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Physical therapist students as moral agents during clinical internships

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PHYSICAL THERAPIST STUDENTS AS MORAL AGENTS DURING CLINICAL EXPERIENCES

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This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: THE RESEARCH PROBLEM

Statement of the Problem

During my experience as a faculty member who has coordinated clinical experiences and taught ethics and professionalism in an entry-level physical therapist (PT) education program, I found students returned to the classroom with stories of situations they encountered that often had ethical implications. Students told stories of times they were asked to provide physical therapy treatment that they knew was not optimal. They encountered patients who the student or other health care practitioners perceived as unlikable or difficult. They related stories of patients who refused to participate in physical therapy because they were ready to die, how they felt at a loss as to how to deal with these patients and unable to ascertain their clinical instructor's (CI's) reasons for affording the patient the choice to participate or not. They returned to the classroom with stories of receiving information from patients who wanted their illicit drug use held confidential, and not receiving advice as to whether or not to honor that request. Oftentimes the students talked of the advice and support they received from the physical therapists in the clinics, but they also talked of times they felt they were alone while they dealt with these challenging situations. All of these stories reflect the ethical terrain PT students navigate during their clinical experiences and situations in which they must make a decision about the right course of action.

My students' stories suggest that PT students frequently make decisions where there is a potential for ethical issues to emerge in the triad among patient, student and CI. This triadic relationship exists within the broader context of the health care system in which the student, patient and CI interact with other health care practitioners and the

patient's family and other caregivers. The final clinical experiences before they graduate provide PT students with the opportunity to apply what they have learned in their PT education thus far in the context of the health care system directly with patients. They make decisions about what to do for patients and share responsibility for those decisions with their CI. These decisions and that responsibility suggest the students act as moral agents.

A moral agent is one "who qualifies generally as an agent open to responsibility ascriptions (e.g., only beings possessing the general capacity to evaluate reasons for acting can be moral agents)" (Eshelman, 2004). Purtilo (2005b) wrote that society grants health care practitioners status as moral agents by virtue of their skills, knowledge and expertise. Triezenberg (2005) concluded physical therapists have moral obligations to patients and others with whom they interact, e.g. colleagues, other health care practitioners, and patients' caregivers. He concluded the moral responsibilities physical therapists have to patients are founded on the fiduciary relationship that exists between therapists and patients (the relationship that arises through the trust the patient places in the therapist to act in the patients' best interest.) Triezenberg concluded that physical therapists' moral roles are centered on their relationships with patients and are characterized by altruism, advocacy and collaboration. He described the moral responsibility physical therapists have to others involved in caring for patients as based on a social contract with both direct and indirect influences on the therapists' relationship with patients. If physical therapists are moral agents, are PT students moral agents during their clinical experiences?

All entry-level PT education programs include clinical experiences or internships that are interspersed through the program. Out of all of the combined classroom, laboratory and clinical contact hours in entry-level PT education, students spend, on average, 46% of these contact hours in clinical education (American Physical Therapy Association, 2005a). After completing all of the academic coursework, there is an average of 36 weeks in culminating internships (American Physical Therapy Association, 2005a). As Mostrom (2005) noted, "Clinical education experiences…are important 'bridges' in the developmental trajectories of future therapists as they make the journey from being students in the classroom, to students in clinical practice settings, and ultimately to entering the profession" (p. 266). During these internships, students are not licensed and function under the direction and supervision of a physical therapist CI. As students gain clinical skills, the CI gives the student more responsibility for patients, and the student often sees patients alone with periodic consultation with the CI, particularly during the final stages of their clinical internships. During the internship, the nature of PT students' relationship with patients and others in the health care setting is similar to that of the physical therapist. These relationships develop through delegated responsibility for patient care and students and CIs are jointly accountable for the outcomes and processes of that care. The CI maintains full legal responsibility for the patients seen by PT students.

Students must successfully finish the internship to complete the degree requirements and qualify to sit for the national physical therapy licensure examination. The CI evaluates the student's performance during the clinical experience, and it is this evaluation that forms the basis for the decision as to whether the student has met the

requirements for the internship. The most widely used instrument to evaluate students during clinical experiences (American Physical Therapy Association, 1998) includes one criterion related to student's ethical behavior and another related to the student's professional behavior, in addition to other criteria related to the elements of direct physical therapy services to patients. The CI, while serving as a clinical mentor, also holds a position of power in relation to the student in that they formulate judgments about all aspects of each student's professional abilities that are critical to a student's future.

Based upon the stories my students tell when they return from clinical experiences and the nature of clinical education in physical therapy, it would seem PT students have the opportunity to function as moral agents during their clinical experiences. Clinical education experiences are an important element in the PT students' transition to a member of the physical therapy profession and where they have the opportunity to learn to become caring and compassionate practitioners (Mostrom, 2005). How students experience this role of moral agent during their clinical experiences merits further exploration, hence this dissertation.

Purpose

The purpose of this study was to explore the experiences of PT students as moral agents when confronting ethical issues during their clinical internships. The range of ethical issues students encountered that relate to their moral agency provided the foundation for inquiry into how they fulfill their role as moral agents and how they reason through situations in which ethical issues exist. Given the clinical instructors' involvement in all aspects of students' experiences during the internship and the clinical instructor's ultimate responsibility for the patients, this study also explored the clinical

instructors' involvement in students' role as moral agents and in the PT students' reasoning process.

The overall design of this study employed a qualitative approach based in complexity sciences. The participants were five Doctor of Physical Therapy students and the physical therapists who served as their clinical instructors during the final clinical internships. Data sources included journals, semi-structured interviews and telephone conference focus groups with both types of participants.

Background and Need

The physical therapy profession and the entry-level programs that prepare physical therapists are undergoing rapid, significant change. There is a shift in the professional practice arena in which patients and clients have direct access to the services of a PT and physical therapists practice more autonomously. In 2000, the American Physical Therapy Association (2006a) adopted a vision for the profession for 2020 that reads

> By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other health care professionals as the practitioners of choice to whom consumers have direct access for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.

The mission of physical therapist professional education is, "to graduate knowledgeable, service-oriented, self-assured, adaptable, reflective practitioners who, by virtue of critical and integrative thinking, lifelong learning and ethical values, render independent judgments concerning patient/client needs that are supported by evidence" (American Physical Therapy Association, 2004). Currently, patients can directly access the services of a physical therapist in 39 states (American Physical Therapy Association, 2006d).

Through the 1960s, two models for entry-level physical therapist education predominated. The programs were either baccalaureate degree granting or post-baccalaureate certificate programs. The first entry-level master's degree program started in 1960 (Murphy, 1995) and in 1979 there were five entry-level, master's programs (American Physical Therapy Association, 2005a). Until 2002, accreditation standards for physical therapist education programs permitted accreditation of programs at the baccalaureate, master's or doctoral level. As of January 1, 2002, the Commission on Accreditation in Physical Therapy Education, the sole accrediting agency in physical therapy education, no longer accredited baccalaureate programs. The first entry-level, Doctor of Physical Therapy program started in 1995 and by January 2007 there were 166 accredited doctor of physical therapy programs out of a total of 209 programs (American Physical Therapy Association, 2007). The Commission on Accreditation in Physical Therapy Education projects that by 2013 there will be 190 DPT programs with only a slight increase in the total number of programs (American Physical Therapy Association, 2005a). These changes signal a shift toward more autonomy in the physical therapy profession as it transforms to a culture comprised of doctors of physical therapy and patients who are able to directly access physical therapy.

The American Physical Therapy Association adopted its first code of ethics in 1935 (Purtilo, 2000). The changes from 1935 to the current physical therapy code of ethics reflect the increasing autonomy of physical therapists and professional growth of physical therapy. The Code includes principles that emphasize physical therapists' responsibility to maintain high standards of care, to act in a trustworthy manner toward patients and others, and to provide compassionate care that respects the dignity of

individuals. The *Code of Ethics* (American Physical Therapy Association, 2006c) and the accompanying *Guide to Professional Conduct* also act as a guide to the professional development of PT students (American Physical Therapy Association, 2006b).

Swisher (2002) analyzed ethics knowledge in physical therapy evidenced by peer-reviewed publications that appeared in the literature between 1970 and 2000. Her analysis revealed three recurring themes in the literature during those 30 years: (a) the need to identify the ethical issues physical therapists experience, (b) the parallel between clinical and ethical decision making, and (c) the change in the relationship between the physical therapist and patient from hierarchical to "mutual models". The evidence in support of the third theme that she offered included calls for shared decision-making, patient empowerment, using a more interactional model of relating to patients, and models of mutual respect. In her recommendations for future research, she included studies that examined ethical issues in all of the roles physical therapists fulfill, e.g. clinical service provider, educator, and researcher. She explored aspects of moral judgment, moral sensitivity, moral motivation and moral courage among physical therapists, but did not specifically mention the role of PT students in ethics.

There have been several articles describing approaches to ethics education in the entry-level physical therapist curriculum (Barnitt & Roberts, 2000; Jensen & Paschal, 2000; Jensen & Richert, 2005; Triezenberg & Davis, 2000). Publication of *Educating for Moral Action: A Sourcebook in Health and Rehabilitation Ethics* (Purtilo, Jensen, & Brasic-Royeen, 2005) was an outcome of a grant from the Health Resources Services Administration. One goal of that grant was to "develop and implement innovative leadership in ethics education for allied health" (Purtilo, et al., 2005, p. ix). The

accreditation criteria in physical therapist education require curricular content relative to ethics and values (American Physical Therapy Association, 2005b). Additionally, there are criteria for practice expectations in accountability, altruism, compassion and caring, integrity and professional duty, all of which relate to preparing students for the ethical aspect of their professional roles. These criteria establish minimal standards for content and insure ethics is part of the curriculum at all accredited entry-level programs for PT education. The above articles and text addressed what the ethics curriculum in physical therapy should consist of, how ethics should be taught, and how it might be evaluated.

The primary focus of these articles on ethics in physical therapist education was on pedagogical approaches in the classroom that would prepare PT students for professional practice. There have been few explorations of PT students' experiences in the ethical realm, descriptions of their moral development, or investigations of their ethical reasoning in the empiric literature. In the literature on ethics education, there has been only one article (Mostrom, 2005) that had a specific focus on approaches to teaching and learning ethics during clinical education experiences. The lack of understanding about ethical issues PT students confront and how they learn to approach ethical issues were key influences on conducting this study.

A similar situation existed in medical education until the mid-1990s (Christakis & Feudtner, 1993). Christakis and Feudtner examined the ethical dilemmas medical students confronted and noted:

> …Medical students are *not* [emphasis in original] physicians, and the issues they face are of a different ilk than those faced by house staff or attending physicians. …These medical-student-level dilemmas do not fit neatly into the prevailing paradigm of medical ethics education, a paradigm that is insufficiently sensitive to the stage of students' clinical and ethical development at which they are no longer lay persons but are not yet physicians. (p. 250)

The same might be true about physical therapy students and the ethical dilemmas they confront, but too little is known about their experiences during their entry level education.

Stiller (2000) described the evolution of the ethos of physical therapy and the enduring traits of the profession. The enduring traits she identified were caring and helping, hard work and dedication, warmth and openness, and a positive attitude. These traits help identify the profession that PT students are being prepared to enter. Hafferty and Franks (1994) maintained that ethics is a professional identity and that identity is created during the professional education through transmission of a specific professional morality. These authors proposed that professional socialization is the means by which "people acquire the values and attitudes, the interests, skills and knowledge" (p. 865) of the group they are joining. One could argue that in this process people adopt the morals of the profession and learn to act on those morals through their roles as agents. Hafferty and Franks suggested professional socialization occurs through the hidden curriculum, those implicit messages all role models convey, whether intentionally or not, to students. This research study was intended to provide insight into the experiences of PT students as they learned to adopt and act on their role as moral agent.

Conceptual Framework

There are two elements to the conceptual framework for this study. The first element of the framework is the work of Martin Buber in *I and Thou (Buber, 1970),* providing a context for relationship between student and patient and CI and student. The second element of the conceptual framework is complex responsive processes (Griffin,

2002; Stacey, 2001), an approach to learning and knowledge creation and identity formation founded in complexity science and related to the work of Mead (1934).

I and Thou

Buber (1970) distinguished between the detached world of experience, "I-It", and the empathic world of relation, "I-You". The essence of Buber's description of relation is found in the beginning of the text, when he stated, "When one says You, the I of the word pair I-You is said, too…The basic word I-You can only be spoken with one's whole being" (p. 54). He continued, "…where You is said there is no something. You has no borders. Whoever says You does not have something; he has nothing. But he stands in relation" (p. 55). In these passages, he described the oneness that has the potential to exist in a caring relationship.

Seeing, perceiving, wanting, sensing, all occur in the objectified world of separation. Buber described the detached observation of another person that occurs through examination. When interacting with another human, a person can describe any physical attribute, i.e. hair color, eyes, quality of speech, or fluidity of movement, much like a doctor can apply a diagnosis when interacting with a patient. Any of these ways of interacting objectify the other person in relation to the observer. Buber maintained that in this form of objectified observation, the sense of the other person as an integral member of a broader community or for that person's uniqueness is lost. This reasoning suggests that to act as a moral agent, one must enter into the world of the other person, to place that person in the context of community and to see that person's uniqueness as a human being. One cannot imagine a health care professional as ethical, if that practitioner is unable to truly see the patient as a person in relationship with the broader context of that

person's life. The importance of the relationship between practitioner and patient is central to ethical practice whether one thinks in terms of the common bioethical principles (i.e. beneficence, autonomy, and justice), rules (i.e. veracity and fidelity), or virtues (i.e. integrity and commitment) (Beauchamp & Childress, 2001).

From the stance of objectification during a visit to a health care practitioner working from a medical model, there is a tendency for the observer to place a person and the illness in a linear, causal relationship. The act of diagnosis in physical therapy suggests the PT must identify the underlying pathology, determine how that pathology might cause the impairments the PT observes or measures, and relate the effect those impairments have on the person's functional ability. Buber asserted that the person who assumes an objective stance can only know particular qualities of others, and would therefore not experience the "substance" of "You" (p. 80-81). Buber did not deny the validity of the objective, experienced world in which one lives. However, he asserted that without relationship, those "queer lyric-dramatic episodes" (p. 84), life would not be worth living. He stated, "… the drive that is wedded to and determined by our being is the plasma of communal life, while the detached drive spells its disintegration" (p. 97-98). While he recognized the importance of the scientific order of nature, he maintained that one need not be confined to that world. "Only those who know relation and who know of the presence of the You have the capacity for decision" (p. 100). The essence of agency is making decisions and the essence of ethics is doing so in relation with other people.

Buber seems to suggest that the health care practitioner who approaches patients with clinical detachment and objectification would have a limited view of moral agency.

Furthermore, the practitioner whose approach is one of establishing a relationship with the patient as a whole person in the broader context of a community would embody the essence of the practitioner as moral agent. Understanding how these differing approaches to patients might be evident in PT students' approaches to patients and the effect on their moral agency is crucial to the purpose of this study.

Complex Responsive Processes

Stacey (2001) suggested that identity, both individual and collective, emerges through interaction between or among people and through this interaction meaning emerges. People communicate their intention through symbols, expressed thought, and feelings and actions. These intentions lead to cooperation and the creation of a potential future that people create together. According to Mead (1934), these symbols become significant because they have the same meaning for all members of the social group and arouse the same attitudes in people who are receiving and making those symbols. Stacey then concluded that in the course of interacting, the potential exists for resonance and attunement between people that can be perceived as empathy, or shared understanding.

Stacey placed importance on the simultaneous emergence of each person's reactions that takes place within historic, biologic, individual, and social contexts. Between people who enter into a relationship from very different contexts, the potential exists for creating novel, self-organizing means of relating and the capacity to create patterns of relating in which differences and similarities are recognized. The different contexts of patient and physical therapist or patient and PT student would be an example of situations in which the potential Stacey described could exist.

In Stacey's construct, human agency, which he described as action taken to survive through interaction with others, is the human imperative and is solely contained within human beings and not the social or organizational structures in which they function. Human agency is a broader concept than moral agency, but the latter falls within Stacey's description and is also contained solely within human beings. I will henceforth use moral agency. The social or organizational structures only exist and act through the behaviors of the individuals of which they are constructed. Griffin (2002) used the example of the hospital that has a value to "provide each patient with the best possible care" (p. 116). He suggested that through communication, cooperation, and negotiation among people within that hospital, with their differing conceptions of what that value means, this value becomes a functional reality. Griffin went on to suggest that when they confront the conflicts that inevitably arise while trying to provide the best possible care for patients, people negotiate with one another and reconstruct the past through action in the present. The pattern of relating reflects the "perpetual construction of the future as both continuity and potential transformation" (Stacey, 2001, p. 93). Ethical action thus occurs in relationship with and through interaction with others. Coherent ethical action emerges through the self-organizing property of these interactions among people over time (Griffin).

Stacey (2001) maintained that the "essence" (p. 230) of a complex responsive process perspective lies in the social negotiation of action that occurs between people and the means they use to fulfill that action. From that perspective, responsibility for one's actions and accountability to the other person for those actions are ethical requirements of social interaction. According to Mead (1934), the social interdependence of all of the

members of a society gives rise to ethical ideals in the consciousness of the individual members of that society. Members of a society encounter problems when they cannot adapt or be true to their sense of self, and the solution they realize is one of placing self in opposition to or superior to others. He maintained that cooperation, interaction, and identification with the other person lead to ethical action. Further Stacey held the ability to construct a sense of self in relation to society underlies ethical action. The perspectives from Mead (1934), Stacey (2001), and Griffin (2002) offer guidance through which the internal constructs of ethical and moral reasoning among the participants in this study can be explored.

At the core of this study are the relationships between people in the social world of a health care system. As Dimitrov (2003) wrote,

> The most significant characteristic of interactive human dynamics is their inherent potential to give birth to emergent phenomena and thus to bring forth changes. … Unpredictability in the social world is not an obstacle for understanding it…By exploring unpredictable dynamics of a non-linear process, one can gain insight with enormous explanatory power… it is the unpredictability of the social world that helps us understand that there are no negligible human actions… (p. 26-27)

Purtilo (2005b) claimed, "A moral agent is one who has been given responsibility and authority for decisions affecting society's deep moral fabric." (p. 6). The dynamics of communication among PT students, clinical instructors, and patients and the impact they have on one another's lives, particularly patients, were central to this research study.

Stacey (2001) also stressed the importance of the interactions themselves, as they hold the meaning of what occurs and provide the potential for change and continuity. Mead (1934) in discussing mind and self held that the internal conversations one has with oneself, "thinking," are self-similar to interactions with others (p. 134-135). It is through interaction that knowing occurs and the future created. Stacey asserted that

communicative interaction among people is characterized by mutual, circular causality. When there is diversity among those interacting, the narratives and ideas brought forth are more varied and these variations, while they seem small, may trigger significant, seemingly discontinuous changes. Stacey wrote, "Meaning or knowledge, emerges in this local communicative process in the living present, as does freedom of choice and intention within the conflicting constraints of power relations. Knowing is, therefore, the process of communicative interaction" (p. 163). Dimitrov, Stacey and Mead emphasized the centrality of the dynamics of human interaction to creating meaning from which understanding and action emerge. In addition to providing part of the conceptual framework for the purpose of this study, the research methods employed in this study intended to access and describe the creation of meaning and identity that occurs through the daily interactions among student physical therapists, clinical instructors, patients and others.

In summary, how a person acts is, at heart, an ethical question. Central to the complex responsive process perspective is the concept of people socially negotiating action to create meaning and identity through cooperation, identification, and interaction with each other. Moral agency, the ability to act in an ethical context, occurs in relation to other people and is the expression of self-responsibility and accountability to those people. In the specific context of this study, PT students continuously interact, cooperate and identify with their clinical instructors and patients. During and through these interactions, with the inevitable conflicts and differences that people bring to situations, they act and create their sense of self as an ethical person and create a perception of themselves as ethical people, accountable to their clinical instructors and

patients. Underlying these communicative interactions is the PT students' basic approach toward their relationship with their patients, whether it tends toward objective detachment of I-It or relationship with the person in context of community, I-You.

Research Questions

Overall, this study considered how Doctor of Physical Therapy students experienced the role of moral agent during their final clinical internships. This study explored five questions: (a) What ethical issues did PT students encounter during their clinical internships? (b) How did PT students reason through ethical issues when they encountered them? (c) How are PT students' descriptions of their approaches to patients associated with their experience of their role as moral agents? (d) What is the relationship between PT students' social negotiation of action with their CIs and the PT students' role as moral agents? (e) What is the relationship between PT students' social negotiation of action with their patients and their role as moral agents?

Definition of Terms

Terms from complexity sciences are defined as they occur in the text and are not included in this definition of terms.

Beneficence: acting to benefit others, including preventing harm, removing harm and bringing about a positive good (Purtilo, 2005a).

Clinical experiences: in general, any learning experiences in which the student is in a clinical site providing patient services under the supervision of a clinical instructor. These experiences may be part-time (less than 20 hours per week) or full-time (typically 40 hours per week) and are of varying lengths of time.

Clinical instructor: a physical therapist who works at a clinical facility and who supervises, teaches, directs, and evaluates the performance of PT students during the clinical experiences. They function as clinical faculty in the academic program under a written agreement between the clinical facility and the program.

Clinical internships: the final, full-time clinical experiences following all academic courses that occur before graduating from the physical therapy program and eligibility to take the national physical therapist licensure examination. There may be a single extended clinical internship, or a series of internships in different clinical sites.

Dilemma: used alone in this study, means any situation in which the PT student or CI has to make choices between undesirable alternatives or when there is indecision about what to do when faced with multiple alternatives (Pearsall & Trumble, 2002).

Discursive ethics: Ethical decision making that relies upon the moral principles, values, and duties that are accepted within the society, in this case health care professions. This approach to ethics is deductive in nature; reasoning from observable patterns, laws and rules (Purtilo, 2005a). Thus, nondiscursive ethics is more inductive in nature and uses approaches such as narrative, virtues, and casuistry (case-based ethics). (Davis, 2006)

Distributive Justice: fair, equitable and appropriate distribution of benefits and burdens among people, particularly when there are insufficient resources to meet the needs of all people. (Beauchamp & Childress, 2001; Purtilo, 2005a)

Ethical dilemma: a situation in which evidence or argument exists to support more than one action, but the evidence is not sufficiently strong in one way or the other to support one action over the other; or in which the agent believes action is required in at

least two mutually exclusive ways (Beauchamp & Childress, 2001). Use of the term ethical dilemma is consistent with this definition. I will include ethical temptation in the category of ethical dilemmas. An ethical temptation occurs when there are inducements or rewards for behaving unethically.

Ethical Issue: any situation in which there are ethical considerations of any degree or severity that merit exploration and understanding. These situations could involve socially accepted norms of right and wrong, behaviors in relation to professional standards of conduct, or situations in which the ability to express caring and compassion is present. Ethical issue is the terminology used in this study to describe any of these situations regardless of the nature or severity and it includes ethical dilemmas as defined above.

Ethical: the personal attributes and actions of a person in relation to the widely accepted social norms of what constitutes right and wrong human behavior or in relation to the accepted standards of behavior of the physical therapy profession, e.g. Code of Ethics (Pearsall & Trumble, 2002; Purtilo, 2005a; Triezenberg & Davis, 2000). Ozar (1993) contended, "there is no widely or consistently employed distinction between" (p. 161) the words moral and ethical, thus, I will use the word ethical in this study.

Guillain-Barré Syndrome: a self-limiting, demyelinating syndrome that results in paralysis that begins in the extremities and moves centrally. (Dierckx, 2008)

Medicaid or Medi-Cal: health insurance program for people whose income is below guidelines established by the federal government, who are unemployed, or who are disabled and unable to work as a result. The federal and state governments share funding

for the program. The program in California is called Medi-Cal (Bodenheimer & Grumbach, 2005).

