cannot afford a medical procedure that a health care provider feels is necessary, what is the health care provider to do? Compromise the standard of care to reduce costs? Urge the patient to proceed despite the cost? Decline to treat the patient at all? Absorb all costs associated with treating the patient? Attempt to manipulate reimbursement rules or falsely adjust a bill downward for a patient's benefit? This problem is pervasive in many areas of medical practice (Weiner, 2001) including physical therapy, which is the focus of this study. According to Weiner (2001), clinicians have three basic options when a patient cannot afford to pay for needed medical services: (a) refer the patient to a safety net provider, such as a public health clinic; (b) forego indicated tests and therapies because of costs; (c) reduce, or eliminate, fees by fee waivers or other "adjustments" in billing.

A safety net provider is a health care facility that exists to provide medical care to individuals who lack the resources to pay for such services (APTA, 2006a). Referral to a safety net provider seems, on the surface, to be an adequate response for a practitioner confronted with the dilemma presented above. However, with 20% of the United States population uninsured and a great many more underinsured, these providers are operating at capacities that were never intended (American College of Emergency Physicians, 2006). The large numbers of patients
seen by safety net providers often cause the quality of medical care at these facilities to be compromised; and, in an effort to provide basic care for the greatest number on a limited budget, these facilities have often, out of necessity, eliminated specialized services such as many surgeries and ancillary services (Weiner, 2001). Safety net providers, therefore, are often not an answer to this dilemma.

It seems that the second solution, foregoing medically necessary tests and therapies, is no solution at all. Limiting or terminating a patient's care at a physical therapy practice due to the patient's inability to pay is often times legally or ethically unappealing to the individual service provider. Foregoing such tests and therapies, in an attempt to reduce costs, is likely in conflict with the American Physical Therapy Association (APTA) code of ethics (APTA, 2006b), the APTA bylaws (APTA, 2006a), and/or state law (OT/PT/AT, 2006). The penalties for lack of compliance with these laws and rules include censure, suspension of license to practice physical therapy, revocation of license to practice physical therapy, or expulsion from the professional organization (Carroll, Frampton, & Pauken, 2006).

Another solution, reducing or waiving fees, or otherwise making adjustments to billing, is the most often sought solution. Waiving or reducing fees alone, however, cannot be relied upon as a long-term solution due to the large number of uninsured individuals and the realities of maintaining an economically viable clinical environment. Thirty-nine percent of physicians have admitted to manipulating reimbursement rules to obtain coverage for services they perceived as necessary for their patients (Wynia, Cummins, VanGeest, & Wilson, 2000). Many others attempt to reduce fees through a variety of billing adjustments. These include undercoding, such as billing for a minor service when the patient received more extensive treatment; waiving deductibles; reducing charges below the usual and customary fee(s); or billing nothing at all.
These practices usually violate either provider agreements or the code of ethics of the medical profession. Many health care providers involved in these practices may be committing technical violations or may be engaging in abuse or fraud (Carroll et al., 2006). But human beings are not driven by laws and rules alone. It is possible that an individual may have no perceived risk of violating a rule or law governing the profession of physical therapy in Ohio and yet still find it unappealing, or even personally damaging, to fail to provide treatment to a patient in need.

**Purpose of Study**

The purpose of this survey study was to examine the relationship between two independent variables, (1) Professional role of the physical therapist, and (2) APTA membership status, and two dependent variables, (1) perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the patient in a case dilemma, and (2) perceived risk of violating personal moral or ethical values in the same situation. The first independent variable, professional role, was divided into three levels: administrator, educator, or clinician. The second independent variable, APTA membership status, had two levels (member or nonmember). Since a member of any of the three professional role categories can hold or not hold membership within the APTA it was likely that there would be crossover within the variables. Thus there were six possible categories into which a respondent might fit. The rationale behind these categories is further explored later in this document.
Research Questions

The present study addressed the following questions:

(1) Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role?

(2) Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by APTA membership status?

(3) Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role and APTA membership status?

(4) Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role?

(5) Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by APTA membership status?

(6) Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role and APTA membership status?

(7) What is the relationship between the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio if treatment is not provided to or
arranged for the uninsured or underinsured patient in the dilemma and the perceived risk of violating personal moral or ethical values in the same situation?

Rationale

Research in the area of physical therapy services to uninsured or underinsured patients is important. As the situation currently stands, physical therapists in Ohio are at serious risk of violating state laws, their professional code of ethics, their professional by-laws, and their personal moral or ethical values if they do not refer the uninsured or underinsured patient to a safety net provider or become a de facto safety net provider by treating the patient themselves free of charge (Carroll, et al., 2006). The lack of compliance with laws and rules that would accompany any other solution could lead to loss of membership in their professional organization, censure from the state licensure board, or suspension or revocation of their professional license to practice physical therapy in Ohio (OT/PT/AT, 2006). Research in this area is needed to educate physical therapists of the risk and promote other changes which might provide a more suitable ethical and legal pathway. The laws, by-laws, and ethics code may need to be examined further by both legislators and the APTA. Optimistically, one might hope that such an examination will result in a realization that funding to safety net providers should be increased. One might also hope that other changes would be made to the guidelines under which physical therapists operate, which would provide a path for both effective and ethical care for the large and growing population of the uninsured and underinsured. The fact that a great many physical therapists are operating in a manner which is in conflict with their professional by-laws and ethics code, and even the laws of their state, without suffering legal and professional consequences does not excuse the professional organization or legislative bodies from providing a financially viable, ethical, and legal path for these providers. Nor does it excuse the physical
therapists themselves from fighting for one, as is called for through use of the ethic of critique (Starratt, 1991). Such an examination of these rules is called for in Principle 3 of the APTA code of ethics, "...strive to effect changes that benefit patients/clients" (APTA, 2006b), as an aggressive use of the ethic of critique, may be the best ethical and viable solution available for the long run.

Rules and Laws Governing the Practice of Physical Therapy in Ohio

It is important to know the rules, laws, and ethics code to which a physical therapist must conform if he or she is to arrive at a rational plan for handling a professional dilemma. Most or all medical practice fields operate under a set of laws, rules, and ethics codes dictated to their members by the professional organization and state in which they operate. A review of the pertinent laws, rules, and ethics codes of the profession of physical therapy, as it is practiced in Ohio, illustrates the difficulties that a physical therapist may have in resolving this dilemma of treating an individual who lacks the resources to pay for the needed treatment.

The organization that oversees the profession of physical therapy in the United States is the American Physical Therapy Association (APTA). The APTA offers various services to its members including a code of ethics. It also offers a set of by-laws under which its members must practice. While it is not mandatory for an individual physical therapist to be a member of the APTA, physical therapists who are not members are still bound by the code of ethics. Table 1 presents the preamble and principles of the APTA code of ethics. It was not a goal of this study to discuss all of these principles individually. However, several of the principles do warrant consideration and discussion in terms of our ethical dilemma. For the convenience of the reader, these principles have been bolded within Table 1.
Table 1

*Code of Ethics of the American Physical Therapy Association*

<table>
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<th>PREAMBLE</th>
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<tr>
<td>All physical therapists are responsible for maintaining and promoting ethical practice. To this end, the physical therapist shall act in the best interest of the patient/client. This Code of Ethics shall be binding on all physical therapists.</td>
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**PRINCIPLE 1**

A physical therapist shall respect the rights and dignity of all individuals and shall provide compassionate care.

**PRINCIPLE 2**

A physical therapist shall act in a trustworthy manner towards patients/clients, and in all other aspects of physical therapy practice.

**PRINCIPLE 3**

A physical therapist shall comply with laws and regulations governing physical therapy and shall strive to effect changes that benefit patients/clients.

**PRINCIPLE 4**

A physical therapist shall exercise sound professional judgment.

**PRINCIPLE 5**

A physical therapist shall achieve and maintain professional competence.

**PRINCIPLE 6**

A physical therapist shall maintain and promote high standards for physical therapy practice, education and research.

**PRINCIPLE 7**

A physical therapist shall seek only such remuneration as is deserved and reasonable for physical therapy services.

**PRINCIPLE 8**

A physical therapist shall provide and make available accurate and relevant information to patients/clients about their care and to the public about physical therapy services.

**PRINCIPLE 9**

A physical therapist shall protect the public and the profession from unethical, incompetent, and illegal acts.

**PRINCIPLE 10**

A physical therapist shall endeavor to address the health needs of society.

**PRINCIPLE 11**

A physical therapist shall respect the right, knowledge, and skills of colleagues and other health care professionals.
Principle 1 of the APTA code of ethics states that a physical therapist shall respect the rights and dignity of all individuals and shall provide compassionate care (APTA, 2006b). This principle offers no guidance on keeping a practice financially sound when the provision of these services occurs without remuneration.

Principle 3 states that a physical therapist shall comply with the laws and regulations governing physical therapy and shall strive to effect changes that benefit patients/clients (APTA, 2006b). This principle, though clearly stated, creates a dilemma for a professional when the various laws and rules governing the profession of physical therapy in Ohio are in conflict with each other. But the principle does encourage professionals to work for changes to correct these conflicts.

Principle 10 states that a physical therapist shall endeavor to address the health needs of society (APTA, 2006b). This, of course, can be troublesome if a physical therapist finds that the health needs of society do not match society's (or in an individual case, the patient's) ability to pay for the needed services.

As has been stated, the APTA also has an established set of by-laws under which its members must operate. The by-laws of the APTA are not included in their entirety in this paper. A reader wishing to gain a full copy of these by-laws may do so by contacting the site included in the references for this paper. We will limit our discussion of the by-laws to those listed in Table 2.
Table 2

Excerpts from the By-Laws of the American Physical Therapy Association

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| Function (a). . . it is a function of a physical therapist to "address the needs of members of society and the demand for physical therapy services through the promotion of, access to, and availability of these (physical therapy) services."

Function (e) . . .a physical therapist must "further the profession of physical therapy and the enhancement of the health and well being of members of society."

Article IV, Section 7 "The association shall expel from membership or otherwise discipline any member who is not in good standing."

Article III of the by-laws of the APTA lists two functions pertinent to our dilemma. Function (a) of Article III of the by-laws states that it is a function of a physical therapist to
"address the needs of members of society and the demand for physical therapy services through the promotion of, access to, and availability of these services" (APTA, 2006a). Function (e) states that a physical therapist must "further the profession of physical therapy in the enhancement of the health and well being of members of society" (APTA, 2006a). These by-laws put the responsibility for providing treatment on the physical therapist. No provision is made for appropriate action in the absence of a patient's ability to pay for these services.

Article IV, Section 7 of the by-laws describes disciplinary action and states, "The association shall expel from membership or otherwise discipline any member who is not in good standing." Thus, the by-laws discussed in the present study must be upheld by association members to avoid such disciplinary action.

Unlike the APTA Code of Ethics, which must be followed by all physical therapists practicing in Ohio, the APTA by-laws are only binding to those physical therapists who are APTA members. As a result, a physical therapist may be disciplined through censure or have his
or her APTA membership revoked for violating the APTA by-laws. However, it is not within the jurisdiction of the APTA to revoke or suspend a physical therapist's license for such an infraction. Even though the penalties for violating the by-laws of the APTA carry less severe penalties than those imposed for violating the code of ethics, such an infraction is, nonetheless, considered to be a serious breach of the values of the profession. Loss of membership in the APTA carries with it a loss of several membership rights and privileges, such as the right to vote on many matters important to the profession, the right to run for an office within the APTA, discounted fees for professional conferences, and several others. Thus, a physical therapist should seriously consider the APTA and its rules when seeking a solution to this dilemma.

Based upon the Code of Ethics and by-laws of the APTA, it would seem that the correct ethical action on the part of a physical therapist faced with our dilemma would be to provide the services despite the patient's inability to pay. The problem with this solution is that waiving or reducing charges is no way to keep a physical therapy practice viable and, even if it were, state law may enforce upon the physical therapist laws and rules that affect his or her ability to provide treatments at costs that a patient can afford.

State licensure boards, including the Ohio Occupational Therapy, Physical Therapy, and Athletic Trainers Board (OT/PT/AT) have several duties including the issuance of licenses and disciplinary action against those licenses once granted (OT/PT/AT, 2006). Disciplinary actions the OT/PT/AT board may impose include censure, or suspension or revocation of the offender's license to practice occupational therapy, athletic training or, in the present study, physical therapy.

The laws and rules regulating the practice of physical therapy in Ohio incorporated into the Ohio Revised Code (APTA, 2006b). The Ohio Revised Code (ORC) sections 4755.01
through 4758.48 deal with the governance of physical therapy practice in Ohio. Section 4755.47 of the ORC outlines suspension, revocation and denial of a license and states that a state licensure board may suspend or revoke the license of a physical therapist or physical therapist assistant or reprimand or place a license holder on probation on several grounds. Chapter 4755 of the Ohio Revised Code is lengthy and it is not within the scope of this study to examine it in its entirety. Key excerpts pertaining to the present study's dilemma are included in Table 3.

Table 3

Excerpts from the Ohio Revised Code

Section 4755.47(A) …the physical therapy section of the Ohio occupational therapy, physical therapy, and athletic trainers board …may suspend or revoke the license of a physical therapist, or physical therapist assistant or reprimand or place a license holder on probation, on any of the following grounds:

Section 4755.47 (A) (10)(a) "Waiving the payment of all or part of a deductible co-payment that a patient, pursuant to a health insurance or health care policy, contractor plan that covers physical therapy would otherwise be required to pay the waiver as enticements to a patient or group of patients to receive health care services for that provider."

Section 4755.47 (A) (10)(b)(i)
. . . "A physical therapist may waive deductibles or co-pays with the knowledge of a third party provider."

It is pertinent to the discussion to note the inter-relatedness of the ORC and the APTA code of ethics. Prior to April 4, 2007, the ORC incorporated the APTA code of ethics into law in section 4755.47(A)(5), which stated that violation of the code of ethics of the American Physical Therapy Association was a violation of Ohio law. Therefore, prior to April 4, 2007, even non-members of the APTA were legally duty-bound to follow the professional code of ethics and might suffer legal penalties imposed by the state of Ohio for violation of this ethics code. On April 4, 2007, however, Ohio House Bill 403 took effect (Ohio Legislative Service Commission, 2007). This bill created several changes to physical therapy law, most of which are not pertinent
to this study. Of importance to this study, however, is a provision that disconnects Ohio law from the APTA Code of Ethics. This new law removes the duty of enforcing the APTA Code of Ethics from the state of Ohio, and thus, removes the duty for such enforcement from the OT/PT/AT board. This means that, since April 4, 2007, a physical therapist may violate the APTA’s professional code of ethics without fear of disciplinary action from the state of Ohio, including the OT/PT/AT board.

The change in Ohio law is of little functional importance to a physical therapist striving to resolve the dilemma of providing for a patient who is uninsured or underinsured because, in the case of all possible resolutions to this dilemma (other than referral of the patient to a safety net provider or becoming a de-facto safety net provider by treating the patient free of charge), the physical therapist is still in violation of the laws and rules of the profession. These include the APTA Code of Ethics, APTA by-laws, and other parts of the Ohio Revised Code discussed in this study. The sole impact of the recent change to Ohio law upon this study lay in the fact that the change was implemented in close proximity to the dissemination of the study's survey, which sought, among other things, to gather a measure of perception of risk of violating a law or rule of the profession. Since dissemination of information regarding the changes to this aspect of the ORC may have been be incomplete at the time the survey was distributed, and realization and practice with this information may have potentially varied across the participants, the impact this new law has on the perception of risk was a potentially confounding variable. The researcher designed the survey to control for this.

The APTA code of ethics, Principle 3, states that it is unethical to violate a rule or law pertaining to physical therapy. This would include the Ohio Revised Code. This means that a violation of the ORC is a violation of the APTA code of ethics. The changes to physical therapy
law in Ohio, resultant from House Bill 403, have no impact upon the application or interpretation of Principle 3.

Also pertinent to our discussion is ORC section 4755.47 (A) (10) (a) prohibiting a physical therapist from "waiving the payment of all or part of a deductible or co-payment that a patient, pursuant to a health insurance or health care policy, contract, or plan that covers physical therapy would otherwise be required to pay if the waiver is used as an enticements to a patient or group of patients to receive health care services from that provider". Though illegal, waiving part, or all, of a deductible or co-payment is one of the most commonly used adjustments to billing and is used to resolve the dilemma presented in this study (Wynia, Cummins, VanGeest, & Wilson, 2000).

ORC section 4755.47 (A) (10)(b)(i) states that a physical therapist may, in fact, waive deductibles or co-pays with the knowledge of a third-party payor. However, it is the experience of this author, who is a physical therapist, that third-party payors universally have individual policies prohibiting such waivers because waived deductibles remove a patient's stake in the payment scheme. Third-party payors have a preference that a patient share in the cost of the treatment so that they may be partners with the third-party payor in terms of preventing overcharges, billing for unnecessary treatments, or other unethical behaviors on the part of the physical therapy provider. While such third-party payor policies do not prohibit a physical therapist from treating a patient for free, they do close down one commonly used avenue of adjusting a patient's bill; waiving an underinsured patient's co-payment or deductible for services (Wynia, Cummins, VanGeest, & Wilson, 2000).
Solving the Dilemma

As has been demonstrated, there are a significant number of variables that a physical therapist must consider when addressing this dilemma. Appendix A contains a table which compares the three solutions that a clinician may choose and shows the conflicts between the Ohio Revised Code, APTA by-laws, code of ethics of the APTA, or third-party payor agreements that accompany each choice.

One action that a physical therapist may take in response to the dilemma is to refer the patient to a safety net provider. Unfortunately, the very high number of uninsured and underinsured individuals in the United States have severely stressed the resources of safety net providers. Because of this, nearly all safety net providers have eliminated many surgical and ancillary services (Weiner, 2001), such as physical therapy. Because of these limitations, safety net providers are unlikely to be a practical solution to our dilemma.

If a physical therapist chooses the second solution to the dilemma, foregoing indicated tests and therapies because of cost, he or she may be in conflict with Article III of the by-laws of the APTA because of his or her failure to "address the needs of members of society and the demand for physical therapy services through the promotion of, access to, and availability of these (physical therapy) services" (APTA, 2005a). The clinician may also find him or herself in conflict with Article III(e) of the by-laws through a failure to "further the profession of physical therapy and the enhancement of the health and wellbeing of members of society" (APTA, 2006a). The physical therapist would also be in conflict with Principle 1 of the Code of Ethics of the APTA due to a failure to respect the rights and dignity of all individuals and provide compassionate care. Interestingly this therapist would be in compliance with the first part of Principle 3 of the Code of Ethics of the APTA, which states that "a physical therapist shall
comply with laws and regulations governing physical therapy …", but seemingly out of compliance with the second part of the same sentence, "…and shall strive to effect changes that benefit patients/clients" (APTA), because of his or her seemingly blind obedience to a payment system that fails to address other major principles of the ethics code, including Principle 10, which states "a physical therapist shall endeavor to address the health needs of society" (APTA, 2006a). Prior to April 4, 2007, this physical therapist would not have been in compliance with ORC section 4755.47(A)(5) because of the breach of the code of ethics indicated above.

The physical therapist who seeks resolution to this dilemma by the third solution, reducing fees by adjustment to normal billing, would be in conflict with Principle 3 of the APTA Code of Ethics by breaking a law governing the profession, such as lowering a patient bill by waiving a co-pay or deductible (ORC sec. 4755.47 (A) (10)(b)(i)). Conversely, prior to April 4, 2007, this scenario would put the physical therapist in conflict with ORC section 4755.47(A)(5) because he or she would be out of compliance with the APTA Code of Ethics Principle 3.

This physical therapist would likely be in conflict with contractual obligation to the third-party payor if he or she were to reduce the fees by waiving co-pays or deductibles. It should also be stated that, while it is possible for a therapist to lower a bill somewhat without lowering co-pays and deductibles, doing so would not assist most patients because most often the co-pay takes the form of a "cost per visit." An example would be a common type of policy which charges a flat $20 co-payment regardless of the service performed. If the therapist charges a patient for anything at all the patient must pay the first $20 of the bill. This is often more than a patient can afford to pay. More importantly, in order to do this the therapist must provide a "billable" service of some sort. This may lead to unnecessary services offered in addition to the needed-but-not-covered service that the therapist is providing for "free." Providing unnecessary
services is considered to be insurance fraud and is punishable by criminal law and may also include suspension or revocation of the individual's license to practice physical therapy. Of course, if the physical therapist attempts to provide the needed service and bill it under another procedure code he or she may be found guilty of insurance fraud and face legal penalties as well as suspension or revocation of their physical therapy license. Insurance fraud is a violation of the Ohio Revised Code (ORC sec. 4755.47 (A)(10)(a)) and, as such, is also a violation of Principle 3 of the APTA Code of Ethics which states that a physical therapist must comply with the laws and rules governing physical therapy. Unfortunately such illegal and unethical adjustment to billing is the solution most often used by medical professionals (Weiner, 2001).

One influence on a physical therapist's decision regarding this ethical dilemma has not yet been addressed, that being any individual company's policies regarding billing adjustments. If a company employing the physical therapist has a pool of charitable funds available for treating uninsured or underinsured individuals, the health care practice would be operating as a de-facto safety net provider and the comments in this chapter regarding safety net providers would apply.

Unless a physical therapy provider has unlikely access to a viable safety net provider or the equally unlikely ability to act as the safety net provider itself (by waiving all fees), the provider is placed in a position where this ethical dilemma must be resolved by a means that puts the therapist in opposition with the rules governing the profession. The choice of unsavory options that remain may be influenced by the individual clinician's stage of moral development (Kohlberg, 1984), his or her professional code of ethics, state law, and, if he or she is an APTA members, the by-laws of the APTA. It is almost certain that regardless of the path taken, a physical therapist will be in conflict with one or more of these. Stages of moral development as
described by Kohlberg (1984) and the ethical models of care, justice, and critique as described by Starratt (1991) may influence a physical therapists judgment and actions as he or she seeks to resolve the dilemma caused by the conflicts in the laws and rules of the profession. The ethical models and stages of moral development which might factor into his or her solution are discussed in Chapter 2 (see also Appendix A).

Significance of the Study

It is important to understand the perception of risk that physical therapists have of violating the rules governing their profession, or their personal ethical and moral code(s) if treatment is not provided for an uninsured or underinsured patient. It is also important to understand if this perception of risk is influenced by their experiences while practicing within their professional category, or by their APTA membership status. Prior to this study no such research had been conducted. In designing this study the researcher imagined several possible outcomes, many of which would have had potential implications on the practice of physical therapy. For example, if the study found that professional experiences lead to differing perceptions of risk of violating the laws and rules of the profession a researcher might ask why such differences exist. If the study revealed that physical therapists operating in different professional roles have different career experiences. If this proved to be the case then information disseminated to physical therapists could be changed so that all physical therapists in Ohio might benefit from receiving information similar to that of physical therapists operating within the most informed professional category. The researcher imagined that this study might, perhaps, uncover a more systemic lack of perception of risk across all professional categories. If this proved to be the case then changes within the curriculum of entry-level physical therapy education programs may be warranted. If the study found that differences exist in perception of
risk between APTA members and non-members it may be that the information disseminated by the APTA, to its members, could be the cause of the difference in perceived risk. If this was the case then similar information may need to be disseminated to all physical therapists in Ohio, regardless of their APTA membership status. Regardless of categorical differences, a knowledge of risk level may prove to be valuable information to be used in an argument for reform of the laws and rules governing the practice of physical therapy. Knowledge of perception of risk in this scenario could also be valuable to those conducting future research within this area.

Definitions of Related Terms

Administrator: for purposes of this study, a physical therapist whose primary professional role is that of overseeing the day-to-day operations of a physical therapy practice (APTA, 2006a).

American Physical Therapy Association (APTA): the governing body of the profession of physical therapy in the United States (APTA, 2006a).

APTA By-Laws: an internal set of rules which must be followed by members of the APTA (APTA, 2006a).

APTA Code of Ethics: an internal set of laws pertaining to all physical therapists that practice physical therapy within the United States whether or not they are members of the APTA (APTA, 2006b).

APTA Member: an individual who holds membership status within the American Physical Therapy Association (APTA, 2006a).

Clinician: for purposes of this study, a physical therapist whose primary professional role is that of evaluating and treating patients in a physical therapy practice (APTA, 2006a).
Educator: for purposes of this study, a physical therapist whose primary professional role is that of teaching within an academic program which prepares physical therapy students for entry level physical therapy practice (APTA, 2006a).

Licensure Board: a board which, in physical therapy, is sponsored by the state of residence of the physical therapist. Such boards are responsible for issuance of physical therapy licenses and enforcing the rules and by-laws of the APTA, the Code of Ethics of the APTA, and state laws pertaining to the practice of physical therapy (APTA, 2006a).

Licensure Cycle: term in which a physical therapist may hold a license to practice physical therapy in their state of residence (APTA, 2006a). In Ohio, a licensure cycle equals two years (OT/PT/AT, 2006).

Physical Therapist: an individual who possesses a license to practice physical therapy (APTA, 2006a).

Physical Therapist Assistant: an individual who is licensed to practice physical therapy as a physical therapist assistant (APTA, 2006a).

Risk Perception: the subjective judgment that people make about the characteristics and severity of a risk (Rafaely, Meyer, Zilberman-Sandler, & Viener, 2006).

Safety Net Provider: a health care facility, often sponsored by state, local, or federal government, which exists to provide medical care to individuals who lack the resources to pay for such services (APTA, 2006a).

Standards of Ethical Conduct for the Physical Therapist Assistant: an internal set of laws pertaining to all physical therapist assistants who practice physical therapist assisting within the United States whether or not they are members of the APTA (APTA, 2006e).
Third Party Payor: an individual or agency, often times a government agency or private health insurance company, which is responsible for all or part of a patient's bill for services rendered (APTA, 2006a).

Uninsured: term used to describe an individual who is solely responsible for their own bill for care or services received without the assistance of a third-party payor (APTA, 2006a).

Underinsured: term used to describe an individual who, while possessing insurance through a third-party payor, does not have, as a provision of his or her contract with that third-party payor, a benefit which would allow for payment of the service(s) that the patient may require (APTA, 2006a).

Assumptions

In order to generalize the results of this study to the population, an assumption must be made that the respondents will be able to read and comprehend the surveys and that they will complete the surveys honestly and accurately. This assumption includes the ability of the respondent to properly report their role as an administrator, a clinician, or an educator and accurately report their APTA membership status.

Delimitations

This study was limited to physical therapists in Ohio as well as the specific Ohio Laws governing physical therapy practice.

On April 4, 2007, Ohio House Bill 403 took effect (Ohio Legislative Service Commission, 2007). As stated above, there is a provision in this new law that disconnects Ohio law from the APTA Code of Ethics. This new law removes the duty of enforcing the APTA Code of Ethics from the state of Ohio, and thus, removes the duty for such enforcement from the OT/PT/AT board. The sole impact of this recent change to Ohio law upon the present study lay
in the fact that the change was implemented in close proximity to the dissemination of the study's survey, which sought, among other things, to gather a measure of perception of risk of violating a law or rule of the profession. Since dissemination of information regarding the changes to this aspect of the ORC may have been incomplete at the time the survey was distributed, and realization and practice with this information might have varied across the participants, the impact this new law has on the perception of risk was a potentially confounding variable.

Limitations

Due to the limitations of the sample for this study, results of this study are not generalizable to physical therapists outside of Ohio. This study seeks only to generalize the results to physical therapists in Ohio. Generalization to physical therapists outside of Ohio is not justified methodologically.

Overview of Document

Chapter 2 of this dissertation presents the reader with background knowledge of the areas pertinent to this study, including an historical perspective of related research in these areas. This will allow the reader to develop a fuller understanding of the variables examined in the present study.

Chapter 3 discusses the research design, provides an explanation for how participants were sampled and screened for inclusion or exclusion and categorized within the independent variables, discusses instrumentation and data collection, and includes proposed methods of data analysis.

Finding of the study are presented in Chapter 4 and discussion of these results is presented in Chapter 5.
CHAPTER II. LITERATURE REVIEW

Background

The purpose of the present study was to determine the perception of risk that exists, regarding the ethical dilemma involving a physical therapist who encounters an uninsured or underinsured patient who is in need of physical therapy treatment of violating the American Physical Therapy association (APTA) By-Laws, the APTA Code of Ethics, the Ohio Revised Code, or an individual's personal moral or ethical values. The researcher examined whether this perception is affected by the experiences gained working in categorized professional roles and/or by experiences gained as an APTA member. Professional roles include administrator, clinician, and educator. Since any physical therapist may choose to hold or decline to hold membership in the APTA, each professional role may include physical therapists who are APTA members and physical therapists who are not APTA members. This creates six categories across the independent variables, as described in Chapter 1. A similar response was sought by the researcher to attempt to determine if themes exist in respondents' perception of risk of violating their personal moral or ethical values. Background knowledge of these areas, including an historical perspective of related research in these areas is important to develop a full understanding of these variables. To accomplish this, the researcher presents this review of the literature.

The researcher found an absence of well-developed research studies in many of these areas. According to Bommer, Gratto, Gravender, and Tuttle (1987) most ethics research involves accounts of particular cases describing decisions to act ethically or unethically; and other research studies that utilize surveys of managers regarding their attitudes toward certain ethical dilemmas, their perceptions about the circumstances within which these dilemmas
currently must be resolved, and their beliefs about changes in these circumstances which would make resolution of the dilemmas easier. Case studies, however, do not always indicate why particular decisions were made; nor do they indicate causes behind ethical and unethical behavior (Bommer et al., 1987). Gaps in the literature substantiate the need for this study. The influence of professional role and membership in professional organizations on risk perception is included in this literature review. Also included is evidence of the use of ethics codes in professional practice, influence of ethics codes, influence of membership in a professional organization, and influence of professional role on decision making. A description of Kohlberg's work on moral development and Starratt's work on ethical leadership, and research regarding the relationship of ethics codes to law are also included. Additionally the theoretical framework of risk, demographic effects on perception of risk, the relationship between risk perception and compliance with law, and methods of measuring risk perception are examined.

Ethical Decision Making and Moral Reasoning

According to Kidder (2005) morality is a socially constructed linguistic concept that names and defines the sum of accepted conventional principles or standards of right or wrong conduct in culture or society. Liska (2005) defines ethics as the study of human conduct in terms of what is right or wrong, what is worth doing, or what should not be done. Liska states that ethics is primarily concerned with shedding light on the question of what should count as morally good behavior, of what is the good life, and providing the justification of rules and principles that may help to assure morally good decisions.

The ethics of critique, justice, and care (Starratt, 1991), as well as the stages of moral development (Kohlberg, 1984) may impact the way in which an individual handles a moral
dilemma. Each ethical model has within its scope an individual's willingness and/or motivation to either comply with rules, laws, and ethics codes or circumvent them.

A brief discussion of ethical models and moral stages of development, as well as the rules and laws governing the practice of physical therapy in Ohio, pertinent to this ethical dilemma, is warranted.

Ethics

Bersoff and Koeppl (1993) stated that deontology and utilitarianism are the two most generally accepted ethical frameworks on which ethics codes can be built. Deontologists hold that the morality of the behavior is directly related to its intrinsic or inherent values. In other words actions are right or wrong regardless of their consequences. Codes of ethics tend to operate in this way by being a framework for proper and improper behavior. But what about when a conundrum exists in which the code of ethics, which might meet the approval of deontologists, is in conflict with other codes or laws in which the consequences of a decision will damage one party or another? In this case utilitarianism might serve well. Utilitarianism proposes that the results of a behavior ultimately dictate its morality. In other words a behavior is most morally correct when the results are more favorable than the predicted results of its alternatives (Bersoff & Koeppl). When faced with such a conundrum a utilitarian ethicist is put in a position of balancing the possible costs and benefits of an action. It most often means choosing among the possible "evils" and searching for the least detrimental alternative.

Thus, an individual who meets with a conundrum in which he or she needs to decide among unappealing alternatives, such as a physical therapist endeavoring to resolve the ethical dilemma involving the uninsured or underinsured patient, might use the utilitarian approach. Such an individual might need to reflect upon his or her own personal ethics code. Several types
of ethics have been described in the literature. Among these, perhaps the most pertinent to the
dilemma discussed in the present study is the work of Starratt (1991). Starratt describes the ethic
of justice, the ethic of care, and the ethic of critique. These are models which might be used
individually or in conjunction with one another when a physical therapist is confronted with the
conflicting laws and rules pertaining to the dilemma described in Chapter 1. A discussion of
these models is warranted.

_Ethic of justice_

The ethic of justice involves an ability to perceive of justice in the social order as well as
some minimal level of caring about relationships within that social order (Starratt, 1991). An
individual operating under the ethic of justice seeks to operate within the boundaries of the rules
and laws which are in place. However, this individual operates under the belief that individuals
within society have certain rights to which they are entitled and that justice and equality may
supersede the rules which are in place if those rules infringe upon those rights. An individual
operating under the ethic of justice may place the rights of individuals or society ahead of the
rules of the establishment if he or she believes that not doing so would lead to inequality and
injustice. An individual operating under this ethic may be motivated to behave outside of the
rules if he or she is motivated by what he or she perceives to be a conflict with the established
rules and the rights of either an individual or society. In fact, according to Starratt (1991) the
ethic of justice has two general schools of thought. The first focuses on the individual and the
second focuses on society. According to Starratt (1991):

In the individual school, the primary human reality is the individual, independent of
social relationships; the individual is conceived as logically prior to society. Individuals
are driven by their passions and interests, especially by fear of harm and desire for
comfort. Individuals enter into social relations to advance their own advantage.

Individual will and preference are the only sources of value. (p. 192)

In the 'society' school of thought, human reason is the instrument that individuals use to analyze, in a more or less scientific fashion, what is to their advantage, and to calculate the obligations to social justice called for by the social contract. As Sullivan (1986) stated, "In its more benign application, this theory conceives of social justice as 'a social engineering to harmonize the needs and wants' of self-serving individuals in society" (p. 113).

In the dilemma regarding the uninsured or underinsured patient seeking physical therapy services decisions must be made regarding the rights of the individual patient and the rights of the clinic in which the physical therapist is practicing, as well as the rights of the medical system in the United States as a whole. The various needs of these persons or entities were described in Chapter 1. In a system with unlimited resources the physical therapist would not have a dilemma at all. Unfortunately, distributing resources to one person or entity in this situation will lead to a reduction in these resources to others. Because of this the physical therapist in our dilemma must decide, when utilizing the ethic of justice, whether he or she is practicing this ethic as it pertains to the individual, organization, or society. This lack of adequate resources, coupled with the conflicting laws and rules of the profession (Carroll et al., 2006) require the physical therapist to decide what is right, just, and fair.

John Rawls (1971, 1977) looked at justice and its relationship to fairness. Rawls promoted the concept that justice is fairness and that an act or decision can not be both just and unfair. In John Rawls' earlier writing (Rawls, 1971) he promoted a similar idea but in his later work noted that creating a good society is not achieved through just improving justice and fairness. In fact he states that "justice is not to be confused with all-inclusive vision of a good
society; it is only one part of any such conception" (Rawls, 1977, p. 101). Rawls states that justice, as he describes it, has two primary principles. The first of these principles is that each person who is participating in a practice or an organization or who is affected by a practice or organization has an equal right to liberty which is compatible with others within the organization. He states that this first principle may only exist if all relevant factors are equal and that if things must be unequal there must be firm justification for departing from equality. He also states that the burden of proof is placed on the policy maker or leader who departs from it. However, Rawls states in his later work that such justifications may exist. He uses the examples of players in a baseball game who do not protest when an umpire has more decision making ability than a batter, pitcher, or catcher. He states that this arrangement, although unequal, is fair because it benefits all individuals to achieve their goal, which in this case is the successful completion of the game.

Rawls' second principle upon which justice is based is that inequalities are arbitrary unless such inequalities work out to everyone's advantage and provided that the positions and offices to which the inequalities attach may be gained by any member of the organization or are open to all. He states that it may be, for example, to a common advantage to attach special benefits to certain offices within an organization. One reason for doing so might be to attract top talent to these offices. This would be to the advantage to all but these positions and offices must be won in a fair competition in which contestants are judged on their merits alone (Rawls, 1977).

The ethic of justice finds its contemporary roots in the work of John Rawls (1971). According to Rawls, in justice, the primary human reality is the individual. This means that an individual is independent of social relationships. It also means that individuals are driven by their passions and especially by fear of harm and a need for comfort. Rawls felt that individuals enter
into social interactions to advance their own well being. Rawls felt that human reason is the means by which individuals analyze what is to their advantage, and calculate the obligations of a social contract. The key organizational concepts of the ethic of justice include participation, equal access, due process, policy formation and implementation, rights, responsibilities, and resource allocation (Rawls, 1971; Starratt, 1991). Because the rights of the individual and the policies that govern payment of health care in the United States are closely tied to the ethical dilemma, the ethic of justice must be considered when resolving the dilemma if the physical therapist is to decide whether to act in the interest of the individual, the institution, or society.

William Sullivan (1986) echoed Rawls' views when he wrote that justice is "a social engineering to harmonize needs and wants self serving individuals in society" (p. 19). Sullivan stated that through living in a society an individual learns lessons of and from morality. Sullivan stated that life itself teaches individuals how to think about their own behavior in terms of larger common good of the community.

The work of Lawrence Kohlberg (1984) will be addressed shortly. For the moment it is pertinent to this discussion to note that Kohlberg identified the individual as the primary source of ethical judgment and viewed ethical judgment in terms of normal human development. Thus when combing the work of Rawls (1971), Sullivan (1986), and Kohlberg (1971) justice can be understood as individual choices to act justly and justice can also be understood as the communities choice to direct or govern its actions justly (Starratt, 1991).

Despite an extensive search of the literature the researcher found a discouraging lack of citations relating the ethic of justice to physical therapy. The ethic of justice is pertinent to this study because, ultimately, the dilemma of treating the uninsured or underinsured patient is one of allocation of resources. As has been stated if safety-net providers had adequate resources to meet
the needs of all uninsured or underinsured patients then the uninsured or underinsured patient would not present a dilemma to the physical therapist.

**Ethic of care**

According to Starratt (1991) one of the limitations of an ethic of justice is that it holds an inability to decide between claims which are in direct conflict with one another. Because justice can vary from situation to situation often times the ethic of justice boils down to determining minimal conditions which must be met to fulfill the claims raised by either side in a conflict. According to Starratt (1991), in such instances the ethic of care may come into play.

Such an ethic focuses on the demands of relationships, not from a contractual or legal standpoint, but from a standpoint of absolute regard. This ethic places the human persons-in-relationship as occupying a position for each other of absolute value; neither one can be used as a means to an end; and each enjoys an intrinsic dignity and worth, and given the chance, will reveal genuinely loveable qualities. An ethic of caring requires fidelity persons, a willingness to acknowledge their right to be who they are, an openness to encountering them in their authentic individuality, a loyalty to the relationship. Such an ethic does not demand relationships of intimacy; rather, it postulates a level of caring that honors the dignity of each person and desires to see that person enjoy a fully human life. Furthermore, it recognizes that it is in the relationship that the specifically human is grounded; isolated individuals functioning only for themselves are but half persons. One becomes whole when one is in a relationship with another and with many others. (Starratt, 1991, p. 194)

The ethic of care involves the ideal fulfillment of all social relationships (Starratt, 1991). One of the limitations of the ethic of justice, according to Starratt (1991), is that "what is just for
one person might not be considered just by another person. Hence, discussion of what is just in any given situation can tend to be mired down in minimalist considerations. "What minimal conditions must be met to fulfill the claims of justice?" (p. 195). Starratt goes on to say "an ethic of care requires fidelity to persons, a willingness to acknowledge their right to be who they are, an openness to encountering them in their authentic individuality, and loyalty to the relationship" (p. 195). Those individuals who use the ethic of care are generally "grounded in the belief that the integrity of human relationships should be held sacred" (Starratt, p. 195).

Milton Mayeroff (1995) states that to care for another person, in the most significant sense, is to help that person to grow or to actualize himself or herself. Mayeroff differentiates caring from well-wishing, comforting, liking, or simply having an interest in what happens to another individual. He states that caring is a process and a way of relating to someone that may be developed over time, and states that in order for this to occur there must be mutual trust and a deepening transformation of the relationship. Mayeroff also states that caring is necessary for full human development, that individuals tend to order their lives around their ability to care, and this ordering is a sign that there is basic stability within an individual's life. Mayeroff states that caring allows us to avoid "merely drifting or endlessly seeking a place in the world" (Mayeroff, 1995, p. 336). He also states that "through caring for certain others, by serving them through caring, a man lives the meaning of his own life. In the sense in which a man can ever be said to be at home in the world, he is at home not through dominating, or explaining, or appreciating, but through caring and being cared for" (Mayeroff, 1995, p. 336) Mayeroff states that in caring we place another at the center of our attention and that the growth of another is at the center of attention rather than the growth of the individual. Despite this the first individual, in caring for the second individual, is experiencing growth in his or her own right.
Physician Willard Gaylin (1976) agrees with Mayeroff and asserts that in caring there is the assumption that there exists the potential for growth and the ability to move toward potential. Gaylin claims that this type of growth can be nurtured and supported or, conversely, damaged and misdirected. Gaylin states that true caring happens when persons relate to each other that honor and encourage development.

Noddings (1988) echoes these sentiments by suggesting that "the relational mode seems to be essential to living fully as a person" (Noddings, 1988, p. 35). She goes on to say:

When I care…I do not relinquish myself. …I allow my motive energy to be shared; put it at the service of others. It is clear that my vulnerability is potentially increased when I care, for I can be hurt through the other as well as through myself. But my strength and hope are increased for if I am weakened, the other, which is a part of me, may remain strong and insistent. (Noddings, 1988, p. 33)

According to Lynn Beck (1994) caring depends on a special kind of relationship between persons and includes not just a relationship but commitment. True caring steps away from the examination of power, laws, and policy which are evident in the ethic of critique and is away from the essence of fairness and control which exemplify the ethic of justice. Caring brings things to the human level and is evidenced in the following quote from To Kill a Mockingbird (Lee, 1960) as Atticus Finch explains this aspect of human nature to his young daughter Scout.

First of all, if you can learn a simpler trick, Scout, you'll get along a lot better with all kinds of folk. You never really understand a person until you consider things from his point of view…until you climb into his skin and walk around in it. (Lee, 1960, p. 34)

The ethic of care might come naturally to physical therapists and other members of the caring professions. Unfortunately, as shown in Chapter 1, the ethic of care is often times difficult
to implement under current state law, by-laws of the professional organization, and the profession's code of ethics. According to Greenfield (2006) caring has been identified as a desirable indicator of professional behavior in physical therapy and other health professions. The researcher performed a series of in-depth, open-ended interviews with five physical therapists regarding the ethic of care. He found that four of the five participants felt that caring constituted of an ethic of practice or moral orientation. He also found that moral orientation influenced moral judgment and did have an effect on both clinical practice and ethical decision making. He went on to stress the difficulty of caring in a managed care health environment that results in conflicting demands for physical therapists to take care of their patients in a system that increasingly values cost control and profit margin.

*Ethic of critique*

The ethic of critique is often used to examine the set of laws and rules which are under consideration by an individual operating under an ethic of justice. An individual who wishes to operate within the bounds of established rules, by way of the ethic of justice, may find it difficult to do so if he or she believes the rules themselves are unjust (Starratt, 1991). Thus the ethic of critique may come into play if an individual believes that the system under which they seek to operate is unjust.

The ethic of critique draws its force from 'critical theory' as described by Young (1990). Young is one of the Frankfurt School of Philosophers who explore life as globally problematic because of the struggles and competing interests of wants of various groups in society. Theorists from the Frankfurt School of Philosophy feel that when social relationships, social customs, social institutions, or law are considered it must be remembered that they are grounded in power relationships. Young and members of this school ask many questions: Who benefits from
specific arrangements? Which group dominates this social arrangement? Who defines the way things are structured? Who defines what is valued and disvalued in a situation? Young feels that it is important to determine which group has an advantage over others and how things got to be the way they are and to expose how situations are structured to maintain the legitimacy of social arrangements. Her point is that no social arrangement is neutral. When looked at in this way, it allows the thinker to step away from the status quo and provides a new awareness of how power and privilege came to be. This allows for open discussion, or critique, of a situation (Young, 1990).

The ethic of critique involves a point of view about social justice and human rights, and about how communities ought to govern themselves (Starratt, 1991). An ethic of critique often times is used to examine the operations and policies of a bureaucracy (Starratt, 1991). Starratt's work echoes and expands upon Young's (1990) work when Starratt writes:

[When] considering social relationships, social customs, laws, social institutions grounded in structured power relationships, or language itself, thinkers ask questions such as the following: 'Who benefits from these arrangements? Which group dominates this social arrangement? Who defines the way things are structured here? Who defines what is valued and disvalued in this situation?' The point of this critical stance is to uncover which group has the advantage over the others, how things got to be the way they are, and to expose how situations are structured and language used so as to maintain the legitimacy of social arrangements. (Starratt, p. 189)

According to Starratt "the point the critical ethician stresses is that no social arrangement is neutral. It is usually structured to benefit some segments of society at the expense of others" (p. 189). The organizational concepts of the ethic of critique involve examining whether a culture
of silence and domination, power structures, class distinctions, privilege, and hierarchy exist (Starratt, 1991). Principle 3 of the APTA code of ethics encourages the use of the ethic of critique when it states that physical therapists must strive to effect changes that benefit patients (APTA, 2006b).

In the blending of the three ethics - the ethic of critique, the ethic of justice, and the ethic of caring - Starratt (1991) weaves the three moral philosophies into one. According to Starratt, "None of these ethics by itself offers an educational administrator a fully adequate framework for making ethical judgments; together, however, each ethic compliments the others in a developmental context of practice" (Starratt, 1991, p. 186). Starratt goes on to say:

Moreover, each ethic needs the very strong convictions imbedded in the other. The ethic of justice needs the profound commitment of the dignity of the individual person found in the ethic of caring. The ethic of care needs the larger attention of social order and the fairness of the ethic of justice if it is to avoid an entirely idiosyncratic involvement in social policy. The ethic of critique requires an ethic of caring it is to avoid the cynical and depressing ravings of the habitual malcontent, and the ethic of justice requires the profound social analysis of the ethic of critique, to move beyond the naive fine tuning of social arrangements in a social system with inequities built into the very structures by which justice is suppose to be measured. (Starratt, 1991, p. 198)

**Morality**

It is impossible to discuss ethics without discussing morality. There is a connection between morals and ethics which will be explained here. Ethics is the philosophical study of morality (Callahan, 1988). As a field of philosophical inquiry morality includes three conceptually distinct but closely related forms of ethics. The first of these is metaethics, which is
an enterprise that involves trying discern what moral terms such as 'good' or 'right' are generally understood to mean. A second type of ethics included within moral philosophy is theoretical normative ethics. In this type of ethics moral judgments are made but at the most general level. The purpose of theoretical normative ethics is to develop general moral theories. Finally, the third branch of ethics in moral philosophy is applied ethics. The purpose of applied ethics is to resolve specific moral ethics and morally problematic cases which arise in life (Callahan, 1988). Applied ethics is the type of ethics that could most readily be utilized by the physical therapist attempting to resolve the dilemma of the uninsured or underinsured patient.

Lawrence Kohlberg believes that individuals pass through various stages of moral development one step at a time as they progress from the bottom (Stage I) to the top (Stage VI) (Kohlberg, 1984). The six moral stages are divided into three major levels (a) pre-conventional level, which includes Kohlberg's Stages I and II, (b) conventional level, which includes Stages III and IV, and (c) post-conventional level, which includes Stages V and VI. Kohlberg states that:

One way of understanding the three levels is to think of them as three different types of relationships between the self and society's rules and expectations. From this point of view, level I is a pre-conventional person, for whom rules and social expectations are something external to the self; level II is a conventional person in whom the self is identified with or has internalized the rules and expectations of others, especially of those of authorities; and level III is a post-conventional person who has differentiated his or herself from the rules and expectations of others and defines his or her values in terms of elf chosen principles. … Within each of the three moral levels, there are two stages. The
second stage is a more advanced and organized form of the general perspective of each major level. (p. 173)

According to Kohlberg (1984) the pre-conventional moral stage is the level of most children under the age of nine, some adolescents, and many criminal offenders. The conventional level is the level of most adolescents and adults in our society and other societies, and the post-conventional level is reached by a small minority of adults. The individual at the pre-conventional level has yet to truly understand and uphold the rules and expectations of society.

Kohlberg (1984) states that since moral reasoning is clearly reasoning, advanced moral reasoning depends on advanced logical reasoning. A person whose logical stage is only concrete-operational is limited to the pre-conventional moral stages which Kohlberg terms stage one and stage two. A person whose logical stage is that of low formal operations is limited to conventional moral stages three and four. To achieve moral stages five and six the individual would have to operate at higher formal operational stage. Kohlberg states that "many individuals are at a higher logical stage then their parallel moral stage, but essentially none are at a higher moral stage then their logical stage" (Kohlberg, 1984, p. 171).

According to Kohlberg (1984) to act in a high moral manner requires a high stage of moral reasoning. One cannot follow the moral principles of stages five and six if one does not understand them and believe in them. Kohlberg (1984) states "one can, however, reason in terms of such principles and not live up to them. A variety of factors determine whether a particular person will live up his or her stage of moral reasoning in a particular situation, but moral stages are good predictors of action in various experimental and naturalistic settings" (Kohlberg, 1984, p. 172).
It is not the purpose of, nor does it serve the needs of this discussion to address each level and stage in detail. It is important, however, to consider the stage of moral development at which the decision maker resides prior to discussing why he or she may choose one of the three solutions to our dilemma. Kohlberg's first three levels (Stage I, heteronomous morality; Stage II, individualism, instrumental purpose, and exchange; and Stage III, mutual interpersonal expectations, relationships, and interpersonal conformity) (Kohlberg, 1984) are early stages of moral development. It is likely that a physical therapist making a thoughtful moral decision regarding the dilemma that inspires the present study would have achieved these stages prior to achieving his or her role as a professional healthcare provider. Perhaps the rare physical therapist operating at these lowest levels would present a dilemma unto himself or herself but not one which will be included in the current examination. Because of this the discussion is limited to Kohlberg's Stages IV through VI.

Kohlberg's Stage IV, social system and conscience, is a level at which individuals strive simply to fulfill the actual duties to which they have agreed. Laws are upheld at this stage and are only deviated from when they conflict with other fixed social duties. An individual operating at this level has a goal of keeping society going as a whole and avoiding breakdown within the system. Individuals exist within this framework only as they would exist in terms of their place within society. It would not be uncommon to hear a person justify a decision with words such as "if everyone did it…" (Kohlberg, 1984).

Kohlberg's Stage V, social contract or utility in individual rights, might be utilized by a person who is aware that people hold a variety of values and opinions, and that most of these values are relative to their group. This individual is willing to concede that some non-relative values and rights like life and liberty must be upheld regardless of the rule of law. This
individual also has concern that laws and duties be based on rational calculation. It would not be unusual for an individual operating at this stage to make a statement such as "we must do that which will produce the greatest good for the greatest number" (Kohlberg, 1984). Safety net providers, such as public health clinicians, often operate at this stage when they choose to spend their limited resources on provision of influenza inoculations for several thousand individuals rather than life saving (but expensive) surgical procedures for a few individuals.

Kohlberg's Stage VI, the universal ethical principles, is utilized by those following self-developed ethical principles. When laws violate these self-chosen ethical principles, a person at this stage of development will act in accordance with the principle rather than the rule or law. These principles are principles of justice and focus on the equality of human rights and respect for the dignity of human beings as individual persons (Kohlberg, 1984).

Kohlberg's stages of moral development are often linked to the ethic of justice and in our discussion thus far the ethic of care has been described as distinct from the ethic of justice. In the interest of fairness and balance, a discussion of the writings of Carol Gilligan (e.g., Gilligan, 1987) is worthwhile. A primary difference between Kohlberg's morality of justice and Gilligan's morality of care and responsibility lies in the fact that the primary moral imperative in Kohlberg's system is justice and the primary moral imperative in Gilligan's system is non-violence and care (Brabeck, 1983). Gilligan believes that an individual, when addressing an ethical dilemma, may operate under either the ethic of care, or the ethic of justice, or a combination of the two. Gilligan also holds the opinion that because Kohlberg used an entirely male sample in his research on stages of moral development, his findings may not be transferable to females. In fact, Gilligan proposes that women may not follow the same type of moral development outlined in Kohlberg's stages and may operate under an ethic of care when a male
counterpart may be inclined to operate under an ethic of justice (Gilligan, 1987). Gilligan states that "I observed that women… often define moral problems in a way that eludes the categories of moral theory and is at odds with the assumptions that shape psychological thinking about morality and about the self" (Gilligan, 1987, p. 24). Gilligan is not seeking to disprove Kohlberg's findings, merely to assert that there may be a combination of the ethics of care and justice and that the stages of moral development may be applied to the ethic of care, as they are to the ethic of justice. Delving further into this matter is not within the scope of this study. However, it is fair to acknowledge the possibility that future researchers may find the acts of categorizing individuals into stages of moral development, or predicting which ethical principle they may operate under, may be more complex than previously imagined.

Ethical Decision Making

Ethical decision making is a recurrent theme in the present study. Therefore it is appropriate to discuss ethical decision making models as a bridge between the examination of ethical decision making and moral reasoning and the upcoming examination of ethics codes. According to Johnson (2001), decision-making guidelines or formats help individuals make better ethical choices. He states that a systematic approach encourages teams and individuals to define a problem, gather data, and apply ethical standards and values after which they may identify and evaluate alternative choices of action and follow through on those choices. Several ethical decision making models exist. Kidder (1995) suggests a nine-step process to bring order to confusing ethical issues: recognize that there is a problem, determine the actor, gather the relevant facts, test for right-wrong issues, test for right-vs.-right values, apply the ethical standards/perspectives, look for an alternative way, make the decision, and revisit and reflect on the decision. Lauren Nash (1989) offers a similar system which includes defining the problem,
gathering data, and examining all perspectives prior to making an ethical decision. Chritians, Rotzoll, and Fackler (1991) described another similar system, the Potter Box, which is a diagrammatic model for making an ethical decision.