Medicare: Federally funded social health insurance for people over the age of 65 or who are permanently disabled and meet other requirements.

Moral agent: a person who has the capacity to evaluate the reasons for actions and the ability to act (Eshelman, 2004) in situations with ethical implications. A moral agent acts in relation to common bioethical principles (i.e. beneficence, autonomy, and justice), rules (i.e. veracity and fidelity), or virtues (i.e. integrity and commitment) (Beauchamp and Childress, 1993) or has the capacity to express caring and compassion (Phillips & Benner, 1994).

Moral Principles: Fundamental moral norms that guide or underpin behavior (Beauchamp & Childress, 2001, p 12)

Moral Virtue: a moral character trait that is valued by society (Beauchamp & Childress 2001, p27).

Morality: widely accepted norms of right and wrong within a society, including the principles, rules, rights and virtues that guide behavior (Beauchamp & Childress, 2001).

Normative ethics: Inquiry into or reasoning from the societal standards of what is agreed upon as right or wrong, typically relying upon the moral principles and duties in health care practice (Gabard & Martin, 2003; Purtilo, 2005a). Thus non-normative ethics does not rely on the search for agreement on societal standards.

Patient: a person who is the recipient of physical therapy services because of a disease, disorder, or condition and thus has resultant impairments, functional limitations

or disability that required the skilled services of a physical therapist (American Physical Therapy Association, 2001, p. S681) or other health care practitioner.

Physical therapist student: a person enrolled in an entry-level physical therapist education program preparing for licensure as a physical therapist.

Speech disfluencies: breaks or irregularities in speech, such as repeated words, words that are cut off mid-way, and repeated syllables (Wikipedia contributors, 2008).

Speech fillers: parts of speech that are not purposeful or do not have meaning, such as "uh," and "er" (Wikipedia contributors, 2008)

Tetraplegia: full or partial paralysis of all four limbs and trunk, usually as a result of a traumatic spinal cord injury. Also known as quadriplegia (Dierckx, 2008).

Values: operational beliefs that a person adopts and that guide action. Moral values are those that guide actions in the way people relate with one another (Davis, 2006). Given the purpose of this study, I use the term values to mean moral values.

Limitations

This study is a qualitative inquiry and as such was designed as an initial exploration into the concept of physical therapist students as moral agents and how they experience that role during their clinical internship when confronting ethical dilemmas. The sample of five PT students and their four clinical instructors was a sufficient sample for this type of qualitative inquiry. The student's clinical internships occurred at only four of the many different types of clinical sites in which these internships typically occur, thus caution must be exercised in transferring the findings to other settings. For three of the four clinical instructors who participated in the study, this was their first or second full-time student physical therapist they supervised, thus they were relatively

inexperienced as clinical instructors. As is common in qualitative research studies, the findings are not generalizable across larger populations of physical therapist students, clinical instructors, or clinical education experiences. However, achieving this type of generalizability is not the goal of qualitative research. Rather, the goal is for the reader to consider the transferability of the findings to other settings, a goal that is met primarily through the trustworthiness of the findings (Creswell, 2007; Lincoln & Guba, 1985). These concerns are addressed in Chapter Three.

Significance

The results of this study are of benefit to physical therapy educators, whether they fulfill that role in the academic or clinical setting. Increased understanding of PT students' experiences of their role as moral agents and how they enact that role provides physical therapy educators guidance in how to help PT students make the transition to membership in a profession. The common ethical dilemmas students encountered can help classroom educators better prepare students for their clinical education experiences. The insight this study provides into how students reason through the ethical issues they face and relationship between their moral agency and their approaches to their patients helps educators build these reasoning skills and strengthen the availability of resources to help students while on their clinical experiences. An improved understanding of how clinical instructors perceive their role of developing students' moral reasoning and ethical decisions offers insights into the content of staff development and training activities for clinical educators. Ultimately, their understanding can help them better fulfill their role as clinical instructors.

CHAPTER 2: REVIEW OF THE LITERATURE

The literature that is relevant to this study covers five main areas: (a) ethics education in physical therapy, (b) clinical education in physical therapy, (c) ethics in physical therapy and rehabilitation, (d) ethical issues and students of physical therapy, nursing and medicine, and (e) clinical reasoning and ethical reasoning in physical therapy, including novice and expert differences.

Ethics Education in Physical Therapy

The literature on how physical therapist (PT) education programs teach ethics is relevant to the purpose of this study. A 1988 survey of how PT entry-level education programs taught ethical and legal content disclosed wide variability among the programs (Finley & Goldstein, 1991). Eight-one percent of the 116 accredited programs surveyed responded. Among these programs, barely 25% included 20 or more instructional hours on ethics and 25% included five or fewer hours. Twenty-seven percent of responding programs had a course devoted to ethics and the remainder included ethics in other courses. Interestingly, 31 programs indicated topics in ethics were covered in clinical education. No more recent, similar surveys in the literature of curricular content on ethics in PT entry-level education were found.

Current accreditation standards for PT education require all programs to cover ethics in physical therapy (American Physical Therapy Association, 2005b). These standards, while not prescriptive, assure a minimal level of content on ethics. The *Normative Model of Physical Therapist Education* (American Physical Therapy Association, 2004) provides guidance for the design of entry-level curricula and influences the accreditation process. The model includes educational outcomes for all of

the professional practice expectations in physical therapy, including expectations of accountability, altruism, compassion and caring, integrity, and professional duty. As an example, the expectation for accountability includes an educational outcome that states, "the graduate seeks and weighs the expertise of others in ethical decision making" (p. 16). The accreditation criteria and these education norms have a significant influence on how educational programs teach ethics.

Triezenberg (1997) conducted a Delphi study with a panel of six experts to discover what ethics content areas should be addressed in PT education programs, how and when this instruction should occur and the faculty members' qualifications to teach this content area. He identified the three main categories of topics for ethics instruction as (a) topics related to moral development and ethical choices including ethical problem solving and decision making; (b) societal expectations and professional responsibility including the code of ethics, legal issues, and physical therapy ethical issues; and (c) ethical principles and theories. There was consensus on instructional methods of case studies, discussion, lectures, and activities to investigate personal ethical issues. The panel nearly reached consensus on problem-solving strategies, practice with ethical decision-making, and clinical observations. The panel also agreed that ethics instruction should begin early, be integrated throughout the curriculum, and continue into the clinical education experiences. When considering the qualifications of faculty to teach ethics, the panel identified the importance of several personal characteristics (such as understanding, flexibility, articulate, insightful and enthusiastic) along with formal preparation and experience in ethics. This study emphasized the importance of applied ethics with ethical decision-making and problem solving and the importance of extending ethics education

into clinical experiences. The study did not discuss how learning applied ethics can best occur during clinical education experiences, perhaps because too little is understood about how students approach ethical situations in the clinic, how they reason through them, and how their interactions with clinical instructors, patients, and others help students learn applied ethics.

Another study investigated whether 17 PT students chose to explore learning about ethics in an exclusively problem-based curriculum with cases designed to intentionally include ethical issues (Solomon & Geddes, 2000). These authors' data sources were observation of three tutorial groups, focus groups with tutorial group members, semi-structured interviews with the faculty tutors and a student recall questionnaire of the importance of the learning issues addressed in the case. These PT students placed a lower priority on pursuing learning about ethics than they did the clinical elements of the case. These authors concluded that students could not adequately articulate ethical issues, found ethics difficult to research, and lacked personal experience with ethical dilemmas, even though they had nine-weeks of prior clinical experiences. Students raised ethical issues in the case discussion groups far more frequently than the tutors, who were clinicians that taught part-time. Much like Triezenberg's study, this research also reinforces the need to develop an understanding of how students approach ethical issues in the clinical environment and how they and their clinical instructors negotiate an understanding of these issues. Solomon and Geddes raise important issues about whether PTs and PT students have the language or desire to discuss ethical issues when they encounter them.

Triezenberg and Davis (2000) urged physical therapy educators to place ethics education at the center of the physical therapy curriculum. They suggested that the primary goals of ethics education are promoting moral behavior, integrating students into the professional values and behaviors of physical therapy, and preparing students to be active participants in the dialogue of moral issues in physical therapy. These authors listed 39 suggested instructional strategies to achieve these goals and emphasized the importance of experiential learning. Of these strategies, only two explicitly related to learning in the clinical environment where students spend, on average, nearly 46% of their contact hours during their professional education (American Physical Therapy Association, 2005a).

Jensen and Reichert (2005) conducted a case analysis using interactions between PT students and standardized patients in a series of ethics courses over three years. They used two, clinically situated ethics cases in which the students interacted with the trained actor, reflected on that experience and participated in a peer assessment discussion group. They assessed the learning outcomes with a qualitative analysis of the students' reflection papers and a pre- and post- survey on self-efficacy. These authors concluded that student learning in ethics was enhanced by the authentic, experiential learning that the standardized patients afforded. Jensen and Reichert emphasized the value of placing ethics within a specific clinical context in order to help the students associate ethics with typical physical therapy practice as opposed to an abstract or separate experience. They also found that the opportunity for critical self-reflection was an important element of the learning experience. They observed that some students demonstrated the ability to move toward more patient-centered judgments while others, who expressed more confidence in

their interactions than would be expected of a student, were quick to judge the patient and adapted a stance of certainty. There are themes in this study, e.g. the importance of social, communicative interaction and change toward a patient-centered approach, that are consistent with the conceptual framework of this study.

Section Summary

The literature on PT entry level education in ethics, while sparse, illustrates a general lack of specifics about approaches to ethical reasoning in the clinical education component of the curriculum and supports the concept of active, interactional strategies to promote learning about moral agency and ethics. Jensen and Reichert (2005) provided a way to bridge academic and clinical learning in ethics.

Clinical Education in Physical Therapy

This research takes place within the environment of clinical education in physical therapy. Clinical education is an essential and important aspect of entry-level PT education. In the average Doctor of Physical Therapy program, students spend 45.6% of their total clock hours in clinical education and an average of 35.7 weeks in full-time clinical experiences (American Physical Therapy Association, 2005a). Clinical experiences afford students the opportunity to apply the entirety of their learning in the context of clinical care with patients where they have the opportunity to develop as ethical and compassionate practitioners (Mostrom, 2005). Several empiric studies provide information that is relevant to this research.

Scully and Shepard (1983) conducted an ethnographic study of PT clinical instructors at five hospitals in New York. They identified several important environmental and situational factors and clinical instructor behaviors and actions.

Among the environmental and situational factors were the types and numbers of patients, the length of time students were assigned to the clinic, and where the clinical experience fell within the academic program. An important perspective of clinical instructors in this study was that the patients' need for competent, skillful care took precedence over student learning needs. In this study, the most important characteristic students brought to the clinic was their professional maturity, which the clinical instructors described as the ability to work with people. Scully and Shepard reported that the clinical instructors used several teaching approaches to promote student learning in the clinic environment. These authors characterized the approaches as diagnosing student readiness to learn, selecting clinical problems, providing supervision, and evaluating the student. Of these, the supervision technique of coaching was the most salient to the present study. The clinical instructors used nonverbal signals, e.g. clearing the throat or questioning looks, and instructions given to the student through the patient to guide the student's action. They also used direct feedback and questioning before, during and after patient visits. Scully and Shepard illustrated the importance of interaction between clinical instructors and PT students for student learning, an important element of the current study. Scully and Shepard described characteristics of PT student-CI interaction that are consistent with the constant, emerging interaction Stacey (2001) described.

Two studies investigated PT clinical instructors and their teaching behaviors (Emery, 1984; Emery & Wilkinson, 1987). In the 1984 study, Emery surveyed PT students who had completed all of their clinical experiences to discover the students' perspectives on clinical instructor behaviors that were important and how frequently these behaviors were actually observed. In the later study, Emery and Wilkinson

surveyed clinical instructors using the same instrument to investigate their perceived importance and frequency of these behaviors. The students ranked communication skills, interpersonal skills, teaching behaviors and professional skills in that order of decreasing importance. While communication and interpersonal skills were perceived as important, the students reported they did not frequently observe these skills in their clinical instructors. There were similar findings among the clinical instructors and the CI findings were generally well correlated with the student findings.

Cross (1995) used a survey to examine important characteristics of clinical instructors as perceived by English PT students, the students' clinical instructors, and academic faculty during each of the three years of the program. Only the findings from the clinical instructors and students are relevant to this review. These authors reported the importance of communication skills and approachability across all of the groups. While the clinical instructors and students in the first two years of the program ranked the CI as a good role model of high importance, this characteristic was much less important to the third (final) year students. For the students in the final year of the program, the clinical instructor's competence and interest in learning processes were of increased importance. All three studies (Cross, 1995; Emery, 1984; Emery & Wilkinson, 1987) established the importance of communication and interpersonal behavior in successful clinical education experiences. Cross's findings revealed a shift in relative importance of some aspects of CI behavior during the final clinical experiences.

PT student behaviors are an important element in the clinical education experiences and are used to judge whether PT students have met entry-level criteria (D. Jette et al., 2007). A qualitative study examined which behaviors caused clinical

instructors to question PT student competence (Hayes, Huber, Rogers, & Sanders, 1999). These authors reported that, while clinical instructors valued and noticed problems with poor communication and poor professional behaviors more frequently than cognitive skills, they addressed the cognitive skill problem more frequently with the students. This study reinforces the importance of students' communication skills in clinical learning and the apparent difficulty clinical instructors have in directly addressing interpersonal problems when they are evident in student behavior. This finding will influence the characteristics of the study sample for this study. Selecting PT students as participants who have prior evidence of strong communication skills and clinical instructors who are skillful communicators and assertively address communication problems if they arise will more likely result in data that can be meaningfully interpreted. In the study by Jette, et al. interpersonal communication was an important criterion clinical instructors used to judge whether or not a PT student is functioning as an entry-level PT. Interpersonal communication was characterized as the ability to establish relationships with patients and colleagues through demonstrated respect for others and effective forms of verbal and nonverbal communication.

Two studies of preferred learning experiences, one with English and Swedish PT students and another with Canadian PT students, had findings relevant to this research. Lindquist, Engardt and Richardson (2004) used semi-structured interviews of 18 first year PT students (eight from England and ten from Sweden) after their first two academic semesters. These students expressed overwhelming preference for clinical learning experiences over classroom learning. They discussed the importance of interacting with patients and learning from practicing physical therapists to understand the patients'

needs. While most of the reported comments from these first-year students concerned learning that focused on acquisition of clinical skills, they did discuss the perspective gained on the physical therapist's role as a member of a health care team and the importance of listening to patients. In a later study of early clinical experiences among 51 Canadian PT students, Cole and Wessel (2006), examined students' perceptions of effective learning experiences. These authors found that students felt they were more engaged in clinical learning experiences when they had direct contact with patients, were challenged through questioning by the CI, had time to reflect on their experiences, perceived their input was respected, and the CI modeled professional behavior.

Mostrom (2005) reported on what students learn from clinical instructors and how clinical instructors approach teaching in the clinical environment. She described findings that indicate clinical instructors can create an environment and give cues and encouragement so that students learn to engage their patients in meaningful conversations about their illness or their lives. CIs also model listening, compassion, respect and the moral role of physical therapists in ways that students can witness and wish to emulate. Just as students learned from positive role models, Mostrom reported they learned from negative role models who did not exhibit respect for patients and colleagues, did not listen, and discouraged student questions. These findings provide further support for the importance of the creation of a conducive learning environment and effective interactions between clinical instructors and PT students.

Section Summary

These studies illustrate the importance of the interaction between clinical instructors and PT students. Various CI communication skills were observed in an

ethnographic study of clinical education (Scully and Shepard, 1983), PT students and clinical instructors reported these skills were critically important in clinical education (Emery, 1984; Emery & Wilkinson, 1987), and students reported the importance of clinical instructors as positive and negative role models (Mostrom, 2005). PT students valued clinical learning experiences (Cole &Wessel, 2006; Lindquist, et al., 2004), supporting Mostrom's assertions about the importance of clinical education in entry-level education. These studies point to the critical nature of clinical education as a formative experience in PT students' entry into the profession. Finally, the study by Hayes et al. (1999) provided guidance on selecting PT student participants who have strong interpersonal and communication skills.

Ethical Issues in Physical Therapy and Rehabilitation

The ethical issues in physical therapy and rehabilitation provide the context for the profession students are preparing to enter and the clinical education environment in which they have critical learning experiences. During these clinical experiences, students witness PTs interact with their patients and with colleagues, provide care themselves and interact with these same colleagues. Ethics in the more general field of rehabilitation is important to this study because physical therapy is one of the rehabilitation professions and student internships in rehabilitation centers was one of the sites where this study occurred.

Ethical Issues in Physical Therapy

Guccione (1980) surveyed 450 practicing PTs in New England who were members of the American Physical Therapy Association to determine the common ethical issues these PTs confronted and those ethical issues they found difficult to solve.

The survey listed 30 ethical issues in a questionnaire format and asked the participants to rate the frequency with which they encountered that issue and the difficulty they had resolving it. Guccione categorized those issues that were identified by at least 35% of the participants as moderately frequent and moderately difficult to resolve into four groups. The four groups of ethical issues he identified were (a) decisions about the choice to treat (e.g. priorities for treating terminally ill patients); (b) duties that arise from the fiduciary relationship between patient and therapist (e.g. conflicts between what the therapist identified and the patient identified as important needs); (c) moral obligations and economic issues (e.g. how care is represented to third party payers); and (d) relationship between PTs and other health care professionals (e.g. reporting questionable practices of other health care practitioners).

Triezenberg (1996) conducted a Delphi study in which a panel of six PT ethics experts identified 16 current and future ethical issues. Five panelists had "extensive" clinical experience, all had acknowledged expertise in ethics, four had academic appointments and all had additional experience in ethics as speakers. Triezenberg grouped these issues into three categories of patient rights and welfare, professional responsibility and role, and business and economic considerations. The topics in the category of patient rights and welfare focused on informed consent, sexual and physical abuse, confidentiality, the limits of personal relationships within professional settings, and providing physical therapy services to patients without regard to personal or social characteristics. The category of professional responsibility and role included overutilization of physical therapy, supervising PT assistants and unlicensed personnel, reporting ethical and legal misconduct of others and continued clinical competence.

Business and economic issues concerned setting fees for services, advertising, product endorsement, billing fraud, and conflicts of interest in business arrangements.

Three published studies addressed moral and ethical issues confronted by PTs and occupational therapists in the United Kingdom. Barnitt (1993) published an article giving an overview of ethical concepts in which she peripherally mentioned the results of a preliminary survey of "35 occupational therapists and 37 physical therapists and students" (p. 211). The main concerns these therapists identified were ineffective treatment, unethical colleagues, and priorities in treatment. Barnitt (1994) reported using a mail survey of 238 occupational therapists and 249 physical therapists to determine the types of ethical dilemmas they encountered and what they did in response to those dilemmas. She also asked the respondents to categorize the ethical dilemma using terms such as confidentiality, doing harm, autonomy, and truth telling. The first study she published based on the results of that survey (Barnitt, 1994) reported the results specifically examining truth telling among physical therapists and occupational therapists. Thirty percent of the physical therapists categorized the ethical dilemma they encountered as involving truth telling. She concluded that therapists often compromise the principle of veracity, usually because of disagreements within the health care team about whether to uphold this principle. When they compromised veracity it resulted in less effective relationships with patients and colleagues and strong emotional reactions from the therapists. In a report of the results of the earlier mail survey, Barnitt (1998) found the major ethical themes the physical therapists identified concerned unfair allocation of resources, efficacy and appropriateness of care, incompetent staff, truth telling, respect for therapist opinions and dealing with difficult patients.

Barnitt and Partridge (1997) identified the common ethical dilemmas confronted by the physical therapists who participated in their study of ethical reasoning among physical therapists and occupational therapists. The participants were eight physical therapists and eight occupational therapists whose primary responsibility was direct patient care and who had at least five years clinical experience. The authors did not identify any other information about the participants. They interviewed these therapists about an "ethical dilemma" they confronted in the last six months. These authors described the types of dilemmas the therapists confronted and categorized them by the nature of the ethical principles involved, the reasoning processes used, and the role of the therapists. Only the types of ethical dilemmas confronted are discussed here. The eight physical therapists identified dilemmas pertaining to refusal to participate in physical therapy by patients whose competence to make decisions was in question, families demanding more services than was deemed necessary, and disagreements among health care practitioners about patient care and discharge, particularly when the care or decisions were considered to be harmful to the patient.

In a qualitative study using semi-structured interviews of moral and ethical decision-making among five, experienced physical therapists, Greenfield (2003) reported seven common ethical and moral concerns these physical therapists confronted in their practice. The ethical concerns that centered around the direct relationship between the PT and patient were (a) conflicts between the physical therapists goals and those of the patient, (b) perceived need to provide psychological or emotional support to patients after the patient met the goals for physical therapy, and (c) conflicts with patients who do not adhere to the PT's recommendations. One of the participants in this study discussed the

moral issues that arise when there is no specific scientific evidence that supports the intervention he wished to provide. The most common ethical conflicts reported were those the PTs attributed to the health care system. These were described as conflicts in which the ability to meet the needs of patients was restricted by corporate owners or non-PT managers of physical therapy practices, fiscal constraints from third party payers, and limits imposed by PT managers. In a later article based upon the same study, Greenfield (2006) reported these PTs moral orientation toward caring was integrated into their clinical practice and founded upon the importance of the PTs relationships with patients. Greenfield concluded that a moral orientation toward caring led these PTs to "seek a full and deep understanding of the patients' situation and motives" (Greenfield, 2006, p. 186). In an earlier qualitative study of ten female PTs that examined issues of gender and professionalism among female PTs, the participants placed a high value on their interpersonal relationships with their patients and oriented themselves toward caring, cooperation and relationship (Raz, Jensen, Walter, & Drake, 1991).

Takahashi (2004) examined how PTs learn ethical behavior through a qualitative study of the narratives of sixteen Canadian PTs. These PTs described a process in which they were aware of the ethical concerns, had knowledge of the issue and of their role, used reflective problem solving, took action and reflected on that action. These PTs reported they learned from experience, including their family experiences, from talking to peers, and from reflecting on their experiences. These PTs did not describe a formal understanding of ethics and ethical analysis, but considered ethical decisions as clinical decisions.

Carpenter (2005) investigated the ethical dilemmas six Canadian PTs in rehabilitation settings experienced via a qualitative study using multiple interviews over six to eight months. She concluded there were three major themes of dilemmas in this setting: (a) the need to justify PTs' knowledge and practices using scientific evidence when that evidence was lacking; (b) administrative practices and resource allocation that compromised patients care; and (c) miscommunication among professionals that compromise care and result from different philosophies of practice and the nature of contact with patients. Carpenter intentionally avoided framing her questions in terms of ethical dilemmas. Instead, she asked about dilemmas these PTs confronted in their daily practice. This broader framework of questioning may have opened the therapists' to responding in ways that expanded the issues considered as ethical dilemmas and resulted in findings that were characterized in different terms than in other studies.

Triezenberg (2005) conducted a study examining the moral role of PTs in the health care system. The 15 participants in this study had at least five years experience, advanced training or a degree in social sciences and/or ethics, and were recognized as making positive contributions to the scholarship of ethics in physical therapy. He did not describe their current practice settings or whether they had academic appointments. He collected data via semi-structured interviews and subsequent focus groups. He identified moral obligations PTs have toward patients and others involved in the patients' care, e.g. colleagues, other health care practitioners, and patients' caregivers. Triezenberg characterized the moral role of PTs to patients as advocacy, altruism, collaboration, unique contributions to meeting the patient's needs, and assisting the patient to achieve functional independence. He concluded this moral role arose through the relationship

therapists have with their patients, which the participants described as being "very personal and intimate" (p. 95). The interactions with other people involved in the patients' care created additional moral responsibilities that were secondary to those toward patients. These additional responsibilities had an important impact on patients and included effective collaboration and communication with members of the health care team and keeping promises and agreements made to others. The moral responsibilities PTs have toward society included upholding professional and legal standards, being good stewards of resources, and advocating for just laws and organizational procedures.

Finch, Geddes and Larin (2005) conducted a qualitative study of ethics in clinical decision-making among eight Canadian PTs with four to forty years of experience. The authors explored one or two situations with each participant in which the participant experienced a conflict of values. The types of ethical problems these PTs encountered were similar to those reported above by Barnitt (1998) and Triezenberg (1996). They concluded that the PTs recognized clinical decisions that involved ethics, but could not describe the ethical principles involved and did not use systematic methods of ethical analysis. These participants did gather more information about the situation and consulted with peers when considering their options for resolution. During the study, Finch, Geddes, and Larin explored a total of ten scenarios, six of which were resolved by the PTs. The authors reported that when the situation was resolved, the PTs had a clearer understanding of professional ethos, valued patient autonomy, reacted with less emotion to the dilemma, and explored a greater variety of options for resolution before implementing a solution.

Ethical Issues in Rehabilitation

There are relevant research findings from studies conducted at inpatient rehabilitation settings. In these settings, physicians, rehabilitation nurses, occupational therapists, physical therapists, speech and language pathologists and neuropsychologists collaborate with the patient to provide comprehensive care (Kuczewski & Fiedler, 2001). The focus in rehabilitation is restoring function and reducing the impact of disability for people with impairments that arise from a variety of illnesses or accidents (Haas, 1993) when cure may not be possible (Scofield, 1993).

Lucke (1998) conducted a qualitative study of 15 individuals with spinal cord injury in a rehabilitation setting about aspects of caring exhibited by nurses and therapists. She described the importance of building a caring relationship in which the patients felt empowered to set and achieve their goals. The participants described the importance of dialogue with nurses and therapists which Lucke described as having "moral sensitivity, responsiveness, creativity and imagination" (p. 258) to assist the person with spinal cord injury reintegrate into society as a person with a disability.

Redman and Fry (1998) conducted a study of 91 certified registered rehabilitation nurses who were practicing in rehabilitation centers using an open-ended written survey in which participants were asked to describe ethical conflicts. They found that ethical conflicts arose from payment policies, patient rights issues, or disagreements with organizational policies and practices. Fifty-eight percent of the reported conflicts reached resolution and of these, the majority was resolved through interaction and cooperation with others.

A survey of 217 clinicians, including PTs, physicians, social workers, and admitting personnel at an urban acute inpatient rehabilitation hospital in the United States identified six major ethical issues (Kirschner, Stocking, Wagner, Foye, & Siegler, 2001). The six issues were (a) lack of insurance coverage for needed services, (b) allocation of resources, (c) pressures from Medicare requirements, (d) impact of the lack of community resources on patient safety at time of discharge, (e) justifying necessary care to insure continued payer coverage for rehabilitation, and (f) increased use of support personnel and group therapy models in response to increased financial pressure.

Section Summary.

In summary, the studies from physical therapy described how some of the ethical issues PTs experience exhibited some stability and some evidence of change over 25 years. The participants were practicing PTs who represented broad perspectives of direct patient care service in a variety of practice settings in the United States, Canada, and the United Kingdom. All of these studies identified ethical issues that arose from patient rights and addressed issues that arose from conflicts in the PTs' professional responsibilities. While the nature of ethical conflicts that arose from the economics of health care persisted, the importance of managed care and administrative restrictions on care became more important over time. Finally, conflicts that arose among health care practitioners, over either patient care or meeting collegial responsibilities were evident over time. Triezenberg (1996) reported on ethical issues that arise from advertising, product endorsement and conflict of interest that others did not report. It may be the background and perspectives of the members of the Delphi panel resulted in identification of these ethical issues that have broader professional and social

ramifications. Carpenter's finding of the dilemmas that arose from pressure to justify practice in the face of sparse scientific evidence and the mention of this issue by one participant in Greenfield's study was unique among these studies. This may have arisen because the pressures for evidence-based practice is a relatively recent phenomenon in physical therapy or because their interview questions were more broadly stated than in the other studies, in which the questions were specifically focused on ethical or moral issues. Triezenberg's (2005) study of the moral role of PTs took a different perspective than other studies in which the purposes were to identify ethical issues. His study cast the moral role of PTs in relation to patients and their families, to colleagues in the health care system, and to society at-large. The studies from rehabilitation identified ethical problems that are similar to those in physical therapy.

The studies by Lucke (1998) and Greenfield (2006) reinforced the importance of caring and building relationships with patients in attempts to understand patients' motivations and behaviors. The findings also support the importance of conversation and relationship in approaches to understanding and resolving ethical issues. The studies by Finch, Geddes, and Larin (2005) and Takahashi (2004) described the difficulty PTs had using the language of ethics and ethical analysis in resolving problems. These authors found that the PTs consulted with peers and considered alternatives before deciding what action to take to resolve an ethical problem. Takahashi reported the importance of reflection when making ethical decisions.

Ethical Issues and Students of Physical Therapy, Nursing and Medicine

The literature reviewed thus far has focused on practicing PTs who were often very experienced and, sometimes, considered to be experts in ethics. That literature

provides some of the moral and ethical context in which PT students learn and practice during their internships. There is very limited literature on ethical and moral issues that PT students confront, therefore, studies that address ethical issues confronted by medical students and nursing students provide additional, important background for this study.

Studies of these students' experiences illustrate approaches to investigating the ethical concerns of students, help identify gaps in the physical therapy literature, and suggest further steps for research in physical therapy. The moral and ethical concerns encountered in medicine and nursing, and, by extension, students in those professions, are similar to those in physical therapy. While there are subtle differences among them, all three professions attribute importance to the principles of respect for autonomy, nonmaleficence, beneficence and justice and the rules of veracity, fidelity, privacy and confidentiality (Beauchamp & Childress, 2001). Beauchamp and Childress also described the five virtues of compassion, discernment, trustworthiness, integrity, and conscientiousness as relevant to all health care professionals. In nursing, an ethic of care has emerged as an important part of practice. As Benner (2000) wrote, "Nursing practice is a public extension of ordinary care of family and self in everyday life" (p. 49). She described nurses as extending the practice of physicians by aiding the transfer of medical interventions into the daily life of patients. She emphasized the importance of care giving in the moral community of health care practitioners who provide technical expertise and relational support. The importance of caring and relationship in physical therapy practice is also evident in the literature (Raz, Jensen, Walter, & Drake, 1991; Romanello & Knight-Abowitz, 2000; Stiller, 2000). Clouder (2005) concluded that physical therapy and occupational therapy students experiences of caring were critical to

the students' identity as health care professionals. While evidence of caring is not as prevalent in the medical ethics literature, two studies found that while nurses and physicians approached their caring from different perspectives, the physicians and nurses stressed the importance of caring in their practice (Lindseth, Marhaug, Norberg, & Uden, 1994; Peter & Gallop, 1994). These similarities provide support for examining the literature from medical and nursing students to gain an understanding of this study.

Comparisons between the approaches to patient care are salient to consider here. PTs' approach to patient care includes examination, evaluation, diagnosis, developing a plan of care, implementing interventions, and discharging or discontinuing care (American Physical Therapy Association, 2001). This approach is similar to the medical diagnostic model of physicians and, when coupled with the increasing professional autonomy of PTs and the ability for patients to directly access the services of PTs, the parallels to medicine are evident. Nurses approach patient care using specific terminology, such as nursing assessment, nursing diagnosis, and nursing intervention. While these terms and the purpose of each aspect of nursing care differ from medicine and physical therapy, the process is similar. All three professions collect information from the patient via taking a history and physical examination, interpret the data collected, form that interpretation into a constellation of signs and symptoms that comprise a diagnosis, and develop and implement a plan of care. They also refer patients to other health care practitioners and function within interdisciplinary teams.

Finally, models of clinical education among the three professions have some differences and some similarities. Medical education includes pre-licensure clinical clerkships, in which medical students are learning directly from patients in hospitals and

supervised by medical school clinical faculty. Medical education also includes post-licensure medical residencies, where senior physicians, who are not formal members of the medical school faculty, supervise the resident. Physical therapy clinical education only occurs before licensure, and students are supervised by senior PTs who are typically not members of the program faculty in the traditional sense. The Commission on Accreditation in Physical Therapy Education (American Physical Therapy Association, 2005b) considers these PT clinical instructors to be clinical faculty. Clinical learning experiences for nursing students typically occur in hospitals, where program faculty members supervise groups of students on the nursing unit and are pre-licensure experiences.

In summary, the clinical, educational, professional, and ethical foundation of physical therapy, nursing and medicine are sufficiently similar to warrant a review of the literature from students in medicine and nursing to inform this study. While these three professions provide distinctly different clinical care, they have a common underlying process for that care. The differences among the clinical education models are not insignificant, but the similarities are sufficient for medicine and nursing to provide guidance to this research study concerning PT students in physical therapy.

Ethical Issues of PT Students

There are few empiric studies of ethics and morals of PT students. Sisola (2000) investigated the relationship between moral reasoning and clinical performance among PT students, because such a relationship would underscore the importance of moral reasoning in PT education. She used the Defining Issues Test, a measure of moral reasoning based on Kohlberg's model of moral development (Rest, 1994), to measure

moral reasoning. The measure of clinical performance was the Clinical Competence Scale (Leuthwaite, Blaskey, & Burnfield, 1992), an instrument that comprehensively measures key clinical performance outcomes in physical therapy practice using a nine-point, Likert-type scale. Sisola used the mean score from the 48 items in ten categories from the Clinical Competence Scale as the numeric measure of clinical abilities. Her sample population was 58 students from three physical therapy programs during their first, full-time clinical experience. She found a modest, positive correlation between Defining Issues Test score and the clinical performance score. She also found that there were no students who had high clinical performance scores and low moral reasoning scores and only two students who had low clinical performance scores and high moral reasoning scores. These latter two students had their clinical experiences in large comprehensive hospitals, in which Sisola found generally lower clinical performance scores. Sisola concluded these findings were consistent with those from other health professions and underscored the importance of moral reasoning in PT students' clinical performance. She used Kohlberg's conceptual framework, which categorizes the moral reasoning into one of five stages, but does not provide insight into specific approaches to ethical reasoning that a PT student might use when confronted with ethical issues during clinical experiences. Sisola's study supports using evidence of positive clinical performance on prior clinical experiences as a criterion for participant selection in the purposive sample of participants for this study and highlights the gap in understanding of how PT students approach their ethical reasoning.

In their investigation of ethical issues PT students face, McGee and Ogger (2000) used open-ended, weekly journals written by nine PT students during their first of two

final 14-week clinical internships. The participants submitted 60 journal entries with a range of two to ten entries per participant. Five participants returned eight or more entries. Six of the participants were in outpatient orthopedic settings and the remaining three were in long-term care, subacute care and inpatient rehabilitation settings. These authors categorized the responses according to Triezenberg's (1996) classification system. The only issues they could not categorize in this system were identified as "student issues." Within the category of professional role and responsibility, they found issues related to (a) discrimination by the student or other PTs toward patients, (b) decisions to refer patients to other practitioners, (c) conflicts around the referring diagnosis and subsequent treatment, and (d) PTs and other health care practitioners making derogatory comments about patients, other health care practitioners or students. Within the category of patients' rights and welfare, the most common ethical issue surrounded difficulty respecting patient confidentiality. They also found ethical issues concerning decisions to limit needed care due to constraints on PTs work schedules or decisions by PTs to place their needs above those of the patient's. Within this category were experiences of inappropriate relationships between therapists and patients and excluding patients from treatment planning. Within the category of business and economic factors, McGee and Ogger found evidence of ethical issues concerning inappropriate billing, deceptive billing and coding, and constraints on providing care in the absence of adequate insurance coverage. The several ethical issues that were specific to students' experiences included inadequate quality and quantity of supervision, conflicts around how students' performance was evaluated by clinical instructors, and

negative consequences from performing interventions as taught in school instead of as requested by the CI.

A study by Dieruf (2004) had as its main purpose the investigation of whether there are measurable changes in moral reasoning among physical therapy and occupational therapy students during their professional education in baccalaureate programs at one school in the United States. Dieruf also used the Defining Issues Test and conducted a longitudinal study of changes in the score on that test. She found no significant differences from the time these students started their respective programs and the time they graduated. Dieruf's study did not attempt to investigate the importance of clinical education experiences to students' moral reasoning or to discover how students reason through moral situations during their physical therapy education. While contributing to the literature in physical therapy education, it is not directly relevant to the purpose of this study. It is included here as one of only few published empiric studies found that examine morals or ethics in PT students.

Geddes, Wessel and Williams (2004) used open-ended journals of 56 undergraduate, Canadian PT students to explore the ethical issues these students identified during clinical experiences. Of 280 journal entries, 181 contained ethical issues categorized into six themes. They described three major themes, discussed by at least 45% of the students, as respect for individuals, professional responsibility, and professional collegiality. They described three minor themes, reported by 23% or fewer students, as (a) concerns over allocation of resources, (b) advocacy for patient interests, and (c) obtaining informed consent from patients.

Mostrom (2005) drew on data from several sources to describe how students and clinical instructors approached learning about ethical dimensions of care during clinical education experiences. She used data from McGee and Ogger's (2000) master's thesis, data from student journals that she collected, and data from focus groups with clinical instructors that she gathered as part of a larger study on expertise in clinical education. Apart from McGee and Ogger's categorization, data from student journals included the importance of learning to take a holistic view of patients' experiences of illness and disability, learning to build relationships with patients, and learning to express genuine caring. Mostrom reported evidence of students' awareness of the significant emotional impact of illness and disability on their patients and their families and how these emotions affected the students. She also recounted findings from focus groups and interviews with clinical instructors in which they described intentionally role modeling ethical behaviors, such as advocacy for patients and taking the time to listen to patient's stories. She concluded that as ethical dilemmas became more apparent and distressing, the clinical instructors efforts to model ethical care became more explicit.

While not her primary purpose, the study of Canadian PTs by Takahashi (2004) included findings related to ethical experiences of PT students and their clinical instructors. She reported that eight of the 16 participants felt that PT students were making reasonably sound ethical decisions. These PTs reported that students' had ethical lapses about honesty in the clinical setting, including falsifying medical records. They also had some concerns about students' behaviors relative to dress and interpersonal skills with patients and other health care practitioners.

Section Summary.

These studies of PT students reveal that students discern the ethical aspect of their work and the ethical issues they confront are similar to those encountered by PTs. The qualitative data from Mostrom (2005) reflect the importance of student learning through interaction, dialogue, and engagement with their patients and other caregivers and their clinical instructors. These studies also establish the critical role the CI plays in guiding students toward the goal of skillful, compassionate and ethical comportment as future PTs. Findings from these studies illustrate that journals offer rich data on students' ethical issues and their approaches to these concerns that will be important in this study. While the paucity of empiric studies indicates fertile ground for future research, they do not provide an adequate framework to guide future research studies, including this one. To that end, the literature on ethics and morals in nursing and medical students is reviewed here.

Ethical Issues of Nursing Students

Studies of ethical issues in nursing students can illuminate some of the gaps in the physical therapy literature, provide background on methodological issues and expose need for further research in physical therapy. Kelly (1992) studied 23 senior nursing students using guided interviews for the purpose of discovering the professional self-concept they had and the forces that influence that concept. She discovered that caring was the most important variable in their self-concept. These students identified their role models as, in decreasing order of importance, nursing faculty, nursing clinical preceptors, and family or friends. Positive faculty and preceptor role models were supportive of the students, demonstrated pride in their work, listened to patients and to student nurses, and were closely involved with patients. In a related study with the same 23 nursing students,

Kelly (1993) investigated the behaviors that were ethical exemplars of practice for these student nurses. They reported that respect for patients, advocating for patient needs, accepting patients' value systems, and allowing patient self-determination were important aspects of ethical practice. These nursing students reported a sense of failure when they failed to speak up when confronted with behaviors that did not conform to their perceived positive ethical behavior on the nursing unit. These studies support the value of semi-structured interviews as a means to expose students' conceptions of moral and ethical problems and how they react to these problems. These studies also illustrate the importance of relationship with patients and clinical instructors to learn about and negotiate the ethical terrain of clinical practice.

Turner and Bechtel (1998) used a "guided design model" that allows for interaction among nursing students and faculty in an environment that closely simulates the clinical environment during a community health nursing experience with 144 nursing students. These researchers used instruments based on Kohlberg's theory of moral development (Rest, 1994) and written case studies to examine moral reasoning and ethical decision-making. They used a quasi-experimental, pre- post-test design that allowed testing of participants before and after exposure to the treatment variable, a guided design community health nursing scenario. They found that the opportunity for interaction and discussion with faculty and among students enhanced ethical decision-making processes, but had little effect on moral reasoning. This study is important because it seems to be consistent with Stacey's (2001) complex responsive process model of knowledge creation through interaction and conversation.

Lemonidou, Papathanassoglou, Giannakopoulou, Patiraki, and Papadatou (2004) studied 75 Greek nursing students using general open-ended journals during early clinical experiences. These authors asked the students to engage in an inner dialogue in their journals and record their reactions and feelings from experiences during this clinical experience. Students' concerns reflected common ethical principles, e.g. nonmaleficence, beneficence, autonomy, but the students did not explicitly identify them as such in their journals. How students reflected on these concerns and acted were key findings of this study. The students reported (a) the importance of empathizing with patients and nurses; (b) their disillusionment with nursing when they encountered ethical misconduct; (c) recognition of their ethical role as nurses and of ethical conflicts that arise in practice; (d) the need to sometimes transcend the ethical norms of the nursing unit when those norms did not support ethical practice; and (e) their satisfaction when they were able to demonstrate sound clinical and ethical practice. These authors did not instruct these students to focus on ethical issues, but ethical and moral roles were very commonly reported by these student nurses, illustrating how salient these issues are to students. Additionally, written journals proved to be a meaningful instrument for students to record their experiences and reactions to them.

Nolan and Markert (2002) conducted a longitudinal study of 15 undergraduate nursing students over the four years of their nursing education in the United Kingdom using a questionnaire and case analysis. By the time they graduated, nursing students perceived they were making ethical decisions and they all reported their clinical experiences had the most significant influence on development of their ethical thinking. While this was a small study, the fact that these student nurses unanimously reported the

importance of clinical education in forming their approaches to ethics points to the importance of these learning experiences in nursing education as it might in physical therapy.

Cooper, Taft and Thelen (2005) studied 32 senior nursing students' online postings of reflections about clinical experience for the purpose of investigating the utility of a "thinking-in-action" approach to foster professional development. Students described clinical situations they encountered and what thoughts and feelings these situations triggered. These authors identified seven themes from the online postings: (a) human vulnerability particularly when experiencing pain and death; (b) responsibility for care given their inexperience and likelihood of committing errors; (c) limits on care that typically arose from patient resistance or family behaviors; (d) how students evaluated themselves, for example as capable or inadequate; (e) gaining the family's and patient's perspective on illness and treatment; (f) ethical issues such as autonomy, end of life, pain; and (g) expectations on professional behavior and the impact of policies on practice and procedures. While not categorized as such by these authors, all of these themes have moral implications in practice for these student nurses. The ability to discern these key moral issues through written records, even those subject to peer review in on-line discussion board, offers compelling evidence in support of written journals and the opportunity for peer interaction to uncover important aspects of students' moral roles.

Section Summary.

These studies from nursing students offer additional evidence that students discern the presence of moral issues during clinical experiences and the importance of relationships with patients and clinical instructors in forming their understanding of these

moral issues. These researchers used more open-ended methods to categorize the ethical issues than was apparent in the literature investigating PT students. It seems more open-ended categorization results in a greater variety in the types of ethical issues that were described. The research in nursing students also supports the quality of data written journals provide into students' thoughts and feelings about ethical issues and point to the potential for interviews as an additional source of meaningful data.

Ethical Issues of Medical Students

In the early 1990's, several studies investigating the ethical development of medical students and the ethical dilemmas these students confront appeared in the medical education literature. Previous to that time, the medical school curriculum about ethics was in a state of flux and merited considerable attention from school administrators, faculty and collegial support (S.H. Miles, Lane, Bickel, Walker, Cassel, 1989). By 1994, 100% of medical school curricula included ethics education in some form (Fox, Arnold, & Brody, 1995), but these authors argued for a continued examination and restructuring of ethics education, with a particular focus on integrating clinical learning experiences on ethics into clinical clerkships and residency education.

A series of articles documented either a lack of moral development or ethical erosion among medical students during their medical education (Feudtner, Christakis, & Christakis, 1994; Hébert, Meslin, & Dunn, 1992; Self, Schrader, Baldwin, & Wolinsky, 1993). Two later studies reported that personal codes of ethics and moral development did not change during medical school (Patenaude, Niyonsenga, & Fafard, 2003; Satterwhite, Satterwhite, & Enarson, 2000). Feudtner, et al. surveyed 665 third and fourth year medical students at six Pennsylvania medical schools about whether they had

encountered ethically problematic situations, their reactions to those situations and their personal ethical development. Fifty-eight percent reported having done something they believed was unethical, including misleading patients about their status as medical students or about their experience performing procedures. Their finding about misleading patients was consistent with one previous study (Cohen et al., 1988) and later corroborated by another (Beatty & Lewis, 1995). Feudtner et al. also reported that 98% of these respondents reported hearing physicians talk about patients in a derogatory manner, 61% witnessed perceived unethical behavior by team members, and 54% felt like accomplices in these behaviors. Sixty-seven percent of these students reported feeling negatively about their behaviors and 62% felt their ethical principles had eroded. Those students who witnessed unethical behavior were more likely to act unethically themselves, usually out of fear of a poor clinical report or from trying to fit in with the team. No similar studies have been conducted with PT students.

Several studies catalogued the ethical dilemmas that medical students confront in attempts to understand these dilemmas and differentiate medical students' experiences from those of physicians. Christakis and Feudtner (1993) argued that ethics education in medicine does not recognize the unique ethical dilemmas students confronted and does not accommodate their ethical development. These authors acknowledged the middle ground in which students find themselves; not yet full members of the profession but no longer lay people. Christakis and Feudtner collected written ethical case reports from third year medical students enrolled in an ethics seminar during their first internal medicine clerkship, developed a taxonomy of ethical dilemmas from those cases and confirmed that taxonomy via subsequent case analysis and in depth interviews with

students. These authors identified five major types of ethical dilemmas: (a) performing procedures within the conflicting aims of learning medicine, functioning as a member of a team and caring for patients; (b) conflicts between personal ethics and team expectations in which students ignored what they ought to do and did what they thought was expected of them as a team player; (c) conflicts that arise when student's inexperience and lack of knowledge place them lower on the medical team hierarchy so that their opinions are discounted or they are fearful of speaking up; (d) dilemmas that arise when medical students, who have spent more time with patients, feel they know patients' wishes more thoroughly than other house staff; and (e) dilemmas from witnessing or assisting with unethical actions by other members of the medical team.

A survey of 249 sophomore and senior medical students found similar ethical issues as Christakis and Feudtner (Bissonette, O'Shea, Horwitz, & Routé, 1995). These authors categorized the issues into seven categories with those of (a) breaches of professional norms, (b) lack of respect toward patient, and (c) communication the most frequently reported categories. These authors asked the students to report on one critical incident that occurred during their clerkships that had ethical implications. They found this report took less than ten minutes to complete.