Terry Cooper (1998) developed a decision making model which he calls the Active Process Approach. This model is similar to, but possibly more comprehensive than the models already mentioned. According to Cooper, individuals respond to ethical problems at four levels: expressive, moral rules, ethical analysis, and post-ethical. Cooper says that the lowest level, the expressive level, includes our emotional response to ethical situations. This response to an ethical dilemma might include sadness, fear, or frustration. Cooper states that an individual must move through this level prior to achieving the next level. The second level, which he calls moral rules, is the level at which an individual begins to consider alternatives and consequences. This is the stage at which moral rules play a key role in solving dilemmas. An individual may decide that honesty is the best policy and so ethical dilemmas should be addressed directly and according to law; an individual may decide that they will resolve the dilemma by following the organizational chain of command. Cooper states that most ethical problems are resolved at this level. Cooper states, however, that ethical problems do not truly become ethical dilemmas unless moral rules do not apply or moral rules conflict with each other. If the moral rules do not allow for such a clear pathway then the individual may need to move onto the third level; the level of ethical analysis. Ethical analysis is the level at which individuals link their values with specific actions and determine priorities. These values may relate to the ethic of care, justice, or critique as described by Starratt (1991). The physical therapist would utilize this level or the post-ethical level of decision making when resolving the dilemma involving the uninsured or underinsured patient. The post-ethical level of decision making occurs in cases when individuals are faced
with particular thorny problems. At this level perhaps the individual finds him or herself in a place where they need to consider an act of civil disobedience so that they might live within their own morality. This is reminiscent of Kohlberg's stage six level of morality (Kohlberg, 1984).

Cooper emphasizes that decision makers routinely move between these levels. He also states that when solving ethical dilemmas as part of a group it is important to recognize that group members may be functioning at different levels at the same time. The active process approach adds some elements that are missing from the other three models. The first of these new elements is the emotional component in the first level. Cooper states that emotional reaction should not drive our forces but allows that it is acceptable to vent and check our emotions to see if we are comfortable with our decisions. The second unique component in this level is the consideration of level of ethical difficulty. Some decisions are going to be more taxing than others and will require more concentrated analysis to resolve. Other ethical decision making models, such as those referenced above, tend to treat all ethical dilemmas as equally taxing.

Another component unique to Cooper's model is the link between action and character. Cooper argues that ethical character emerges over an extended period and that individuals develop moral character by repeatedly handling moral dilemmas. A fourth component of Cooper's model is the notion of moral imagination; the ability to foresee or visualize what likely consequences will come from our decisions. The fifth and final component unique to Cooper's model is balance. Cooper states that an individual should not expect to find a perfect solution but should strive, instead, to reach one that fits well within his or her moral rules, can be defended, and is congruent with their self image (Johnson, 2001). This researcher favors Cooper's active process model because it appears to be more comprehensive in nature and mirrors the developmental language of Lawrence Kohlberg (1984).
Ethics Codes

Use of Ethics Codes

Misuse or limited usefulness of an ethics code is a common theme in the literature. Ianinska and Garcia-Zamor (2006), for example, stated that individual morality alone might fail to protect the public and might not render the right choice in an ethical dilemma. Organizations attempt to improve decision making skills of employees by establishing codes of ethics or standards of conduct. These codes increase the accountability of employees and organizations to ethical norms.

Cava, West, and Berman (1995) found that ethics codes can be used in two ways: a formal approach that includes establishing a code of ethics or standard of conduct for rule enforcement, and an informal approach that uses general ethics principles for guiding decision making. In the formal approach codes of ethics are established to assist in directing an individual to decisions and actions that are in compliance with established laws, or address specific organizational concerns. Codes of ethics and standards of conduct can serve as "in-house law" to minimize legal liability, promote adherence to broad ethical principles, and contain sanctions for violations. In the informal approach general ethical principles can be used by organizations to stimulate critical thinking and assist with organizational decision-making. These informal uses are believed to be useful when used in concert with the more formal strategies but must be brought into the organization by training, example from top leaders, and through communication on matters of ethics (Cava, West, & Berman, 1995).

These findings seem to indicate that ethics codes can be of general value and match the individual needs of an organization. But are they, in practice, effectual in either regard?
Samuel Gorovitz (1988) notes that Plato held right actions to be a matter of understanding. Plato stated that to know the good is to seek the good. For Aristotle, however, understanding alone would not suffice. Aristotle stated that right actions flow from will, not from understanding alone. Gorovitz agrees with Aristotle's position and uses the Watergate scandal of the 1970s as an example. He points out that those involved in Watergate were largely intelligent and highly trained professionals. They broke the laws anyway and that this was a problem of motivation and basic human values rather than understanding. According to Gorovitz "there are a lot of people in jail today who have passed ethics courses" (Gorovitz, 1988, p. 426).

Brockitt (1996) and Henry (1995) found, in related studies, that occupational therapists may have ethical issues that are not solved through use of their ethical code. They found that, while the code of ethics for occupational therapists can support the discussion of ethical issues, it often cannot provide answers to many of the problems encountered in clinical practice and may even create further dilemmas. Atwal and Caldwell (2003) found more evidence of this when they examined occupational therapists in the United Kingdom and found that occupational therapists are unintentionally breaching a set of principles laid out in the Code of Ethics of Professional Conduct for Occupational Therapists in an attempt to keep their core values. This suggests that ethics codes can conflict with personal ethical values. It seems then, that difficulties in arriving at ethical and moral decisions in treatment and care, and related problems with usefulness of their ethics code in this regard, are not limited to physical therapists from Ohio.

Ideally an organization might create an ethics code that meets its specific needs. Verpeet, de Casterle, Arend, and Gastmans (2005) had the unique opportunity to explore views on "potential" content and functions of an ethics code for nurses in Belgium. The term "potential" is used because Belgian nurses did not have an ethics code at the time of the study. The authors
sought to explore the values that are present in a group of individuals who are seeking to create content for, and decide upon the future uses of, an ethics code. Through the use of focus groups the authors were able to determine that the nurses had an expressed opinion that an ethics code could and should be used to support professional identification in relation to nurses themselves, other professions, and society. Furthermore they found that an ethics code could provide nurses with support and be utilized as a reference upon which to base clinical decisions. According to this study an ethics code "could also serve as a guideline for nurses in acting according to their consciences and agreement with general ethical standards" (Verpeet, et al., p. 191). There were diverging opinions regarding whether an ethics code should be used as a disciplinary tool. Some of the nurses in the study felt that such use of an ethics code added value to the document, whereas others felt that such a use might restrict professional freedoms. This research illustrates that ethics codes may vary in content and use. It is logical then to assume that content and use may affect the influence that an ethics code has upon ethical thinking and behavior.

Ethics codes can have different meanings and different uses for different organizations. Linker (2005) found that the American Physical Therapy Association (APTA) Code of Ethics seems to have been developed to meet the needs of that organization. Linker found that the history of codes of ethics has most commonly mirrored the work of physician's codes of ethics. Linker notes, however, that the American Physical Therapy Association (APTA), an historically female dominated organization, developed its ethics code in a more unique fashion. As the APTA code of ethics was developed the therapists engaged in dynamic dialogue with the male physicians of the American Medical Association in the name of professional survival. Linker states that contrary to historians and philosophers, who contend that professional women have historically operated under a gender-specific ethic of care, the physical therapists avoided
rhetoric construed as feminine and instead created a business-like creed in which they spoke solely about their relationships with physicians and remained silent in the manner of patient care. This might indicate that the APTA code of ethics is based more upon a business model, suiting the needs of professional survival, rather than upon the ethic of care.

Ethics codes may communicate specific rules, but they may lack impact on important problems. Several studies found a gap between what managers hope to accomplish with codes and what is actually accomplished. For example, Robin, Giallourakis, Zilberman-Sandler, and Viener (1989) evaluated 84 ethics codes used by Business Week 1000 firms. The authors found that most of the codes read less like ethical statements and more like dictates of rules that prohibit or demand specific behaviors. The findings of the study suggest that ethics codes tend to mimic criminal law and contain few innovative ideas about how ethical standards of a business can be improved. In summary, ethics codes can be used as a law enforcement tool or to stimulate critical thinking and problem solving if they are designed to meet the specific needs of an organization. In order to be of real use in either of these instances even the most carefully designed ethics codes must have an influence on the members of an organization.

The National Association of Social Workers (NASW) is the professional organization for social workers in the United States. Social work is a profession rich in the practice of the ethic of care and justice as well as critique. It is also a profession in which ethical dilemmas are regularly encountered. Excerpts from the NASW code of ethics communicate the fact that in several instances the NASW code of ethics is more highly developed as a tool to be used in handling ethical dilemmas than the American Physical Therapy Association code of ethics. For example the NASW code of ethics states
Reasonable differences of opinion can and do exist among social workers with respect to the way in which values, ethical principles, and ethical standards should be rank ordered when they conflict. Ethical decision making in a given situation must apply the informed judgment of the individual social worker and should also consider how the issues would be judged in a peer review process where the ethical standards of the profession would be applied. (NASW, p. 1)

No such guide to ethical decision making was found in the American Physical Therapy Association code of ethics (APTA, 2006b). In addition the NASW code of ethics spells out the hierarchical order of laws and rules governing the profession. This information might prove valuable to an association member in defending their decisions.

In addition to this code, there are many other sources of information about ethical thinking that may be useful. Social workers should consider ethical theory and principles generally, social work theory and research, laws, regulations, agency policies, and any other role in codes of ethics, recognizing that among codes of ethics social workers should consider the NASW code of ethics as their primary source. (NASW, p. 1)

Again, the APTA code of ethics offers no such statement which allows the American Physical Therapy Association code of ethics to supersede other laws and rules governing the profession of physical therapy. The NASW code of ethics continues along these lines as follows: instances may arise when social workers ethical obligations conflict with agency policies or relevant laws or regulations. But when such conflicts occur, social workers must make a responsible effort to resolve the conflict in a manner that is consistent with the values, principles, and standards expressed in this code. If a reasonable resolution of a conflict does not appear possible…. (NASW, p. 1)
Additionally it is clearly spelled out in the NASW code of ethics that there is not a direct link between violation of the law and violation of the code.

…Violation of standards in this code does not automatically imply a legal liability or violation of the law. …Alleged violations of the code would be subject to peer review process. Such processes are generally separate from legal or administrative procedures and insulated from legal review or proceedings to allow the profession to consult and discipline its own members…. (NASW, p. 1)

Another way in which the NASW code of ethics is possibly superior to the code of ethics of the American Physical Therapy Association is that there is specific direction regarding payment for service. This is illustrated in an excerpt from ethical standard 1.13 of the NASW code of ethics (NASW, p. 2). "(a) when setting fees, social workers should ensure that the fees are fair, reasonable, and commensurate with the services performed. Consideration should be given to the clients' ability to pay." Consideration of the client's ability to pay for services is encouraged in Principle 10.1 of the APTA code of ethics and pro-bono service is also encouraged in Principle 10.2 but the language in the APTA code is more suggestive and less prescriptive than that used by the NASW. The NASW code of ethics also calls for specific criteria for termination of services as indicated in ethical standard 1.16, termination of services:

(c) social workers in fee-for-service settings may terminate services to clients who are not paying an overdue balance if the financial contractual arrangements have been made to clear the client, if the patient does not pose an immediate danger to self or others, and other consequences of the current nonpayment have been addressed and discussed with the client. (NASW, p. 2)
This offers a level of protection to the social worker, as well as insures that the proper communication with the client has occurred prior to termination. Again, no such language exists in the APTA code of ethics (APTA, 2006b). Language similar to that used in the NASW code of ethics and referenced above would be a logical and viable step toward providing the physical therapist with an ethical and legal solution to the dilemma outlined in this paper.

**Influence of Ethics Codes**

Is ethical thinking and behavior perceived to be an important part of an organization's values? Research shows that practicing corporate managers perceive ethical actions and decisions to be an integral part of their daily work. Mortensen, Smith, and Cavanaugh (1989) examined the extent to which practicing managers perceived ethics to be an important part of their jobs. The data were collected for the purpose of designing and improving business school curriculum. Pertinent to the present study, Mortensen, Smith, and Cavanaugh's work included an ethics/integrity dimension. The ethics code/integrity dimension included ten behavioral skills grouped under four categories. The respondents indicated that ethical considerations were less important parts of their jobs than traditional management functions and skills such as decision making, managerial leadership, initiative, and problem solving. However, ethics were rated as more important than activities such as written communications, awareness of external affairs, concern for quality and customer satisfaction, and group interaction skills. Managers clearly viewed ethical analysis, decision making and action as important in regular parts of their work lives.

Very little research was found in the literature which related use of ethics codes to their influence on decision making. Those that do exist indicate that often times ethics codes are ineffective but could be more effective if used properly. Marnburg (2000) argued that the use of
corporate ethics codes, which are used solely as an instrument in a company's image management, is morally questionable and the use of ethics codes must have the intention of achieving behavioral change or the maintenance of already superior behavior. The author conducted a survey of Norwegian professionals in business and states that, although within most business organizations codes do exist, they do not seem to influence the members of the business organization.

Pattison (2001) performed a theoretical critique of ethics codes for nurses and midwives throughout the United Kingdom and examined the extent to which professional codes may be likely to elicit "ideal type" practice. The author found that the majority of the ethics codes examined use vague terminology, combined with arbitrary values and principles, and lack of helpful ethical guidance. She also found them to exclude examples of ordinary moral experiences which a professional may encounter in practice. Because of these deficiencies she argues that these codes of ethics used in these fields in the United Kingdom are inadequate. Similarly, the extent to which ethics codes are actually used by executives when making strategic choices as opposed to being merely symbolic was examined by Stevens, Steensma, Harrison, and Cochran (2005). They performed a survey of 302 financial executives to determine their opinions regarding ethics codes and their use of ethics codes within their organization. The researchers found that the executives were in favor of ethics codes but in order for the codes to be effective the executives need to be convinced of the benefits of the codes to the firm and they also must be provided training in how to use the codes. In other words, simply formulating and distributing such codes did not appear to be adequate. Furthermore, they felt that ethics codes are useful within corporations if the executives perceived pressure from market stakeholders, such as suppliers, customers, shareholders, etc. to use them and they believed that the use of ethics codes
creates an internal ethical structure and promotes a positive external image for their firms. Finally, the executives believed that codes must be integrated into daily activities and worked into the polices and procedures of the company. Norman Bowie (1988) comes to the defense of ethics codes, stating that the public often has a cynical reaction to individual codes and feels that they are mere exercises in public relations. Bowie says that there is good reason for that public reaction and that an individual code by a particular firm on matters of industry-wide significance is in danger of being nothing but window dressing. Bowie goes on to say, however, that an industry-wide code designed to protect legitimate businesses from unethical acts of their competitors is not mere public relations, but is, rather, designed to preserve the trust and confidence of the public toward the industry itself. Industry-wide codes of ethics therefore do have a place. One of the reasons for this is that it is difficult to make regulations flexible enough to meet a wide variety of situations, especially new situations, through legislation (Bowie, 1988).

Banks (1998) examined the question of "what is the relationship between codes of ethics and ethical conduct?" She examined some of the issues surrounding several medical professions, including physical therapy, and examined the content and function of different codes to shed light on the extent to which codes of ethics enhance or inhibit ethical conduct. She found that such codes can perform a useful function in encouraging ethical reflection in debate, provided they are not treated as "tablets of stone" or rigid rule books prescribing the minutiae of professional practice.

How do employees come to their understanding of what it means to be ethical in an organization? According to Stevens (1999), it is debatable whether ethics can be taught in the workplace; however, it is recognizable that effective communication, from management to lower level employees, is critical when sending ethical messages. The findings of this study appear to
support ethics codes as a means for communicating ethical responsibility. Furthermore, she found that supervisors were influenced by their managers slightly more than their co-workers, but neither group influenced all respondents. The study also found that an ethics code exerted a strong influence on ethical decisions; however, personal values and standards brought into the workplace were more influential.

John Kultgen (1988) identified four basic inconsistencies between professional ideologies and true depictions of the profession which become evident in professional ethics codes. The first of these inconsistencies is that professions portray their groups as oriented to service rather than profit, with no affiliations to any particular social class. Kultgen states that the reality is that professions pursue high socio-economic status and differentially serve the interest of the ruling elite. The second inconsistency that Kultgen identifies is that the professions identify themselves as having the superior ability and merit, ignoring the fact that privileges of education and autonomous practice have been provided by society. Kultgen also states that professions depict professional work as somehow more elevated than non-professional work, thus establishing a social distance between professionals and other workers. Kultgen states that this is not the case and that the work of most professionals is, in fact, akin to that of certain non-professionals rather than that of the idealized professionals depicted by the profession. Finally, Kultgen states that professions depict themselves as collegial communities voluntarily subscribing to a superior ethic which makes them trustworthy to manage a monopoly over services vital to society. Kultgen states that the reality is that self-regulation, other than that designed to make professionals faithful agents of whoever pays their keep, is an illusion and suggests that the vague codification of moral rules damages the ability to enforce such rules. Kultgen goes on to say that ethical persons generally write ethics codes and formulate the codes to carry moral
authority. Society then recognizes the value of the actions promoted by the code and rewards them. These actions then, if minimally adhered to by less moral individuals, continue to carry the rewards that society has assigned to the higher moral standard under which the ethic code was written.

Kultgen (1988) stated that communication is important in professional life. He asserts that the vague language used within ethics codes assumes that there are shared assumptions but that often times this vague language causes the instrument to fail altogether. Bowie (1988) admits that using terms such as "fair dealing" and "public welfare" may be charged with being too general and vague. He states, however, that except in the use of proper names language is always general and always in need of interruption and that ethics codes should be no different.

**Influence of Ethics Education**

Does ethics education influence ethical decision making? Peppas and Diskin (2001) examined the values of current college students studying business with regard to professional and business ethics. They examined the attitudes of students who had taken a course in ethics compared to those who had not taken a course in ethics. The findings of this study indicated that neither ethics education nor recent news stories of corporate misconduct had a significant impact on attitudes of the students toward their codes of ethics. This study did uncover, however, that ethics codes offered a level of protection to professionals who were coerced into doing unethical acts of the job, but the respondents in the study otherwise indicated that work experiences, personal beliefs, personal experiences, and religious beliefs provided their primary ethical guidelines.

In a similar study Wynd and Mager (1989) performed a longitudinal study over a two-and-a-half year period. The sample in their study included business students and the study
determined that a course in business and society produced no significant effects on students' attitudes toward ethical decisions. Additionally, Luoma (1989) found that teaching the rules and guidelines of a particular profession to achieve a professional certificate or license would not ensure that students would act more ethically.

Perhaps the results of these studies indicate that the ethics education offered in professional training programs is ineffective in promoting ethical decision making. For example there is evidence that ethics education in occupational therapy has had a limited scope. In separate studies, three authors found that in occupational therapy ethics education is focused mainly on the teaching of ethics (Haddad, 1988), confidentiality in ethical issues in occupational therapy (Sim, 1996), and ethical dilemmas in occupational therapy (Barnitt, 1993). These studies seem to indicate that simply introducing ethics training into the classroom is not enough to promote its value to students. According to Puckett, Graham, and Nash (1989), medical ethics education is a matter of whether and how one chooses to have some influence on the values that are being taught in medical education.

Traditionally medical ethics education has existed to endow healthcare practitioners with practical wisdom or an ability to realize the importance of values in patient care (Loewy, 1986). Stated differently, "all of us need help confronting the limits of medical control and tangled choices presented by medical successes…we need wisdom, not knowledge alone, and wisdom is the realm of ethics" (Calleigh, 1989, p. 699). Much of the literature calls into question the effectiveness of this training, however. Loewy (1986) expresses doubt that in many medical schools ethics instruction is perceived as soft and separate from the technical considerations of medicine. What is apparent from the literature is that instruction in ethics strives to be clinically relevant and focused on day to day ethical problems encountered in medical practice (Charon &
Because of this medical education has kept up with scientific advances to a greater degree than ethics education has. Furthermore, ethics training tends to vary widely in form and content from school to school (Sanders, 1995). No matter how carefully laws and rules are written one must assume that inconsistencies will exist. Thus, a physical therapist needs to understand his or her own values and understand which rules he or she might choose to circumvent, ignore, or try to change as part of the ethic of critique and/or advanced moral reasoning.

Cleck and Leonard (1998) administered a fifty-item questionnaire to 150 graduate and undergraduate business students at a large public university. Included in the survey were seven items which were presented as scenarios on the topic of ethical behavior. The respondents were asked to identify behaviors and decisions they would make in each scenario. In some of the scenarios the fictitious organization described within the scenarios had an institutional code of ethics and in other scenarios the institution did not. The authors sought to determine if this information made a difference to the business students who took the survey. Results indicated that there was not a significant difference in ethical decision making ability between those students who were and were not told that their organization had a specific code of ethics. The authors concluded that one of the reasons for this might lie in the fact that it is not so much that the organization should have corporate codes of ethics, but the emphasis should be placed on how the codes are communicated, enforced, and used as a basis for strengthening the culture of the organization.

Ethics education is important to the present study because if a difference is found in perceived risk between groups, follow up studies may seek to determine why the difference exists. In finding a solution for the ethical dilemma outlined in Chapter 1 it is important to know
if those breaking laws and rules are doing so out of ignorance or out of intention. If individuals are breaking laws due to ignorance of the law the solution may lie in education. If individuals are knowingly breaking the law this might result in enforcement as a solution.

*Influence of Professional Role*

The present study categorizes physical therapists according to job title and examines their perception of risk of violating the laws and rules of their profession. These laws and rules include the APTA code of ethics. This researcher found no studies in the literature which specifically examined physical therapists' use of ethics codes based on their professional role. The literature does suggest, however, that individuals operating at different managerial levels may use and interpret ethics codes differently. Posner and Schmidt (1987) sent a survey to the greater than 6,000 members of the American Management Association. They sought to determine if a difference exists in beliefs regarding ethics for individuals at different managerial levels. The surveys went to groups of top executives, middle managers, and supervisory managers on an evenly distributed basis. This study yielded two key points. The first was that there was a statistically significant difference across management levels in the belief regarding the ethics of the corporation. At higher management levels there was a significantly stronger belief that the company operated in an ethical manner. When the authors asked managers whether or not they found that they sometimes had to compromise their personal principles to conform to organizational expectations, the top executives responded that they generally did not. Pressures to conform or compromise were felt more strongly by middle managers and even more strongly experienced at the supervisory manager level. Likewise when asked whether their personal values were compatible with the values of the organization nearly 20% of the
supervisory managers, 15% of the middle level managers, but less than 10% of the executives disagreed.

Another study pertinent to this discussion examined differences in managerial levels and information used to solve ethical dilemmas (Stevens, Steensma, Harrison, & Cochran, 2005). The top executives were statistically more likely than the middle managers or supervisory managers to use employees' past behavior, seniority, and value to the organization in developing a strategy to cope with an ethical dilemma. At lower management levels respondents indicated that they are more likely to use policies and procedures which exist within the organization, including professional codes of conduct, to guide them in their response to a situation in which there has been a breach of ethics. The researchers suggested that different professional roles, specifically different management roles, may have an impact on perception of the organization's ethical level, and the use of internal policies and professional codes of ethics to resolve ethical dilemmas which arise within an organization.

This research suggests that different professional roles, specifically different management roles, may have an impact on perception of the organization's ethical level, and use of internal policies and professional codes of ethics to resolve ethical dilemmas which arise within an organization.

In the interest of completeness it should be noted that these findings are not universal. Wiley (1998) conducted a study which examined perceived ethical issues and roles in employment managers based on their response to a survey. The researchers found that employment managers' perceptions of influential factors do not vary significantly according to position. Wiley found that whether male or female, whether vice president of human resources or a personnel administrator, and whether the company is large or small, human resources
professionals are influenced by the same factors without evident significant difference. This study is somewhat different in scope and applicability than the Posner and Schmidt (1987) study and the work of Steensma et al. (2005) and does not support their findings regarding different ethical behaviors and knowledge at different levels of management.

The relative lack of research conducted in this area and these differing results underscore the need for the research conducted by this researcher and presented in the present study. As mentioned in Chapter 1, it is the assertion of the researcher that physical therapists operating in different roles (i.e., clinician, administrator, or educator) may have access to different information and thus, have different experiential knowledge which might effect their perception of risk. While the studies discussed above organize professional role in a hierarchical fashion (e.g. CEO, middle manager, supervisor, etc) the present study categorizes professional role by activity (clinician, administrator, or educator) without ranking them in any pyramidal way. Regardless of this difference the studies found in the literature, and described above, suggest that different professional roles may an impact on how ethics codes are used and interpreted.

Influence of Membership in Professional Organizations

The present study categorizes physical therapists according to their membership in their professional organization (i.e., APTA member or APTA non-member) and examines their perception of risk of violating the laws and rules of their profession or their personal moral or ethical codes. These laws and rules include the APTA code of ethics. This researcher found no studies in the literature which specifically examined physical therapists' use of ethics codes based on their membership in their professional organization. The literature does suggest, however, that individuals who are members of a professional organization may use and interpret ethics codes differently.
According to Maes, Jeffery, and Smith (1998), membership in a professional organization may influence ethical decision making and knowledge of ethics codes. The researchers surveyed 250 agency branch managers/presidents, and 250 creative directors who did or did not hold membership in the American Association of Advertising Agencies (4 As). The survey instrument consisted of six questions related to knowledge of, and use of ethics codes within a respondent's daily practice. The study showed that 51% of the 4 As members who were aware of their organization's code of ethics said it had directly or indirectly influenced one or more of their decisions within the past twelve months, whereas non-members who were cognizant of the code only 25% had used the code for such purposes. The results of this study show that membership in this professional organization appeared to influence both the knowledge and use of the ethical code of conduct for this profession. Not all authors would agree. Brockitt (1996) found that professional organizations may not have the answer to ethical problems because ethical relationships are not solely based on rules and regulations.

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*Relationship of Ethics Codes to Law*

The relationship between a profession's ethics code and laws governing the profession speaks to the enforcement of an ethics code. An historical perspective on previous research related to this variable is important to a readers' understanding.
Somers (2001) conducted a study using a sample of 613 management accountants drawn from the United States to study the relationship between corporate and professional codes of ethics and employee attitudes and behaviors. He found that the presence of corporate codes of ethics was associated with less perceived wrongdoing in an organization and also that in contrast to corporate codes of ethics, professional codes of ethical conduct had no influence on perceived wrongdoing in the organization.

Ianinska and Garcia-Zamor (2006) found that individual morality is crucial for dealing with ethical issues. They state that ethics is operational when an individual makes personal choices and selects one action over another, not when decisions are imposed on the individual. Thus, use of an ethics code as an enforcement device would seem to be ineffectual.

William May (1988) noted that there are approximately 300,000 to 400,000 practicing physicians in the United States yet only a tiny percentage have their licenses revoked in any given year. The most typical method of enforcement of breaking an ethics code is to have hospital privileges, rather than licensure, revoked. May states that although such lesser disciplinary actions may be considered in any total assessment of the extent of professional self regulation they hardly solve the problem. The practitioner who is driven out of a given referral system often relocates into another circle and continues to practice. Thus, it seems that use of ethics codes as a disciplinary tool, as discussed earlier in this chapter, might be less effective than one might hope.