Because prior studies focused on hospital-based ethical situations medical students confronted, Homenko, Kohn, Rickel and Wilkinson (1997) examined the ethical issues reported by medical students in primary care ambulatory settings. These authors analyzed 124 critical review papers submitted by students that addressed ethical issues. They categorized the most common situations as involving decision-making in ambiguous situations, upholding professional standards, locus of care, social and

community issues for care, and patient confidentiality. These authors also reported that 40% to 53% of students who participated in this study chose to discuss ethical issues with their clinical supervisors indicating the importance of these issues for students and substantiating the importance of conversation and dialogue in reaching understanding about important issues.

In a study of Canadian medical students using a mixed methods design (Hicks, Lin, Robertson, Robinson, & Woodrow, 2001), 47% of students reported via survey that they were pressured to act unethically and 61% reported witnessing unethical conduct among clinical teachers. In subsequent focus groups, students reported situations in which ethical problems revolved around conflicts between goals of medical education and patient care, having responsibility that exceeded their ability as students, and involvement in substandard care. These students reported these ethical problems were seldom discussed or resolved with their clinical teachers.

A study of medical students in the United Kingdom (Cordingley, Hyde, Peters, Vernon, & Bundy, 2007) found the students encountered ethical problems similar to those previously reported in the literature. These authors found that the medical students did not feel well prepared to deal with the ethical problems. The students commonly consulted with peers (90%), clinical teachers (80%), and written materials (60%) to help them cope with the ethical situations. A majority of these students expressed a desire for more support in addressing the ethical problems, with just over half of them identifying the clinical teacher as the person most appropriate to assist them.

Section summary.

From these studies, it would appear that in the twelve years since Feudtner and Christakis's 1993 study and the most recent Canadian study (Cordingley, Hyde, Peters, Vernon, & Bundy, 2007), the nature of the ethical dilemmas medical students confront has not changed substantively. These studies used a variety of methodologies in a variety of settings and found similar results. Additionally, it would appear that medical students encountered ethical issues in hospitals and ambulatory settings. There were some differences in these studies about students' willingness to explore and discuss these dilemmas with others. The study in which the students did discuss their ethical concerns occurred in an ambulatory setting and the dilemmas were reported to be subtler than in hospital settings (Homenko, Kohn, Rickel, & Wilkinson, 1997). It would be important to discover if this willingness to engage in conversation was contextual if and when ethical issues occur in a similar fashion for PT students. These studies also offer methodological approaches that corroborate those reported in nursing and provide new alternatives, for example, one study used student focus groups to explore ethical dilemmas.

Summary of ethical issues and students of physical therapy, nursing and medicine

The sparse literature from ethics and PT students established that they encounter ethical situations similar to those encountered by PTs in addition to ethical situations unique to the student role. The larger body of literature from ethics and nursing students and medical students illustrated the importance of students' relationship with their patients and clinical instructors in helping them understand the ethical issues they confronted, and that they need support from clinical mentors when confronting ethical problems. This literature also illustrated the value of open-ended approaches to

investigating ethical issues and provided support for interviews and focus groups as qualitative data collection methods.

Clinical Reasoning and Ethical Reasoning in Physical Therapy

In the conceptual framework for this study (Stacey, 2001), knowledge and meaning are continuously created and emerge in the communicative interaction between people. Knowledge is perpetually created and occurs through the habitual and spontaneous themes that influence the roles people take in their interactions. It is the reflexive process of give-and-take in responses that enables the participants to organize the themes that emerge in their conversation into meaning. Even though not specifically linked in Stacey's work, there are parallels in the literature on clinical reasoning to complex responsive processes of relating. That literature is the focus here.

The Clinical Reasoning and Ethical Reasoning of Experienced Physical Therapists

In health care, no test provides 100% certainty and no diagnosis has a definitive boundary, but practitioners make decisions in the face of this uncertainty, not only in an attempt to address patients' chief complaints, but also to allay their anxiety and provide a modicum of predictability to the course of an often uncertain course of their illness (West & West, 2002). In clinical reasoning, knowledge, thinking, and metacognition interact as the health care practitioner gathers, synthesizes and interprets data from patients, family members and others to arrive at a sound, justifiable decision (Higgs & Jones, 2000). Clinical reasoning is more than internal thinking; it requires communication with patients and families to gather data. Subsequently, the clinician must justify and explain decisions from the results of their reasoning to patients, families, and other health care

practitioners (Higgs, 1993). Higgs and Hunt (1999) described a model of the interactional practitioner in which all of the participants in health care are able to act to promote the quality of health and well-being through interaction. Given that most of the decisions and actions health professionals make are complex and unstructured with numerous possible solutions, it is only through engagement with patients via skillful dialogue that successful outcomes are achieved (Higgs & Hunt).

A study of clinical reasoning in physical therapy (Edwards, Jones, Carr, Braunack-Mayer, & Jensen, 2004) explored the nature and scope of clinical reasoning in physical therapy. This study used direct observations of six PTs as they provided patient care in three types of settings. Prior studies of clinical reasoning in physical therapy primarily focused on diagnosing patient problems, focused on orthopedic physical therapy and supported a hypothetico-deductive model of reasoning (Payton, 1985; Rothstein & Echternach, 1986; Rothstein, Echternach, & Riddle, 2003). Based on their findings, Edwards et al. arrived at a "dialectical reasoning" model to describe PTs' clinical reasoning. At one pole of the dialectic, PTs used diagnostic reasoning characterized by hypothetico-deductive processes founded in the empiric and analytic paradigm. These authors described the outcomes of this pole of the reasoning process as more instrumental in nature, e.g. the specific impairments and activity limitations as well as the types of physical therapy interventions that would address them. At the other pole in the dialectic, the PTs used narrative reasoning founded in the interpretive paradigm. Edwards, et al. described the outcome of this pole of the reasoning process as more communicative in nature; that is, gaining an understanding of the patients' beliefs, expectations, and perspectives about the nature of their illness. The PTs in this study

engaged in a constant interplay between these reasoning processes. These authors identified six clinical reasoning strategies that the PTs used during the clinical reasoning process: interaction, procedure, teaching, collaboration, prediction and ethics. The PTs did not use these strategies singly, but rather the strategies overlapped and required distinctly different actions by the therapists. The therapists used cues from patients to flow among the various reasoning strategies. The resultant model of clinical reasoning these authors presented suggests clinical reasoning is an intricate phenomenon in which the interaction between practitioners and patients is central to the process. They also found that clinical reasoning is not a dichotomy between traditional, rational methods and interpretive methods, but rather a constant interplay between them.

Edwards et al. (2004) included ethical reasoning as one of the clinical reasoning strategies they saw among the PTs in their study. These therapists relied on principle and rule based ethical decision-making, and also personalized it via the use of narrative reasoning to the context of each patient and responded to the emotions and needs of the patients. Edwards, Braunack-Mayer and Jones (2005) investigated ethical reasoning more specifically in a separate paper based on the same data from the six PTs described previously. These authors observed parallels between ethical reasoning approaches and clinical reasoning approaches. They found that these PTs used casuistry (case-based reasoning), ethical principles, narrative ethics and virtues when they encountered situations with ethical ramifications. The corresponding ethical reasoning approaches were pattern recognition, hypothetico-deductive reasoning, narrative reasoning and the development of personal knowledge respectively. They maintained that PTs use critical reflection and constructive engagement with their patients to foster professional virtues

and caring. Finally, these authors suggested that ethical reasoning is an integral component of clinical practice and inextricably linked to PTs daily practice with their patients and those significant others with whom they interact.

Three studies explored PTs' moral foundation and their ethical reasoning. Barnitt and Partridge (1997) conducted an investigation of ethical reasoning among PTs and occupational therapists in the United Kingdom that was previously described in this paper. Only the findings on the reasoning processes of the PTs are reported here. These authors concluded that PTs reasoning proceeded primarily from a biomedical model, with an emphasis on the clinical aspects of the case, and secondarily a psychosocial model, with consideration of the person's disability and handicap. The PTs structured the stories of their dilemmas in a procedural fashion in which the ethical dilemma was placed within the clinical aspects of the physical therapy care. Of importance to all of the participants were the uncertainties and emotions surrounding the ethical dilemmas and the importance of their past experiences dealing with similar dilemmas. Barnitt and Partridge concluded that the therapists reduced uncertainty and emotion by quickly reaching decisions as opposed to engaging in prolonged rational decision making.

The main purpose of one study was to investigate how PTs construct morality and ethics (Greenfield, 2003). He found that the PTs constructed core values important in their professional life from Judeo-Christian morality, spirituality, and a Protestant work ethic. Influences from community, such as family, school, and organizations, also played an important part in how these therapists constructed their core values, sometimes providing support to their professional values while sometimes seeming to conflict with their professional values. Greenfield concluded these therapists used moral imagination

guided by their emotional reactions to resolve the ethical dilemmas they encountered. In his analysis of his findings about ethical decision-making, he concluded that the PTs' moral understanding and approach was framed by their personal values and, similar to Edwards et al. (2005), they blended ethical decision-making within their clinical decisions. He did not find these PTs used any ethical decision making model that they could describe. Greenfield suggested these PTs used a "creative, fluid and contextual approach" (p. 171) to ethical decisions that was at times deductive and at times inductive and fell on a continuum between normative and non-normative ethics. All of these PTs reported they came to increasingly rely on discerning their patients' points of view and communication with their patients to guide their ethical decision-making.

Wise (2000) studied ethical decision-making among PTs using a qualitative approach. She interviewed ten PTs with at least five years of experience who responded to recruitment flyers and consented to an interview at a professional meeting. She conducted a structured interview in which she explored one ethical dilemma they encountered in the last one to two years and how they resolved it. She found these therapists used a five step process in which they (a) identified the problem, (b) weighed important factors, (c) gathered information through sharing with others, (d) decided and acted and, finally, (e) reflected on the process. Wise concluded that PTs identified problems quickly through cognitive and emotional processes. When weighing important factors, there was evidence of principle-based approaches to ethics as well as caring and relationship approaches. During the third step, PTs typically consulted with their colleagues at work, family and friends, and PT experts within the American Physical Therapy Association. They also consulted written documents, such as codes of ethics or

standards of practice. PTs reflections on these dilemmas often involved attempts at reconciling the emotions that the dilemma aroused. The five-step decision making process was the result of the investigator's coding and reformulation of the PTs responses, not explicitly described by the participants. The nature and structure of the questions and the purpose of the study may have contributed to findings that differed from Greenfield's findings.

Section summary.

To summarize this literature on clinical and ethical reasoning, the work from Edwards et al. (2005) on ethical reasoning and that of Greenfield (2003) on the PTs construction of morality and ethics are aligned with the conceptual framework for this study. These experienced PTs engaged in a constant, emerging, reflexive process with their patients, with colleagues, and with themselves to make decisions in uncertain, ambiguous situations. Barnitt and Partridge (1997) showed how ethical reasoning was embedded in clinical processes, highlighted the impact of uncertainty and emotion, and emphasized the importance of past experience in making decisions when confronted with ethical dilemmas. The PT's in Greenfield's study described an evolution in their approaches to ethical issues and a patient-centered approach to ethical decision making over their careers. The participants in Wise's study (2000) indicated they used interactive processes in an ethical decision making process that Wise characterized in a more linear fashion, in contrast to the fluid process identified in the other studies. All of these authors studied expert or very experienced PTs. The question then arises as to what reasoning processes novice PTs use.

The Clinical Reasoning and Ethical Reasoning of Novice Physical Therapists and Students

The findings relative to the importance of the interaction between the patient and expert PTs in the two papers by Edwards et al. (2004) and Edwards, Braunack-Mayer, and Jones (2005) are similar to other studies of expert practice in physical therapy (Jensen, Gwyer, & Shepard, 2000; Jensen, Shepard, Gwyer, & Hack, 1992; Jensen, Shepard, & Hack, 1990). Of these three studies, those in 1990 and 1992 included novice and experienced PTs while the 2000 study only investigated expert clinicians. In their 1990 study, Jensen et al. observed eight PTs in outpatient settings treating patients with orthopedic problems. Their participants were two PTs with less than two years experience, three with three to seven years experience and three with more than 13 years experience. For their 1992 study, Jensen et al. again used observations of PTs in orthopedic outpatient settings. There were three novice PTs (defined as recent graduates) and three master clinicians (nominated by a panel of academic faculty who coordinated PT student clinical experiences). In the two studies that compared novice and expert PTs' clinical practice (Jensen et al., 1990; Jensen et al., 1992), the novice PTs were guided by rules, had less fluid interactions with patients, and were seeking "right answers" during their interaction with patients when compared to the experienced PTs.

As another part of her previously reported study, Mostrom (2005) analyzed results from open-ended PT student journals collected during various clinical education experiences to study how students learned about ethical practice in the clinical environment. In contrast to the studies mentioned above (Jensen et al., 1990; Jensen et al., 1992) she reported that the students' journals reflected how they learned through their

discussions with patients and families, how this learning guided their clinical and ethical decisions, and how this learning affected their sense of who they were as PTs. In contrast to the practice of novice PTs described by Jensen et al., the PT students seemed to use patient-centered reasoning, tolerated ambiguity, and recognized the conflicts they had with institutional practices. Mostrom concluded these characteristics had parallels to expert PT practice.

Section summary.

To summarize the findings on novices and PT students, Mostrom's (2005) findings provided a different perspective on PT students than those from studies of novice PT practitioners (Jensen, et al., 1990; Jensen, et al., 1992). Mostrom's use of students' written journals compared with the observations of novice practitioners by Jensen et al. might be one source of difference in the findings among these studies. It might also be that the different focus between the two studies, one examining outpatient orthopedic clinical practice and the other specifically examining ethical concerns in clinical education, explains the difference in the findings among these studies. The absence of clear descriptions of the settings in which she collected the journal entries also make it difficult to draw conclusions about the differences in findings among these studies. The present study is intended to increase understanding of PT students' ethical reasoning and moral agency by examining their approaches to ethical reasoning and the construction of knowledge through communicative interaction with their patients and clinical instructors.

Summary of the Review of the Literature

It is important and relevant to summarize how the existing, dissimilar literature supports and guides this study on PT students as moral agents in clinical education experiences. This summary will synthesize the literature from clinical and moral reasoning, ethics in physical therapy and in student experiences, and from academic and clinical education and relate it to the present study.

The models of clinical and ethical reasoning described in two studies (Edwards et al. 2004; Edwards et al., 2005) proposed processes that take place in an iterative manner in a relation between the patient and the PT in which each of them constantly call forth responses from the other to create meaning and understanding of the patient's problem for both participants. It is through these interactions that PTs and patients create mutual understanding and knowledge in constantly adaptive processes. These models seem to align with a complex responsive processes perspective that Stacey (2001) described and represent an approach to understanding social processes from a complexity science viewpoint. These studies and those on ethics also support the importance of relationship, characterized by seeing the other person as a whole and in connection with community, not in objectified knowing, described by Buber (1970).

Studies of expertise described here (Jensen, et al., 1990; Jensen et al., 1992, Jensen et al., 2000) also supported the patient-centered, fluid process of reasoning and decision-making described above. Some of these authors' findings on novice practitioners reflected a minimal use of patient-centered reasoning and a more rigid interactional process in which there was a search for a right answer. Mostrom's (2005) work suggested students learn from and try patient centered approaches to create their

understanding and knowing in the clinical environment. These differences in the literature are an area in which this present study may provide further understanding.

Twenty-five years of literature on ethics in physical therapy established patient rights, patient welfare, and PTs professional responsibility as sources of ethical conflicts in PTs' practice. This literature also helps us understand how the interplay between the PT, patient, family members and others is a source of ethical conflict and the relationship between these people is the means to approach the ethical conflicts and create meaning and understanding about them.

The literature from PT student ethics reveals a relationship between moral reasoning and clinical competence that establishes the critical nature of moral reasoning in the field (Sisola, 2000) and can serve as a guide to selecting the participants for this study. This study also revealed the importance of increasing our understanding of the nature of those relational processes between PT students, clinical instructors and patients to help prepare PT students for the complexities of practice. This literature, while sparse, establishes the similarities between PT students' and PTs' perceptions of the nature of ethical dilemmas in practice settings.

The literature from PT students' ethics and from clinical education in physical therapy confirms the value of the CI in PT student learning. Exploring how students and clinical instructors experience their roles together will be an important part of comprehending how PT students approach learning and create knowledge and understanding when faced with ethical issues that is a central question of this study.

The literature on ethics of nursing and medical students revealed areas where the physical therapy literature on ethical dilemmas confronted by PT students is lacking. The

literature from medicine can lead to the conclusion that ethical dilemmas are pervasive across all health care settings, and that those in ambulatory care settings are perhaps subtler in nature.

Studies and reviews of ethics education in physical therapy established the importance of integrating ethics throughout the curriculum, including the clinical education experiences. This literature revealed little evidence of how academic and clinical faculty can prepare practitioners who are able and willing to act as moral agents. Jensen and Reichert (2005) offered the importance of using realistic scenarios enacted with standardized patients as a realistic means to prepare student PTs for ethical practice.

This present study is intended to investigate some of the gaps in the literature this review has uncovered. Two studies (Geddes, Wessel & Williams, 2004; McGee & Ogger, 2000) described ethical issues PT students confronted, a description of these issues is fundamental to the other research questions of this study. By describing these issues, this study will add to the existing literature to help deepen and extend our understanding of the ethical issues PT students' experience. There are some discrepancies among the studies as to how PT students and novice PTs approach clinical and ethical reasoning. This study will investigate how PT students reason through these ethical issues when they encounter them in an effort to provide further understanding of the ethical reasoning process of PT students. The findings relative to the question of ethical reasoning may also provide a basis of comparison to ethical reasoning models of experienced PTs (Edwards, et al., 2005). The importance of clinical experiences and the potential for learning from interactions with patients and their families, clinical instructors and other health care practitioners was evident in the existing literature in

physical therapy, nursing and medicine. None of the studies found in the literature specifically investigated how students used these interactions to socially negotiate action and the impact this had on their role as moral agents. This study is intended to provide an initial understanding of this process and relationship.

CHAPTER 3: METHOLDOGY

Restatement of Purpose

The purpose of this study was to explore the experiences of physical therapist (PT) students as moral agents when confronting ethical issues during their clinical internships. The type of ethical issues students encountered that relate to their moral agency provided the foundation for inquiry into how they fulfill their role as moral agents and how they reason through situations in which ethical issues exist. Given the clinical instructors' (CIs) involvement in all aspects of students' experiences during the internship and the CI's ultimate responsibility for the patients, this study also explored the CIs' involvement in students' role as moral agents and in the PT students' reasoning process.

Research Design

The overall design of this study used a qualitative approach based in complexity sciences to achieve its purpose. The participants were five Doctor of Physical Therapy students and the four PTs who served as their CIs during one of the students' final two clinical internships. The students were enrolled in three different educational institutions and the clinical internships occurred at four different clinical agencies. Data sources for this study were journals, semi-structured interviews and focus groups with both types of participants.

Complexity science proposes that knowledge and understanding emerge as self-organizing phenomena within interactions among people (Stacey, 2001). It is through these interactions themselves, not through external causal agents, that meaning emerges and is continuously created. The researcher cannot be and does not need to be an

objective observer of the phenomenon at hand. Rather the researcher engages in a dialectic of engagement and detachment through interaction and reflection on those interactions (Stacey & Griffin, 2005a, 2005b). In general, meaning is preserved as participants relate with one another or with the investigator because, while there may be many small misunderstandings in communication, people tend to "repeat what they say to one another in a number of different ways" (Stacey, 2001, p. 143) and thus provide stability in meaning over time. This stability is countered by the realization that people never truly and fully understand one another, creating a tension that, when coupled with rarely occurring large misunderstandings, can lead a conversation into new, unexpected directions. Additionally, diversity and variety are obtained through the ways in which people imperfectly interpret each other's communication and subsequently create different ways of understanding or communicating (Stacey, 2001). The dialectic between stability and instability, the communicative redundancy people exhibit when interacting in different situations over time, and the nature of diversity and variety imply that a research methodology must include multiple opportunities for interaction in multiple ways among the participants and with the researcher. As elucidated in this section, several means for data collection served to maximize variety and diversity of interpretation and meaning.

The fractal nature of narratives and interacting is also a guiding research design principle from complexity sciences. Fractal implies self-similarity across any scale, whether that scale is space or time (Gleick, 1987; Stacey, 2001). It also implies there is no higher order importance to any scale at which a phenomenon or an object is explored; no one level is any more or less fundamental than another (Stacey, 2001). Stacey (2001)

argued that in an examination of interactions among people in a group, between two people in that group, within a single person's gestures and responses within that group, or within that person's silent internal process of thinking, one can observe self-similar processes of communication.

This study used methods to access the various levels of temporal scales and spatial scales implied by the fractal nature of narratives and interaction. Specifically, in this study journals, interviews, and focus groups occurred at different times and in different places throughout the study. Additionally, the research design permitted exploration of multiple perspectives to capture the intricacies of complex systems (Richardson, Cilliers, & Lissack, 2001). The students were from three different educational programs in the United States and each brought their unique perspective to the study. The CIs also offered differing perspectives given their range of different experiences as physical therapists and CIs. Different perspectives also arose in the variety of clinical settings in which the internships occurred. This variety included the type of patient problems encountered, the sociocultural diversity of the patients served, and the types of physical therapy services provided.

Protection of Human Subjects and Informed Consent

I obtained approval for this study from the Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco. Appendix A contains the IRBPHS approval. One academic program in which the PT student participants were enrolled required approval by that institution's IRBPHS. The other academic programs' IRBPHS coordinator reviewed the IRBPHS proposal from the University of San Francisco and determined IRBPHS approval was not necessary. One

clinical education site required approval by that institution's IRBPHS and that approval was obtained. The other clinical education sites did not require IRBPHS approval. The managers of the physical therapy service at these sites gave permission for the physical therapist who served as the CI to participate in the study before each CI was asked to consent to participate. Each participant gave informed consent to participate in the study (See Appendix B for Informed Consent Forms).

Participant Recruitment

Participant recruitment occurred via procedures outlined in the IRBPHS proposal approved by the University of San Francisco. I used two methods to identify potential participants. I contacted clinical education sites known to take a large number of PT students and I contacted physical therapy education programs that might have students on clinical rotations during the time data were collected for the study. Once the IRBPHS at the University of San Francisco approved the study I began recruitment with the intent to enroll participants whose clinical experiences began the soonest and continued enrolling participants until four to six participants consented to participate. Recruitment was restricted to clinical education sites in California due to the nature of data collection methods, which included on-site interviews and focus groups.

In the first method to recruit participants, I contacted the clinical education coordinator or manager at 13 clinical education sites to determine if they had students scheduled for clinical experiences who might meet the selection criteria during the period of data collection. Three of these sites had a total of four students from four PT education programs scheduled who appeared to meet criteria for the study during the planned time of data collection. I obtained the name of the academic program and

contacted the faculty person who coordinates clinical education at the academic program to further explore whether the students met the criteria for inclusion in the study. Among these students at four programs, three met the criteria of the study and one program identified one additional student from that program who met the criteria for the study. Four of these students consented to participate. Once the students consented, I contacted the person at the clinical education site with whom I initially coordinated recruitment, informed that person that the student consented, and received permission to seek consent from the PT assigned to be the student's CI. Subsequently, one CI declined to participate. Thus, this recruitment method yielded three PT student participants with their CIs.

In the second method to recruit participants, I contacted the faculty person who coordinates clinical education at five Physical Therapy academic programs to determine if they had students assigned to clinical education sites in California during the planned period of data collection. I described the general purpose of the study and read the PT student selection criteria to the faculty member. Among these five programs, two had clinical education experiences configured such that they suited the study. In accordance with procedures contained in the IRBPHS and consistent with the policies of the academic institution, these faculty members provided me with the students' email addresses. I contacted 22 students from these two programs, and of those, two students consented to participate. I obtained the name of the clinical education site to which they were assigned. I explained the nature of the study to the clinical manager at each clinical education site and subsequently obtained consent from the CIs assigned to these students. I later learned that one of these students had two CIs at the site, only one of whom agreed

to participate in the study. The circumstances surrounding these CIs' consent were described above.

Ethics in Research

All participants' identities were kept confidential and only pseudonyms were used in all published material associated with this research. I did not give any person the name of any participant in this study. I did not tell the people through whom I recruited participants whether or not the person consented to participate. The names of the clinical sites and the cities in which they were located were kept confidential and do not appear in any reports or transcripts that are part of this research study. The names of any participants in journals or transcripts of interviews or focus groups were replaced by pseudonyms and the names of clinics were also replaced with a pseudonym. A coded list of participant pseudonyms and their actual names and clinical sites were kept in a separate file from the rest of the research materials associated with this project, e.g. transcriptions, journal entries, and memos. The PT students and the CIs did not disclose the names of any patients or clients in their journals, interviews or focus group discussions. All materials were kept on a computer to which only the researcher had access via a confidential password.

Sites and Participants

There were two populations of participants in this study: Doctor of Physical Therapy students and physical therapists who serve as their CIs. These participants formed dyadic teams for the purpose of this study. The clinical internships in which these dyadic teams functioned occurred in California.

Student Participants

Physical therapist entry-level programs have multiple designs for the clinical education program, but all programs have at least one, full-time clinical internship after students complete all of the academic courses. Some programs have a sequence of two or more final clinical internships. The student participants in this study comprised a purposeful sample of five PT students who were on one of their final, full-time clinical internships before completing a Doctor of Physical Therapy program. Three of the participants were on the final clinical internship and two were on the next to last clinical internship. The sample size was similar to that of other studies of physical therapists with a purpose similar to the purpose of this study (Carpenter, 2005; Greenfield, 2003; Edwards et al., 2004). Each student met the following five criteria as determined by the faculty member at the physical therapy program who oversees the clinical education courses (the Academic Coordinator of Clinical Education or the Director of Clinical Education): (a) they met or exceeded performance expectations on prior clinical experiences; (b) they were never on academic probation or in jeopardy of academic suspension or dismissal; (c) they had demonstrated ability to reflect on their experiences; (d) they had strong self-assessment abilities; and (e) they had strong communication skills.

The students were all enrolled in accredited Physical Therapy programs in the United States, two PT student participants were enrolled in one program on the West coast and three PT students came from two programs in the Midwest. Four were enrolled in Doctor of Physical Therapy (DPT) programs and one was simultaneously enrolled in a master's of physical therapy program that was transitioning to a DPT and in the DPT

program at that institution. That participant was completing courses for the DPT degree after the completion of the final internship. The remaining courses this participant would take to receive the DPT degree were courses on current topics in research, clinical sciences, basic sciences, as well as courses on wellness, direct access to physical therapy, nutrition and advanced communication. The seven courses totaled 12 semester units. Her remaining courses were not directly related to the knowledge and abilities required to participate in this study.

There were three female and two male participants. In the 2004-2005 academic year, 73% of all students enrolled in physical therapy programs were female (American Physical Therapy Association, 2005a). All of the PT student participants identified themselves as Caucasian. The PT students' ages ranged from 24 to 37 years. Given the research questions in the study, age and ethnicity were not considered important characteristics for selecting the purposive sample. Table 1 describes the characteristics of the PT student participants.

Clinical Instructor Participants

There were four physical therapists who served as the CIs for the PT student participants. One CI simultaneously supervised two of the PT student participants in a collaborative clinical education model. The CIs had from one to six years of prior clinical experience. This was the first student for two of the CIs, the second for one of the CIs, and the fourth CI had previously supervised 10 students. Two of the CIs self-identified as Caucasian, one as Asian, and one as Filipino. There were three females and one male and they ranged in age from 28 to 31 years. Table 2 describes the CI participant characteristics. The original design called for an equal number of

Table 1

PT Student Participants Demographic and Prior Clinical Experience

Pseudonym	Age	Gender	Self-identified race/ethnicity	Degree	Weeks of prior full-time clinical experiences	Years experience as aide or volunteer in PT before PT school
Amy	25	Female	Caucasian	DPT	18*	3
Luke	37	Male	Caucasian	DPT	14*	0
Cathy	24	Female	Caucasian	MPT & DPT	17	1.5
Rick	31	Male	Caucasian	DPT	22	1.5
Ruth	25	Female	Caucasian	DPT	22	5

* Amy and Luke were from the same academic program on the same clinical experience rotation schedule. These students self-reported different numbers of weeks of prior full-time clinical experiences.

CI participants as PT student participants. Collaborative clinical education models are common at many clinical education sites (DeClute & Ladyshewsky, 1993; Ladyshewsky, 1993). Having one CI with two students might raise concerns over confidentiality among the students and the CI. The informed consent procedures, including the right to withdraw from the study, and instructions and agreements about confidentiality during the interviews served to protect participant confidentiality. Luke had two CIs at one site. One CI supervised him on the inpatient rehabilitation unit and another in the outpatient clinic. The former CI declined to participate. I instructed the student to include experiences from both settings in his journals and during the interviews. My inability to

explore the experiences of his CI on the inpatient rehabilitation unit and her perspective of Luke could be considered a limitation in the study.

Table 2

CI Participant Demographic and Prior Clinical and CI Experience

Pseudonym	Age	Gender	Self-identified race/ethnicity	Degree	Years of clinical experience	Years of experience as CI	Number of prior students
Anne	30	Male	Filipino	Master	2	0	0
Len	29	Female	Caucasian	Master	3	1	1
Claudia	28	Female	Asian	DPT	1	0	0
Rhoda	31	Female	Caucasian	DPT	6	5	12

The original research design called for each CI to have at least two years clinical experience and have one prior experience supervising a student. For two CIs this was their first student and one CI had one year of experience. Accreditation standards in physical therapist education require a CI to have a minimum of one-year clinical experience with demonstrated competence in the practice area in which they are supervising a student (American Physical Therapy Association, 2005b). In PT clinical education, there is not a systematic process that attempts to match a CI with a particular student. Typically, the faculty member at the academic program who is responsible for the clinical education courses assigns students to a particular clinical education site and a clinical education coordinator at the site assigns the student to the CI. Because of the relatively random nature of assignment between CI and students, the focus of this study on the PT students, and the fact that all CIs met the minimal accreditation standard, I

decided the original requirements regarding the CIs' years of clinical experience and prior experience as a CI could be waived.

Clinical Education Sites and Experiences

The clinical education sites and experiences provide the context in which this research study occurred. There were four clinical education sites all of which were in California. Table 3 provides a description of the clinical education sites and experiences and the PT student-CI pairs at those sites. The clinical education sites were located in ethnically diverse communities with Latino populations representing the largest non-white population in each locale. The Latino population varied from 27% in the smallest, rural community to 46% of the population in the largest metropolitan area. The white population varied from 74% in the rural city to 30% in the largest metropolitan area (United States Census Bureau, 2008). Clinical education occurs in sites that can be categorized according to several different criteria. The categories that were important to this study were (a) where in the continuum of care the clinic provides services and (b) whether the clinical agency was publicly or privately owned. Whether the clinics were academic medical centers or teaching hospitals was not a selection criterion used in the study because all of the sites had committed to physical therapy student education. Each of these criteria is discussed in order along with a description of the clinical education sites in which this study occurred.

One method to categorize sites is where in the continuum of health care the clinic provides services, i.e. from acute, inpatient intensive care through home health care and ambulatory care. Clinical internships may occur anywhere along that continuum. In the original methodology, the sites in this study were intended to be (a) ambulatory care

settings (also called outpatient clinics), (b) inpatient, acute rehabilitation units within larger hospitals or free-standing rehabilitation hospitals, and (c) sub-acute care units within larger hospitals or sub-acute facilities (often referred to as skilled nursing facilities). Ambulatory care settings may be part of a larger health care system, contained as part of a larger hospital, or a freestanding clinic. Inpatient rehabilitation and sub-acute sites are similar in that they are all inpatient facilities, patients have longer lengths of stay than at acute hospitals, which means there are longer periods of interaction with PTs and other health care providers, and the patients are not acutely ill. When compared to sub-acute units, the patients on inpatient rehabilitation units can tolerate at least three hours of rehabilitation therapy each day and are less medically frail. Three of the PT students were solely in outpatient ambulatory clinics, each of which was a component of a larger hospital system. One PT student was in an outpatient ambulatory care clinic 50% of the time and an inpatient acute rehabilitation center the other time. The other student was on an inpatient cardiac rehabilitation service, in which she saw patients during the acute hospitalization for non-surgical cardiovascular diseases. This setting did not precisely match one of the original three settings intended for the study. At the time this student and her CI consented to participate in the study, there was some uncertainty as to whether she would be solely on an inpatient cardiac rehabilitation service, or whether she would also have outpatient experiences. Once the clinic and academic program decided it would only be an inpatient service, I decided that I would proceed with data collection through the first interview and then determine if the original data was similar to that obtained from the previous participants. (At the time this student began participation, I had one complete set of data from two students and the CIs.) There would need to be

Table 3

PT Student-CI Participant Pairs and Type of Clinical Education Site

PT student pseudonym	CI pseudonym	Length of internship (weeks)	Type of hospital	Type of service	Community setting
Amy	Anne	8	Private hospital	Outpatient center	Major metropolitan area, population >1 million
Luke[a]	Len	8	Private hospital	Outpatient service and acute inpatient rehabilitation	Rural city, population <100,000
Cathy	Claudia	9	Public hospital	Inpatient cardiac rehabilitation	Major metropolitan area, population >1 million
Rick[b] Ruth[b]	Rhoda[b]	12	Public hospital	Outpatient rehabilitation (neuromuscular disorders)	Major metropolitan area, population >1 million

a. Luke's assignment was for half-day on each service. His CI from the acute inpatient rehabilitation service declined to participate in the study. Len was his CI on the outpatient service.

b. Rick and Ruth were assigned to the same CI in a 2:1 collaborative clinical education model.

sufficient opportunities to interact with patients over time to allow this participant to describe her relationship with patients and to experience ethical problems. Based on the similarity of the initial data from the initial journals and the first interviews from this dyad compared with the data through the same time frame from the other participants, I decided to continue with this dyad as participants in the study.

Clinical education sites can be either publicly owned or operated or privately owned (i.e. not-for profit, for-profit, publicly traded or privately held). In the original methodology, at least one of the sites in this study would be a publicly owned or operated hospital or facility because often the patients admitted have more financial constraints and are more likely to be medically indigent (have no identifiable source of funding for the hospitalization). Three of the PT student participants were at two different publicly owned hospitals and the other two were at privately owned hospitals.

Sites may be academic medical centers, teaching hospitals (they have medical residents) or hospitals without a medical teaching mission. Because all of the sites had a commitment to PT students, this was not considered an important criterion for site selection for this study. Three of the hospitals were teaching hospitals and two were hospitals that did not have a specific medical teaching mission.

In addition to the above characteristics, each clinical internship was a full-time experience of eight hours per day for five days per week. The length of the clinical internships ranged from eight to twelve weeks.

Instrumentation

Data Sources

Data sources for this study were (a) written journals from PT students and CIs; (b) a series of three individual, semi-structured interviews with each participant and verbatim transcripts of those interviews; (c) focus groups with students and another with CIs and verbatim transcripts of those focus groups; and (d) researcher memos. Figure 1 provides a schema of the research data sources and timing of data collection. The journals served as data sources and as a source of topics for exploration in the interviews and focus groups. These three data sources provided three distinctly different types of interactions to provide diversity and variety of meaning and interpretation. The journals provided means to access the participants' internal processes, i.e. thinking and reflection. Interviews provided a dialogue between each participant and the researcher. The series of three interviews permitted in-depth exploration of the participants' behaviors, context of those behaviors and explanations of those behaviors (Seidman, 1998). The focus groups offered an opportunity for interaction among the participants and researcher to permit interactive exploration of their experiences, ideas and opinions after having completed the clinical internships (Duggleby, 2005).

I collected demographic and clinical background information from participants in writing, during interviews, and followed-up by email with any participant to clarify any information as necessary. Appendixes C and D include the PT student and CI written

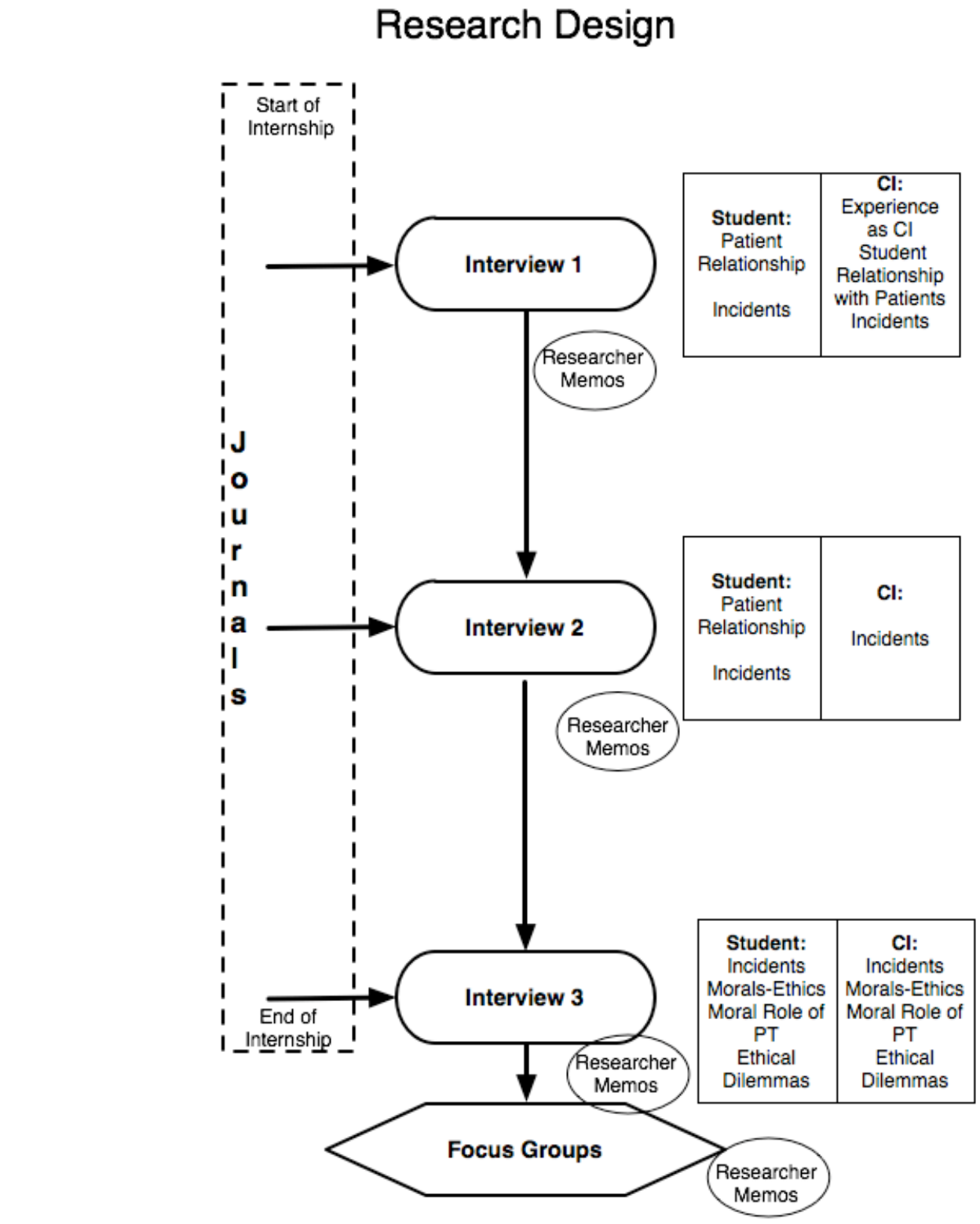

Figure 1. Data collection schema

demographic forms. The demographic and clinical background data provided a description of the gender, ethnicity, age and prior clinical experience of the participants (See Tables 1 and 2).

Journals

A guided, reflective journal, completed by PT students and CIs from the beginning of the internship, was one data collection instrument for this study. These journals served as a guide to the semi-structured interviews and focus groups and as a primary data source for this study. The guiding questions and instructions for the journals for both groups of participants are found in Appendix E for PT students and Appendix F for the CIs. The guiding questions concerned critical incidents, memorable patients (for PT students), memorable clinical teaching and learning events, conflicts or troublesome events, dilemmas and reflection. These guiding questions served to provoke reflection in different ways. Critical incidents asked the writer to describe an event that had some importance to them and their reaction to it. In a journal entry about a memorable patient, the PT student described a patient who they perceived made an impact on them based on any criteria they chose. Journals about memorable teaching and learning events addressed situations that influenced the PT students' learning. When writing about conflicts or troublesome events, the writers addressed situations in which they felt they could not act in the way they thought they should act for any reason. A reflection was a journal entry summarizing general thoughts or feelings about events in the clinic.

All participants were instructed to send two journal entries per week via email. They were told the journals could be anywhere from 60 to 300 words, the equivalent of

one-fourth to one double-spaced page, but could be any length they wished. I told the students and CIs these journals may take 10-30 minutes to complete. Table 4 describes the number of journals received from each participant. There were a total of 65 journal entries from the PT students and the students sent from one to 1.6 journals per week averaged over the internship. There were 58 journal entries from the CIs ranging from 1.3 to 2 journals per week per CI. While I intended to receive journal entries on an ongoing basis, one student, Rick, and one CI, Len, had computer and Internet access problems, and I received their journals sporadically during their participation in the study.

Interviews

A series of three semi-structured, individual interviews with each PT student and CI were another source of data for this study. I developed standard questions or statements to elicit a discussion of experiences based on the research questions. Some of the questions or statements were used for both types of participants and others were only pertinent to PT students or the CIs. I derived other questions for specific participants from review of the participants' journals. Appendix G contains tables with the standard interview questions. In Appendix G, Table G1 describes the semi-structured interview questions for PT students and Table G2 describes the questions for the CI interviews.

The first question for the PT students, "Tell me about a patient who has had an impact on you," was designed to begin the interview in an open-ended way allowing the student to explore any aspect of a patient who somehow affected him or her and the student's relationship and interaction with that patient. The interview questions were designed to progressively address more sensitive topics and to avoid specific use of terms

Table 4

Number of Journals Received from each Participant

PT Student	Length of Internship (weeks)	Number of Journal Entries	CI	Number of Journal Entries
Amy	8	12	Anne	11
Luke	8	7	Len	16
Cathy	9	14	Claudia	15
Rick	12	13	Rhoda[a]	16
Ruth	12	19		
Total		65		58

a. Rhoda was the CI for Rick and Ruth. Her journal entries addressed both students and are counted as one journal entry

such as "ethical dilemma" or "ethical problem" in the question or eliciting statement until the final interview. By avoiding these terms and using operational definitions of them, the student did not have to think in ethical language, but could tell a story of an incident that probably had ethical implications. An example of this type of eliciting statement is: "Tell me about a time that you knew you should do something, but something stopped you." The final interview began with the same types of questions from the first and second interview and then progressed to: (a) the participants description of ethics and morals, (b) what they thought influenced their ethics and morals, (c) what they thought were the important values, virtues or morals of PTs, (d) what they saw as the moral role of PTs in today's health care system (Triezenberg, 2005), (e) how they saw themselves

fulfilling that role, and, (f) questions about times they encountered ethical problems. This pattern was similar for the students and CIs, but the focus on the final two types of questions for the CIs was the times they encountered the moral role as CIs and ethical problems that the student encountered.

The three individual interviews occurred near the end of the first third of the internship, e.g. the beginning of week four of a twelve-week internship or the beginning of week three of an eight-week internship, near the end of the second third of the internship, and at the end of the internship. The individual interviews with the PT students and their respective CIs occurred on the same day. The order of the interviews on any day was scheduled at the convenience of the participants. Personal interviews occurred in private locations at the respective clinical sites, e.g. a conference room, an office, or unused treatment room. Each interview was audio recorded and a verbatim transcript prepared by a professional transcription service. That service had a written confidentiality agreement prohibiting disclosure of the identities or content of any audio recording they transcribed. The length of the PT student interviews ranged from 49 minutes to 98 minutes. The length of the CI interviews ranged from 22 to 50 minutes.

Focus Groups

There were three focus groups conducted for this study, two for PT students and one for CIs. The study was originally designed such that there would be one focus group for the students and one for the CIs after all of the participants completed their clinical experiences. The study was designed with the intent that all of the students would be on clinical internships within a similar period of time, conclude their clinical experiences within a narrow timeframe, and, thus be ready to participate in one focus group together.

Due to participant recruitment and consent and the timing of the clinical internships, two students who matriculated at the same physical therapy program completed their clinical internships four months before the other three PT student participants completed theirs. In consultation with the research advisor for this study, I decided to hold one focus group with the two students who completed their internships first. In this way, the focus group occurred when events where still recent in their memories. While focus groups typically have six to ten participants (Patton, 2002), Kitzinger and Barbour (1999) held that the group size was not as important as was the focus group leader's attention to the interaction among group members. The other three students participated in another focus group held via telephone conference call because they were living in different areas of the United States and travel was prohibitive for a focus group in one location. The use of teleconferences for focus groups is documented in the literature (Bloor, Frankland, Thomas, & Robson, 2001). There was one focus group for three of the CIs held via telephone conference call two months after the final group of PT students completed their internships. The CI focus group was done via telephone conference call instead of in person or via videoconference for the same reasons as the PT students. Rhoda, the CI for Rick and Ruth, failed to call in during the scheduled focus group time, an appointment to which she had previously agreed. I conducted a follow-up, individual telephone interview with her two days later. Table 5 describes the timing of each focus group relative to the end of the clinical internship and the length of each focus group. The focus groups lasted from 43 to 68 minutes. The student focus groups occurred from 10 to 77 days after the end of a student's internship. The CI focus groups occurred from 104 to 202 days after the end of the internship.

The focus groups were semi-structured with open-ended questions. Appendix G contains the focus group questions for each participant group. In that Appendix, Table G3 describes the PT student focus group questions and their relationship to the research questions and Table G4 describes those for the CI focus group. I used the standardized focus group questions for the students and CIs and added questions as the focus groups proceeded, reflecting the emergent nature of the information and conversation.

The Researcher as Instrument

Given the nature of this qualitative study, the researcher is an important instrument for data collection. I have extensive content expertise in the topic area of the study. My interest in this study stems from my past experience as a CI for twelve years, as a center coordinator for clinical education at two sites for nine years, and as an academic coordinator of clinical education at an entry-level PT education program for five years. I have also taught courses in ethics and professionalism in an entry-level PT education program for ten years. These experiences provide me with extensive experience in clinical education for PT
students, including the primary subject area of this study, and in academic, entry-level education.

I have taken one course in qualitative research while a student in the doctoral program in the Department of Organization and Leadership at the University of San Francisco. As part of that course I conducted a small-scale pilot project with PTs about the ethical problems they encountered and how they coped with them. That project included participant observation and semi-structured interviews. I analyzed the data from that project and wrote a paper presenting and analyzing my findings.

Table 5

Length and Timing of Focus Groups

Focus group participants	Length (hours:minutes) [a]	Timing
Amy and Luke	1:08	Ten days after end of internship
Cathy, Rick and Ruth	0:52	Cathy: 77 days after end of internship Rick and Ruth: 24 days after end of internship
CI Focus Group	0:43	Anne and Len: 202 days after end of internship Claudia: 104 days after end of internship
Rhoda Follow-up to Focus Group[b]	0:15	63 days after end of internship

a. Rounded to nearest minute.

b. Rhoda failed to call in during scheduled focus group teleconference. A telephone follow-up occurred instead.