Risk Perception

Slovik (1987) has shown that being aware of risks in the environment allows individuals to avoid risks or to control them. Slovik also wrote that people are typically inaccurate in their risk judgments. It has been demonstrated that people overestimate the probability of unlikely but
catastrophic events such as dying from a tornado, and underestimate the probability of frequent but less catastrophic events such as dying from a stroke. Slovik (2000) performed further research which showed that people's judgments of risk are subject to biases. According to Belzer (2001) there is a discrepancy between the expert and lay perceptions of risk. The literature shows that perception of risk and risk-taking behavior vary by demographics, experience, and personal judgment. This section will provide an overview of research associated with risk and the factors that affect it.

*Theoretical Framework of Risk*

When examining risk it is useful to examine the different schools of thought within which risk has been explored. According to Taylor-Gooby and Zinn (2006) the most important approach used in researching risk in mainstream psychology is the cognitive/learning perspective. This perspective works from the assumption that humans are rational choosers within the constraints for their capacity for reasoning and learning, the experiences to which they have access, and the context of their life experiences. Within this model is a subcategory entitled the Value Expectancy Model, which states that behavior is the result of assessment of the likelihood of the success or failure of outcomes. In other words, people often evaluate good and bad repercussions and make choices based upon the expected outcomes. However, research in this field finds that people are often sensitive to factors that are not directly attached to theory and this makes their choices at times inconsistent. At times their choices may seem irrational, but there are several forces at work within this model beyond risks and rewards which are used in decision making.

Hargreaves-Heap, Hollis, Lyons, Sugden, and Weape (1992) found that people often make mistakes in evaluating and comparing risks. These researchers found that people often
develop convenient mental strategies which they term "cognitive heuristics" in order to facilitate their decision making. These include availability bias, which is the tendency to overestimate the significance of rare but striking factors; immediacy of effect, which means that results which directly follow an action tend to receive greater attention in thinking about risk than more remote consequences; and loss aversion, which states that the damage of a loss tends to be weighted more highly than the benefits of a gain when both are present in a result.

Eiser (2005) found an additional factor which affects decision making within the cognitive and learning perspective. He found that a successful learner needs to gather appropriate feedback from his or her environment in order to decide on a course of action and monitor behavior accordingly. Eiser uses the example that, most of the time, speeding drivers reach their destination safely and thus learn that the risks associated with speeding do not apply to them.

Another influence on decision making, also within the cognitive and learning perspective, was described by Johnson-Laird (1983) and is termed the mental modeling approach. This approach stems from the idea that people develop mental models as part of a process of constructing explanations. These representations tend to include concepts and rules which relate most closely to them personally. These mental models often include critical gaps and cognitive understanding of the risks that are present in the minds of the public. Thus the decision made under this form of thinking can appear non-rational.

Finucane, Slovik, Mertz, Flynn, and Satterfield (2000) found that emotional and affective factors are also significant within the cognitive/learning perspective. These researchers found that, in some instances, individuals can make emotionally based judgments to supplement or supplant rational judgments in assessing situations or making choices, particularly those situations involving time, pressure or uncertainty.
Eiser (2005) found that trust is important in making judgments regarding risk. Eiser reports that this is closely related to the affective orientation which determines basic acceptability of an action when relating that action to a risk. Similarly, Alaszewski (2003) found that trust is a strong affective component in accounts of how people decide whether or not to trust authority figures on the basis of brief interviews when they lack the technical competence to arrive at a choice on their own. Kahneman (2000) would agree with this discussion of affect having an effect on decision making involving risk, but stresses that affective issues are best understood not as a distortion of the cognitive process but simply as an unavoidable component of how people make risky choices. He states that certain aspects of an experience may have disproportionate effects on the situation and states that the importance of primacy or recency (appearing at the beginning or end) may make factors in decision making more or less important to an individual since these are more or less recent events within an individual's experience. Because of this an individual, when making a decision, may place greater emphasis on first impressions or experiences that happen within the last few minutes of an experience. Because of these various factors in decision making there has been no available basis for pure objective assessment which is independent from context and framing (Taylor-Gooby & Zinn 2006).

A second stream of research follows the empiricist psychometric approach. According to Taylor-Gooby and Zinn (2006) this approach uses evidence from questionnaire surveys, interviews, experiments and other quantitative data gathering tools and does not rely on strong theoretical frameworks. This approach assumes that risk is subjectively defined by individuals who may be influenced by a wide array of physiological, social, institutional, and cultural factors. This approach has yielded a finding that the acceptability of risk within individuals is concerned, on the one hand, with the extent to which the consequences of the risk provoke fear
and the extent to which risk is seen and known to be controlled. Furthermore this approach has yielded findings that differences in risk perception vary by gender, ethnicity, nationality, and social class.

A third perspective in which risk research has been conducted is the socio-cultural perspective (Taylor-Gooby & Zinn, 2006). The key element in this perspective is the understanding of the basic principles that underlie the way in which people see themselves and others and how this view of the relationship between themselves and others influences their interactions with individuals generally and their perceptions of risk in particular. The socio-cultural perspective has shown a wide range of cultural bases for risk perception and that cultural assumptions across social groups are powerful bases for ideas about risk.

Finally, Taylor-Gooby and Zinn (2006) state that risk theories may be examined through a framework of realism and constructionism. Realists tend to categorize perception of risk by objectively examining existing hazards without attaching additional value or meaning to these hazards. Cognitive/learning theorists typically fall into this category. They base their perception of risk on the assumption that risks are real. Constructionism, on the other hand examines the extent that social factors may, for example, influence mental modeling that generates a particular ranking of risk. These mental models may include the affect and emotional responses which play a role in risk perception.

*Demographic Effects on Perception of Risk*

Research suggests that demographic factors such as age, gender, and race may have an effect on an individual's perception of risk.

Glik (1999) showed, in his research, that younger adults, under the age of twenty-five years, tend to underestimate the risk of a traffic accident. Similarly, Glendon, Dorn, Davies,
Matthews, and Taylor (1996) showed that younger adults are prone to optimistic biases. In other words they tend to perceive their own risk as lower than that of their peers. Consistent with these findings is the work of Sivak, Soler, Trankle, and Spanghol (1989) and Rafaely, Meyer, Zilberman-Sandler, and Viener (2006). Sivak et al. performed research which suggested that older adults perceived traffic risks as greater, compared to younger adults. Older drivers (65-75 years old) assessed traffic scenes as possessing higher risk relative to younger drivers (19-21 years old). Rafaely et al. in a study of risk perception related to traffic accidents, showed that older participants, in their study, provided overall higher estimates of traffic risks. This study, and research as a whole, showed that older individuals seem to perceive the world as riskier, both for themselves and for younger people.

As stated, individuals of different genders and races seem to perceive risk differently. Finucane et al. (2000) performed research in how gender and race are related to a large range of socio-political factors that influence risk perceptions. One of the aims of this research was to provide data on how people of different genders and races perceive risks. The researchers designed a survey which contained questions on a wide variety of environmental and health hazards. All respondents were asked to consider health and safety risks to themselves and their families and to indicate whether "almost no risk", "slight risk", "moderate risk" or "high risk" from each of thirteen hazardous activities and technologies. The authors found differences in the high risk responses of males and females with the percentage of high risk responses greater for females on every item. Likewise, the researchers examined the differences between percentages of whites and people of color who rate a hazard as 'high risk' to individuals; the percentage of high risk responses was greater for people of color on every item. When the researchers examined the differences between the percentages of white males and the rest of the sample who
rated hazards as 'high risk' to individuals and to the public they found high risk responses were lower for white males on every item. In other words, white males were always less likely to rate a hazard as posing 'high risk'.

The physical therapy profession has a set of laws and rules which encourage standardized behavior and enforce these behaviors through the laws and rules of the profession. It is important to remember, however, that physical therapists are individuals with different experiential knowledge and values. It is not within the scope of the present study to examine the perception of risk among physical therapists in relation to the demographic categories discussed here. However, consideration of these group differences should be taken into account when the results of this study are considered. It is of interest that perceptions of risk do seem to differ between categories of people based, at least partially, upon life experiences. The present study will divide respondents into such categories, although these categories will include professional role and membership status in their professional organization rather than age and gender.

**Perceived Risk of Punishment and Legal Compliance**

The present study examines, in part, perceived risk of violating a law or rule governing the practice of physical therapy. There is a relative paucity of research available on perceived risk of violating laws and rules in the literature. There are a few studies that examine the perceived risk of punishment and its influence on compliance with the law. These studies come from fields other than physical therapy but still shed some light on the relationship between risk and compliance with laws and rules.

Insights into perception of risk and its relationship to compliance with law have been illustrated in literature related to traffic safety. This has been particularly true in literature that has examined the effectiveness of seatbelt laws. Williams, Wells, McCartt, and Preusser (2000)
showed in their research that selective traffic enforcement programs, where police publicized heightened enforcement prior to a period of actual highly visible seatbelt enforcement, have been effective in deterring seatbelt law violations. These results have been backed up Preusser, Williams, and Lund (1991) who did research involving phone interviews with high risk drivers. The results of this research indicated that high risk drivers admit that they fail to comply with seatbelt laws because they think that they are unlikely to be ticketed for non-compliance.

Chaudhary, Solomon, and Cosgrove (2004) conducted research which aimed to show that individuals who report using their seatbelts have a higher perceived risk of being ticketed than individuals who report using their seatbelts less often. The authors believed prior to the study that increasing concern regarding being ticketed motivates individuals to wear their safety belts. The results of this study showed that there was indeed a relationship between seatbelt use and perceived risk of being ticketed. Participants who reported wearing their seatbelts at all times while driving felt that they had a higher chance of getting a ticket than those who reported wearing their belt less.

Similar evidence of perceived risk of enforcement impacting behavior is evident in the work of Higgs-Kleyn and Kapelianis (1999). These researchers investigated the regulation of ethical behavior of professionals and ethical perceptions of South African professionals operating in the business community, specifically accountants, lawyers, and engineers. The study examined the need for an awareness of professional codes and the frequency and acceptability of pure contraventions of such codes. The researchers found that the existence of conflict between corporate codes and professional codes was experienced by few individuals between these groups. The results of this study also indicated that South African accountants, lawyers, and engineers believe that professional codes were necessary and that awareness of punitive
measures of professional codes was high among these professionals. Furthermore these professionals found it highly unacceptable when their peers contravened their ethics code. Despite these ethical tendencies the subjects of this study believed that their peers contravened their professional codes relatively often. This suggests that professionals perceive a low likelihood of detection when they contravene their codes.

Pogarsky, KiDeuk, and Paternoster (2005) investigated the process in which perceptions of threat are formed and modified. They found that risks have little effect on perceptions of the certainty of punishment for stealing and attacking and, in fact, numerable offenses corresponded with decreases in the perceived certainty of punishment for both offenses. Their study shows that offending experiences do not seem to be directly related to the consequences of these experiences. Other studies have attempted to test the correlation between perceived "objective" sanction of risk (Cohen, 1978; Erickson & Gibbs, 1978; Kleck, 2003). These studies found weak to non-existent correlations between perception of risk of punishment and actual risk of punishment. Thus, they seem to indicate that perception of punishment may be reliably measured only with great difficulty, if at all.

This information is pertinent to the present study because this study only attempts to measure risk of violating laws and rules, not risk of punishment. If this study shows that there is a difference in perception of risk of violating the laws or rules for any of the categories, a follow up question might be "why does such difference exist?" If individuals are breaking laws due to ignorance of the laws one solution might be to improve education of law and ethics. If in fact they are breaking the laws consciously a proper response might be a call for increased enforcement.
Measuring Risk Perception

Lennart Sjoberg (2000) is a leading researcher on risk. Much of Sjoberg's work has involved measurement of risk perception. Sjoberg questions whether it is possible to measure risk perception. He argues that risk can not be sensed; only dangers and threats can be sensed. He goes on to say that risk concerns the likelihood and severity of a future event, and future events can be imagined or construed, but not sensed. Sjoberg admits, however, that the term risk perception has been around for decades and despite its basically confusing meaning can be measured in much the same way that other beliefs and attitudes are measured. When measuring risk perception in this way researchers are, essentially, asking the respondent to speak of the 'likelihood' of the occurrence or severity of a future event. Sjoberg is a proponent of using quantitative means to measure risk perception. He states that:

People can be asked to make ratings of size of perceived risk on a scale, say, from 0 (no risk) through a number of defined categories to maximum risk, perhaps defined as "an extremely large risk". Such ratings have been found to be quite useful. Other, more sophisticated, ways of rating subjective intensities have been suggested and used in psychophysics and related work in perception, and also with regard to constructs and beliefs. However, these so-called ratio scaling methods have not turned out to be more useful data then the simpler category ratings and they do provoke protest from subjects who feel that they cannot give such precise estimates of their belief strength as called for in the instructions. (Sjoberg, 2000 p. 409)

In other words, Sjoberg is accepting of Likert-type rating scales for measurement of risk. He feels, however, that categorical rating scales can serve the same function as interval scales:
Logically speaking, category rating scales could be extremely misleading. Suppose one category interval is subjectively one thousand times larger than the others. In such a case, analyses that assume all intervals to be equal could be quite invalid. However, nothing suggests that such extreme deviations actually occur. And even if there are some mild deviations from strict linearity they probably play only a minor role and can be safely disregarded. As a check, some simple forms of statistical analysis can always be carried out with ordinal statistics. When this is done, results typically coincide, more or less, with those based on conventional metric analyses.

It is plausible that category rating scales carry far more information than the simple ordinal one, in particular also some valid information about the order of the intervals. If this is true, they yield ordered metric scales and it has been shown that such scales are close approximations to interval measurement. It can be concluded that psychological rating scales give close enough approximations to interval scales: restrictions on numerical assignment, posed by the scaling methods, are large enough to rule out widely divergent numerical representations. Hence, the data analyses will be robust with relation to the finer details of measurement.

However, this argument is not widely known or tends to be buried in a wealth of more or less sophisticated measurement discussions. There is frequent criticism of quantitative approaches, ranging form the naive "a four could just as well be a five" to more elaborative arguments built on the logic of measurement rather than the psychology of measurement. The result of these uninformed and destructive standpoints is a flight from quantitative methods all together. (Sjoberg, 2000 p. 410)
It seems, then, that categorical scales may be used to effectively measure risk perception. It seems that Sjoberg feels that quantitative methods, including surveys utilizing categorical scales, might be of greater use than qualitative methods.

Thus, it is commonly argued that risk perception should be studied by "soft" methods such as "depth interviews", and that surveys are necessary or even misleading. It suffices, apparently, to interview in an unstructured way a handful of persons to get an idea about risk perception in a population! Social scientists know, however, that this is indeed a very dangerous road to travel. (Sjoberg, 2000 p. 411)

It is clear that Sjoberg feels that quantitative measures involving either interval scales or categorical responses are a preferred method of data collection over qualitative techniques. Sjoberg also states that it has been shown that people can make approximately valid ratings of intensity of their beliefs, while interviews are likely to be subjected to many interviewer biases. He states that the same is true of telephone interviews. Dillman (1991) echoes these assertions. He states that people can be prompted in interviews to construct negative scenarios which have little or nothing to do with their spontaneous risk perception. Dillman also states that questionnaires are an excellent choice in terms of cost and objectivity.

Sjoberg (1999) wrote that one common argument against using mailed questionnaires is that social scientists have appeared frequently pessimistic about getting adequate response. Sjoberg argues that these problems are experienced by commercial firms rather than research being performed for academic and scholarly purposes. He states that people are "clearly less enthusiastic about spending some of their time doing unpaid work for what is obviously commercial interest" (p. 131). He goes on to state that when individuals are asked to participate in a study that they perceive as important and interesting social and political topics, such as risk
perception, they react in a different manner and are willing to participate for quite small incentives. Sjoberg reports sixty to seventy percent return rate of random samples of the population in these instances.

Suchman and Jordan (1990) seem to agree with Dillman and Sjoberg when they refute the common argument that interviewers can monitor and guide the process and correct any misunderstandings, thus lending advantage to interviewers over mailed questionnaires. They state the questions themselves appear to be a major factor accounting for answers to a questionnaire and that face-to-face interviewing can have lower reliability. Groves (1999) adds more strength to this argument by his findings that interviews of the 'depth' variety lend reason to believe that interviewers often vary the questions in an uncontrolled manner and there is no guarantee that the interviewers do not affect the results that they get.

Sjoberg (2000, p. 414) stated that his research has found that questionnaires tend to be at least as reliable as face-to-face interviews. He states "all formats gave essentially linearly related results". He adds that category scales with five to seven responses appear to be preferable to either lengthy questionnaires or interview techniques. It seems then that the use of survey research to measure risk perception has been found to be valid and reliable and lacks some of risks inherent in qualitative research.

Sjoberg also stated that perceived risk is often not a good indicator of demand for risk reduction. He states that this is because risk reduction is more closely related to expected severity of consequences. He states that it does matter whether the hazard is defined as a consequence of a risk or if the hazard is measured as simply a risk generating activity Sjoberg (1999). It must be clear that this study is not measuring the risk of consequence because, as Sjoberg has shown, there is not a strong link between perception of risk and perception of punishment.
Finally, Sjoberg states that "the quantitative approach tries to do the opposite from the qualitative one; instead of generating more and more details it is a way of singling out a few dominating themes" (Sjoberg, 1999, p. 133). Thus it seems that the methodology for the present study as outlined in Chapter 3 is sound.

**Summary**

There is, perhaps, an inverse relationship between the amount and quality of the previous research within a content area and the need for future research within that area. One might make the arguable assertion that a review of the literature which produces a plethora of research articles which are of very high quality and which address the research question in a comprehensive manner come from a field in which the research is being conducted in a more or less adequate fashion. This is not to say that future researchers will not make significant contributions to the body of knowledge. The contributions may however, in some instances, be at risk of being considered to be less pioneering.

The available literature pertinent to the variables which will be examined in this dissertation has produced an uneven harvest of information. Concerns regarding the applicability of the literature to the dissertation remain, however. An overview of the findings reveals, however, that the variables to be examined in this dissertation have an historical context and have been utilized by past researchers to explore content area similar to that which will be explored in this dissertation. Thus, the literature does support, in a practical sense, the need for the research which will be conducted in this dissertation and lends credence to the methodology which will be used.
CHAPTER III. METHODS

This chapter discusses the research design, provides an explanation for how participants were sampled and screened for inclusion or exclusion and categorized within the independent variables, discusses instrumentation and data collection, and includes proposed methods of data analysis.

Research Design

This study used a causal-comparative research design to examine the relationship between the independent variables of professional role (three levels) and APTA member status (two levels) and the dependent variables of perception of risk of violating a law or rule governing physical therapy in Ohio, and perception of risk of violating a personal moral or ethical value. The independent variables were divided into six categories: clinician/APTA member, clinician/non-APTA member, administrator/APTA member, administrator/non-APTA member, educator/APTA member, and educator/non-APTA member. A causal-comparative design was appropriate since the researcher was attempting to determine the strength of the relationship between these variables. The researcher compared the level of perceived risk between groups. The study was not experimental in nature and did not seek to determine which independent variables best predict level of perceived risk. The purpose of this study was to examine the job category differences between professional role (educator, administrator, or clinician), and APTA membership status to the perception of risk that individuals in each category hold of violating a rule or law governing the practice of physical therapy in Ohio, or their personal moral or ethical values, when encountering an uninsured or underinsured patient, as described in Chapter 1. Physical therapists in each of these categories may have had different experiences from those in other categories, which might effect their perception of risk.
There are two dependent variables in this study. The first dependent variable is perceived risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma. The second dependent variable is the perceived risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma. Both types of perceived risk were measured on an ordinal scale ranging from 1, "Highly unlikely" to 5, "Highly likely".

The independent variables were categorical and the dependent variables were quantitative. The study will attempt to identify the cause for an effect that already exists. There was no manipulation of the variables by the researcher.

Participants

To control for possible threats to internal validity the participants must have met two selection criteria in order to be included in the study: (1) He or she must have been currently licensed to practice physical therapy in Ohio and must have held his or her current license for the previous two years, (2) He or she must have practiced physical therapy in Ohio for the previous two years.

Educators of physical therapist assistants were excluded from the study. It was and is the assertion of the researcher that physical therapists who teach in physical therapist assistant education programs may have experiences and knowledge, unique to this professional role, that might create a confounding variable. This is discussed in further detail elsewhere in this chapter.

A licensure cycle is the period of time that a physical therapist may hold a license to practice physical therapy prior to renewal (APTA, 2006a). In Ohio, two years is the length of one licensure cycle (OT/PT/AT Board, 2006). It is the assertion of the researcher that two years of
practice within the profession allows an individual to receive the amount of literature and base knowledge that he or she needs from his or her professional organization, as well as the state licensure board, so that any information disseminated during the activities of gaining and maintaining a physical therapy license will have been gained prior to responding to the survey.

The original plan for this study included additional requirements that the participant must be currently practicing only in Ohio and have never practiced in a state other than Ohio and that he or she must have received their physical therapy education in Ohio. The original reasoning behind these criteria was that the researcher supposed that individual physical therapists that practice outside of the state of Ohio, even if they were Ohio residents practicing jointly in Ohio, were subject to different (or additional) state laws than those practicing solely within Ohio. These individuals would also have been governed by a licensure board other than, or in addition to, the Ohio OT/PT/AT board. Because of this they may have had significantly different experiences than those who practice only under Ohio law and received information regularly disseminated by a governing body other than the OT/PT/AT board. The researcher had similar concerns regarding the education of non-Ohio physical therapy students and the training they received which was based upon different state laws. These requirements were dropped from the screen for inclusion following data collection for two reasons. The first reason was that the researcher was surprised to learn of the high number of physical therapists in Ohio that fit into these categories. Applying either screen reduced the usable sample by nearly 40% and applying both screens reduced the usable sample by more than two-thirds. Second, the researcher originally included these screens because he presumed that they would affect relatively few individuals and because he felt that education or work experience outside of Ohio might represent an experiential difference which would effect a respondent's perception of risk. Neither
of these assumptions was proven to be correct and so these categories were examined but not included as reasons for exclusion. This is discussed further in Chapter 4.

Individuals were asked to self-identify their job category as clinician, administrator, or educator. Some individuals may operate in multiple roles. To allow for this, respondents were allowed to self-identify as a member of more than one category.

The researcher asserts that most physical therapists, regardless of professional role, practice clinically. Thus, most physical therapists will have access to the information and experiential knowledge of a clinician. Because of this, if an individual is considered to be both an administrator and a clinician, he or she was categorized as an administrator in the study. If an individual respondent was currently practicing as a clinician but self-identified as having operated in the role of administrator for one licensure cycle or longer at any time during his or her career prior to responding to the survey, he or she was categorized as an administrator in the study. For the same reason, if an individual identified himself or herself as both an educator and a clinician, he or she was categorized as an educator in the study. If an individual respondent was currently practicing as a clinician but operated in the role of educator for one licensure cycle or longer during their career prior to responding to the survey, he or she was categorized as an educator in the study.

The original plan for this study would have excluded individuals who have spent one licensure cycle or longer as both an educator and an administrator. The original reason for this is that the researcher supposed that such an individual might have had likely access to information and have had experiential knowledge of members of all three job categories. One of the purposes of this study was to compare perception of risk between members of each job category. Thus, the researcher supposed, that an individual with such unique work experience would not add to such
a comparison. This requirement was dropped from the screen for inclusion following data collection for two reasons. The first reason was that only 17 individuals identified themselves as educator/administrator/APTA member and only 14 respondents identified themselves as educator/administrator/ non-APTA member. These numbers are too small to produce statistically sound data, but were large enough to greatly reduce the number of educators included in the study. In retrospect the researcher is not surprised by the outcome. Physical therapy education programs tend to have fewer than ten faculty members. Among these one must assume the presence of a director, assistant program director, and Academic Coordinator of Clinical Education. Each of these is an administrative role. Additionally it is quite easy to imagine that educators, like many other physical therapists, served in an administrative capacity prior to entering higher education. For these reasons it is difficult to separate administrative experience from the experience of most educators. Thus, this screen was excluded from the study.

Originally the researcher planned to exclude individuals who identified themselves as having "...gained an exceptionally high level of knowledge of the laws and rules governing physical therapy in Ohio by means other than through the curriculum offered in (their) entry-level physical therapy education or through information disseminated on a routine basis through the APTA or OT/PT/AT board". The researcher's intention in applying such a screen was to exclude those statistical outliers such as physical therapists who hold a law degree, serve on the OT/PT/AT Board, or teach ethics or law in an educational setting. Greater than 21% of all respondents identified themselves as having such expertise. This result led the researcher to believe that the question was in some way misinterpreted by many respondents. Further analysis of the responses from the self identified "experts" versus the "non-experts" showed no significant
difference. For these reasons use of this screen was discontinued. This is discussed further in Chapter 4.

Within physical therapy education reside physical therapists who educate physical therapy students and also physical therapists who educate physical therapist assistant students. This presents experiential differences between the two types of educator. Physical therapist assistants are not bound to the APTA code of ethics. Rather, they follow the Standards of Ethical Conduct for the Physical Therapist Assistant (APTA, 2006e). Physical therapist assistants are not the focus of this study because they do not evaluate the patient or create treatment plans for the patient. Thus, the physical therapist assistant does not make the decisions necessary to resolve the ethical dilemma presented in this study. This researcher was an educator of physical therapist assistant students and is currently an educator of physical therapy students and asserts that physical therapists who teach in physical therapist assistant education programs do not teach the APTA code of ethics to their students in the same depth as those teaching in physical therapist education programs. The researcher also believes that physical therapist assistant educators spend more time teaching their students the Standards of Ethical Conduct for the Physical Therapist Assistant. Because of this it is possible that the physical therapist assistant educators do not share the same professional experiences and knowledge that a physical therapist educator would have. Any physical therapist that identified himself or herself as spending the majority of their professional time teaching physical therapist assistant students was excluded from the study.

For purposes of inclusion in the category of 'APTA member' the individual must have held current membership in the American Physical Therapy Association and have held this membership for a period of one licensure cycle or longer prior to responding to the survey.
Those individuals who have not held membership in the American Physical Therapy Association (APTA) or have held membership for a very limited period of time may have had significantly different experiences than respondents who are APTA members.

No limits were placed on age, ethnicity, gender, or socio-economic status.

Participant Selection

According to the OT/PT/AT board there are 6,635 licensed physical therapists in Ohio (OT/PT/AT, 2006). Because the exclusion criteria was applied after the questionnaire was returned the researcher needed to send more surveys than might have otherwise been needed for statistical soundness in order to insure sufficient numbers of respondents. The researcher anticipated that he would likely receive enough responses to achieve statistical soundness and acceptable representation by sending invitations and links to the questionnaire to one-third of the physical therapists in Ohio. Ultimately additional survey invitations were sent. This is discussed further in Chapter 4.

The researcher accurately predicted that a practical problem existed in finding enough respondents within each category to achieve validity. It was the correct prediction of the researcher that the majority of the individual respondents were primarily involved in providing patient care and would thus categorize themselves as clinicians. Thus, it was likely that the study would gain a large enough response from clinicians to provide validity within that category. It was the further correct assertion of the researcher that, although there are undoubtedly fewer individuals who might categorize themselves as administrators, the number of respondents that do so would still be sufficiently large to provide validity. The researcher was concerned that the lower number of educators within the state of Ohio would provide a problem in gaining a sufficiently large sample by using stratified random sampling. Statistics gathered from the APTA
website indicated that there are ten institutions of higher learning in Ohio that offer entry-level degrees in physical therapy (APTA, 2006d). These ten institutions employed 89 full time faculty members at the time of the data collection phase of this study (APTA, 2006d). Additionally, the researcher was, and is, a full-time faculty member at a physical therapy education program in Ohio. Because the researcher had openly discussed the dilemma presented in this study with his co-workers, his fellow faculty members were excluded from the study. Excluding the faculty members at the researcher's university brought the number of full time physical therapy educators to 78. This placed the study at risk of gaining a number of responses that was too low to provide validity if simple random sampling was used. This population was over-sampled in order to promote slightly more equal numbers of physical therapists allocated to each of the three professional categories of clinician, administrator, and educator. To allow more proportionate sampling of each of the three strata, invitations to participate in the study were sent to all 78 of the aforementioned faculty members in the state of Ohio.

From the list of therapists acquired from the OT/PT/AT board, a random number was chosen and the therapist at that number on the list served as the starting point for randomly choosing the therapists. Every third therapist on the list, after removing educators, and starting from the first randomly chosen therapist, was selected as a participant. Thus, the population included all licensed physical therapists in Ohio who met the inclusion criteria. The accessible population included all licensed physical therapists in Ohio who were drawn in a simple random sample and met the inclusion criteria, and all educators within the state with the exception of the faculty at the researcher's university. Due to undeliverable addresses and a lower than hoped for response rate an additional one-third of physical therapists on the OT/PT/AT list were sampled. This is discussed further in Chapter 4.
At the time of data collection for this study approximately 65% of physical therapists, nationwide, held membership in the APTA. It was the correct assertion of the researcher that the sampling methods described above would yield sufficient numbers of APTA members and non-APTA members within each professional category to provide validity.

Instrumentation

The tool utilized to obtain data was a self-reporting questionnaire. The questionnaire that was used in this research was the Physical Therapy Risk Perception Measurement Instrument (PTRPMI) and was carefully designed for ease of use and to elicit a high response rate. A copy of the PTRPMI is included in Appendix B. Dillman (1991) has shown that questionnaires can be effective in gathering data on perception of risk.

The researcher crafted the PTRPMI to elicit measurable responses. The PTRPMI utilized resolutions depicting an uninsured or underinsured patient seeking treatment from a physical therapist. The respondent was asked to envision him or herself as the physical therapist responding to each resolution. Separate resolutions to the dilemma were created which corresponded to Weiner's (2001) solutions described in this study: (a) refer the patient to a safety net provider, such as a public health clinic; (b) forego indicated tests and therapies because of costs; or (c) reduce, or eliminate, fees by fee waivers or other "adjustments" in billing. Although Weiner did not list it, a fourth solution exists. Resolution (b) above might include denying ALL services to the patient or providing only those that are affordable to the patient or covered through a third party payor. Because of this Weiner's three solutions are described in four resolutions in the questionnaire.
Each resolution was varied to indicate a possible action which might be taken on the part of the respondent. Two survey questions followed each resolution and sought to determine the likelihood of (1) violating a law or rule governing the practice of physical therapy in Ohio and (2) violating a personal moral or ethical value. For each item, participants were asked to indicate a degree of likelihood, from 'highly unlikely' to 'highly likely'. There was no correct way to respond to any of the questions other than as reflecting the individual respondent's perceived likelihood of violating the laws or rules governing physical therapy in Ohio, or their personal moral or ethical values. Of interest only was consistency (or lack thereof) across the six groups of physical therapists with respect to their perception of risk. Reasons for use of the term 'likelihood' to measure perception of risk have been described in Chapter 2.

**Instrument Development**

According to Fanning (2005) developing a 'good' instrument usually takes a fair amount of time and effort and a considerable amount of skill. The researcher was aware of these challenges but felt that the development of the PTRPMI was necessary because no usable measurement tool was found, despite an extensive review of the literature.

One of the first steps to developing a new instrument is to review pre-existing instruments that measure similar variables (Fanning, 2005, Fraenkel & Wallen, 2006). If practical, the researcher should strive to follow the same format or salvage some of the items from these pre-existing instruments. This researcher was successful in this regard. Younglove, Kerr, and Corey (2002) used a format similar to the PTRPMI to determine perceptions of police officers regarding whether a violation of law occurred in different instances of domestic violence between same-sex couples. These researchers categorized respondents in a survey that used a five-point Likert-type scale to determine perception of violation of law given differing
resolutions. These researchers validated the survey instrument and used it successfully to compare responses between groups. The PTRPMI is similar in scope, length, style, terminology, and design to Younglove's instrument.

Fanning (2005) suggests that the researcher begin to design a survey by compiling and/or writing items, making sure that, in the researcher's judgment, each is logically valid. That is, that the item is consistent with the definition of the variable. Fanning also encourages the researcher to ensure that the vocabulary is appropriate for the intended respondents.

The PTRPMI utilizes several questions to determine whether a subject is eligible for inclusion in the study. These questions are imbedded within the instrument and consist of multiple choice (yes/no) responses to questions pertaining to past professional experiences. Those who qualified for inclusion in the study were categorized by three levels of professional role and two levels of APTA membership status, and were further divided into professional categories (administrator/APTA member, administrator/non-APTA member, clinician/APTA member, clinician/non-APTA member, educator/APTA member, educator/non-APTA member). Additional demographic multiple choice questions were included. These questions call for self identified information including entry-level education. These data will not be utilized in this study but were gathered for potential use in future studies. The questions that follow each resolution call for perceived likelihood of violating a law or rule governing physical therapy practice or violating a personal moral or ethical value and utilize a five-option response. This will be further discussed in the data analysis section of this chapter.

Fraenkel and Wallen (2006) state that the next steps in developing an instrument include making sure that each item is a measure of its variable and is understandable, providing clear instructions regarding the completion of the survey, and making sure the instrument is not
too long or repetitious. The researcher endeavored to achieve these things and utilized a focus
group to ensure that he was successful. Feedback from the focus group, and resultant changes to
the survey, are discussed later in this document.

Instrument Formatting

The formatting of the survey should add to its clarity, make it easier to complete, and
thus, improve its response rate (Dillman, 1991). Formatting refers to how the questionnaire is
laid out and how its information is organized and presented. A well formatted instrument makes
it easier for the respondent to read and complete it (Bradburn, Sudman, & Wansink, 2004). In
addition, a well formatted instrument will reduce measurement error as respondents will be more
likely to follow the flow of the survey and less likely to misread or overlook questions (Dillman,
1991). Thoughtful formatting addresses respondent motivation in part by reducing the
respondent's apprehension in their involvement in and performance on the instrument and
increasing their trust in the purpose of the survey (Dillman, 1991). Dillman recommends that
researchers keep questionnaires rather brief because those that are too lengthy can discourage a
respondent and decrease response rate. Similarly, use of open-ended questions has been shown to
lower response rates. Because of this the researcher has designed the PTRPMI so that it should
be clear, easy to use, and avoids use of open-ended questions. Fanning (2005) stated that the
items for each variable should be distinct. In general, a particular item or question should be used
for only one variable. The researcher followed the suggestions of these authors in the design of
the PTRPMI.

Dillman (1991) also recommends that response types, such as multiple choice or Likert
scales be grouped so that a respondent does not need to switch formats too often. For these
reasons Dillman also recommends that researchers keep the layout and amount of answer options
consistent. According to Dillman the proper number remains a topic of debate but a general rule of thumb is to keep the number 7, plus or minus 2. In the present study questions pertaining to likelihood of violating a law, rule, or personal value have been limited to 5 responses and the responses of all (yes/no) multiple choice questions are consistently ordered. Following Dillman's advice, the researcher also has attempted to keep all language in the questions and responses free from bias. Also, confidential information and demographic information that might be used to identify an individual was not used.

According to Dillman (1991) in creating a survey, visual comprehension is supported by simplicity, regularity, and symmetry. The researcher followed these suggestions in the development of the PTRPMI. Complete directions for completion of the survey were written according to Dillman's recommendations. The directions for completing the PTRPMI include a description of how confidentiality is ensured and information regarding Human Subjects Review Board (HSRB) approval. Additionally the PTRPMI instructions include notification that the survey is of no risk known to the researcher, participation is not reimbursed, and that the respondent may withdraw from the study at any time without prejudice.

To increase ease of use and increase response rate Dillman recommends using dark print for questions and light print for answer options, placing answer spaces consistently on the same part of the page like the right or left, keeping answer options vertically inclined, and keeping negative and positive orientation the same for all questions. The researcher included these suggestions in the PTRPMI. A copy of the PTRPMI is included in Appendix B.

Validity and Reliability

The researcher formed a focus group of physical therapists and performed needed testing, as described by Fanning (2005) and detailed below, to determine usefulness and validity of the
tool prior to its use in this study. Face validity and content validity were established for the survey instrument through consultation and administration of the survey instrument to a panel of experts. This panel was composed of nine physical therapists purposefully selected by the researcher. Three of these physical therapists were individuals who worked primarily in the role of clinician, three were individuals who worked primarily in the role of administrator, and three were individuals who worked primarily in the role of educator. These experts reviewed the survey items for content validity. The researcher asked them to review the survey for format as well as content. Suggestions for changes for improvement of the survey were welcome and needed changes were made to the survey. This piloting process yielded several suggestions for improvement. The pilot group noted that the questionnaire contained reversed orientation to yes/no responses on questions 10, 11, and 13. These questions were revised to improve clarity and promote uniformity in yes/no responses. Per the suggestion of the pilot group different fonts were utilized for resolutions versus responses on questions 1-8. This helped to delineate the resolution from the survey question. Also, the scenario, which unlike the resolution did not change throughout the first eight questions was, nonetheless, repeated prior to each resolution for reader convenience. Additionally, on the piloted version of the questionnaire question 18 and question 19 only required a response from those that indicated that they were clinicians in a previous question. Despite this the technology required a response from all participants prior to allowing them to move to later questions. This potentially serious problem was identified by the pilot group and was easily corrected in the final version of the PTRPMI.

Procedures

Before the data collection began the project received approval from the Human Subjects Review Board (HSRB) at Bowling Green State University. Following HSRB approval, a list of
addresses of licensed physical therapists was obtained from the OT/PT/AT Board. The researcher utilized this list to select a simple random sample and contacted the resultant sample. As has been described, selection of educators in Ohio for inclusion in the study involved purposive sampling and the selection of clinicians and administrators involved random sampling.

The researcher sent invitations containing a link to the questionnaire's website to all those selected to participate. The individuals that provided e-mail addresses to the OT/PT/AT Board were sent an invitation and link to the web-based questionnaire via e-mail. Those without reported e-mail addresses were sent invitations with a link to the website via U.S. mail. Additional information regarding the number of mailings is included in Chapter 4 of this document. In all cases the introductory letter provided information regarding the rights of the respondent as discussed above.

Research Questions

(1) Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role?

(2) Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by APTA membership status?

(3) Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role and APTA membership status?
(4) Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role?

(5) Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by APTA membership status?

(6) Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role and APTA membership status?

(7) What is the relationship between the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio if treatment is not provided to or arranged for the uninsured or underinsured patient in the dilemma and the perceived risk of violating personal moral or ethical values in the same situation?

Data Analysis

The researcher tabulated the results of the completed surveys and assessed the data received. Data collected from questionnaires which were included in the study were analyzed by descriptive and inferential techniques.

Descriptive Statistics

The dependent variables in this study were perceived risk of violating laws and rules of the profession and risk of violating personal moral and ethical values. Perception of risk of violating the laws and rules of the profession was measured in questions 1, 3, 5, and 7 on the PTRPMI. Perceived risk for each resolution was demonstrated by calculating the mean response on each of these questions. Overall perceived risk of violating a law or rule was demonstrated by
calculating the mean of all responses on each of these questions. Perception of risk of violating personal moral or ethical values was measured in questions 2, 4, 6, and 8 on the survey instrument. Perceived risk for each resolution was demonstrated by calculating the mean response on each of these questions. Overall perceived risk of violating a personal moral or ethical value was demonstrated by calculating the mean of all responses of all four of these questions.

The mean and standard deviation was calculated for both dependent variables across all 6 categories (clinician/APTA member, clinician/non-APTA member, administrator/APTA member, administrator/non-APTA member, educator/APTA member, and educator/non-APTA member). These results are described in narrative and depicted through the use of tables in Chapter 4.

Inferential Statistics

Data from the completed surveys was entered into SPSS for analysis. Of particular interest were differences between the groups based upon how each of the items was rated, not on total questionnaire score. The dependent variables in this study were perceived risk of violating a law or rule of the profession or violating a personal moral or ethical value. Each of these dependent variables had four measures which are reflected in the four resolutions that the respondent was asked to respond to. The primary focus of the analysis was on the main effects of each of the two independent variables—professional role and APTA membership status—and not on the interaction effects between them because, conceptually, these comparisons across the six groups are not as important as the comparisons across levels of each independent variable separately.
The two dependent variables were measured on a five-item scale which was assessed categorically. The five categories were; 'highly unlikely', 'somewhat unlikely', 'neither likely nor unlikely', 'somewhat likely', and 'highly likely'. In SPSS these responses were numerically coded with scores of 1-5, with the higher numbers assigned to the response, for each question, which indicates a higher understanding of the laws and rules, as well as moral and ethical values. For example, in 'Resolution A' a physical therapist who has a higher understanding of the laws and rules of the profession should recognize that there is a high likelihood of violating the laws and rules of the profession, thus on question number one a response of 'highly unlikely' received a score of "1". The other, intermediate responses received scores of "4" for a response of 'somewhat likely', "3" for 'neither likely nor unlikely', and "2" for a response of 'somewhat unlikely'. A response of 'highly likely' will receive a score of "5".

Resolutions A, C, and D depicted scenarios in which laws and rules of the profession are broken and also a situation which was likely to be ethically and morally unappealing to a physical therapist. Because of this a response of 'highly likely' were anticipated on questions 1, 2, 5, 6, 7, and 8. These questions were coded in SPSS as indicated above. 'Resolution B' depicted a scenario which a physical therapist should recognize as legal and ethically and morally appealing. For this reason an anticipated response from a knowledgeable physical therapist would be 'highly unlikely' for questions 3 and 4. Thus questions 3 and 4 were coded in the reverse order of questions 1, 2, 5, 6, 7, and 8.

Different questions were statistically analyzed by separate methods, each matching the variables within that question. Table 4 indicates the method of analysis used for each question.
<table>
<thead>
<tr>
<th>Research question</th>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Statistical test</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Does the perceived level of risk of violating the laws and rules…differ by professional role?</td>
<td>Professional role</td>
<td>Perceived risk of violating laws and rules</td>
<td>ANOVA</td>
</tr>
<tr>
<td>(2) Does the perceived level of risk of violating the laws and rules…differ by APTA membership status?</td>
<td>APTA membership status</td>
<td>Perceived risk of violating laws and rules</td>
<td>t-test of independent samples</td>
</tr>
<tr>
<td>(3) Does the perceived level of risk of violating the laws and rules…differ by professional role and APTA membership status?</td>
<td>Professional role and APTA membership status</td>
<td>Perceived risk of violating laws and rules</td>
<td>Factorial ANOVA</td>
</tr>
<tr>
<td>(4) Does the perceived level of risk of violating personal moral or ethical values …differ by professional role?</td>
<td>Professional role</td>
<td>Perceived risk of violating personal moral or ethical values</td>
<td>ANOVA</td>
</tr>
<tr>
<td>(5) Does the perceived level of risk of violating personal moral or ethical values …differ by APTA membership status?</td>
<td>APTA membership status</td>
<td>Perceived risk of violating personal moral or ethical values</td>
<td>t-test of independent samples</td>
</tr>
<tr>
<td>(6) Does the perceived level of risk of violating personal moral or ethical values …differ by professional role and APTA membership status?</td>
<td>Professional role and APTA membership status</td>
<td>Perceived risk of violating personal moral or ethical values</td>
<td>Factorial ANOVA</td>
</tr>
<tr>
<td>(7) What is the relationship between the perceived level of risk of violating the laws and rules…if treatment is not provided to or arranged for the uninsured or underinsured patient in the dilemma and the perceived risk of violating personal moral or ethical values in the same situation?</td>
<td>N/A</td>
<td>Perceived risk of violating laws and rules AND Perceived risk of violating personal moral or ethical values</td>
<td>MANOVA</td>
</tr>
</tbody>
</table>
CHAPTER IV. RESULTS

This chapter presents the results of the analysis of the data in the study, beginning with a description of the participant demographics and a brief explanation of the data collection process followed by an explanation of the analyses applied to each research question.

The purpose of this survey study was to examine the relationship between two independent variables, (1) Professional role of the physical therapist, and (2) APTA membership status, and two dependent variables, (1) perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the patient in a case dilemma, and (2) perceived risk of violating personal moral or ethical values in the same situation. The first independent variable, professional role, was divided into three levels: administrator, educator, or clinician. The second independent variable, APTA membership status, has two levels (member or nonmember). Since a member of any of the three professional role categories can hold or not hold membership within the APTA, there are six possible categories into which a respondent could fit.

Description of the Participants

The target and accessible population for this study consisted of physical therapists in Ohio. As has been discussed, the OT/PT/AT Board provided the researcher with contact information for each of the 6,635 physical therapists in the state of Ohio. The plan for data collection called for a random sampling of one-third of these physical therapists. Physical therapists that provided email addresses to the OT/PT/AT Board were sent invitations by email that contained a link connecting them to the electronic survey. Those who did not provide an email address to the OT/PT/AT Board were sent a hardcopy letter via U.S. mail that provided them with a URL address to connect them to the electronic survey. The first wave of collection
consisted of 2,211 invitations. Of these, 670 hardcopy letters were sent and 34 of these were
returned as undeliverable. This yielded 634 hard-copy invitations that were assumed to have
been delivered. One thousand five hundred and forty individuals provided an e-mail address to
the OT/PT/AT Board and the researcher sent each of these individuals an electronic invitation
that included a link to the survey web site. Two hundred and fourteen of these e-mails were
returned as undeliverable. This yielded 1,326 letters that were assumed to have been delivered.
Thus, 1,963 email invitations were assumed to have been delivered.

Approximately 72 hours after sending the first wave of invitations the researcher noted a
slower than expected response rate. This finding, combined with the fact that the researcher was
surprised at how simple and time-efficient it was to conduct these mailings, sought and received
approval from the HSRB at Bowling Green State University to send out survey invitations to an
additional, randomly selected one-third of the physical therapists on the OT/PT/AT mailing list.
To compile a mailing list of the second one-third of the physical therapists on the OT/PT/AT
mailing list the researcher took the remaining physical therapists on the list and chose at random
the number two. Beginning at number two on the list of unused email addresses the researcher
sent an invitation to every second physical therapist on that list. This yielded a mailing list of
2,212 physical therapists. Of these 2,212 individuals 680 had not provided email addresses to the
OT/PT/AT Board and so they were sent hard copy invitations via U.S. mail. Of these 680 letters
37 were returned as undeliverable for a total assumed delivery of 643 letters. Of the 2,212
individuals in the second wave of invitations 1,532 provided the OT/PT/AT Board with email
addresses, and this group was sent e-mail invitations. Of the 1,532 individual emails sent, 217
were returned as undeliverable for a total of 1,315 assumed delivered. The two waves yielded a
total of 1,279 letters, which were assumed to have been delivered and 2,641 emails, which were
assumed to have been delivered. Thus, 3,920 invitations were believed to have been delivered to the intended recipients.

The survey website distinguished between responses received through the email link and those received through the URL address. Because of this the researcher knows that 476 responses were received as a result of the email invitation and 40 were received through the paper invitation sent by U.S. mail. Thus, the email response rate equaled 18.0%, the paper letter/URL response rate equaled 3.1%, and the total response rate equaled 13.2%. Despite this rather low response rate the researcher received 516 responses and, encouragingly, there were a suitably large number of respondents in each of the categories that the researcher sought to examine. Because of this the researcher feels that the data collection process was a success.

Results of the data collection are included in Table 5.

Table 5

Survey Delivery and Response

<table>
<thead>
<tr>
<th>Delivery Method</th>
<th>Invitations Sent</th>
<th>Undeliverable Invitations</th>
<th>Invitations Delivered</th>
<th>Questionnaires Returned</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. Mail</td>
<td>1350</td>
<td>71</td>
<td>1279</td>
<td>40</td>
<td>3.1%</td>
</tr>
<tr>
<td>E-Mail</td>
<td>3072</td>
<td>431</td>
<td>2641</td>
<td>476</td>
<td>18.0%</td>
</tr>
<tr>
<td>Total</td>
<td>4422</td>
<td>502</td>
<td>3920</td>
<td>516</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

Application/non-Application of Screens

Once the data were collected respondents were categorized into groups. Originally the study design included exclusion of individuals who currently held, or had ever held, a license to practice physical therapy in any state other than Ohio. This would have excluded 40.2% of respondents from the survey. There was no means by which the researcher could have known
what the percentages of these individuals were prior to obtaining the results of the questionnaire. Rather than lose such a high number of respondents the researcher opted to run a t-test comparison between those who only held Ohio licenses and those who currently or at one time held out of state licenses. The results of this t-test yielded no significant difference between these groups in terms of personal moral or ethical values \((p=.850)\), or laws and rules governing the practice of physical therapy in Ohio \((p=.932)\). Thus, although this exclusion criterion was not applied, it is highly likely that there would not have been a significant difference in the results of this survey if this screen had been applied.

Similarly, the original study design included exclusion of individuals who did not receive their entry-level physical therapy education within the state of Ohio. Again, there was no means to determine, in advance of the study, how many respondents this would omit. The result was that 37% of all respondents received their physical therapy education outside of the state of Ohio. Rather than exclude such a large number of individuals the researcher ran a t-test comparison on those individuals who were educated in physical therapy programs located within the state of Ohio versus those that received their entry level physical therapy education at physical therapy programs outside of the state of Ohio. The results of the t-test yielded no significant difference between these groups with respect to personal moral or ethical values \((p=.488)\) or laws and rules governing the practice of physical therapy in Ohio \((p=.454)\). Thus, although this exclusion criterion was not applied, it is highly likely that there would not have been a significant difference in the results of this survey if this screen had been applied.

The original research design called for the exclusion of individuals who identified themselves as having exceptional expertise in the laws and rules governing physical therapy in the state of Ohio, other than that received through information regularly disseminated by the
OT/PT/AT Board or the APTA. This screen was intended to exclude individuals with exceptional levels of expertise, such as physical therapists who also held law degrees, physical therapists who served on the OT/PT/AT Board, or physical therapists who taught law and/or ethics in a physical therapy education program. The researcher was surprised to discover that 21% of respondents indicated that they had such exceptional expertise. The researcher believes that such a high number of individuals claiming exceptional expertise suggest a likelihood that this question was misinterpreted by a large number of respondents. Rather than exclude such a large number from the study the researcher ran a $t$-test comparison between the responses of the experts versus the non-experts and found no significant difference in terms of personal moral or ethical values ($p=.959$) or laws and rules governing the practice of physical therapy in Ohio ($p=.641$). Thus, although this exclusion criterion was not applied it is highly likely that there would not have been a significant difference in the results of this survey if this screen had been applied.

Finally, the original research design of this study called for the exclusion of those individuals who indicated that they held status as both a physical therapy educator and an administrator. A total of 17 APTA and 14 non-APTA members indicated that they held this dual status. This presented a situation in which there were not enough individuals within each of those categories to provide statistical validity if they were compared, and it dropped the weakest useable cell, that being the educators who are APTA members to a low number of 22, which would damage the potential for that group to produce statistical validity. As a result this screen was not applied. The group of respondents who were both educators and administrators were included as educators in the study. The reason for this is that, as described in Chapter 3, the researcher found that a majority of educators operated in the role of administrator in either their
current position or in their past professional lives. Similarly, individuals that identified
themselves as belonging to all three professional roles were included as educators within the
study because, as stated in Chapter 3, it is the assertion of the researcher that virtually all
physical therapists have, at one time or other in their careers, operated in the role of clinician and
thus should be expected to have gained the experiential knowledge of that group.

All other inclusion criteria discussed in Chapter 3 was successfully applied. The number
of participants in each group is recorded in Table 6.

Table 6

*Number of Respondents by Category*

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinician – APTA Member</td>
<td>59</td>
</tr>
<tr>
<td>Clinician – APTA non-Member</td>
<td>105</td>
</tr>
<tr>
<td>Administrator – APTA Member</td>
<td>69</td>
</tr>
<tr>
<td>Administrator – APTA non-Member</td>
<td>54</td>
</tr>
<tr>
<td>Educator – APTA Member</td>
<td>50</td>
</tr>
<tr>
<td>Educator – APTA non-Member</td>
<td>35</td>
</tr>
</tbody>
</table>

The means and standard deviations of all respondents to the survey, broken down by
survey question and without regard to professional role or APTA membership status, are
included in Table 7. While reviewing these results the reader should recall that an individual with
a greater perception of risk in each resolution would have indicated a "highly likely" perception
of risk across all resolutions in response to survey questions 1, 2, 5, 6, 7, and 8. As discussed in
Chapter 3, survey questions 3 and 4 relate to Resolution B. Resolution B, referring the patient to
a safety-net provider, or becoming a de-facto safety-net provider by treating the patient for free,
is the only resolution that offers the respondent a resolution that should be recognized, by an
individual with a deeper understanding, as both legal and morally and ethically appealing. Thus,
a respondent with a greater perception of risk would be likely to respond "highly unlikely" to these questions. Because of this, the scores used to produce a mean were reverse coded on survey questions 3 and 4. This was done for the reader's benefit so that higher scores are indicative of higher participant understanding of laws, rules, and ethics in all resolutions and, thus, in all survey questions.

Table 7

*Means and Standard Deviations for Survey Items and Factors for Total Sample*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Laws and rules/treatment is not provided to patient</td>
<td>3.5932</td>
<td>1.46</td>
</tr>
<tr>
<td>2. Personal moral and ethical values/ treatment is not provided to patient</td>
<td>3.9927</td>
<td>1.43</td>
</tr>
<tr>
<td>3. Laws and rules/ patient is referred to safety net provider</td>
<td>3.9419</td>
<td>1.30</td>
</tr>
<tr>
<td>4. Personal moral and ethical values/ patient is referred to safety net provider</td>
<td>4.2131</td>
<td>1.18</td>
</tr>
<tr>
<td>5. Laws and rules/ partial treatment is provided for patient</td>
<td>3.5182</td>
<td>1.35</td>
</tr>
<tr>
<td>6. Personal moral and ethical values/ partial treatment is provided for patient</td>
<td>3.8402</td>
<td>1.28</td>
</tr>
<tr>
<td>7. Laws and rules/ illegal billing adjustments</td>
<td>4.4068</td>
<td>1.06</td>
</tr>
<tr>
<td>8. Personal moral and ethical values/ illegal billing adjustments</td>
<td>4.0460</td>
<td>1.34</td>
</tr>
<tr>
<td>Overall Law/Rule</td>
<td>3.8650</td>
<td>.79</td>
</tr>
<tr>
<td>Overall Personal Morals/Ethics</td>
<td>4.0230</td>
<td>.75</td>
</tr>
</tbody>
</table>
Survey questions 1, 3, 5, and 7 ask the respondent to report their perceived level of risk of violating the laws and rules governing physical therapy in Ohio given four different resolutions. Questions 2, 4, 6, and 8 ask the respondent to report their perceived level of risk of violating their moral or ethical values in these same scenarios. It is of interest to note that the mean scores in questions 1, 3, and 5, were lower than the mean score in questions 2, 4, and 6. This would indicate a higher perceived risk among respondents of their personal moral and ethical values when compared to their understanding of the laws and rules governing physical therapy in Ohio. This pattern was also present in the overall scores for laws/rules versus morals/ethics. The only exception to this pattern existed in questions 7 and 8. Questions seven and eight relate to Resolution D, falsely adjusting the patient's bill. It is the opinion of the researcher that Resolution D outlines the most clearly illegal and morally/ethically unappealing resolution to the dilemma. The higher mean on question 7 seem to back this assertion.