I have past experience using some of the data collection methods selected for this study. I have used journals for students during clinical experiences when I was coordinating the clinical education component of the entry-level academic program. I have extensive experience with structured and semi-structured interviewing techniques from my experience interviewing candidates for employment and students for admission to the program where I am currently chair. I have used informal focus groups to collect feedback from students about various aspects of their experience in the program.

The student participants were not from the program in which I am a faculty member. One CI was a former student.

Data Analysis

Coding Schemes and Interpretation: Journals, Interviews and Focus Groups

I used an inductive coding technique to analyze data (M. B. Miles & Huberman, 1994). This technique allowed for the emergence of codes that were derived from the data without preconceived notions of what data might be found. I repeatedly read data from journals and transcripts of interviews and focus groups and took margin notes that guided development of the coding schema.

I read journal entries on receipt and before the next scheduled individual interview with that participant. I subsequently read journal entries several times. I listened to the recording of each interview and focus group while reading the transcript of the interview or focus group. During this reading I marked elapsed time of the recorded interview on the transcript so that I could find and listen to interview segments if necessary. Listening to all of the audio recordings while reading the transcripts assured

accuracy of the transcripts and exceeds guidelines for spot-checking transcribed interviews (MacLean, Meyer, & Estable, 2004). The transcription agency was instructed to prepare verbatim transcripts, including colloquialisms, contractions, speech disfluencies and speech fillers. This process of listening and reading the transcripts permitted analysis of these speech patterns. During this process, pauses in the participants' speech of more than five seconds were timed and noted in the transcripts. I also notated audible, non-speech sounds, such as foot tapping, finger tapping, or finger drumming and audible sighs, all of which might be indicators of a participant's emotions during the interview. Inaudible speech was marked as such in the transcripts (MacLean et al). When citing direct quotations from participants, I use the verbatim transcripts that capture colloquial, individual speech patterns. I include speech fillers, speech disfluencies, times of pauses, or audible, non-speech content when they are pertinent; otherwise, the quotations are edited to improve readability. I do not indicate any of these non-standard speech patterns with "[*sic*]" in the quotations unless it is essential for understanding.

After several readings of all of the data, I developed a series of concept maps related to the research questions and used those concept maps to develop preliminary coding categories (M. B. Miles & Huberman, 1994). I subsequently read the transcripts several more times, to identify themes and concepts that arose and to apply and revise the coding scheme. I developed operational definitions of each category of code and sub-codes. The coding scheme applied to PT students and the CIs with the exception of one set of codes that only applied to the CIs. The five primary coding categories for the PT students and CIs were (a) occurrence, (b) patient, (c) resource, (d) action, and (e) morals-

values-ethics. The sixth coding category for the CI was "student." That code was appended to any of the five primary coding categories when the CI described aspects of the student in relation to that category.

Data that did not seem relevant to any research question were highlighted and subsequently reviewed to assure they were not relevant. Irrelevant content from transcripts and journals included information that was only clinical in nature, was off topic, or was participant and interviewer discussion about the research process.

Within Case and Cross Case Analysis

I used an analytic framework approach to the data analysis based on the research questions, processes and issues that were evident in the data (Patton, 2002). Given the purpose of this study and the research questions, issues and processes were important elements of the analytic framework during data analysis. As one example, a student's description of an ethical issue she encountered would clearly relate to one research question. A student's description of processes used to resolve the ethical problem could relate to more than one research question and might reflect the participant's use of several resources and processes to resolve the ethical problem.

First, I analyzed all of the data within each participant case (Patton, 2002). Once the initial coding scheme was developed from the concept maps, I read the transcripts and coded segments of the data within each participant case. As part of the within case analysis, I abstracted narrative sequences that pertained to a particular ethical situation from interviews, journals, or focus groups. A researcher memo, including interpretation and summary, accompanied each abstracted narrative sequence. In this way, a narrative of any ethical situation was created. Each abstracted narrative sequence included

markers that identified the source of the data, e.g. which interview or journal, and, if it was abstracted from an interview or focus group, where it occurred. These markers permitted an iterative analysis between the abstracted narrative and the source of the abstracted narrative to permit a contextual analysis of the narrative and facilitate accurate data analysis.

I then used a cross-case analysis (Patton, 2002) wherein I abstracted data from all data sources based on the coding applied to the data. I collected each data segment by code into separate worksheets by the primary coding categories and then aggregated by sub-codes within each major coding category. I used *Excel* (*Office 2004 for Mac*, Microsoft) to create databases for the cross-case analysis. Each database allowed identification of the participant, interview number, and precise location within the transcript or journal and the coding for that data. All of these identifiers were linked to the applicable segment of the transcript or journal. I analyzed PT student and CI data separately in the cross case analysis. I read the aggregated data multiple times within the cross-case analysis and further refined coding schemes and reclassified data into different codes. During the cross-case analysis, one major coding category, resources students used when they encountered ethical problems, was further extended into smaller sub-categories to allow further differentiation of data within this category (M. B. Miles and Huberman, 1994). The sub-set of codes relating to reflection and thinking within this same major category was also further extended into smaller sub-categories to identify the focus of the students' reflection and thinking, e.g. patients or self. I continued data analysis and coding until all data was accounted for.

Findings that were related to various aspects of complexity science, including complex responsive processes (Stacey, 2001) emerged during data analysis. Transcripts and the coded data from the cross-case analysis were subsequently analyzed and coded according to the relevant aspects of complexity science. The major initial coding categories related to complexity science were attractors, complex adaptive entities, complex responsive processes, dissipative structures, emergence, fitness peaks, and fractals. These terms are explained in Chapter Seven where the findings relative to each term are addressed. Upon analysis, data associated with fitness peaks and fractals were not germane to the purpose of this study and were not included. These findings are reported in a separate chapter.

Consistency and Dependability

Given the nature of qualitative research, most authors support use of the terms consistency and dependability over reliability and validity in qualitative research (Merriam, 2002). The nature of this qualitative study relied on the researcher's interpretation of the participants' expression of their understanding of the phenomena being investigated. Qualitative methods that establish internal validity, consistency, and dependability are closely related. The direct interaction between the researcher and participants via their writing, interviews, and focus groups help establish the internal validity, the consistency, and the dependability of the research data. The multiple methods of data collection over the duration of the clinical internships and data from two different sources, PT students and CIs, about the same incidents provided a means to triangulate data (Merriam).

Research memos are an important element of qualitative research. I kept research memos following the interviews and focus groups and while analyzing and coding data. The memos taken during data analysis and coding helped me reflect on the coding process and note patterns that emerged during the coding and analysis process (M. B. Miles & Huberman, 1984). These memos also provided a means to establish dependability and consistency.

External validity or generalizability, the extent to which one can apply the particular results from a study to more general circumstances, has been a controversial topic in qualitative research (Merriam, 2002). Some qualitative researchers have argued these concepts are contrary to the nature of qualitative research (Patton, 2002). Given the inductive nature of qualitative research, one stated goal is to provide the reader (as opposed to the researcher) with sufficient details and context to permit the reader to reason from the particular to different or more general environments (Merriam). Both of these authors urged the use of thick, rich descriptions of the data collected and purposive sampling strategies with the potential for variability to help establish transferability in qualitative research. The purposive sample that resulted in the variability of clinical education sites, the different durations of the clinical internships, the varying levels of experience of the CIs and the various academic programs in which the PT students were enrolled all contributed to the potential for transferability of the data. The multiple data collection methods and repetition of standard interview questions among the various interviews and in the focus groups provided the reader thick, rich descriptions of that data. Additionally, as stated, I engaged in a dialectic of engagement and detachment throughout the study and the subsequent data analysis (Stacey & Griffin, 2005a, 2005b).

The multiple sources of data and multiple interactions between the participants and me helped establish a stability of meaning when the data were considered over time (Stacey, 2001).

CHAPTER 4: THE PARTICIPANTS

Introduction

This chapter describes the findings relative to the participants, the physical therapist (PT) students' interpretation of and interaction with the environment, and the clinical instructors (CIs) beliefs and actions relative to ethics and students. These findings are not specifically related to any single research question. Rather these findings emerged from the study and provide a contextual understanding of the participants and the environment in which they functioned.

The demographic characteristics of the student participants and the CIs were depicted in the methods chapter. These demographic data only provide a cursory understanding of the participants. Given the purpose of this research study, the participants' values, their beliefs about ethics and morals, and the importance of ethics and morals in their professional work offer an understanding of the participants. The three major areas of findings that are pertinent to report here are (a) the participants' values and beliefs, (b) their beliefs and interpretation of the constraints on their actions, including the constraints from the environment, and (c) the CIs beliefs about the ethical orientation of PT students and how those beliefs guided their actions. These three areas provide a basis for understanding the participants and the clinical environment in which they operated. The first part of this chapter explores each of these aspects of the participants in two sections, first for the students and then for the CIs.

Findings that describe the constraints on students' actions as moral agents and their ethical reasoning emerged during the course of the study and provide a context for understanding the findings relative to the five research questions. A person, when

considered as a complex adaptive entity, responds within and to their experience of the constraints on their actions. These constraints can be external, that is they arise from other people or the environment, or can be internal, they arise from within the person. The external constraints describe the environment or the students' interpretation of the environment. The internal constraints were the students' interpretation of their roles and how their values and ethical beliefs governed their actions. The second part of this chapter discusses these constraints

The CIs prepared the students for their responsibility as physical therapists and moral agents based upon (a) their beliefs about the underlying ethos of physical therapists, (b) the ethical development of PT students, and (c) how they approached their role as CIs. These beliefs and actions taken by the CIs provide additional understanding of the CIs and the setting. The findings relative to how they set the stage for the students to act as moral agents constitute the third part of this chapter.

The Participants: Students

For each student in turn, I will describe the following five aspects about them: (a) background characteristics; (b) their personal definitions of morals and ethics; (c) the important values, principles or virtues these students ascribed to in their professional lives; (d) their views of the moral role of physical therapists; and (e) their perspectives on what influenced the development of their values and ethics. There was not a systematic attempt to collect background information about the students during this study, e.g. I did not ask about their marital status, if they had prior careers, or if they had experience with physical therapy as they were growing up. When a student disclosed this type of

information, and it seems relevant to understanding the student, I will include it in the background characteristics for each student.

Amy

Background Characteristics

Amy was a 25 year-old woman who worked as a physical therapy aide or volunteer for about three years before entering physical therapy school. During her previous clinical assignments as a PT student, she was in three different acute hospitals and 2 different outpatient clinics, one a private practice and the other a hospital-based clinic. By the end of her final internship, she completed 28 weeks of full-time clinical experiences.

Amy was a competitive swimmer for 12 years growing up. She received physical therapy for a shoulder injury she sustained swimming and this experience was important to her choice to become a PT. She considered medical school, but did not think she would make it through, and chose physical therapy instead. The social atmosphere and ability to help people were important to her career choice. She said it was not until she entered PT school that she grasped the concept that she would have patients who she would have "to try to fix." During the second interview, she disclosed she was engaged, and her fiancé was an important support person for her.

Personal Definition of Morals and Ethics

Her definition of morals was succinct, "what's right and wrong." Then, when asked how she would describe ethics she said, "Kind of the same thing to me…What's right and wrong." Attempts to explore this further did not elicit any further explanation from Amy.

Important Values, Virtues or Principles in Their Professional Lives

The primary value that Amy voiced was a focus on doing what was best for her patients. As she summarized it, "…your patients are coming to you for a reason…you give them the best possible care you can." She explored this further during the focus group with Luke:

> They are coming to you for help. … That's the whole reason you're a therapist. It's your job to help them or to at least try your darndest to help them and I wouldn't think that they would want to come to someone who only puts in half the effort. That's not morally right in my view.

She had the viewpoint that patients are at the center of what happens in the clinic, "the patient is the reason we're employed." At the same time, she voiced some internal struggles about whether there are limits to respecting patients' wishes:

> Essentially within reason, … the thing the patient wants out of this is essentially what we give them, and as long as we always keep the patient in mind about what it is that they want and what it is that they think they need, I- I think- I think you'll be- you'll [stammers] make a good physical therapist. … So as long as- as long as you do everything for that patient that you possibly can, uhm.. you know, within reason, uh.. that's what you need

She experienced conflicts during her internship that were a result of differences between what a patient wanted and what she thought was best. These conflicts are explored in Chapter Five.

Hope and justice were two other values that she recognized as having significance for her. She talked about the importance of supporting patients' hope for achieving the goals they set out for themselves. Her views of justice are related to access to care and the amount of effort patients put forth in physical therapy. She said she had some patients who were very willing to work hard in physical therapy, but whose ability to get

an appointment was delayed by patients taking appointment times who were "not really putting in the effort."

She valued competence in her work as a PT and said using current evidence in practice was essential to providing the best possible care. She offered her appreciation of her CI who frequently read the literature, cited that literature in her work, and was actively engaged in continuing education. She contrasted her CI with a former CI who did not endeavor to stay current.

Views on the Moral Role of Physical Therapists

When she described the moral role of PTs her discussion initially was directed toward the importance of meeting the patient's goals. She then focused on the importance of education for continued competence as a PT and the importance of educating patients. In her view, educating patients was critical to the moral role of PTs. When asked how educating patients was a moral role, she responded, "..they deserve to know why they're here." She explained that by educating patients, they were "more willing to interact and wanting [*sic*] to know more." When I asked for other examples of the moral role of PTs, she said that hand washing was an important moral role, because it was not right to see a patient without washing one's hands first.

Influences on the Development of Values and Ethics

She described her family as having an important influence on her view of what was right and wrong. When she began her physical therapy education, she realized her new responsibility for the lives of others differed from when she experienced in high school. She described it this way:

> I essentially went from, high school … only having myself… to worry about, and now I have potentially nine, ten patients a day that I have to worry about. … it's

> like… what it's going to feel like when you're a mom, and you have two kids, … you got two other people to completely worry about. ... to a lesser degree with the patients, 'cause they're not there all the time, but…I think … it's just kind of come to the point that these people are relying on me, and they're kind of my responsibility now, so I've got to look out for them

She believes her emphasis on clinical competence and using evidence to guide practice was instilled in her during her physical therapy education. Past and current CIs reinforced her views on the importance of staying current through continuing education and using evidence in practice. She enjoyed her experience as a patient in physical therapy where she had a PT who spent time with her in physical therapy, she worked hard, and returned to competitive swimming. That experience led her to value spending time with patients who put forth effort to meet their goals.

Luke

Background Characteristics

Luke was a 37 year-old man who disclosed the least information about his background than any of the other students. When he completed the standard student participant questionnaire, he did not include any prior experience as a physical therapy aide or volunteer prior to physical therapy school. He had two prior full-time clinical experiences; one at a private, outpatient clinic and another at an acute care hospital. On his questionnaire, he indicated he completed 14 weeks of prior full-time clinical experiences as a PT student, thus he had 22 weeks of clinical experience at the end of his final internship.

During the second interview, he said he was a coach, and his CI told me that Luke coached gymnastics. He was previously employed in a health care practice, but did not describe his job or the nature of the business any further. He brought up his past

employment during the third interview when discussing ethics because a psychologist with whom he worked was accused of taking kickbacks. That episode triggered ethics training in the company. I often asked the student participants whom, besides their CI, they talked to or consulted about the ethical issues they were confronting. He was the only student who did not identify anyone outside of the clinic that he talked to in response to those questions.

Personal Definition of Morals and Ethics

When describing morals, he said they are a "kind of driving force for what you do." When asked to describe ethics he said it means to "do the right thing" and added ethics are often gray.

Important Values, Virtues or Principles in Their Professional Lives

Luke said that honesty and integrity were the two key values that were important to him. When discussing honesty with patients, Luke used an example of honestly setting realistic goals with a patient who had ataxia whose potential to improve was less than he and his wife hoped. He also talked about being honest with himself and with his CI when he discussed the importance of admitting mistakes or acknowledging areas in which he was uncertain about what to do for a patient. He described integrity as "…wanting to do the best that you can…where you're not just going through the motions." The importance of integrity was also evident when he discussed how he overcame bias when working with a patient with HIV infection and with patient's in whom he questioned their motivations and honesty. In both instances, he spoke of coming to the realization that he was judging the person, had to suspend that judgment, and then focus on providing the

patient with physical therapy because that was his job. He said caring and compassion are important virtues in the moral character of PTs, and felt he possessed these virtues.

He described putting the needs of patients before his own as an important value. He gave an example of giving up sleep and coming to work early to do research that would benefit the patient. While he did not use the word altruism, he is describing altruistic behavior.

Views on the Moral Role of Physical Therapists

During the focus group, Luke concurred with Amy's view of the importance of continued competence as a component of the moral role of PTs. During the third interview in response to the direct question, "what do you think is the moral role of PTs in today's healthcare environment?" his response was different from the other four student participants. He talked about the importance of PTs stepping "into the broader healthcare realm and having this open and honest interaction with doctors, psychologists, nurses [and] other health care practitioners, that … this is what we have to offer." He saw improved patient care as the goal of this improved collegiality.

During the interviews, his view of other components of the moral role of PTs emerged. He talked about including family members in physical therapy, saying he was "bringing them into the circle" with the patient and him. He discussed the importance of focusing on improved function for people with permanent disabilities. He also talked about the importance of his role as an advocate for patients to assure their needs for healthcare were met.

Influences on the Development of Values and Ethics

Luke emphasized several important influences on his morals and ethics from his experiences growing up and as a PT student. He said:

> growing up in a Christian home, …constantly exposed to…characters from the Bible, their moral background, their fiber and character. And you know you kind of look up to [them].

He also talked about observing his father's work ethic. He said his father, who got up to go to work at 5:00 A.M. for 50 years, instilled in him the importance of integrity about work. He said his father taught him that "standing around with your hands in your pockets is not an option." He said he often had the phrase, "what would my dad [do]?" in the back of his mind when he faced difficult decisions. In physical therapy school he was influenced by his classmates and CIs who demonstrated they truly cared about their patients. One CI, whose ability to work with difficult patients with significant psychological problems, inspired him to look beyond the patient's medical and behavioral problems to see them as people deserving of care and attention.

Cathy

Background Characteristics

Cathy was a 24 year-old woman who reported she had one and one-half years of volunteer experience at a pediatric hospital prior to beginning her physical therapy education. By the conclusion of her final internship, she had 26 weeks of full-time clinical experiences. Her previous full-time clinical experiences were at a pre-school, a hospital-based outpatient clinic and a private outpatient clinic. As noted previously she started in a master of physical therapy program, completed that degree and was continuing in the DPT program.

Cathy was an athlete in her youth, but did not report what sport(s) she played. When she was ten years old, she had an elbow injury for which she received physical therapy. Her experience in physical therapy for that injury was an early influence on her decision to pursue a career in physical therapy.

Cathy was in physical therapy school in the Midwest, and she had a boyfriend there who she spoke to often and who came to visit her while she was on this internship.

Personal Definition of Morals and Ethics

When I asked Cathy to describe morals she said morals are a sense of right and wrong. She said her upbringing and her faith helped her formulate her sense of right and wrong. When describing ethics she said,

> Morals definitely feed into that. …I would say that's the root of where I get my ethical principles. And it's just a sense of right and wrong and then putting it in context of the situation and whether the situation is being handled appropriately and fairly to the individual or the group.

She concluded by saying "I'd say they go hand in hand, morals and ethics."

Important Values, Virtues or Principles in Their Professional Lives

In Cathy's initial description of her values, she said she had to "stand by the APTA and then the physical therapy motto of do no harm beyond all else." Her values also included keeping the patient's best interests in mind and focusing on their ability to function in the community. She said honesty and trustworthiness were important to her. In her view, trustworthiness extended to co-workers in addition to patients. She felt that trustworthiness meant being a responsible and dependable member of a team. The discussion of values, morals and ethics occurred in the third interview, immediately following her description of what transpired with a patient who was a Christian Scientist, who was being given medication against her wishes. As she said, "in light of what I've

experienced most recently … always adhere to the patient's rights, including the right to refuse service regardless of best interest." She spoke of the importance faith and that value was reinforced in her experience with this patient.

Views on the Moral Role of Physical Therapists

In the third interview, when talking about the moral role of PTs, she discussed the importance of providing "complete and honest health care" for patients, to assure "no harm is being done either in treatment or to the patient outside of therapy" and the responsibility to report wrongdoing to the patient. Her experience with the patient being medicated against her will had a significant impact on her thinking in this area.

Influences on the Development of Values and Ethics

Cathy recognized the important influence of religion and family in her views of morals and ethics and her moral role as a PT. She was discussing the guidance her family and faith provided to her moral development, when she concluded:

> If I were weaving a moral blanket, … there are threads coming from all of those aspects, but it's largely family-based and experience-based, … my experiences throughout my life and kind of … learning from my mistakes and also from things that went very well.

Her early experiences as a patient in physical therapy influenced her current views, particularly developing a sense of compassion, and supporting and caring for her patients, all of which she experienced as a ten-year old receiving physical therapy. She also talked about past life experiences that instilled in her the importance of trust and dependability as important facets of her character.

Rick

Background Characteristics

Rick was a 31 year-old male with three separate volunteer experiences of six months each prior to entering physical therapy school. These experiences occurred at two separate hospitals and included inpatient and outpatient experiences. He had three clinical experiences in hospital-based outpatient settings during his physical therapy education each of which was three to four weeks long. One of these included an inpatient experience as well. Just prior to the internship included in this study, he had a twelve-week internship at a private clinic. The internship included in this study was followed by one final twelve-week internship. He reported a total of 46 weeks of full-time clinical experiences during his physical therapy education.

Rick was married and had a young daughter. He had a long commute on public transportation each day, giving him time to write the journals required for this study and to reflect on what happened each day. Physical therapy was a second career for him and he said it would result in lower income potential than his prior career, but did not disclose his prior career. He reported that he had sophisticated computer and technical abilities that enabled him to diagnose and propose solutions to computer system problems at his internship site. He said the inefficiencies in the clinic's computer system and the inability to implement his solutions frustrated him.

Personal Definition of Morals and Ethics

In our discussion of morals and ethics, Rick said that morals are "standards that you hold yourself to." When attempting to describe ethics, he started by saying morals

and ethics are similar, but then concluded that ethics "is actually doing the right and wrong. It's more of an active thing."

Important Values, Virtues or Principles in Their Professional Lives

Honesty and trustworthiness were important values for Rick. He recognized that honesty extended beyond "not telling a lie" to being realistic with patients. The context for honesty for him came from his role as a professional in which:

> You have that kind of extra information that they don't have in their head … they don't know what all the signs mean. So you are telling them what that means.

Trustworthiness was important because of the sensitive information about patients that is accessible to PTs and the requirement to keep that information confidential.

Views on the Moral Role of Physical Therapists

He characterized the moral role of PTs as having two components one related to finances and the other related to patient care. He said PTs have a financial responsibility within the system to honestly bill for services performed and for the system to pay the PT an appropriate amount for those services. The other component of the moral role was an obligation to be up-to-date with current practice that would enable the PT to provide "…the best possible care you can provide." Providing the best possible care means "…an obligation for PTs to advocate for themselves and for the patients." The role as an advocate included educating patients so that they could effectively advocate for themselves.

Influences on the Development of Values and Ethics

Rick described the importance of his family growing up and his wife and daughter in his moral development. He said that he experienced many positive and negative role models when he was growing up and those role models had important

influences on choices he made in his life. He related a story from his days in high school when a friend told him, in essence, that he was someone who could always be relied on to be truthful and act with integrity. Through that story, he expressed his view that his morals, particularly his integrity and trustworthiness, have been part of his character for many years.

Ruth

Background Characteristics

Ruth was a 25 year-old woman with five years of work experience with children prior to beginning her physical therapy education. She described her jobs as a behavior therapist at a pediatric day care center for children with special needs and as a recreational therapist and counselor at a camp for children with development delays. Her previous clinical experiences included an outpatient clinic for three weeks, critical care units at an academic medical center for three weeks, a school-based program for four weeks and an outpatient clinic for twelve weeks. She had one more twelve-week experience following the internship reported on for the study. At the completion of her final internship she would have accumulated 46 weeks of full-time clinical experience.