Findings from Research Questions

*Research Question #1: Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role?*

Research question one sought to determine if there were differences in perception of risk of violating the laws and rules governing the profession of physical therapy in Ohio between the professional categories of clinician, administrator, or educator. The PTRPMI utilized questions 1, 3, 5, and 7 across four resolutions to gather information on these potential differences. Analysis of variance (ANOVA) revealed that there was no statistically significant difference between respondents in each professional role (clinician, administrator, and educator). ANOVA results are presented in Table 8.
Table 8

ANOVA Results for Survey Items and Factors by Professional Role: Laws and Rules

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Clinician (n=166)</th>
<th>Administrator (n=126)</th>
<th>Educator (n=86)</th>
<th>(F)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Laws and rules/ treatment is not provided to patient</td>
<td>3.63 1.38</td>
<td>3.57 1.53</td>
<td>3.74 1.44</td>
<td>.36</td>
<td>.695</td>
</tr>
<tr>
<td>3. Laws and rules/ patient is referred to safety net provider</td>
<td>3.84 1.28</td>
<td>3.92 1.29</td>
<td>4.18 1.28</td>
<td>1.97</td>
<td>.141</td>
</tr>
<tr>
<td>5. Laws and rules/ partial treatment is provided for patient</td>
<td>3.51 1.29</td>
<td>3.40 1.41</td>
<td>3.74 1.33</td>
<td>1.64</td>
<td>.195</td>
</tr>
<tr>
<td>7. Laws and rules/ illegal billing adjustments</td>
<td>4.35 1.07</td>
<td>4.48 1.02</td>
<td>4.45 1.04</td>
<td>.59</td>
<td>.554</td>
</tr>
<tr>
<td>Overall Law/Rule</td>
<td>3.83 .77</td>
<td>3.84 .79</td>
<td>4.03 .74</td>
<td>1.99</td>
<td>.137</td>
</tr>
</tbody>
</table>

Although no statistically significant differences were found, it is of interest to note that educators had consistently higher mean scores than administrators or clinicians on survey questions 1, 3, and 5 and also on the overall mean score for laws/rules. The only deviation from this pattern occurred on survey question 7, in which administrators scored very slightly higher than educators. As has been stated survey question 7 was a response to Resolution D which was, in the opinion of the researcher, the most clearly illegal and morally/ethically unappealing resolution to the dilemma. Evidence that respondents might have sensed this is seen in the consistently higher mean scores (signaling a higher perceived risk) and the consistently lower standard deviation scores also associated with survey question 7.
Research Question #2: Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by APTA membership status?

Research question two sought to determine if there were differences in perception of risk of violating the laws and rules governing the profession of physical therapy in Ohio between APTA members when compared with non-APTA members. The PTRPMI utilized questions 1, 3, 5, and 7 across four resolutions to gather information on these potential differences. A t-test of independent samples revealed that there was a statistically significant difference (\(p=.008\)) due to APTA membership in response to survey question 5. Effect size, as measured by percentage of variance in perceived risk of violating laws and rules, explained by its relationship with APTA membership status, was calculated and indicates minimal effect due to APTA membership status (\(r^2=.018\)) where APTA members had a higher perceived risk of being out of compliance than non-APTA members did. Survey question 5 asked respondents to rate their perceived risk of being out of compliance with the laws and rules governing physical therapy in Ohio if they resolved the dilemma by providing some forms of treatment, which were more affordable or were covered by the patient's insurance plan, but do not provide other services, which although needed, are un-reimbursable (Resolution C). This resolution to the dilemma is in violation of the laws and rules governing physical therapy in the state of Ohio (Carroll, et al., 2006). There was also a statistically significant difference (\(p=.016\)) when perception of risk of APTA members were compared to the perception of risk of non-APTA members of violating laws and rules across all four resolutions. Effect size indicates minimal effect due to APTA membership (\(r^2=.014\)). These results are presented in Table 9.
Table 9

*t*-test of Independent Samples Results for Survey Items and Factors by APTA Membership Status:

**Laws and Rules**

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>APTA Member</th>
<th>non-APTA Member</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>t</td>
</tr>
<tr>
<td>Survey Question</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Laws and rules/treatment is not provided to patient</td>
<td>4.05</td>
<td>1.23</td>
<td>3.87</td>
<td>1.34</td>
<td>1.39</td>
</tr>
<tr>
<td>3. Laws and rules/patient is referred to safety net provider</td>
<td>3.69</td>
<td>1.34</td>
<td>3.33</td>
<td>1.35</td>
<td>2.65</td>
</tr>
<tr>
<td>5. Laws and rules/partial treatment is provided for patient</td>
<td>4.49</td>
<td>.99</td>
<td>4.30</td>
<td>1.14</td>
<td>1.80</td>
</tr>
<tr>
<td>7. Laws and rules/illegal billing adjustments</td>
<td>3.97</td>
<td>.77</td>
<td>3.77</td>
<td>.80</td>
<td>2.41</td>
</tr>
</tbody>
</table>

Although statistical significance was achieved only in response to survey question 5 and the overall law/rule score it is of interest to note that APTA members had a higher mean score than non-APTA members on all four survey questions 1, 3, 5, and 7.

Research Question 3: Does the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role and APTA membership status?

Research question three sought to determine if there were differences in perception of risk of violating the laws and rules governing the profession of physical therapy in Ohio when examining both professional role and APTA membership status. The PTRPMI utilized questions 1, 3, 5, and 7 across four resolutions to gather information on these potential differences.
Factorial ANOVA results for individual APTA membership status indicate no significant differences in overall perception of laws and rules for membership status, $F(1,366)=3.62$, $p=.058$; for professional role, $F(2,366)=1.82$, $p=.162$; and for the combined APTA membership status and professional role, $F(2,366)=2.24$, $p=.107$. The means, standard deviations, and sample sizes for each group are presented in Table 10. Although no statistically significant differences were found it is of interest to note that administrators and educators who were APTA members had a higher mean score than non-APTA members in these groups.

Table 10

*Perception of Laws and Rules by Professional Role and APTA Membership Status*

<table>
<thead>
<tr>
<th></th>
<th>$n$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinician – APTA Member</td>
<td>59</td>
<td>3.80</td>
<td>.78</td>
</tr>
<tr>
<td>Clinician – APTA non-Member</td>
<td>105</td>
<td>3.85</td>
<td>.77</td>
</tr>
<tr>
<td>Administrator – APTA Member</td>
<td>69</td>
<td>4.01</td>
<td>.76</td>
</tr>
<tr>
<td>Administrator – APTA non-Member</td>
<td>54</td>
<td>3.65</td>
<td>.82</td>
</tr>
<tr>
<td>Educator – APTA Member</td>
<td>50</td>
<td>4.10</td>
<td>.76</td>
</tr>
<tr>
<td>Educator – APTA non-Member</td>
<td>35</td>
<td>3.92</td>
<td>.73</td>
</tr>
</tbody>
</table>

Research Question #4: Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role?

Research question four sought to determine if there were differences in perception of risk of violating personal moral or ethical values between the professional categories of clinician, administrator, or educator. The PTRPMI utilized questions 2, 4, 6, and 8 across four resolutions to gather information on these potential differences. Analysis of variance (ANOVA) revealed that there was a statistically significant difference ($p=.039$) by professional role in response to survey question 6. This difference, as well as mean values, standard deviations, $F$ values, and $p$
values are presented in Table 11. Bonferroni results indicate a statistically significant ($p = .046$) difference between administrators and educators in response to survey question 6. The educator group responded in a manner that shows a higher perceived risk ($M=4.03$) as compared to the group comprised of administrators ($M=3.60$). Survey question 6 asked the respondent to rate their perceived level of risk of violating their personal moral or ethical values when responding to the dilemma by providing some forms of treatment, which were more affordable or were covered by the patient's insurance plan, but not providing other services, which although needed, are un-reimbursable. This action is in violation of the laws and rules governing the practice of physical therapy in Ohio (Carroll et al., 2006).

Table 11

ANOVA Results for Survey Items and Factors by Professional Role: Moral or Ethical Values

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Clinician $n=166$</th>
<th>Administrator $n=126$</th>
<th>Educator $n=86$</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Personal moral and ethical values/ treatment is not provided to patient</td>
<td>$M$ 4.04</td>
<td>$SD$ 1.37</td>
<td>$M$ 3.94</td>
<td>$SD$ 1.48</td>
<td>.29</td>
</tr>
<tr>
<td>4. Personal moral and ethical values/ patient is referred to safety net provider</td>
<td>$M$ 4.23</td>
<td>$SD$ 1.14</td>
<td>$M$ 4.19</td>
<td>$SD$ 1.21</td>
<td>.08</td>
</tr>
<tr>
<td>6. Personal moral and ethical values/ partial treatment is provided for patient</td>
<td>$M$ 3.87</td>
<td>$SD$ 1.18</td>
<td>$M$ 3.60</td>
<td>$SD$ 1.37</td>
<td>3.26</td>
</tr>
<tr>
<td>8. Personal moral and ethical values/ illegal billing adjustments</td>
<td>$M$ 3.97</td>
<td>$SD$ 1.35</td>
<td>$M$ 4.17</td>
<td>$SD$ 1.24</td>
<td>.83</td>
</tr>
<tr>
<td>Overall Personal</td>
<td>$M$ 4.07</td>
<td>$SD$ .70</td>
<td>$M$ 3.98</td>
<td>$SD$ .75</td>
<td>.72</td>
</tr>
</tbody>
</table>
Statistical significance was achieved in response to survey question 6 \( (p=0.039) \) where educators had a higher perceived risk of being out of compliance than administrators did. Effect size as measured by percentage of variance was calculated and indicates minimal effect due to professional role \( (r^2=0.017) \). Although statistical significance was not achieved in other comparisons, it is of interest to note that educators achieved a higher mean score than administrators and clinicians in response to survey questions 2, 4, and 6. Deviation to this pattern occurred in response to survey question 8, in which the administrators scored higher. As has been mentioned, survey question 8 was in response to Resolution D, which was, in the opinion of the researcher, the most clearly illegal and ethically/morally unappealing resolution to the dilemma.

*Research Question #5: Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by APTA membership status?*

Research question five sought to determine if there were differences in perceived levels of risk between APTA members when compared with non-APTA members, of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma. The PTRPMI utilized questions 2, 4, 6, and 8 across four resolutions to gather information on these potential differences. A \( t \)-test of independent samples revealed that there were no statistically significant differences between these groups. This analysis is presented in Table 12.

Although not significant in group differences, non-APTA members achieved higher mean scores on survey questions 2 and 4 while APTA members achieved higher mean scores on
questions 6 and 8. Mean scores were close in among all groups. This is consistent with the lack of significance found in this research question.

Table 12

t-test of Independent Samples Results for Survey Items and Factors by APTA Membership Status:

Personal Moral or Ethical Values

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>APTA Member n=192</th>
<th>non-APTA Member n=212</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Personal moral and ethical values/ treatment is not provided to patient</td>
<td>3.92 1.50</td>
<td>4.11 1.32</td>
<td>-1.35</td>
<td>.175</td>
</tr>
<tr>
<td>4. Personal moral and ethical values/ patient is referred to safety net provider</td>
<td>4.18 1.20</td>
<td>4.24 1.17</td>
<td>-.53</td>
<td>.595</td>
</tr>
<tr>
<td>6. Personal moral and ethical values/ partial treatment is provided for patient</td>
<td>3.94 1.30</td>
<td>3.75 1.25</td>
<td>1.55</td>
<td>.121</td>
</tr>
<tr>
<td>8. Personal moral and ethical values/ illegal billing adjustments</td>
<td>4.12 1.31</td>
<td>3.94 1.37</td>
<td>1.32</td>
<td>.188</td>
</tr>
<tr>
<td>Overall Personal</td>
<td>4.04 .77</td>
<td>4.01 .73</td>
<td>.40</td>
<td>.690</td>
</tr>
</tbody>
</table>

Research Question #6: Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by professional role and APTA membership status?

Research question six sought to determine if there were differences in perception of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma when examining both professional role and APTA membership status. The PTRPMI utilized questions 2, 4, 6, and 8 across four resolutions to gather information on these potential differences.
Factorial ANOVA results indicate a significant interaction between APTA membership status and professional role for personal moral and ethical values, $F(2,366)= 3.40, p=.034$. Partial eta squared =.018 for this interaction. Because the researcher was unable to conduct a post-hoc test to determine which groups were significantly different, a line graph was constructed for this interaction. The line graph, depicted in Figure 1, indicates that the significant interaction was related to Administrator-APTA Members and Administrator-non-APTA Members with the Administrator-APTA Members achieving higher mean scores with respect to risk of violating personal moral or ethical values.

The means, standard deviations, and sample sizes for each group are presented in Table 13. The highest mean scores were achieved by Clinician-non-APTA members, Administrator-APTA members, and Educator- non-APTA members. The lowest mean scores were achieved by Administrator-Non- APTA members.

*Figure 1.* Line graph depicting interactions associated with research question 6.
Table 13

*Personal Moral or Ethical Values Factors by Professional Role and APTA Membership Status*

<table>
<thead>
<tr>
<th>Professional Role</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinician – APTA Member</td>
<td>59</td>
<td>3.89</td>
<td>.82</td>
</tr>
<tr>
<td>Clinician – non-APTA Member</td>
<td>105</td>
<td>4.10</td>
<td>.65</td>
</tr>
<tr>
<td>Administrator – APTA Member</td>
<td>69</td>
<td>4.11</td>
<td>.72</td>
</tr>
<tr>
<td>Administrator – non-APTA Member</td>
<td>54</td>
<td>3.85</td>
<td>.78</td>
</tr>
<tr>
<td>Educator – APTA Member</td>
<td>50</td>
<td>4.07</td>
<td>.76</td>
</tr>
<tr>
<td>Educator – non-APTA Member</td>
<td>35</td>
<td>4.13</td>
<td>.70</td>
</tr>
</tbody>
</table>

Research Question #7: What is the relationship between the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio if treatment is not provided to or arranged for the uninsured or underinsured patient in the dilemma and the perceived risk of violating personal moral or ethical values in the same situation?

Research question seven sought to determine if there were differences in perception of risk of violating the laws and rules governing the practice of physical therapy in Ohio and violating personal moral or ethical values if treatment was not provided to, or arranged for, the uninsured or underinsured patient in the dilemma when comparing both dependent variables (professional role and APTA membership status). To measure the relationship, a multiple analysis of variance (MANOVA) was conducted. Results indicate a significant difference by APTA membership status for the combined dependent variables of perception of risk of violating the laws and rules governing the practice of physical therapy in Ohio and personal moral or ethical values if treatment was not provided to, or arranged for, the uninsured or underinsured patient in the dilemma ($p=.013$). Partial eta squared=.024 for APTA membership status; multivariate Wilks’ Lambda was used as the post hoc test. APTA members responded in a way...
which suggests that they possess a higher perception of risk. The results of the statistical analysis of this question are presented in Table 14. Statistical significance was not achieved in the area of professional role or the combined area of professional role and APTA membership status.

### Table 14

**MANOVA Results for Combined Dependent Variables**

<table>
<thead>
<tr>
<th></th>
<th>$df$</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Role</td>
<td>4,730</td>
<td>.96</td>
<td>.425</td>
</tr>
<tr>
<td>APTA Membership Status</td>
<td>2,365</td>
<td>4.40</td>
<td>.013</td>
</tr>
<tr>
<td>Professional Role and APTA Membership Status</td>
<td>4,730</td>
<td>1.84</td>
<td>.119</td>
</tr>
</tbody>
</table>

**Findings: Open-ended Question**

As has been discussed, prior to April 4, 2007, the Ohio revised code (ORC) incorporated the APTA code of ethics into law in section 4755.47(A)(5), which stated that violation of the code of ethics of the American Physical Therapy Association was a violation of Ohio law. Therefore, prior to April 4, 2007, even non-members of the APTA were legally bound to follow the professional code of ethics and might suffer legal penalties imposed by the state of Ohio for violation of this ethics code. On April 4, 2007, however, Ohio House Bill 403 took effect (Ohio Legislative Service Commission, 2007). This bill contained a provision that disconnects Ohio law from the APTA Code of Ethics. This new law removes the duty of enforcing the APTA Code of Ethics from the state of Ohio, and thus, removes the duty for such enforcement from the OT/PT/AT board. This issue has been discussed in greater detail in Chapter 1. As has been stated, this change in Ohio law is of little functional importance to a physical therapist striving to resolve the dilemma posed in this study. The sole impact of the recent change to Ohio law upon this study lay in the fact that the change was implemented in close proximity to the dissemination of the study's survey. Since dissemination of information regarding the changes to this aspect of
the ORC were incomplete at the time the survey was distributed the impact this new law had on
the perception of risk was potentially a confounding variable. The researcher included survey
questions 24 and 25 to determine if the passage of HB 403 created confusion among respondents
that may have affected their answers to survey question(s) 1-8.

Survey question 24 asked "Have recent changes to the Ohio Revised Code, resultant from
passage of House Bill 403 impacted your answer(s) to questions 1-8 above?" One hundred and
fifty four (39.6%) respondents answered "no" to this question indicating that the passage of HB
403 had no impact upon their answers. Two hundred twenty one respondents (56.8%) indicated
that they were "…unfamiliar with recent changes to the Ohio revised code which resulted from
passage of House Bill 403". This, again, indicates that the passage of HB 403 had no effect upon
their answers. Fourteen respondents chose "yes" as their answer to this question, indicating that
the passage of HB 403 had impacted their response(s) to survey questions 1-8.

To further control for the effect of the recent passage of HB 403 the researcher included
survey question 25; an optional narrative question which read "If you indicated 'yes' to question
24 please feel free to discuss how the passage of House Bill 403 into law effected your responses
in the space below."

The comments offered by respondents who chose to explain how HB 403 affected their
answers to survey questions 1-8 clearly indicated that, in nearly all cases, that their
understanding of HB 403 was incomplete and likely did not, in fact, affect their answers.

Two respondents incorrectly identified HB 403 as a bill that permits physical therapists to
see patients without a referral from a physician. In fact, it has been legal under Ohio
Administrative Code 4755-29-01(D), for a physical therapist in Ohio to evaluate and treat a
patient through direct access (without orders from a physician) since May of 2004. The
following excerpt from survey question 25 illustrates this confusion: "I can now see a patient without a referral and make the judgment on what is necessary rather than the doctor that affects my choices for what I provide and what is covered by the insurance." Another respondent seemed to hold the same confusion regarding the relationship of HB 403 to direct access and also seems to have held the (erroneous) belief that referral from a physician in some way impeded their previous ability to waive patient fees: "We are now permitted to provided free care in the state of Ohio without a referral, so we can see patients for free now."

The responses of two other respondents indicate that their knowledge of HB 403 was incomplete or confused. Echoing an earlier respondent one individual wrote "Able to offer services for free now ". As has been stated, physical therapists had the right to evaluate and treat patients free-of-charge prior to the passage of HB 403. Another respondent seemed to question whether HB 403 made any changes to Ohio Law at all: "If there have been changes to the practice act by the passage of HB 403 it would be the responsibility of the licensing agency to inform all licensed personnel of those changes." The OT/PT/AT board did, in fact, issue a press release that outlined the changes to physical therapy practice resulting from the passage of HB 403 on April 5, 2007.

One individual admitted that he or she had no knowledge of how HB 403 would impact his or her answers to survey question(s) 1-8: "I must go back and look at 403. I am not certain how these issues are to be handled. Very interesting ."

Only two respondents seemed to understand that the passage HB 403 should not have affected their answers: "HB 403 served to improve the language of the Ohio Revised Code and did very little to change our practice. An email was even sent out by the State Board indicating this." And "Ohio relies on the APTA Code of Ethics and I know that will change but I assume
the new rules will be similar." It must be assumed then, that if these individuals were aware that the passage of HB 403 should have had no effect upon their answers that it did then, in fact, not have an effect.

Based upon these narrative responses from individuals attempting to explain why HB 403 effected their answers and the fact that the remaining respondents indicated, in survey question 24, that they either had no knowledge of the content of HB 403 or that HB 403 had not affected their answers, it must be assumed that the recent passage of HB 403 had no effect upon the responses to survey questions 1-8. Thus it seems that this potentially confounding variable had little to no impact upon the results of this study.

Survey question 25 also asked any respondent to the survey to "Feel free to make any other comments regarding this survey or this study below". Some of these responses, although not related to the passage of HB 403, indicated confusion regarding the laws and rules governing the practice of physical therapy in Ohio. The following comment from one respondent indicates that this individual is either unaware that patients in Ohio now have direct access to physical therapists without a physician's referral or, possibly, that he or she has not integrated this new freedom into his or her practice:

"I assume from your resolution that the patient came in without a physician referral. I am an older therapist; when someone has walked in off the street and has inquired about therapy for a physical problem, I will take the time to discuss with the individual their subjective complaints; however, the most I might do is make some suggestions of some things they may do on their own with regard to lifestyle or body mechanics. If I think that they have a potential musculo-skeletal problem, I will recommend to the individual that
they see their family physician or suggest several specialists or clinics. I prefer to see patients who have physician referrals."

Two respondents seemed to confuse the policies of their employers or the peculiarities of their practice setting with the laws and rules governing physical therapy in Ohio. Their comments seemed to indicate this: "If I had a private practice I may have answered differently. I've based my answers on the rules of the org. where I work." And "I work in acute care, but I answered the questions as if I were working in an outpatient setting." However, the laws and rules governing physical therapy in Ohio supersede the policies of any organization or practice setting. The response of another individual seems to indicate that the respondent might excuse his or her personal responsibility for failure to provide treatment(s) to a patient based upon the policies of his or her employer:

"My charges always reflect the specific and actual treatment performed. However, if I worked in a facility where I could waive fees or co-payments, or offer procedures at a reduced rate, that solution to the problem of underinsurance or no insurance would be considered by me to be ethically and morally appropriate for that patient."

This response also signals a lack of knowledge of the fact that waiving co-payments is illegal regardless of the policies of an individual practice.

Encouragingly, the comments of two respondents indicate that some physical therapists, and some organizations, are proactive in their response to dilemmas similar to the one presented in this study. These responses are presented below:

"I would not alter the bill or bill for less than what I do - that is in violation of our legal codes. I would try to find an alternative facility that could provide the needed care. I would not treat for free. My company has financial assistance for these people which
makes treating them compliant with the law and builds a mechanism for the patient to receive the health grants that will help them. We bill everyone the same and then people in this program receive individualized counseling, etc."

And;

"I would consider any lack of provision of care to a patient in need irresponsible of any physical therapist. I work in state paid facilities and do not discriminate based on insurance/ability to pay. I have the benefit of not having to determine the level of care based upon insurance/non-insurance. I also contract in facilities that set standards for efficiency in care and routinely punch out to complete work in a fashion I feel is required by the patient and my own moral/ethical standards. I would hope that you find that therapists do not use insurance to determine the quality of care they provide to their patients."

Seven of the narrative comments took the form of brief comments in support of the type of research that this study represents. One example follows:

"The issues covered in this survey are at the core of why I became a physical therapist--to help people, not to use people as the means of my income. When we do our utmost to provide the best care to those who come to us, we will prosper, but it will not require unethical behaviour. Those who we serve who are capable by insurance or private payment will more than make up for those who can't as we continue to do the right thing."

Summary

The results of this study indicate that significant differences in perception of risk of violating the laws and rules governing physical therapy in Ohio did not differ significantly by
professional role or combined professional role/APTA membership status but did differ significantly by APTA membership status in response to survey question 5. Survey question 5 asks the respondent to identify their perception of risk of violating the laws and rules governing the practice of physical therapy in Ohio if they provide some treatments to the patient that are affordable or covered by the patient's insurance plan, but not provide other services that are unaffordable or not covered by the patient's insurance plan as described in Resolution C.

The results further indicate that significant differences in perception of risk of violating personal moral or ethical values did not differ by APTA membership status but did differ significantly by professional role, with educators demonstrating a deeper level of understanding that administrators. Furthermore there was a significant difference in perception of risk of violating personal moral or ethical values when examining APTA membership status and professional role.

When examining perception of risk of violating the laws and rules governing the practice of physical therapy in Ohio, and perception of risk of violating personal moral and ethical values, there was a significant difference between APTA membership status and professional role with APTA members demonstrating a higher perception of risk.

The study's results indicated a significant interaction between APTA membership status and professional role for personal moral and ethical values. A line graph constructed for this interaction indicated that the significant interaction was related to Administrator-APTA Members and Administrator-non-APTA Members with the Administrator-APTA Members achieving higher mean scores with respect to risk of violating personal moral or ethical values.

The results of survey questions 24 and 25 indicate that the recent passage of HB 403 had no impact upon the respondents' answers to survey questions 1-8.
CHAPTER V. DISCUSSION

Overview/Introduction

As an aid to the reader this chapter will start with a review of the purpose, statement of the problem, and the primary methodology used in this study, followed by a brief summary of the results. Afterward, this chapter presents a discussion and interpretation of the results, as well as how those results relate to previous research. Subsequently, recommendations for future researchers and members of the profession of physical therapy will be offered.

As discussed in Chapter 1, the purpose of this study was to examine the relationship between two independent variables, (1) professional role of the physical therapist, and (2) APTA membership status, and two dependent variables, (1) perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided for, or arranged for, the patient in a case dilemma, and (2) perceived risk of violating personal moral or ethical values in the same situation. Solutions to the dilemma that a physical therapist faces in treating an uninsured or underinsured patient often times involve practices which might violate the laws and rules governing the profession of physical therapy in Ohio or the personal moral or ethical values of the individual physical therapist (Carroll et al., 2006). This study utilized a self-reporting questionnaire to determine the perceived risk that an individual physical therapist has of violating the laws and rules governing the practice of physical therapy in Ohio or the perceived risk of violating personal, moral, or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma. Both types of perceived risks were measured on a nominal scale ranging from "highly unlikely to "highly likely". For further information regarding methodology, please refer to Chapter 3.
Lennart Sjoberg (2000), a leading researcher on risk, questions whether it is possible to measure risk perception. He argues that risk cannot be sensed; only dangers and threats can be sensed. He goes on to say that risk concerns the likelihood and severity of a future event, and future events can be imagined or construed, but not sensed. Sjoberg admits, however, that the term 'risk perception' has been around for decades and despite its basically confusing meaning, can be measured in much the same way that other beliefs and attitudes are measured. Thus the methodology for measuring risk used in this study has a background in literature.