Ruth attended a Lutheran, liberal arts college for her bachelor's degree. She was living in a residential hotel during the internship, without family or friends nearby. She reported she had a boyfriend who she talked to daily on her long drive home from the clinic. Other aspects of her life with relevance for this study are reported below in relation to influences on her ethical development.

Personal Definition of Morals and Ethics

She described morals as:

> very much an internal thing that are rules that you are not willing to ever break or at least that if you break them … it's hard to deal with within yourself and it causes conflict and you're frustrated.

In her view, "ethics are more the shared values … [of] what we as a society value." She concluded that society's laws logically follow from ethics.

Important Values, Virtues or Principles in Their Professional Lives

Ruth described the important values, principles or virtues that she ascribed to were avoiding doing harm to patients and to have the patient's best interests foremost in mind, including above any monetary self-interest. She also expressed the importance of "caring about patients as people first," and for her that meant recognizing when she needed to refer the patient elsewhere. She also said that the Golden Rule influenced everything she did. The value of hope balanced with realism was a common theme in her discussions. In her first journal, Ruth described herself as someone "who strongly values efficiency" and when healthcare is delivered efficiently it is also more equitable.

In each interview, Ruth referenced what she described as a "personal moral [of] not caring more than my patients do." She talked about this in relation to specific patient experiences in her first and second interviews. During the third interview, she said that it was something she struggled with and concluded:

> because if I care more than my patients do and I always put my patients first, then the times when I get so frustrated that I stop caring, … I really struggle with that and have a lot of emotional conflict, so trying to set that rule for myself that … if my patients aren't making any effort I'm going to put a lot out there initially but if I can't get through to them, then I'm not the right person to see them and I'm not putting their needs first … I either help them find somebody else or just accept that when they're ready they'll find someone else

Views on the Moral Role of Physical Therapists

Her description of the moral role of PTs in today's healthcare environment began with a discussion of PTs as gatekeepers because of the understanding PTs have of "a patient's mental condition and a patient's actual attitude toward where they are in their illness." In her view, that understanding accrues through the time patients spend in physical therapy, and PTs have the responsibility to share the information they gain with others. Her description of the moral role of PTs included caring for the patient as a person and doing the best one can for patients. During other interviews, she discussed the importance of patient advocacy and teaching patients to be advocates for themselves. She also talked about the importance of patients realizing functional goals and helping them understand the limits to realizing their goals.

Influences on the Development of Values and Ethics

Her moral and ethical development was influenced strongly by her family, and, while she recognized the importance of her Lutheran upbringing, she was surrounded by people from around the world and exposed to other world religions during her upbringing. While an undergraduate, she took an ethics course that was taught from a philosophic and economic perspective and she felt this course was important in how she thought about ethics.

Several times during the interviews, she described personal experiences as a child, adolescent, and young adult that influenced her views. She related that seeing the physical therapy care her grandfather received and his perseverance in the face of his disability following a stroke had a significant impact on her. As a young girl, she described encounters with physicians who told her she would never drive because of her

visual impairments and teachers who said she should attend special classes because of her learning disabilities. She related that these experiences influenced her as a PT in two important ways. In one instance, she realized that special services or equipment might foster dependence not independence. These experiences also informed her views of how a healthcare practitioner conveys hope to patients and how she interpreted research findings for patients. Both of these experiences were evident as continuing themes with Ruth during the course of her participation in this research study.

The Participants: Clinical Instructors

This section of the chapter concerns the CIs. For each CI in turn, I will describe: (a) their definitions of ethics and morals; (b) the important values, principles or virtues they ascribed to as PTs; and (c) their views on the moral role of PTs. Because their role in the study was in relation to the students and their roles were only central to one of the five research questions, I will only provide limited background information about them. Similarly, I will not discuss influences on their ethical development. I provide findings relative to their views on the importance of their roles in the students' ethical development later in this Chapter.

Anne

Anne graduated with a Master's degree in physical therapy. She had three years experience as a PT, all at the same clinic. Amy was her second full-time, eight-week student. She previously worked with two students on two-week clinical experiences.

Definition of Ethics and Morals

Anne's attempt to describe morals and ethics was marked by one pause of nearly 30 seconds, disfluencies, and fillers. I interpreted these speech patterns as indicators of

the difficulty she had addressing these concepts. Ultimately, she defined morals as doing the right thing in a given situation, and did not differentiate morals from ethics.

Important Values, Virtues or Principles in Their Professional Lives

Anne's efforts to describe the values, virtues and principles important to her role as a PT was characterized by speech patterns as reported above in her description of morals and ethics. She emphasized the importance of honesty, respect and caring as important to her work as a PT. Ultimately, the most important principle she identified was "doing what you believe is right to get the patient better," consistent with the principle of beneficence.

Views on the Moral Role of Physical Therapists

Given generalized past problems with abuses in the health care system by practitioners, Anne thought the most important moral role for PTs in today's health care environment was practicing honestly with the ability to justify treatment. In her view this honest practice was related to treating patients in such a way that emphasized return to function. Her speech pattern when discussing this topic was similar to those described above.

Len

Len graduated from physical therapy school with a master's degree. He had two years experience as a PT, all in the same clinic. Luke was his first full-time student, but he had worked with some students in the clinic for observation experiences.

Definition of Ethics and Morals

Len described morals as standards, principles and guidelines that an individual lives by. He contrasted morals with ethics by saying ethics concerned those same standards, principles and guidelines applied to a group.

Important Values, Virtues or Principles in Their Professional Lives

In our discussion of the topic of virtues, values and principles important to PTs, Len's speech was characterized by pauses of six to fifteen seconds and fillers. Len emphasized the most important virtue and principle was the perspective of helping others and of doing "the best you can with your patients." The importance of advocating for patients was important to him, particularly for patients who did not understand the system.

Views on the Moral Role of Physical Therapists

Len described the moral role of PTs in today's health care environment as "improving quality of life [and] making people happy by giving them independence." He also thought that tolerance and respect for the differences among patients and other health care practitioners were also important components of that moral role. Two pauses, one of 30 seconds and the other of ten seconds, and a significant amount of fillers marked his discussion of this topic. Again, I interpreted these speech patterns as indicators of his difficulty talking about the topic.

Claudia

Claudia graduated with a DPT degree. She had one year's experience as a PT, all at the same clinic. On the day Claudia returned from a vacation, she learned she was assigned her first student, Cathy, and that the student was starting that same day.

Definition of Ethics and Morals

Claudia said morals are the "way things should be" whereas ethics is the law and protocols. As she said, "With ethics one can determine if they are being followed." She could not describe morals beyond this, but did add, "…it's [ethics] done with somebody else and that they likely wouldn't like it or it's not appropriate."

Important Values, Virtues or Principles in Their Professional Lives

Claudia framed her discussion of the important values, virtues and principles for a PT as treating patients "as I personally would like to be treated." For her this meant treating them holistically, not just as someone with a problem to be solved. She emphasized listening, spending time, and focusing on the patient's concerns.

Views on the Moral Role of Physical Therapists

Claudia said the moral role of PTs was "just to help someone." She said she must work collaboratively with the patients to identify their realistic goals and to achieve their maximum potential.

Rhoda

Rhoda graduated with a DPT degree. She had six years experience as a PT, all at the same facility. Over that time, she estimated she had been a CI with 12 students, always working with two students simultaneously. She was the only CI in the study who had completed the American Physical Therapy Association's "Clinical Instructor Education and Credentialing Program."

Definition of Ethics and Morals

Rhoda expressed the idea that morals are the "qualities, attributes, or paradigm statements where everyone ought to choose that you try to fulfill on a daily basis within

your life." She described ethics as the set of principles one relies on when making decisions about what to do.

Important Values, Virtues or Principles in Their Professional Lives

Rhoda emphasized the importance of putting patients' needs first and the importance of collaboratively reaching realistic goals to achieve what patients want for themselves. She said her emphasis on collaborative care requires that she communicate honestly with her patients. The final value she described was seeking continuing education to maintain competency in her practice as a PT.

Views on the Moral Role of Physical Therapists

Rhoda felt the moral role of PTs was to model best practices and meet high moral standards. She said she must "provide safe and prudent care" to each patient.

Summary: The Participants

Every participant discussed providing the best care possible for patients, beneficence, as an important moral role or principle of PTs. Many of them emphasized the importance of maintaining clinical competence through continued education as critical to upholding beneficence. The values, virtues and principles most commonly ascribed to by the students were honesty and integrity. The students saw advocacy on behalf of patients as part of their moral role. The CIs emphasized the importance of meeting the patient's goals for return to function, tolerance and respect, using best practices, and the need to honestly justify the need for physical therapy with payers as part of their moral roles in today's health care environment.

All of the participants defined morals as internal standards of right and wrong and how one ought to act. While they used different terminology to do so, they all

characterized ethics as an action based on those standards of right and wrong in relation to other people.

The paths these five students took prior to entering physical therapy school were varied with no common patterns. All of the students said their families were the central influence in their ethical development, with several emphasizing the importance of faith. The four CIs were in the early phase of the careers as PTs, and, with the exception of Rhoda, they were inexperienced as CIs.

Constraints

The concept of constraints on students' actions as moral agents emerged as an important finding that influenced the students' roles as moral agents in ethical situations. The external constraints the students experienced were interpreted, negotiated and applied in the circumstances of the specific ethical issue and within the students' expression of their moral agency. The external constraints these students operated under were (a) policies and regulations of the clinical site and of third party payers; (b) the broader social environment; and (c) the hierarchical and cultural relationships between health care practitioners, e.g. students or PTs and physicians. Three of the five students experienced constraints from policies and regulations and also from the social environment. Two students described how they experienced hierarchical relationships as a constraint. There were three categories of internal constraints: (a) the students' values and virtues (these constraints were enabling or restricting); (b) the students' perceptions of time and effort or energy expenditure; and (c) the students' insight into their personality traits and preferences. Four students reported constraints from their values and virtues, four described experiences in which they were constrained by time, effort or

energy, and three students discussed how their self-perceptions constrained action. The findings relative to the external constraints are presented first followed by those concerning the internal constraints.

External Constraints

The external constraints these students operated under are discussed in this order of decreasing frequency of the number of students who discussed them: (a) policies and regulations of the clinical site and of third party payers; (b) the broader social environment; and (c) the hierarchical and cultural relationships between health care practitioners, e.g. students or PTs and physicians.

Policies and Regulation

Four of the students said the clinic's guidelines and policies formed one type of external constraint. Ruth, who worked with patients with spinal cord injury who wanted to progress from a wheelchair to walking felt constrained by practice guidelines that established criteria the person must meet to receive the necessary braces and begin gait training.

All of the outpatient clinics had policies about discontinuing physical therapy when patients failed to keep appointments. These policies constrained the student's action when the student considered whether or not to follow those policies. For Luke, clinic policy dictated how long physical therapy visits could last on the acute inpatient rehabilitation unit.

Ruth dealt with a clinic policy that a patient who was referred by an outside physician for evaluation of seating and mobility could not be seen for ongoing outpatient physical therapy. As she described it:

> I …had … to assess her for what mobility devices she needed…there wasn't an option to transfer her over to therapy so I couldn't evaluate her in that sort of way. … I had to keep that narrow focus.

Rhoda and Rick had to deal with a clinic policy that prohibited treating patients who were still on the inpatient unit in the outpatient center.

Rules and regulations from third party payers or the clinic's application of them constrained actions. Luke encountered limits based on total dollar reimbursement from payers and limits on the number of visits a particular patient could receive. He also learned that Medicare policy dictated that patients on an inpatient rehabilitation unit receive three hours of skilled rehabilitation services daily to remain qualified for the rehabilitation stay. His and the nurse's interpretation of this rule guided his action relative to a patient who was refusing to participate in physical therapy. Rick and Ruth had to consider Medicare guidelines about the type of wheelchairs and other mobility devices they could order for patients.

Social and Cultural Environment

The social and cultural environment constrained three of the students' actions. Rick and Ruth were aware of the impact poverty and limited transportation had on their ability to provide the care they thought was necessary. As Ruth described it:

> We were into a very low-income area, and … most of our patients …didn't necessarily have ready, easy, reliable means of transportation, and we were working in an outpatient setting with all of our patients. So a lot of times even when you'd start to have really ... positive interactions with a patient, you felt like you were doing the right thing, then they'd miss the next three appointments because they couldn't get transportation there. And I know that that's not my role as a physical therapist, but the society was stopping us from …being able to do what I wanted to be able to do with these patients

Thus, these students had to adapt what they considered to be optimal care based on how the social environment affected patients.

Ruth and Cathy had insights into how the clinical environment constrained their actions. During the focus group, Ruth described how the environment influenced her in this way:

> I think it really helped me define … how much of myself I put into … fulfilling the moral role. …I'm very whole-person focused in just the way I am. … and just a lot of the systems and structures that the site I was at … made it very hard to feel like I was able to fulfill that, and kind of helped me define what the essential components of that were… making sure that I meet the physical needs and… make every effort I can, but not putting more of myself in than… I could afford to.

Rick also discussed how inefficient clinic operations reduced patients' access to physical therapy services. Cathy had this to say about how the clinical environment affected her:

> Within the large county hospital setting, I definitely found that there wasn't necessarily someone looking over my shoulder making sure I was going to do the right thing or, … it was a very individual choice that I had to make consciously every day I was there. … So being in a setting like that, I really felt like I had to develop my own sense of how I wanted to practice and how I wanted my patients to receive their care and to what extent

Medical Hierarchical Relationships

Another constraint on action arose from the relationship between physicians, PTs, and the students. Two students characterized this as "not stepping on toes." In addressing physicians about a patient being medicated against her wishes, Cathy said:

> There was … a feeling that I didn't want to step on anyone's toes, so to speak. I didn't want to come across to the supervising physical therapy staff or the doctors involved in the case I was accusing anyone of anything, because that's not what I was intending to do. And I know that with issues such as that, it- it can ultimately lead to accusations.

When asked about a physician who refused to consider a total hip replacement for a patient, Amy observed:

> You know there's part of me that- [stammers] am I stepping on the doctor's toes? They are the ones who send their patients to us so there does come a point where you kinda hafta tippy toe around to please everyone. … I'd rather make a

> suggestion and have them actually maybe look into it than not say anything at all. And just have them be miserable. Uhm I haven't got to do this yet

The traditional medical hierarchy exerted its influence with Cathy when she disagreed with a physician's plan of care. She described how she responded to physicians this way:

> I'll raise a question to the doctor if I feel like maybe something's being missed but if I kind of get a confirmation as to why they are or are not doing something then okay, I'll admit that and I'm not going to sit there and push. That's not my place …they've been through medical school

Internal Constraints

The three categories of internal constraints are reported in this order of decreasing frequency reported by the students: (a) the students' values and virtues; (b) the students' perceptions of time and effort or energy expenditure; and (c) the students' insight into their personality traits and preferences.

Values and Virtues

Values and virtues functioned as constraints to action because they provided the students with a foundation for what they should or should not do as moral agents. All of the students discussed the role values and virtues played in constraining their action. The values and virtues these students talked about in decreasing order of frequency were: (a) respect for patient autonomy, (b) justice, (c) honesty, (d) fulfilling the fiduciary responsibility of a PT with patients, (e) respect, and (f) faith.

Patient Autonomy

Respect for patients' right to make decisions about their health care influenced students' decisions in situations involving four of the students. Sometimes, as with Amy, the student immediately recognized this patient right, such as the right to refuse to be seen by a student PT. In this case, that patient right went unquestioned because the

student saw it as an issue of patient informed consent, but the student struggled with the decision and whether to ask the patient why she refused to work with her. With three students, patient autonomy was related to the patient's right to control how much to participate in physical therapy or the right to refuse physical therapy. Ruth said it was up to the patient to decide how much effort to put into achieving the ability to walk. Luke and Cathy discussed the patients' right to refuse to participate in physical therapy. In the case of Luke, a patient's refusal could result in discharge from acute inpatient rehabilitation or presented a potential safety risk to the patient.

Justice

Amy, Rick, and Ruth used a social justice argument to explain their actions when patients failed to keep appointments. Rick said discontinuing physical therapy for a patient who did not keep appointments made those appointment times available for patient who might be more likely to make the appointment, and thus increased access to physical therapy for patients who would more fully participate in their care. He used a different type of justice argument when discussing the impact of a patient not receiving his wheelchair:

> But still that's not fair. … he should have that chair now. … It was approved through the longest waiting thing.

Justice, described by this student as fairness, played an important part of how he felt and how he acted.

Honesty

Students felt compelled to be honest with patients in situations where doing so served patient's interests, despite possible short-term negative impacts on the patient or the patient's relationship with other practitioners or providers. Two students described

how honesty constrained their actions. Rick felt he "had to be honest" when talking to a person with a cervical spinal cord injury who thought he might be recovering movement many years after his injury. While he knew he could have justified physical therapy over the short term, he also knew the patient would "be bummed" when he did not show the expected improvement. This same student also told a patient that she had to have a wheelchair that was better suited to her needs, despite what the physician and wheelchair vendor were recommending. Luke felt he had to confront a PT who was documenting a patient's strength incorrectly in the medical record as a result of improperly performing a manual muscle test. He also referred to honestly assessing what he did within a patient visit and only charging for what was necessary, so as to not "bulk up charges for no reason."

The Fiduciary Responsibility to the Patient: Trust, Confidence and Loyalty

The unique relationship between patients and health care practitioners is founded on the trust that the patient puts in the hands of the practitioner because of the practitioner's special expertise (Purtilo, 2005a). Two students recognized the influence of the fiduciary relationship between patients and the PT student. In the cases of Luke and Rick, they had to set aside other concerns and focus on their responsibility to their patients. As Rick said,

> I just told myself, … 'Well, he's here, this is my job, I'm learning,' and 'let's find out what's really going on.' I've just got to put my feeling behind and try.

Integrating his fiduciary responsibility into practice was also behind his interactions with a patient with a cervical spinal cord injury when he said:

> I guess being a professional, you have that kind of extra information that they don't have in their head and they don't understand that those things can be

> different, that they don't know what all the signs mean. So you are telling them what that means.

Luke said, when speaking of a patient with HIV infection and his concerns about his own safety,

> Part of it is concern for the patient… here I am, making this judgment on somebody I've never even met, …before I even walk in the room. let's go in the room and- and, at least give it a shot, … So there was some concern, and also, some integrity, just this is what I've chosen to do. I'm looking at the patient going, 'Okay, what are your problems that I'm here to deal with?' And … you know, it's like I have blinders on, once I'm at that point.

Respect

Respect for other health care practitioners' and providers' relationship with patients is different from being influenced by the medical hierarchy that was described previously. Two students discussed how respect for other health care providers who were important to patients influenced their actions. Cathy talked about it in relation to how she spoke to physicians about a patient and Rick talked about being respectful and cordial when speaking about wheelchair vendors a patient chose.

Faith

Faith played an important role for Cathy with the patient who was a Christian Scientist and being medicated against her will. She said:

> I think because there is a component of faith involved and that is the reasoning behind why she's making her decisions. It's not just she's being stubborn and she doesn't believe in medicine, you know, for scientific reasons; there is an element of faith there. And, you know, religion is important to me as well and so I respect that and I value that for my own self and so I just give her the same respect as I would any other member of the faith community.

In large measure, the importance of faith in her life, moved her to act on behalf of the patient. While other students talked about the importance of faith in shaping their moral development, they did not apply it to a specific situation.

Effort, Energy, and Time

Another perceived internal constraint is the amount of effort it took to act or effect change. Four students discussed this type of constraint. Ruth questioned how much effort she should put into justifying a particular wheelchair for a person who had a ramp into the home:

> It's not worth the fight. It's much easier to just accept the system and it's do I feel like I'm being the best advocate for my patient at that point? No, because … I'm not advocating for change that down the road would make things better. I'm advocating for the status quo, which is a broken system so that's kind of where I get stuck

Ruth also talked about losing her willingness to expend effort on a specific patient who failed to keep several appointments, but who needed physical therapy. Amy questioned whether it was worth the effort to get authorization for two more visits for a patient covered by Medicaid near the end of his physical therapy because she thought he might be able to stop physical therapy at that point.

Time, as a phenomenon interpreted by the students (Mosakowski and Earley, 2000), was also an important constraint on action for two students. The students' perception of the available time constrained their actions, particularly when weighing what was best for the patient. Luke told about a patient visit in which he assessed the amount of time it would take to bring a patient out of isolation and to the gym for physical therapy, a place he thought provided the optimal setting for the visit:

> For me to wipe all that stuff down I'm gonna have to end treatment early, … I have to see him from this time block and my next patient is next, there's not … break, ... Plus.. getting him.. gowned up, … to take him out of the room, … for myself, I would actually have to gown up, go in, gown him, come out, take my stuff off, and yeah, I mean it just- there's so much time that I would be spending dealing with the precautions during his treatment session that isn't really productive time for him

For Cathy, whether to take the time to personally help a patient with urinary incontinence who had soiled herself or whether to ask the patient to wait for a nurse to help her was based on how fully scheduled she was that day and whether it would affect her ability to stay on schedule.

Self-perceptions

Three students identified self-perceptions that functioned as internal constraints to action as moral agents. Amy said "I don't like conflict" and that characteristic prevented her from talking to a PT whose practices she questioned. She also mentioned that her perceived lack of self-confidence because of her inexperience exerted an influence on her ability to establish rapport. If she did not act confidently she could "lose them" and not be able to meet their needs for physical therapy.

Ruth and Rick found themselves dealing with their view of hope and how that influenced their actions. When speaking of people in a wheelchair who wished to learn to walk, Ruth's perception was, "I'm not a person that is okay with telling people never and no…unless will make them work harder." When describing this aspect of her character, she often related it to her experience growing up and being told she would not be able to drive or might need special education. Rick described his feelings about telling people bad news and how he responded to it this way:

> Just that I felt really uncomfortable at first, being that guy, but then I kind of learned that well, if I'm in this role as a healthcare provider I got to kind of separate myself sometimes from the reality and from what I feel inside, like I'd love to tell him that he's going to move his arms and he's going to maybe use crutches to walk around, but I know that's not the case necessarily…. So I guess I learned just to be objective and still keep on that compassionate role

Summary

Constraints played an important role in framing the students' experiences. The external constraints included the rules and policies of the clinic and external agencies (primarily third party payers), the social and cultural environment in which the clinical experience was situated, and the nature of the traditional medical hierarchy. The rules and policies were part of the clinical environment and required decisions about whether and how to follow them. The other two external constraints were filtered through the student's interpretation of the environment, and thus offer insight into the environment and the student. The students' actions were constrained, or influenced, in particular directions by deeply held values and virtues, with patient autonomy and justice being mentioned most frequently. Their personal interpretation of time, effort and energy and their self-perceptions also functioned as constraints on the students.

Setting the stage: Clinical Instructor's Beliefs and Actions

The CIs had common viewpoints on the ethos of PTs and how PT students develop into PTs. They described the basis of their actions as helping the students realize their responsibility for decisions regarding their patients. There were three components that were important to understanding how the CIs set the stage early in the clinical experience: (a) the CI's beliefs about the ethical development of PT students and their role in that development; (b) their approaches to and methods through which they filled their role as CIs; and (c) how they used role modeling at the beginning of the clinical experience to influence the students' behavior. These three components in the early stages of the clinical experience are described in this order.