As discussed in Chapter 2, many factors influence decision making and perception of risk. Johnson-Laird (1983) found that mental models are used by individuals when assessing risk and making decisions. These models often include critical gaps in cognitive understanding of the risks that are present in the minds of the public. Thus the decision made under this form of critical thinking can appear non-rational. Furthermore, Finucane, et al. (2000) found that emotional affective factors are also significant in assessing risk and making decisions based upon this risk perception. Other research suggests that demographic factors may have an affect on an individual's perception of risk. These demographic factors include age (Glik, 1999), gender and race (Finucane et al., 2000). It was not within the scope of this study to examine the perception of risk among physical therapists in relation to the demographic categories discussed in those studies. The present study divided respondents into categories including professional role and membership status in their professional organization.

Resolutions to the Dilemma

Slovik (1987) showed that awareness of risks in the environment allows individuals to avoid risks or to control them. According to Belzer (2001) there is a discrepancy between the expert and lay perceptions of risk. Taylor-Gooby and Zinn (2006) stated that the most important
approach used in researching risk in mainstream psychology is the cognitive/learning perspective. This perspective works from the assumption that humans are rational choosers and that the experiences to which they have access and the context of their life experiences influence their perception of risk. Each of these pieces of research suggests that perception of risk is linked to knowledge and personal experience. Thus, although risk is a personal matter dependent upon many variables, it may be assumed that knowledge of laws, rules, and personal moral or ethical values, as they relate to an action, may influence an individual's perception of risk resulting from that action. This information is pertinent to the present study because the PTRPMI, developed for this study, measured the perception of risk based upon four actions, or resolutions, that the respondent was asked to imagine implementing to handle the dilemma. It seems likely that individuals with a deeper level of understanding of the laws and rules governing the practice of physical therapy in Ohio, and, speculatively, a deeper understanding of their own personal moral or ethical values, may possess a greater understanding of the level of risk that should be perceived when acting according to each of the four resolutions. For this reason the terms 'greater perception of risk' and 'deeper level of understanding' are used within the same context in this discussion.

The mean scores listed in Table 7 in Chapter 4 reveal that overall there is room for growth in the perception of risk across all resolutions and among all respondents. An individual with a greater perception of risk in each resolution would have indicated a "highly likely" perception of risk across all resolutions in response to survey questions 1, 2, 5, 6, 7, and 8. As discussed in Chapter 3, survey questions 3 and 4 relate to Resolution B. Resolution B, referring the patient to a safety-net provider, or becoming a de-facto safety-net provider by treating the patient for free, is the only resolution that offers the respondent a resolution that should be
recognized, by an individual with a deeper understanding, as both legal and morally and ethically appealing. Thus, a respondent with a greater perception of risk would be likely to respond "highly unlikely" to these questions. Because of this, the scores used to produce a mean were reverse coded on survey questions 3 and 4. As a result of this reverse coding a mean score closer to 5 would indicate a more accurate perception of risk and a deeper level of understanding on all of the first eight survey questions. The fact that survey questions 1, 3, 5, and 7 (those pertaining to perception of risk of violating the laws and rules governing physical therapy in Ohio) had a mean score of 3.86 indicates that the respondents to the survey had a relatively high, although less than ideal understanding of the actual risk of violating the laws and rules in any of the resolutions. Similarly survey questions 2, 4, 6 and 8 (pertaining to perceived risk of violating personal moral or ethical values) had a relatively high, but less than ideal, mean score of 4.02.

Resolution A asked the respondents to imagine that their response to the dilemma was to decline to provide treatment to the patient and decline to arrange for provision of the needed treatment(s) through a safety net provider such as a free clinic. It is the assertion of the researcher that although the resolution is illegal (Carroll, et al., 2006; see also APTA, 2006b), it is also rather widely practiced. Because of this there may be confusion regarding the legality of such an action. The overall mean scores to the responses to the survey questions related to this resolution (survey questions 1 and 2), as indicated in Table 7 in Chapter 4, gave evidence of such confusion. Although survey question 1 asked for the respondents to measure their perception of risk of violating a law or rule governing the practice of physical therapy in Ohio if this resolution was enacted, the relatively low mean score of 3.59 indicates that they had a lower perception of risk of violating the laws and rules of their profession when carrying out this resolution than might be preferred. It is of interest to note however, that the mean response to survey question 2,
which relates to perception of risk of violating personal moral or ethical values when resolving the dilemma, is higher at 3.99. This suggests that average individual respondents may be unsure whether or not this resolution is legal but is clearer in their feelings that they are morally or ethically opposed to denying the patient treatment.

Resolution B asked the respondents to imagine that their response to the dilemma was to refer the patient to a safety-net provider, such as a free clinic, for treatment, or provide the services themselves for free or at reduced prices. It is the assertion of the researcher that this resolution to the dilemma should be legally, morally, and ethically appealing to a respondent with a deeper level of understanding of the laws and rules and of their own moral or ethical values. The mean scores from Table 7 from Chapter 4 seemed to indicate that this is the case. The mean score on survey question 3, pertaining to perception of risk of violating a law or rule of the profession, was a relatively high 3.94 and the mean response to survey question 4, which asked the respondents to indicate their perceived risk of violating a personal moral or ethical values was also a relatively high 4.21. As described in Chapter 4, Resolution B was the only resolution that a respondent with a deeper level of understanding would recognize as being in compliance with the laws and rules governing the practice of physical therapy in Ohio and, likely, in line with their personal moral and ethical values. Because of this survey questions 3 and 4 were reverse coded during data analysis so that the lower perception of risk that these individuals might feel is reflected as a higher mean value. This was done for the reader's benefit so that a higher mean score is reflective of a deeper level of understanding on all survey questions.

Resolution C asked the respondents to imagine that their response to the dilemma was to provide some forms of treatment, which were more affordable or covered by the patient's
insurance plan, but not to provide other services, which although needed, were un-reimbursable. It is the assertion of the researcher that this is the resolution most used in physical therapy to resolve a dilemma such as the one presented in this paper. The researcher has been a physical therapist for 20 years and believes that physical therapists often perform such partial treatments which, although illegal (Carroll et al., 2006; see also APTA, 2006b), are usually within the scope of the policies of their individual practices. It was not surprising to the researcher that the mean scores to questions associated with this resolution (survey question 5 and survey question 6) produced the lowest mean scores of any resolution. The mean score in response to question 5, which asked the respondents to indicate their perceived risk of violating a law or rule governing the practice of physical therapy in Ohio was a relatively low 3.51 and the mean response to survey question 6, which asked the respondents to indicate their perceived risk of violating their personal moral or ethical values was, again, a relatively low 3.84. The researcher believes that physical therapists have a desire to believe that they are moral, ethical, and operating within the scope of the law. An individual, who arrives at his or her workplace each day and practices in this manner, may develop the feeling that this behavior, because it is widespread, is neither illegal nor ethically or morally unappealing.

There was also evidence in the narrative responses to survey questions 24 and 25 that in at least a few instances, respondents to the survey mistook the policies of their workplaces with the laws and rules governing the practice of physical therapy in Ohio. These individuals may feel that if they are in compliance with the policies of their employers then they must be in compliance with the laws and rules of the profession. If so then this could help explain the relatively low mean scores in response to Resolution C.
Resolution D asked the respondents to imagine that their response to the dilemma was to provide all needed services but make adjustments to the patient's bill such as waiving co-payments or deductibles, or billing for a less expensive treatment or a treatment that was covered under the insurance plan, in place of the more expensive or uncovered treatment technique. It is the assertion of the researcher this was the most clearly illegal, and morally and ethically unappealing resolution to the dilemma. Therefore, it was no surprise to the researcher that the mean scores on survey questions 7 and 8 were higher than any questions associated with the other resolutions, indicating a deeper level of understanding regarding this resolution. In response to survey question 7, which asked the respondents to determine their perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, the mean response was 4.40 and in response to survey question 8, which asked the respondent to indicate their perceived level of risk of violating personal moral or ethical values the mean score was also a relatively high 4.04. Resolution D was the only resolution that produced a lower mean score for perception of risk of violating personal moral and ethical values (survey question 8) as compared to perception of risk of violating the laws and rules governing the practice of physical in Ohio (survey question 7). Although, as mentioned above, the mean scores on both questions were rather high, the lower perception of risk of violating personal moral or ethical values when resolving the dilemma through improper billing suggests that there may be a tendency toward civil disobedience among at least some physical therapists. Stated differently, the mean responses to the questions associated with Resolution D suggest that a typical respondent perceives that it is at least 'somewhat likely' that they are violating the laws and rules of the profession and yet do not perceive the same level of risk of violating their personal moral or ethical values. Perhaps the respondents have a personal ethical or moral justification for the
actions described in Resolution D. A physical therapist who values the ethic of care (Starratt, 1991) might decide that providing needing services to the patient supersedes his or her duty to comply with laws and rules. Similarly, a physical therapist who values the ethic of justice (Starratt, 1991) as it pertains to either the rights of the individual patient, the rights of the physical therapy clinic, or the welfare of the healthcare system might decide that these values supersede his or her duty to comply with the laws and rules governing physical therapy in Ohio.

Influence of APTA Membership Status

Perception of Risk of Violating Laws and Rules

The laws and rules governing the practice of physical therapy in Ohio consist of the bylaws of the American Physical Therapy Association, the Ohio Revised Code, and the American Physical Therapy Association Code of Ethics. The Ohio Revised Code and the American Physical Therapy Association bylaws are rather prescriptive in nature. The APTA Code of Ethics, similar to the ethical codes of other organizations, might be used either to provide standards of conduct or to provide general ethical or moral guidance to its users (Cava et al., 1995). Thus, physical therapists making decisions regarding actions that they will take to resolve a dilemma might turn to any of these documents to assist them in their choice.

The researcher found an absence of studies in the literature that specifically examined physical therapists' use of ethics codes based upon membership in their professional organization. The literature does suggest, however, that individuals who are members of a professional organization may use and interpret ethics codes differently (Maes, et al., 1998). The results of the present study suggest that there do appear to be differences in perception of risk of violating the laws and rules governing the practice of physical therapy in Ohio between APTA members and non-APTA members. Research question two ("Does the perceived level of risk of
violating the laws and rules governing the practice of physical therapy in Ohio if treatment is not provided to, or arranged for, the uninsured or underinsured patient and the dilemma differ by APTA membership status?" addresses this point specifically. The PTRPMI utilized survey questions 1, 3, 5, and 7, to gather information on these potential differences.

It is of interest to note that APTA members had higher mean scores (indicating a greater perceived risk of violating a law or rule governing the practice of physical therapy in Ohio) than nonmembers did on each of the survey questions. Additionally the overall mean scores of survey questions 1, 3, 5, and 7, showed that APTA members had a statistically significantly higher mean score ($p = .016$) than non-APTA members.

In the opinion of the researcher, the most significant finding related to differences in perceived risk in violating laws and rules between APTA members and non-APTA members arose in response to survey question 5. In survey question 5 there was a statistically significant ($p = .008$) difference, with APTA members having a higher mean score than the nonmembers, indicating a greater perception of risk of violating laws and rules. As has been mentioned, survey question 5 is the laws/rules response to Resolution C. In Resolution C, the physical therapist is asked to imagine that he or she is resolving the dilemma by providing some forms of treatment, which are more affordable or covered by a patient's insurance plan, but not providing other services which, although needed, are un-reimbursable. It is the assertion of the researcher that the actions described in Resolution C, although illegal, are most likely practiced in a great majority of physical therapy practices. Perhaps individual physical therapists wish to believe that they are acting within the law as they conduct their daily practice. There was also evidence in the narrative comments of this study associated with survey questions 24 and 25 that physical therapists might confuse the policies of their employer with the laws and rules governing the
practice of physical therapy in Ohio. Regardless, it appears that APTA members have a deeper level of understanding of the laws and rules governing the practice of physical therapy in Ohio.

Research question 7 sought to determine if there were differences in perception of risk of violating the laws and rules governing the practice of physical therapy in Ohio and violating personal moral or ethical values if treatment was not provided to, or arranged for, the uninsured or underinsured patient in the dilemma when comparing both dependent variables (professional role and APTA membership status). To measure, a multiple analysis of variance (MANOVA) was conducted. Results indicated a significant difference \((p=.013)\) by APTA membership status with combined dependent variables of perception of risk of violating the laws and rules governing the practice of physical therapy in Ohio and personal moral or ethical values if treatment was not provided to, or arranged for, the uninsured or underinsured patient in the dilemma. APTA members responded in a way that suggests that they possess a greater perception of risk of violating both laws and rules and personal moral and ethical values. Although this multiple analysis of variance was not specific to perception of risk of violating the laws and rules governing the practice of physical therapy, it does provide increased evidence that APTA members may possess a deeper understanding of the variables in the dilemma.

According to Sindal Gorobitz (1988) Plato held that right actions are a matter of understanding. This would suggest that if individuals fully understood the laws and rules governing physical therapy in Ohio, their actions would match their level of understanding and their actions would be appropriate in a manner commensurate with this understanding. Gorobitz states that for Aristotle, however, understanding alone did not suffice. Aristotle stated that right actions flow from will, not from understanding alone. Therefore, it is important to look at an individual's perception of their risks of violating their personal moral and ethical values if we are
to understand, more fully, the reasons for an individual's actions. Thus, the next section examines the effect of APTA membership on perception of risk of violating personal moral or ethical values.

**Perception of Risk of Violating Personal Moral or Ethical Values**

The researcher found an absence of well-developed research studies linking membership in professional organizations to personal ethical or moral development. Bersoff and Koeppl (1993) found that codes of ethics can be used as a framework for proper or improper behavior. But this calls into question what a physical therapist is to do when a conundrum exists when the code of ethics is in conflict with other codes or laws. Such is the case in the dilemma of the present study. Utilitarianism proposes that the results of a behavior ultimately dictate its morality. In other words, a behavior is most morally correct when the results are more favorable than the predicted results of its alternatives (Bersoff & Koeppl, 1993). When faced with such a conundrum a utilitarian ethicist is put in a position of balancing the possible costs and benefits of an action. This most often means choosing among the possible "evils" and searching for the least detrimental alternative. In order to do this, such an individual might need to reflect upon his or her personal moral or ethical values.

Starratt (1991) describes the ethics of justice, care, and critique. A fuller discussion of these ethical models is included in Chapter 2. Although the present study does not seek to understand which ethic the respondent physical therapist is operating under it might be assumed, in the case of the dilemma presented, that the ethic of justice is likely to be in use since the dilemma stems from a lack of resources. After all, if adequate resources existed to treat all patients, the physical therapist would not be experiencing a dilemma at all. An individual operating under the ethic of justice seeks to operate within the boundaries of the rules and laws
which are in place. However, this individual operates under the belief that individuals within society have certain rights to which they are entitled, and that justice and equality may supersede the rules that are in place if those rules infringe upon those rights (Starratt, 1991). An individual operating under the ethic of justice may place the rights of individuals or society ahead of the rules of the establishment if he or she believes not doing so would lead to inequality and injustice. Another individual might place the rights of an organization, such as a physical therapy practice, or the welfare of the healthcare system in the United States, ahead of the rights of an individual patient if it is determined that protecting the rights of the individual patient will jeopardize the welfare of the clinic or system.

Research question 5 asks "Does the perceived level of risk of violating personal moral or ethical values if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differ by APTA membership status?" The PTRPMI utilized question 2, 4, 6, and 8, across four resolutions, to gather information on potential differences between APTA members and non-APTA members. The results indicated that there were no statistically significant differences between these groups.

Influence of Professional Role

Perception of Risk of Violating Laws and Rules

Research question 1 sought to determine if the perceived level of risk of violating the laws and rules governing the practice of physical therapy in Ohio, if treatment is not provided to, or arranged for, the uninsured or underinsured patient in the dilemma differed by professional role (clinician, administrator, and educator). The PTRPMI utilized questions 1, 3, 5, and 7 across four resolutions to determine potential differences. An analysis of variance (ANOVA) revealed
that there was no statistically significant difference between respondents in each professional role.

Despite the lack of statistical significance it is of interest to note that the educators had consistently higher mean scores across all four questions except in the case of question 7. In question 7, the administrators scored slightly higher. Survey question 7 is the question that relates to perceived risk of violating the laws and rules governing physical therapy in Ohio in response to Resolution D. Resolution D, in effect, asks the respondent to imagine that they are resolving this dilemma of the uninsured or underinsured patient by making false adjustments to billing. It is the assertion of this researcher that Resolution D is the most obviously illegal and morally and ethically unappealing resolution. This assertion seems to be supported by the fact that the mean scores across all three professional groups were highest in response to question 7. This would indicate an increased perception of risk in each group. Additionally, although the administrators scored slightly higher than the other groups in response to survey question 7, the mean scores of each group were very close and the standard deviation within each group were lower than any of the other questions associated with laws and rules (survey questions 1, 3, and 5). These findings suggest that there is a high level of understanding among physical therapists, regardless of professional role, that improper billing is illegal. It is of interest to note, however, that there were significant differences in the perception of risk of violating personal moral and ethical values associated with Resolution D. These differences, as well as the other results of perception of risk of violating personal moral and ethical values, are described below.

Perception of Risk of Violating Personal Moral or Ethical Values

Research question 4 sought to determine if the perceived level of risk of violating personal moral or ethical values if treatment was not provided to, or arranged for, the uninsured
or underinsured patient in the dilemma differed by professional role. The PTRPMI utilized questions 2, 4, 6, and 8 across four resolutions to gather information on these potential differences. Analysis of variance (ANOVA) revealed that there was a statistically significant difference \((p=.039)\) by professional role in response to survey question 6. Bonferroni results indicate a statistically significant \((p=.046)\) difference between administrators and educators in response to survey question 6. The group of educators had a higher mean score \((M=4.03)\) as compared to the group comprised of administrators \((M=3.60)\). As has been mentioned, survey question 6 sought to measure the perception of risk of violating personal moral or ethical values in association with Resolution C. Resolution C asked the respondent to imagine that they were resolving the dilemma by providing some forms of treatment, which were more affordable or were covered by the patient's insurance plan, but not providing other services, which although needed, were un-reimbursable. The average mean score on survey question 6 for the group of clinicians fell between the average mean scores of the administrators and educators \((M=3.87)\) but was not significantly different from either of these categories. As has been stated, it is the assertion of the researcher that Resolution C, although in violation of the laws and rules governing the profession of physical therapy (Carroll, et al., 2006; see also APTA, 2006b), is routine practice in many physical therapy clinics.

There were findings in the literature that might suggest why administrators scored significantly lower in terms of perception of risk in Resolution C. These findings include evidence that suggests that managers might process moral and ethical situations differently than other groups. Stephens et al. (2005) conducted a study that found that managers were statistically more likely than their subordinates to use information such as employees' past behavior, seniority, and the employees' value to the organization in developing a strategy to cope with an
ethical dilemma involving an employee within their facility. Lower management levels indicated that they were more likely to use the policies and procedures of the organization, including professional codes of conduct, to guide them in their response to a situation in which there had been a breach of ethics. It is possible then, that clinicians might see a discrepancy between the laws and rules governing their practice and the internal policies of the facility in which they work more clearly than their superiors. Similarly, Posner and Schmidt (1987) conducted a study to determine if differences exist in beliefs regarding ethics for individuals at different managerial levels. This study found that there was a statically significant difference across management levels regarding the ethics of the corporation. At higher management levels, there was a significantly stronger belief that the company operated in an ethical manner. When the authors asked managers whether or not they found that they sometimes had to compromise their personal principles to conform to organizational expectations, the top executives responded that they generally did not. Likewise, when asked whether their personal values were compatible with the values of the organization, nearly 20% of the supervisory managers, 50% of the middle level managers, but less than 10% of the executives disagreed. Thus, those in policy making roles within an organization might see the organization as more ethical than those who are not in a position to make policy for the organization. And, as a result, they might detect violations of personal moral and ethical values less distinctly than the other groups. This would seem to be borne out by the results of survey question 6, the question that sought to determine differences in perception risk of violating personal moral and ethical values in response to providing some, but not all, needed treatments to the patient. The response to this question yielded significant differences between administrators, who manage the physical therapy practice, and educators, who are likely not as involved with clinical practice to the same degree as administrators. The
clinicians, who were likely to be involved in practice to a greater degree than the educators, but were likely at lower management levels than administrators, scored between these two groups in response to survey question 6, although they were not statistically significantly different from either group.

It is also possible that the members of each of the three groups (clinicians, educators, and administrators) are operating according to different ethical models. One might easily imagine that clinicians might be operating under the ethic of care as described in Chapter 2 (Starratt, 1991), since their daily work activities put them in greater contact with individual patients, including uninsured or underinsured patients. According to Lynn Beck (1994) caring depends on a special kind of relationship between the persons and includes not just a relationship but a commitment. True caring steps away from the examination of power, laws, and policy which are evident in the ethic of critique and is away from the essence of fairness and control which exemplifies the ethic of justice. Unfortunately, as shown in Chapter 1, the ethic of care is often times difficult to implement under current state law, by-laws of the professional organization, and the profession's code of ethics (Carroll et al., 2006). If they see the laws and rules of the organization as affecting individual patient care, they may sense this more readily than someone operating under a different ethic.

It is equally easy to imagine that an administrator in charge of the day-to-day operations of a physical therapy practice might be operating under the ethic of justice as it pertains to society or to the needs of their individual physical therapy practice. Resolution of the dilemma regarding the uninsured or underinsured patient calls for decisions pitting the rights of the individual patient against the rights of the clinic in which the physical therapist is practicing, as well as the rights of the medical system in the United States as a whole. Because of this, a
physical therapist utilizing the ethic of justice must decide whether he or she is practicing this ethic as it pertains to the individual, organization, or society. It is possible that the administrators in the present study see the need to maintain a financially viable physical therapy practice, or maintaining the viability of the healthcare system in the United States as a whole, as being more important than meeting the needs of an individual patient. Similarly, it is easy to imagine that educators, who are likely to have less direct contact with either individual patients or individual physical therapy facilities, might be more open to a literal examination of the laws and rules governing the profession and the personal and moral ethics which stem from decisions regarding how to resolve the dilemma presented in this study.

As has been stated, it is the assertion of the researcher that Resolution C (providing some, but not all, needed treatments), although illegal (Carroll, et al., 2006; see also APTA, 2006b), is routinely practiced in physical therapy clinics in response to dilemmas such as the dilemma of treating an uninsured or underinsured patient. Perhaps common procedures, customs, and practices become policy and policy becomes recognized as the unofficial 'law of the land'. Thus, following clinical policy, even flawed policy, might be combined with an ethic of justice as it pertains to the governance and well being of the physical therapy practice to allow physical therapists to believe that the following such a policy is an ethical act.

Survey questions 2, 4, 6, and 8 asked if the respondent was in violation of their personal moral or ethical values. It is possible that professional groups (clinicians, administrators, and educators) operate according to different ethical models. If this is the case, the discrepancy in mean scores in response to survey question 6 might not be an indication of greater or lesser understanding of moral and ethical values for any professional role, but might be due to individuals responding in an equally ethical manner according to their own values.
It is also possible that administrators operate at lower stages of moral development as described by Kohlberg (1984). For example, an individual operating at Kohlberg's stage IV, as described in Chapter 2, has an allegiance to meeting the needs of his or her contractual obligations. It is possible that managers of physical therapy clinics might have a lesser understanding of their own moral values and simply comply with the rules of their organization. The researcher asserts that this is unlikely for two reasons. First, it is the assertion of the researcher that most administrators have, at some point in their careers, acted in the role of clinician. Reasoning behind this assertion is discussed in greater detail in Chapter 3. Thus, administrators should have, at some point in their careers, had experiences similar to current clinicians. Kohlberg (1984) stated that individuals grow developmentally from a lower moral level to higher moral levels, so that it is unlikely that an administrator would move to a lower stage of moral development. If sequential, upward moral development exists, the experiential knowledge that comes from operating as an administrator should not move that administrator to a lower stage of moral development. The second reason that the researcher is doubtful that administrators are operating at a lower moral level is that there was not a significant difference in the perception of risk of violating personal moral or ethical values in association with survey questions 2, 4, or 8. Nor was there a significant difference in the overall risk of violating a personal moral or ethical values in association with survey questions 2, 4, 6, or 8 ($p=.485$). It is likely that if administrators were truly operating at a lower stage of moral development, a greater variance across all survey questions associated with risk of violating personal moral or ethical value would have been present between members of each professional role. Perhaps the higher mean scores attained by the group of educators could be explained by the experiential knowledge they gain through the teaching and research they perform in their educational settings. Perhaps
these settings and activities lead to greater opportunities for contemplation of many issues, including the issues discussed above.

Findings of Narrative Response

As has been stated, on April 4, 2007 Ohio House Bill 403 took effect (Ohio Legislative Service Commission, 2007). This bill contained a provision that disconnected Ohio law from the APTA code of ethics. This new law removed the duty of enforcing the APTA code of ethics from the State of Ohio and, thus, removed the duty for such enforcement from the OT/PT/AT Board. As has been stated in Chapter 3, this change in Ohio law had little functional importance to a physical therapist striving to resolve the dilemma posed in this study. The sole impact of the recent change to Ohio law upon this study lay in the fact that the change was implemented in close proximity to the dissemination of the study's survey. Since the dissemination of information regarding the changes to this aspect of ORC was incomplete at the time the survey was distributed. The impact that this new law had on the perception of risk was potentially a confounding variable. The researcher included survey questions 24 and 25 to determine if the passage of HB 403 created confusion among respondents that may have affected their answers to survey question(s) 1-8. Survey question 25 also gave the respondent the opportunity to make general comments regarding the survey or the study.

Of primary importance to this discussion, survey questions 24 and 25 produced no evidence that HB 403 was a confounding variable in this study. Fully 39.6% of the respondents answered "no" to survey question 24 which asked whether the passage of HB 403 had an impact on their answers, and 56.8% indicated that they were "unfamiliar with recent changes to the Ohio revised code which resulted from the passage of HB 403" in response to the same question. As discussed in Chapter 4, the remaining 14 individuals who indicated on survey question 24 that
the passage of HB 403 had an impact on their answer gave no evidence that their knowledge of HB did, in fact, impact their answers.

Additional narrative comments gathered from survey question 25 yielded evidence, as discussed in Chapter 4, that some physical therapists confused HB 403 with Ohio Administrative Code section 4755-29-01(D), which was the law that gave physical therapists the right to direct access (the right to evaluate and treat patients without a physician's order) in Ohio. As discussed in Chapter 4, other respondents to survey question 25 showed evidence of confusing the policies of their workplace with the laws and rules governing the practice of physical therapy in the state of Ohio. It is the assertion of this researcher that these comments show evidence that studies such as the present study are needed. These findings also suggest that further education of physical therapists in the state of Ohio is needed to improve overall knowledge of the laws and rules governing their practice.

The implications of this study on physical therapy practice based upon this study are addressed in the next section.

Implications for Practice

The most significant findings in this study were found in association with Resolution C. Resolution C asked the respondent to imagine that they are resolving the dilemma of the uninsured or underinsured patient by providing services that are less expensive or covered by the patient's insurance policy and not providing treatments which are prohibitively expensive or not covered by the patient's insurance policy. Survey question 5 called for the respondents to rate their perception of risk of violating the laws and rules governing physical therapy in Ohio based upon Resolution C and survey question 6 called for the respondents to rate their perception of risk of violating their personal moral or ethical values in response to resolving the dilemma.
according to Resolution C. As has been stated, it is the assertion of the researcher that this resolution, although illegal (Carroll, et al., 2006; see also APTA, 2006b), is commonly practiced in physical therapy clinics today. APTA members had significantly higher mean scores than non-APTA members in response to survey question 5. These significantly higher mean scores indicate a higher perceived risk of law and rule violation and, likely, a deeper level of understanding of the laws and rules governing the practice of physical therapy in Ohio by APTA members. It is possible that the APTA provides educational opportunities for its members that might increase their knowledge of the laws and rules governing the profession. It is also possible that individuals with greater knowledge of laws and rules join the APTA in greater numbers than those who have less knowledge of the laws and rules governing the profession. In either case, it seems appropriate that the APTA and its membership maintain their leadership status and duties regarding the creation of by-laws and rules, and level of influence upon legislators who create the laws that govern the profession. This study provides evidence that APTA membership is valuable and that the governance of the profession lies, justifiably, in the hands of those possessing the deepest understanding of the laws and rules of the profession.

In response to survey question 6, which asked the respondent to rate their perception of risk of violating personal moral or ethical values in response to Resolution C, educators had a statistically significantly higher mean score than administrators. The educators also had a higher mean score than the clinicians group, although not significantly so. It is the researcher's assertion that higher mean scores indicate a deeper understanding of personal moral and ethical values on the part of educators. This is good news for the profession because these are the individuals who are charged with educating future physical therapists in all entry level areas, including ethics. The fact that these educators are producing physical therapists (clinicians, administrators, and
fellow educators) who do not match their level of understanding of personal moral and ethical values is, perhaps, a sign that ethics education in entry level physical therapy programs needs to be revised or enhanced. Such improvements might include implementation of practical problem solving approaches dealing with the resolution of dilemmas, rather than simply preparing the students to memorize sets of laws and rules in preparation for state laws and rules examinations. Educators might also offer students the opportunity to engage in role-playing activities that allow them to explore their personal level of moral development as described by Kohlberg (1984) and opportunities to discuss different ethical models such as those described by Starratt (1991).

Confusion regarding the practical difference between clinical policy and the laws and rules governing the practice of physical therapy in Ohio was evident in the narrative responses of a few individuals on survey question 25. This confusion was described in greater detail in Chapter 4. This indicates that a greater level of understanding is needed among some members of the profession regarding the differences between the policies of their employers and the laws and rules governing the practice of physical therapy in Ohio.

These findings have implications for physical therapists in Ohio. In the case of educators, the room for growth in perception of risk evidenced in all survey questions, across all four resolutions, between all groups, suggests that the profession, as a whole, might benefit from improved entry level education in the areas of laws, rules, ethics, and morality. Physical therapists in Ohio are required to pass a laws and rules examination prior to gaining licensure. Thus, it seems unlikely that the laws and rules of the profession are not being taught at the level needed to pass these examinations. If all licensed physical therapists in Ohio have demonstrated knowledge of the laws and rules governing the profession and yet perceive less than high risk of violating these laws and rules perhaps this indicates a lack of practical knowledge. The
researcher calls for an increase in practical problem solving approaches in the classroom, including discussion and problem resolution activities utilizing cases where the laws and rules of the profession conflict with each other, such as in the dilemma of the uninsured or underinsured patient.

Administrators in the profession are charged with monitoring, and often times writing, policy for their places of practice. These individuals should write policies that do not conflict with the laws and rules of the profession and should maintain clinical environments where workplace policies and the rules of third party payers are not confused with the laws and rules governing the practice of physical therapy in the state of Ohio.

The findings of this study also have implications for clinicians. Clinicians should be alert to discrepancies in the laws and rules of their profession and should have a good knowledge of their own personal moral and ethical values so that they might be better equipped to make decisions when these laws and rules are in conflict with each other, or with the policies of their places of practice. Clinicians should also strive to remember that blind adherence to clinical policies that are in conflict with other laws and rules that govern the profession is not likely to be an acceptable defense if they are called to answer before the OT/PT/AT Board, nor is allegiance to the policies of third party payers such as insurance companies. Clinicians must place their identity as physical therapist above their identity as employee and value the laws and rules of their profession above the laws and rules of their employers. This will be easier to accomplish if a proper workplace environment, consisting of policies which are compliant with the laws and rules governing their profession, has been created by the administrators of the physical therapy practices in which they work.
The findings of this study imply that the American Physical Therapy Association should strive to create rules for the profession that are in compliance with the laws of the local jurisdictions of its members. However, it may be impossible to achieve complete compliance in all cases. Possibly a more practical approach would be to offer support to physical therapists who are at risk by disseminating information, or offering access to legal advice, to physical therapists seeking to change to the laws and rules governing the profession in their local jurisdictions. Similarly, this study implies that pro bono practice should have a more prominent place within the profession of physical therapy. Perhaps the APTA should educate its members on means of successfully working pro bono work into their daily practice lives. Such action is encouraged in the APTA Guide for Professional Conduct. Principle 10.1 of this document states "A physical therapist shall render pro bono publico (reduced or no fee) services to patients lacking the ability to pay for services, as each physical therapist's practice permits" (APTA, 2006f). Such supportive language is encouraging but, in the opinion of the researcher, offers little, if any, additional guidance for implementing or expanding such practice. Pro bono service has been successfully implemented into, and supported by, other professions such as the social work profession (National Association of Social Workers, 2007).

Implications for Future Research

This study examined perception of risk among three professional roles (administrator, clinician, and educator) and two membership status groups (APTA Members, and APTA Non-Members) of physical therapists in Ohio. Although these comparisons met the purpose of this study, several other comparisons might be made, or other research questions stemming from the present study might be pursued by future researchers.
This study could be replicated in states other than Ohio. Furthermore it could be replicated in multiple states so that interstate comparisons could be made. Findings from such a study might determine if different administrative groups within the state, including the physical therapy licensure board within a state, have an influence on the perceptions of risk examined in the present study. Access to information gained in such a study might allow an opportunity for different states to compare their laws and rules and make any legal and regulatory amendments that they feel are necessary.

A study might be conducted that categorizes individuals according to graduation from different educational institutions. If significant differences were found in such a study it might indicate that physical therapy education programs have an influence on perception of risk. Additionally, future studies could categorize individual groups by degree earned in their entry-level education (bachelor's, master's, or doctoral degrees).

One of the unanticipated findings in this study was that physical therapists often times have backgrounds in which they might be categorized into more than one professional role at rates greater than the researcher anticipated while designing the study. An example, described in Chapter 4, involved the group of educators. The researcher found, when examining the results of the PTRPMI, that a large number of educators also served, in either their current or past professional lives, as administrators. Perhaps a future study would categorize individuals according to different criteria.

This study had inclusion criteria which required an individual to be practicing within the field for one licensure cycle. In Ohio this is a period of two years (OTPTAT). This inclusion criterion was implemented in order to insure that an individual had practiced in the profession long enough to have gained experiential knowledge, and to have received all of the educational
and informational materials disseminated by the APTA and the OT/PT/AT Board. But perhaps individuals progress morally, ethically, or in terms of knowledge of laws and rules, throughout their careers. Because of this, future researchers might categorize individuals according to the number of years they have practiced physical therapy.

This study asked individuals to rate, on a resolution-by-resolution basis, their perception of risk of violating their personal moral or ethical values. It is possible that individuals working in different professional roles operate under different ethical models. Future researchers might seek to learn what ethical model (Starratt, 1991) or moral level (Kohlberg, 1984) physical therapists operate under, either as a professional on the whole or according to professional role.

This study found that APTA members seem to have a high perception of risk of violating the laws and rules in response to Resolution C. This study did not seek to determine if APTA membership contributes to this higher perception of risk or whether individuals with a higher perception of risk join the APTA. Similarly, this study found that educators had a significantly higher perception of risk of violating their personal moral or ethical values in response to Resolution C. This study did not seek to determine if individuals with a higher perception of risk of violating their moral or ethical values become educators or if the experience of being an educator provides this increased perception. Future researchers might seek answers to these questions.

Conclusion: A Call to Action

Resolving the dilemma of the uninsured or underinsured patient presents challenges on three fronts. The first of these challenges is to expand or improve provision of services to the uninsured and underinsured patients. The second challenge is that the current laws and rules governing the practice of physical therapy in Ohio provide no legal, and likely provide no
morally or ethically appealing, pathway for physical therapists to take when treating uninsured or underinsured patients, other than to refer the patients to a safety net provider or provide the service(s) for free (Carroll, et al., 2006). An offshoot of this second challenge lies in the unsettling fact, as shown in this study, that many physical therapists are apparently practicing in this environment without full perception of the risks involved in mishandling the uninsured or underinsured patient. Thus the third challenge lies in educating physical therapists in the discrepancies in the laws and rules governing the profession that are putting them at such risk. Each physical therapist might play a role in meeting these challenges. Such action is in accordance with the ethic of critique as described by Starratt (1991, 1994) and is called for in Principle 3 of the Code of Ethics of the American Physical therapy Association (APTA, 2006b). In this section of the study the researcher issues a call to action to the leaders and members of the profession of physical therapy to meet these challenges.

A Call to Educators

The researcher issues a call to educators to improve the methods used to educate entry level physical therapists in the laws and rules of the profession and also to improve educational methods used to teach ethical models and stages of moral development. Such improvements might include implementation of practical problem solving approaches dealing with the resolution of dilemmas, rather than simply preparing the students to memorize sets of laws and rules in preparation for state laws and rules examinations. Furthermore educators have, within their authority and scope, the capability of expanding training in the need for, and provision of, pro bono services to patients. The inclusion of such information into physical therapy program curriculum could improve the overall awareness, within the profession, of the need for such services. The researcher issues an additional call to educators, many of whom have, within their
employment contracts, an obligation to conduct scholarly research, to continue the type of research conducted in this study.

_A Call to Administrators_

The researcher issues a call to administrators to write, administer, and enforce clinical policies that are in accordance with the laws and rules that govern the profession. Additionally, the researcher encourages administrators to differentiate between the policies of their clinics and the policies of third party payors, or the laws and rules governing the profession. These administrative leaders should create, within their places of practice, an environment in which physical therapists can operate with the knowledge that their employer's policies and rules are not in conflict with those of their profession. Administrators should also be proactive in budgeting for provision of pro bono service as part of their normal practice routine. Such forward planning might help to alleviate the problems associated with treating the growing numbers of uninsured or underinsured patients and provide the clinicians with an environment that requires them to choose less often between allegiance to their clinical policies and allegiance to their patients or the laws and rules of their profession.

_A Call to Clinicians_

The researcher issues a call to clinicians to be alert to discrepancies in the laws and rules of physical therapy practice and to strive for a deeper knowledge and understanding of their personal moral and ethical values. Clinicians should strive to avoid confusing the policies of their employers and the policies of third party payers with the laws and rules governing their profession and to practice in a manner that is within the bounds of these laws and rules. Clinicians should also seek out opportunities to provide pro bono services, either through their employers or by volunteering at a safety net provider.
A Call to All Members of the Profession

As stated in Chapter 1, the dilemma of the uninsured or underinsured patient might be resolved by referring the patient to a safety net provider such as free clinic. Additionally, physical therapists in any setting might act as a de facto safety net provider by seeing the patient free of charge. This researcher calls to all members of the profession to explore opportunities to expand pro-bono practice within the profession. One means of making pro-bono practice more fiscally palatable would be to seek tax credits for such service or by lobbying their legislators to increase funding to safety net providers.

Finally, the researcher issues a challenge to all members of the profession to continue to examine the laws and rules that govern the profession, and to work to create changes to these laws and rules, as called for in Principle 3 of the Code of Ethics of the American Physical Therapy Association (APTA, 2006b), that would provide a legal and morally and ethically appealing path for a physical therapist to take when treating the uninsured or underinsured patient.
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## APPENDIX A

### INFLUENCES ON, AND SOLUTIONS TO, THE DILEMMA

<table>
<thead>
<tr>
<th>Solution</th>
<th>Refer patient to a safety net provider</th>
<th>Forego indicated tests and therapies because of cost</th>
<th>Reduce fees by adjustment to billing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethic in use</td>
<td>Ethic of Care or Justice</td>
<td>Ethic of Justice-if motivated by rights of society/protection of resources</td>
<td>Ethic of Care or Justice-If motivated by the rights and protection of the patient over those of society or law.</td>
</tr>
<tr>
<td>Stage of moral development in use (Kohlberg)</td>
<td>Any Stage</td>
<td>Stage IV (social system and conscience)-If motivated by fulfilling duties to which they have agreed or avoiding breakdown within the system</td>
<td>Stage VI - If acting in accordance with the principle of valuing human rights and respect for dignity of human beings as individual persons over the rules which govern physical therapy</td>
</tr>
<tr>
<td>Compliance with APTA By-laws</td>
<td>No conflicts.</td>
<td>Article 3(e) in conflict</td>
<td>Article 3(e): no conflict</td>
</tr>
<tr>
<td>Compliance with APTA Code of Ethics</td>
<td>no conflicts</td>
<td>Principle 1: in conflict</td>
<td>Principle 1: no conflict</td>
</tr>
<tr>
<td>Compliance with APTA Code of Ethics</td>
<td>no conflicts</td>
<td>Principle 3: Partial conflict</td>
<td>Principle 3: if in conflict if also in conflict with ORC 4755.47(10)(b)(i)</td>
</tr>
<tr>
<td>Compliance with APTA Code of Ethics</td>
<td>no conflicts</td>
<td>Principle 10: in conflict</td>
<td>Principle 10: no conflict</td>
</tr>
<tr>
<td>Compliance with ORC</td>
<td>No conflicts.</td>
<td>ORC 4755.57(10)(b)(i): not in conflict</td>
<td>ORC 4755.47(10)(b)(i): In conflict if deductible/co-pays are waived without approval of third party payor</td>
</tr>
<tr>
<td>Compliance with contractual obligation to third party payor</td>
<td>No conflicts.</td>
<td>Conflict unlikely</td>
<td>Conflict unlikely unless co-pays/deductibles are waived.</td>
</tr>
</tbody>
</table>
Hello,

I am a physical therapist and a doctoral student in the Leadership Studies program at Bowling Green State University. You are invited to participate in the research study that I am conducting for my dissertation. Your participation will be greatly appreciated and should take approximately 15 minutes of your time. I hope to learn without prejudice the perception of risk, held by Ohio licensed physical therapists, of violating laws and rules governing physical therapy when failing to treat an uninsured or underinsured patient. I also hope to learn the perception of risk that physical therapists hold of violating their personal moral or ethical values in the same situation. You were selected as a possible participant in this study at random. If you decide to participate, please complete the Web-based survey by clicking on the link below. Your return of this survey implies consent. The survey is designed to examine the relationship between professional experiences and perception of risk of violating laws and rules governing physical therapy in Ohio in differing resolutions. Your responses will be used to gain information which will be used to educate physical therapists regarding the subject matter.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and anonymous and will not be disclosed. Responses will be processed in aggregate form only and no individual responses will be linked to any single respondent. Due to the Web-based nature of the survey, there exists a minimal chance that your responses could be intercepted during transmission by individuals not involved in this study. Your decision whether or not to participate will not prejudice any future relationships with Bowling Green State University. If you decide to participate, you are free to discontinue participation at any time without prejudice.

If you have any additional questions regarding this study or your rights as a research participant please contact Mark J. Carroll, P.T., M.Ed. at 419-434-6531 or c/o Physical Therapy Program, University of Findlay, 1000 N. Main St., Findlay, OH, 45840. You may also contact my dissertation chair Patrick Pauken, J.D., Ph.D., at 419-372-2550 or c/o Educational Administration and Leadership Studies, 510 Education Building, Bowling Green, OH, 43403-0250 If you have any questions regarding the consent process please contact the chair of the Human Subjects Review Board at Bowling Green State University (419-372-7716, hscr@bgsu.edu).

If you have decided to participate in this study please access the Web-based survey by clicking here.

PLEASE RESPOND WITHIN ONE WEEK.

Thank you for your consideration.

Sincerely,
Mark J. Carroll, P.T., M.Ed.
Doctoral Candidate
Bowling Green State University
Introductory Letter to Probable Educators

Hello,

I am a physical therapist and a doctoral student in the Leadership Studies program at Bowling Green State University. You are invited to participate in the research study that I am conducting for my dissertation. Your participation will be greatly appreciated and should take approximately 15 minutes of your time. I hope to learn without prejudice the perception of risk, held by Ohio licensed physical therapists, of violating laws and rules governing physical therapy when failing to treat an uninsured or underinsured patient. I also hope to learn the perception of risk that physical therapists hold of violating their personal moral or ethical values in the same situation. Although the majority of individuals invited to participate in this study were selected randomly, you were selected as a possible participant because of your role as a physical therapy educator. The relatively low number of physical therapy educators in Ohio requires purposive sampling in order to gain statistical significance within that professional category. If you decide to participate, please complete the Web-based survey by clicking on the link below. Your return of this survey implies consent. The survey is designed to examine the relationship between professional experiences and perception of risk of violating laws and rules governing physical therapy in Ohio in differing resolutions. Your responses will be used to gain information which will be used to educate physical therapists regarding the subject matter.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and anonymous and will not be disclosed. Responses will be processed in aggregate form only and no individual responses will be linked to any single respondent. Due to the Web-based nature of the survey, there exists a minimal chance that your responses could be intercepted during transmission by individuals not involved in this study. Your decision whether or not to participate will not prejudice any future relationships with Bowling Green State University. If you decide to participate, you are free to discontinue participation at any time without prejudice.

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Doctoral Candidate
Bowling Green State University
Hello,

I am a physical therapist and a doctoral student in the Leadership Studies program at Bowling Green State University. You are invited to participate in the research study that I am conducting for my dissertation. Your participation will be greatly appreciated and should take approximately 15 minutes of your time. I hope to learn without prejudice the perception of risk, held by Ohio licensed physical therapists, of violating laws and rules governing physical therapy when failing to treat an uninsured or underinsured patient. I also hope to learn the perception of risk that physical therapists hold of violating their personal moral or ethical values in the same situation. You were selected as a possible participant in this study at random. Your return of this survey implies consent. The survey is designed to examine the relationship between professional experiences and perception of risk of violating laws and rules governing physical therapy in Ohio in differing resolutions. If you decide to participate, please complete the Web-based survey by going to the Web site address indicated below. In the alternative, if you wish to complete a hard copy of the survey, please contact me and I will send one to you immediately. Your responses will be used to gain information which will be used to educate physical therapists regarding the subject matter.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and anonymous and will not be disclosed. Responses will be processed in aggregate form only and no individual responses will be linked to any single respondent. Due to the Web-based nature of the survey, there exists a minimal chance that your responses could be intercepted during transmission by individuals not involved in this study. Your decision whether or not to participate will not prejudice any future relationships with Bowling Green State University. If you decide to participate, you are free to discontinue participation at any time without prejudice.

If you have any additional questions regarding this study or your rights as a research participant please contact Mark J. Carroll, P.T., M.Ed. at 419-434-6531 or c/o Physical Therapy Program, University of Findlay, 1000 N. Main St., Findlay, OH, 45840. You may also contact my dissertation chair Patrick Pauken, J.D., Ph.D., at 419-372-2550 or c/o Educational Administration and Leadership Studies, 510 Education Building, Bowling Green, OH, 43403-0250. If you have any questions regarding the consent process please contact the chair of the Human Subjects Review Board at Bowling Green State University (419-372-7716, hsrb@bgsu.edu).

If you have decided to participate in this study please access the Web-based questionnaire by going to the following Web site: <ENTER WEB ADDRESS HERE>. PLEASE RESPOND WITHIN ONE WEEK.

Thank you for your consideration.

Sincerely,

Mark J. Carroll, P.T., M.Ed.
Doctoral Candidate
Bowling Green State University
Physical Therapy Risk Perception Measurement Instrument (PTRPMI)

Instructions

Thank you for voluntarily agreeing to participate in this study. You may choose to withdraw from the completion of the questionnaire and you may choose not to answer any item(s) on the questionnaire. This study poses no known risks.

Please respond to the items on the survey in the order that they are presented. It is the intention of the researcher to gain information regarding the current knowledge and perception of risk of the respondent. Therefore, you are asked to refrain from researching the topic prior to answering the questions, discussing the survey with others prior to answering the questions, or changing your answers to the first eight questions once you have responded to them. Please answer all questions honestly and to the best of your ability. All responses will be treated anonymously.

Questions numbered 1-8 below are related to the following scenario:

You are a licensed physical therapist, practicing in Ohio. A patient comes to you, in early May of 2007, seeking a physical therapy evaluation and any needed intervention(s). You determine, as a result of your evaluation that this patient is in need of physical therapy treatment. In your judgment, if the patient does not receive such services they will have continued pain and/or decreased function. The patient reports to you that he or she is either underinsured, uninsured, or otherwise unable to pay for at least some of the necessary treatment techniques.

Below are four separate and stand-alone resolutions to this dilemma. Please read the resolutions and answer the questions which follow it.

**NOTE: the above scenario will be repeated before each resolution for your convenience.

Below are the definitions for underinsured and uninsured:

Underinsured: while possessing insurance through a third-party payor, he or she does not have, as a provision of the contract with that third-party payor, a benefit which would allow for payment of the service(s) that the patient requires.

Uninsured: he or she is solely responsible for their own bill for care or services received without the assistance of a third-party payor.
Resolution A:

Based upon the information presented in the scenario, you do not provide treatment to this patient or arrange for provision of the needed treatment(s) through a safety net provider, such as a free clinic.

1. Please indicate your perceived likelihood of being out of compliance with the American Physical Therapy Association (APTA) Code of Ethics and/or APTA By-Laws, and/or the Ohio Revised Code as a result of your actions.
   ___ Highly unlikely
   ___ Somewhat unlikely
   ___ Neither likely nor unlikely
   ___ Somewhat likely
   ___ Highly likely

2. Please indicate your perceived likelihood of violating your personal moral or ethical values as a result of your actions.
   ___ Highly unlikely
   ___ Somewhat unlikely
   ___ Neither likely nor unlikely
   ___ Somewhat likely
   ___ Highly likely

Resolution B:

Based upon the information presented in the scenario, you refer the patient to a safety-net provider, such as a free clinic, for treatment, or provide the services yourself for free or at reduced prices.
3. Please indicate your perceived likelihood of being out of compliance with the American Physical Therapy Association (APTA) Code of Ethics and/or APTA By-Laws, and/or the Ohio Revised Code as a result of your actions.

__Highly unlikely
__Somewhat unlikely
__Neither likely nor unlikely
__Somewhat likely
__Highly likely

4. Please indicate your perceived likelihood of violating your personal moral or ethical values as a result of your actions.

__Highly unlikely
__Somewhat unlikely
__Neither likely nor unlikely
__Somewhat likely
__Highly likely

**Resolution C:**

*Based upon the information provided in the scenario, you provide some forms of treatment, which are more affordable or are covered by the patient's insurance plan, but do not provide other services, which although needed, are un-reimbursable.*

5. Please indicate your perceived likelihood of being out of compliance with the American Physical Therapy Association (APTA) Code of Ethics and/or APTA By-Laws, and/or the Ohio Revised Code as a result of your actions.

__Highly unlikely
__Somewhat unlikely
__Neither likely nor unlikely
__Somewhat likely
__Highly likely
6. Please indicate your perceived likelihood of violating your personal moral or ethical values as a result of your actions.

   ___ Highly unlikely
   ___ Somewhat unlikely
   ___ Neither likely nor unlikely
   ___ Somewhat likely
   ___ Highly likely

Resolution D:

Based upon the information provided in the scenario, you provide all needed services but make adjustments to the patient's bill, such as waiving co-payments or deductibles, or billing for a less expensive treatment or a treatment that is covered under the patient's insurance plan, in place of the more expensive, or uncovered treatment technique.

7. Please indicate your perceived likelihood of being out of compliance with the American Physical Therapy Association (APTA) Code of Ethics and/or APTA By-Laws, and/or the Ohio Revised Code as a result of your actions.

   ___ Highly unlikely
   ___ Somewhat unlikely
   ___ Neither likely nor unlikely
   ___ Somewhat likely
   ___ Highly likely

8. Please indicate your perceived likelihood of violating your personal moral or ethical values as a result of your actions.

   ___ Highly unlikely
   ___ Somewhat unlikely
   ___ Neither likely nor unlikely
   ___ Somewhat likely
   ___ Highly likely
9. Do you hold a current license to practice physical therapy in Ohio?  Yes  No

10. Have you been a licensed physical therapist for 2 or more years?  Yes  No

11. Have you practiced physical therapy in Ohio for 2 or more years?  Yes  No

12. Do you currently, or have you ever, held a license to practice
    Physical therapy in any state other than Ohio?  Yes  No

13. Did you complete your entry-level physical therapy education in Ohio?  Yes  No

Questions 14, 15, and 16, ask you to identify your primary professional role. If you hold a current position in which your time and/or duties are evenly split between 2 or more categories you may choose to respond "yes" to more than one of these three questions.

14. Is your current primary profession role that of a clinician?
    (Your role is that of evaluating and
     treating patients in a physical therapy practice)  Yes  No

15. Is your current primary profession role that of an administrator?
    (Your role is that of overseeing the
     day-to-day operations of a physical therapy practice)  Yes  No

16. Is your current primary profession role that of an educator of
    physical therapy students?(Your role is
    that of teaching within an academic program which prepares
    students for entry level practice as physical therapists)  Yes  No
17. Is your current primary profession role that of an educator of physical therapist assistant students? (Your role is that of teaching within an academic program which prepares students for entry level practice as physical therapist assistants)  
   Yes  No

18. If you have identified yourself as a clinician, have you operated in the role of administrator for any period of 2 years or longer at any time during your career?  
   Yes  No

19. If you have identified yourself as a clinician, have you operated in the role of educator in a PT program for any period of 2 years or longer at any time during your career?  
   Yes  No

20. Do you currently hold membership in the APTA AND have you held this membership for at least the past two years?  
   Yes  No

21. Have you gained an exceptionally high level of knowledge of the laws and rules governing physical therapy in Ohio by means other than through the curriculum offered in your entry-level physical therapy education or through information disseminated on a routine basis through the APTA or OT/PT/AT board.  
   Yes  No

22. What was/is your entry level physical therapy degree? (the degree that you earned which qualified you to sit for the NPT physical therapy board examination)  
   __Bachelor's degree  
   __Master's degree  
   __Doctoral degree
23. What is the highest degree that you currently hold?
   ___ Bachelor's degree
   ___ Master's degree
   ___ Doctoral degree

24. Have recent changes to the Ohio Revised Code, resultant from passage of House Bill 403 impacted your answer(s) to questions 1-8 above?
   ___ Yes
   ___ No
   ___ I am unfamiliar with the recent changes to the Ohio revised code which resulted from passage of House Bill 403.

25. (Responding to this question is optional) If you indicated "yes" to question 24 please feel free to discuss how the passage of House Bill 403 into law effected your responses in the space below. You may also feel free to make any other comments regarding this survey or this study below.

   BOX FOR NARRATIVE HERE

You have completed the survey. Thank you for your participation.