Beliefs on Ethical development

During the CI focus group and the follow-up interview with Rhoda, we discussed the CIs beliefs about the ethos of PTs and ethical development of PT students. Anne and Len expressed the opinion that all people who are PTs have some commonalities when they enter physical therapy school. Len said that, at their core, PTs "genuinely want to help people." Anne also said that helping others was at the core of PTs' values. She said that the underlying values are molded during school, including the clinical experiences. Len observed that because of the common orientation toward helping others among PTs, discussing values with the student was not necessary. During the follow-up to the focus group with Rhoda, she agreed with the other CIs saying that wanting to help others was central to a PT's orientation to practice.

During the focus group, Claudia considered how the student's personality, the academic experience and the clinical experience came together:

> I'm thinking it's a little bit of everything. The school provides a lot of the laws, regulations that you first learn. Personality and behavior does create a really good basis on where the person's going to be, but I think it also takes just a little experience with [the] CI … to really fortify those gray areas. Because the laws are set up straight, but not all situations are black and white. 'Cause there's gray areas I think that the learning experience, the clinicals are really good for. And I think that's why the students can potentially model after their CI

Anne and Len agreed with Claudia's description. Rhoda also saw the importance of the CI in physical therapy education:

> I think that's really a crucial time in the students' growth and they really remember certain things that happen during their clinical affiliations, because it's the first time this sort of situation is coming up. I think it leaves an impression on them, … they definitely try to model their activities after yours. Number one you are the one whose grading them so they certainly have figured out that if they are more like you, you will probably think they are doing a good job because they are emulating some of the CIs skills. I think then they start demonstrating that and they see the outcomes of it. On the other hand, if the CI is not demonstrating a

> high level of ethical practice, or if there are other therapists in the area that are not, they pick up on that too.

While these CIs felt PTs have some commonalities, particularly as related to the core purpose of helping people, they also recognized the importance of the clinical experiences in shaping students' ethical development.

Setting the Stage: Approaches and Methods

The CIs described several ways in which they recognized the development of the students toward becoming PTs, including becoming ethical PTs. In these CIs' view, the approach they used toward helping the student's overall development toward becoming a PT was integral to the student's development of moral agency and ethical practice.

Rhoda described the emergent nature of the students' process of becoming PTs and, thus, accepting the role as moral agents when she said:

> I think they're making decisions and they're seeing the outcomes, negative, positive … and that's helping them to form the next decision. So I think it's okay 'cause they're not sort of wrestling with it and I think they feel independent.

Len described how he framed this process with students:

> First you have to know that you can trust your student, and then I think once the student gains your trust, I think it's letting them go, being comfortable with that. And letting them experiment and letting them learn the way they learn best. In my case, it's usually jumping right in, getting hands-on, and that's how I learned the best and so I tend to do that with my students too. I try and give them freedom.

Similarly, Claudia was writing about all of the things she worried about with the student learning to treat patients and not cause harm and she concluded:

> I've gotta let her out of my sight sometime. She can't progress and learn from her mistakes if I keep hovering over her and adding comments/suggestions for stuff she may have added later.

Anne offered the following:

> You can offer more efficient ways and better ways of doing things, but you kind of let them experiment. Part of it is trying things and seeing what works and what doesn't at the same time. So you kind of have to allow for that as well.

These CIs described a process in which trust in the students, a willingness to accept uncertainty, and their responsibility to assure patients received the best care constrained their action as CIs. As Len said:

> His patients are my patients, too, and so I want them to get the best treatment as possible. … I try and be an advocate for the student, to help him learn, but also at the same time, still be an advocate for my patients. … I step back and let Luke …help them the best that he can … I just let him run with it. … At the same time ... do my job as a physical therapist, and help my patients … most of the time Luke … was doing- doing important things … for the patients.

Anne and Rhoda described the connection between clinical development and moral agency. They said that it is important to help students develop confidence in their clinical skills early so they can then focus on developing rapport with their patients. Anne described it as allowing the student to focus on the "big picture" and establish sound habits in relation to communication and ethics

> A lot of times, students … first come to…fine tune their skills but I think it's also important to teach the big picture and … teach them almost how to do things too well so, when they get out in the real world, they don't slack off in areas … like, billing, writing insurances and … also teaching them … what is right and what we need to do to justify treatment.

Len said it was important to help students stay focused on the value of what PTs can offer to their patients despite the limits on care from third party payers. As he said:

> I just want to expose him to it and make him more aware of it and make him realize that he's not always gonna be able to do what he wants to do. … it's still a great field… you're helping people …but there are times where you're gonna want to do more for a patient and follow through with things but you're just not- you're not able to.

Rhoda said that when students confront ethical issues, much of the time the decision the student makes is not as important as the fact that the student can make a

decision and describe the rationale for that decision. She felt that providing students with the opportunity to independently make ethical decisions was an important step in the student's development of professional responsibility.

Claudia and Rhoda discussed ways in which they planned specific learning experiences to help the students apprehend the ethical dimensions of their work with patients. Rhoda gave the students the opportunity to spend time in a wheelchair in the clinic to experience the clinic from the perspective of many of their patients. Claudia noticed Cathy's reaction to a patient in prison custody in the hospital, so immediately planned for her to work with a patient in custody, because, as she said, it would:

> … let her see that they're human too, that they're not just in jail for maybe doing something horrible that they need help and assistance

Len made time to talk about the limitations of various insurance policies so that when Luke had patients with these plans he knew what constraints he would be facing.

Clinical Instructors as Role Models for Ethics

All of the CIs talked about ways in which they served as role models, particularly at the beginning of the clinical experience, when the student and CI were together much of the time and the student was often observing the CI. They said the students absorbed how the CI listened to patients, helped the patient become more comfortable, demonstrated caring, advocated for patients in written documentation, and gave patients time to talk about concerns. Anne described the importance of modeling communication with other people that includes "consideration of learning style, language, backgrounds and their cognitive awareness" and then "hoping that they [students] can take on some of these."

Summary: Setting the Stage

Despite their differing levels of experience as clinicians and as CIs, these four CIs held common beliefs about the ethical development of PTs and their role as CIs in that development. They all said PTs have an orientation toward helping at their core. The CIs set the stage for students' ability to act as moral agents and to fully assume the role of PTs by guiding them to independently make decisions. They felt the students' ability to gain confidence in clinical skills early in the clinical experience was critical so the students could focus on the totality of PTs' responsibilities, including interpersonal communication. They also felt it was important that students experienced the limits on practice. Two of the CIs planned specific learning experiences to expose students to potential ethical issues, such as patients' rights to unbiased health care and the experience of disability. These CIs knew they were important, positive role models.

CHAPTER 5: FINDINGS

Introduction

This study considered how Doctor of Physical Therapy students experienced the role of moral agent when they encountered ethical issues during their final clinical internships. This study explored five questions:

1. What ethical issues did physical therapist (PT) students encounter during their clinical internships?
2. How did PT students reason through ethical issues when they encountered them?
3. How are PT students' descriptions of their approaches to patients associated with their experience of their role as moral agents?
4. What is the relationship between PT students' social negotiation of action with their CIs and the PT students' role as moral agents.
5. What is the relationship between PT students' social negotiation of action with their patients and their role as moral agents?

PT students function as moral agents in the clinical environment. As described in the definition of terms for this study, a moral agent has responsibility for other people and has the ability to evaluate the reasons for actions (Eshelman, 2004). Implicit in this definition is the concept that the agent must assume responsibility for other people, and conversely, other people must confer that responsibility. As defined in this study, an ethical issue is any situation in which there are ethical considerations of any degree or severity that merit exploration and understanding. These situations could involve socially accepted norms of right and wrong in the clinical environment, behaviors in relation to

professional standards of conduct, or situations in which the ability to express caring and compassion is present. As previously defined, an ethical dilemma is a situation in which evidence or argument exists to support more than one action, but the evidence is not sufficiently strong in one way or the other to support one action over the other; or in which the agent believes action is required in at least two mutually exclusive ways (Beauchamp & Childress, 2001).

The way in which students and clinical instructors (CIs) talked about situations in which there were ethical issues took on the nature of stories. These stories will be referred to throughout the remainder of this paper as they form the corpus of the findings and the analysis, discussion, and implications of those findings. This chapter reports the findings according to the five research questions. A certain aspect of a story may apply to a particular research question and is reported with that research question. Similarly, a story may be connected to several research questions, and thus, that story is referred to several times in this chapter. To assist the reader and to avoid repeating detailed elements of any story each time it is used, I have given each story a name that I indicate using *[bracketed italics]* and use that name as "shorthand" each time I to refer to the story. Each story is summarized in Appendix H according to the student who was involved.

Research Question One

With one exception (described below), the findings relative to the ethical issues these students encountered during the internship are organized according to the moral principles and duties or the virtues that the students confronted. I categorized the ethical issues by the principles, duties, or virtues that the student or the CI identified as the

primary duty, principle, or virtue they were thinking about even though they recognized there may have been conflicts between them. The principles, duties, and virtues that were at the center of the ethical issues are recounted in this order: (a) beneficence, (b) veracity, (c) patient autonomy, (d) patient privacy, (e) justice, (f) altruism, and (g) caring. Figure 2 summarizes the ethical issues the students encountered within each of the principles, duties and virtues. Beneficence is presented first because it was the most common source of ethical dilemmas. Each of these terms is defined within the following sections as the findings are presented. There were some specific situations that constituted ethical dilemmas that only the students reported and the CIs did not, some that the CI and the student both reported, and some that only the CI reported. Ethical issues that only CIs reported are identified as such when the findings are presented; otherwise all of the following ethical issues were identified by the student or by the student and the CI.

There is an important finding relative to the way in which I classified these ethical issues. With the exception of caring, the students and the CIs did not use the specific ethical terminology of these moral principles or duties to describe or classify the ethical issues. The participants described the situation and characterized their thinking or discussions about it in a way that allowed me to classify the ethical dilemmas in terms of the ethical principles and duties.

The students encountered situations in which there were ethical issues that can best be described as student-specific issues. These ethical issues concerned a student who encountered a CI or other PT who was a negative role model. These situations and the ethical issues are described at the end of this section regarding research question one.

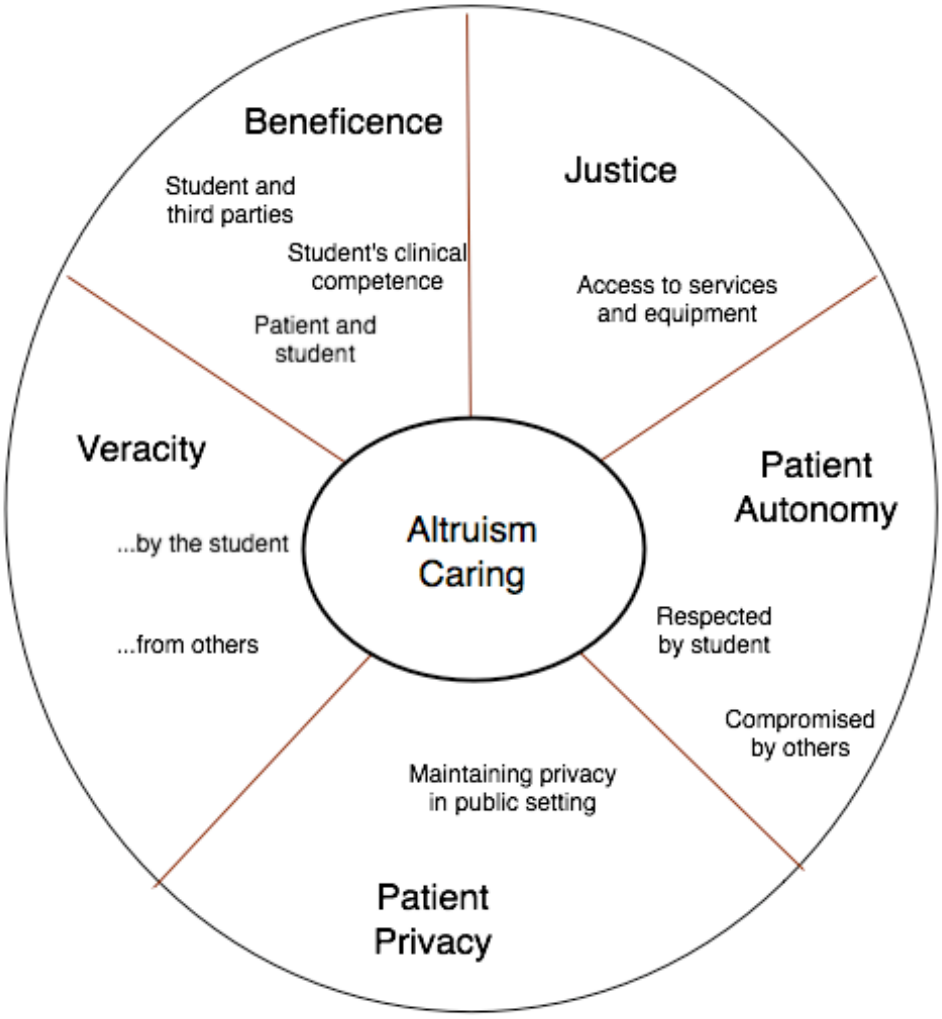

Figure 2. The ethical issues PT students confronted during their clinical internships.

Beneficence

Beneficence, taking action to benefit others (Beauchamp and Childress, 2001), was at the center of the most commonly encountered ethical dilemmas. The students encountered many situations in which there were conflicts in their ability to act to benefit a patient or groups of patients. All five of the students faced ethical dilemmas that concerned beneficence. These ethical dilemmas arose from four sources: (a) within the encounter between patient and student; (b) from third parties, the procedures and rules from those parties and what resources were available from those parties; (c) the ability of the student to meet patient's needs because of limited clinical competence; or (d) preventing harm that resulted from the action of others. There were some situations in which combinations of these sources of the dilemma were present.

Beneficence: Encounter of Patient and Student

The ethical dilemmas that involved beneficence in the encounter between patients and students involved (a) what the patient or family wanted versus what the student judged was in the patient's best interest clinically and (b) student's biases about a patient potentially interfered with the ability to provide optimal care. One student described an ethical dilemma that involved a distraction as a barrier to providing optimal care.

A common ethical dilemma focused on whether the students should give the patients what they wanted when it was counter to what the student physical therapist felt would best address a patient's impairments and activity limitations. These dilemmas presented a conflict between beneficence and patient autonomy. The student could compromise the principle of beneficence and give patients what they wanted or decline to

provide what patients preferred (in which case the patient might seek care elsewhere), opt to accept the student's recommendation, or opt to not receive physical therapy.

Ruth dealt with [*patient with fibroymyalgia*]. (The ethical situations, noted in the text with brackets and italic font, are located in Appendix H.) As she concluded in a journal entry:

> When I really look at the patient I feel that a power chair is probably the worst thing for her. She will not lose weight, increase her activity level or adequately control her diabetes or fibromyalgia if she is sitting all the time. She currently has the potential to walk short distances so if I were seeing her in the OP (outpatient) clinic I would work on getting her on a progressive exercise program. Instead by ordering her a chair I feel like I have actually made it harder for her to improve but I didn't really have a choice because she was not motivated to make any improvements

Rick dealt with [*polio and power scooters*], but thought power wheelchairs would be better and Ruth also had the case of [*patient needs a power wheelchair*]. As Ruth said:

> Patients that … are in the wrong device and you can't convince them they're in the wrong device [they are] … in a scooter and really they need to be in a power chair … it … leads to this question … is it really ethically better for this patient to…be in the chair that is going to help prevent posture deficits or is it going to be better for them to convince themselves they're more independent because they have a scooter instead of a wheelchair

Two students encountered ethical issues in which a patient or family wanted other types of equipment. Rick had a patient who was asking for all types of accessory equipment for a wheelchair that he did not need [*wheelchairs the patients want*]. Luke addressed [*family with a four-wheel walker*] in which a family brought in a four-wheeled walker that they wanted their father to use, but the student thought it was not the correct device for the patient.

Amy was the only student in which the conflict was about the type of physical therapy intervention instead of about a device, [*massage not exercise*]. The patient only wanted a massage, but Amy new it was of little benefit, and he needed exercise.

There were ethical dilemmas concerning beneficence in which students' biases about patients challenged their ability to provide optimal care. Luke struggled with bias toward a patient [*he has HIV infection*]. Luke said:

> [to himself] "I don't want to work with this patient" …it could be actually one of two reasons…life preference for the patient or the disease itself. … I was a little bit fearful going in…I know the basic precautions…I'm going to be in really close contact with this person.

Cathy confronted biases and fears she had about patients who were in the hospital under [*prison custody*]). Cathy also dealt with a patient who acted in ways that the student perceived as [*racially biased patient*]. In a situation that the CI disclosed but the student did not, [*patient's education level and wheelchair*], she reported that Ruth made assumptions based on biased opinions about the patient's education level that would have resulted in poor decisions for the patient. In one of her journals, Ruth made reference to her negative bias toward patients with a diagnosis of fibromyalgia based on her past experience with people with that problem. Rick reported he felt a negative bias toward patients with complicated impairments and severely limited function.

Luke faced a dilemma with [*mother and sons*]. As he said,

> She's got three boys that come in with her and they're young… So it's not a very productive situation and I haven't quite found a solid solution for it yet … the mom tries to keep them still, but that works for all of about half a minute. So it's very difficult to focus on the patient and have an effective treatment situation when you're going "Stop." "Wait." "Could you put that down?" … I haven't actually addressed it - that her therapy could be more effective if there was no distraction.

In this dilemma, he is confronted with providing less than optimal care because her young sons distracted the patient and student, but Luke chose not to address his concerns with the patient.

Beneficence and Third Parties

The dilemmas that arose because of third parties concerned barriers to optimal care as a result of limits on care because from third party payers or a physician's directive. All five of the students encountered this type of dilemma, but only one student encountered the barrier that concerned the physician's directive.

Barriers to providing the best possible care to patients arose from limitations on visits imposed by third party payers, problems with authorization for care, and payment policies. Amy and Luke had patients with private insurance plans that limited the number of visits or total expenditures for physical therapy. In both instances, the students felt they could not provide the care the patient required and comply with those limits. Luke confronted [*over utilize or under utilize*]. Here is how he described his dilemma:

> I've got somebody right now who's a four-visit patient and … they're responding positively to exercise, which kind of then begs the question … "Well, why don't I just give everybody four visits?" That's a difficult thing to look at. Nobody's identical. I can't say whether this person would respond to four visits and exercise or whether they wouldn't. … I do like to get people out of here as soon as I possibly can. …I turn around and bring that back to my other patients, not to say I want to kick you out of here in four, but I don't want to waste your insurance. I don't waste your time. So the patients that the insurance has forced me to be effective with less visits - … it does change the way I think about all my patients

He realized that when he did not have limits on the number of visits, there was a temptation to provide more physical therapy care than was necessary.

During the focus group, in response to the other students' discussions about this topic, Cathy mentioned that the funding limitations, including the lack of funds for

people without health insurance, caused distress for families and limited the types of mobility aids she could provide patients. This dilemma did not arise any other time during her participations in the study and is not mentioned further. It is included here to emphasize that the dilemma pertaining to third party payer limits was pervasive.

Problems with authorization for care or devices were a problem for two of the students. In the case [*he has HIV infection*], the patient also had Guillain-Barré and was at risk for losing authorization for his stay because he was not making progress. In the case [*discharge with Medi-Cal*]. Amy discharged the patient because it would take too long to get authorization for an additional two visits.

The payers' policies regarding the type of wheelchair that can be approved for a patient compromised Ruth's and Rick's ability to order the seating device that best met the needs of the patient and family. In the situation, [*try to get the right wheelchair*], Ruth was tempted to "fudge" her written justification for wheelchairs to get the type of wheelchair the patient needed and meet the requirements of payer policies.

In an ethical dilemma reported only by his CI, Rick dealt with [*cannot treat an inpatient*]. In this case, a physician's interpretation and enforcement of a policy denied physical therapy treatment to a patient. Rick and Rhoda were confronted with the choice to comply with the physician's directive or to violate it and provide necessary physical therapy to the patient.

Beneficence and Students' Limited Clinical Competence

Ethical dilemmas occurred when the student's ability to provide effective care for patients was not adequate to meet the patient's needs. The premise of clinical education in physical therapy is that students have the opportunity to gain entry-level clinical

abilities through supervised experience with patients. An implication of this premise is that students may not always have the necessary clinical skills to provide the best care for every patient. A complication is that the CI is not always immediately available to assist the student with the patient. This dilemma presents several possible alternatives; should the student: (a) have the CI provide the care (a choice that is successful only if the CI is readily available during the allotted appointment time); (b) provide less than optimal care by using another intervention that the student is capable of providing; or (c) perform the test or treatment despite their questionable capability. Four of five students reported these ethical dilemmas.

Amy, Luke, Rick and Ruth all questioned whether they were providing effective interventions for patients they encountered in the clinic. As Amy said, "I always feel bad for them [patient]… I feel like they're the guinea pigs almost."

Ruth encountered two situations in which she did not know how to get the patient's optimal response. In [*get help to do the test?*], she wrote about one of these situations:

> I had a patient who had been sent over for just a complete motor and sensory evaluation. I was able to complete the motor component quickly and easily. However when it came to performing the sensory portion of the ASIA exam I had difficulty getting the [patient] to respond as was necessary to accurately perform the test. I left the [patient] and tried to get help but when the obvious help was unavailable I didn't fight to get more help or tell the [patient] that he should come back. Both of which I later felt would have been better moves. This taught me that I needed to be more proactive in getting the help I needed.

Luke questioned his effectiveness providing a particular intervention that he was still learning. As he described it:

> But there's definitely skills where I'm looking at the patient and going, 'I don't-- I can try this on you, but I don't know that my s—[stammers] my current skill level is going to be effective.'

Beneficence: Preventing Patient Harm by Other Practitioners

Preventing harm is a sub-set of beneficence (Beachamp and Childress, 2001). Cathy encountered an ethical dilemma when she suspected patients would be harmed by the practices of nurses or doctors. When faced with the possibility harm would come to patients, the student considered if she should speak up about the practices and, if so, who she should confront about the problem. Cathy discussed two circumstances in which this aspect of beneficence was compromised. She was convinced that these practices negatively affected patient's health.

The first instance concerns [*nurses and blood pressure cuffs*]. The difference in practice among the physical therapists and nurses, led her to question if she should speak up because she thought the systemic practice might lead nurses and physicians to think the patient's blood pressure was being adequately controlled when it was not and there were potential implications for home safety as a result. Cathy also raised concerns over preventing harm when she disagreed with physicians' decisions to discharge patients from the hospital ([*doctors discharge too soon*]) despite their reduced physical functioning.

Veracity: Telling the Truth

At its simplest, veracity means telling the truth (Purtilo, 2005a). In health care, veracity refers to how the practitioner fosters patient understanding by thoroughly, accurately and impartially transmitting information to the patient (Beauchamp and Childress, 2001). Ethical dilemmas that concerned veracity were the second most commonly reported by the student physical therapists and were reported by all of the

students. These dilemmas concerned the truthfulness of others, e.g. patients, physicians, or wheelchair vendors, or challenges to the student's ability to be truthful.

The Truthfulness of Others

Four of the five students questioned whether patients were telling the truth or putting forth their full effort in physical therapy, an action that lead them to question the patient's veracity. In the worst-case scenario, a patient who intentionally acts dishonestly might fraudulently receive equipment or services for which they are not qualified. At the least, a patient who magnifies symptoms might not receive the best care possible. The students were faced with how to discover the truth in situations in which they are suspicious about the patient's veracity without jeopardizing the relationship between the student and the patient.

Ruth had a patient who claimed to have lost his power wheelchair several years ago, but was only now trying to get it replaced and whose documentation raised questions about whether there might be fraud on the part of the physician or vendor (*[patient lost his wheelchair I?]*). She was only half-joking when she said maybe he was going to "sell it on EBay." In a similar case, [*patient lost his wheelchair II?*], she questioned whether the patient was telling the truth because of discrepancies in the paperwork he brought to the clinic and his reaction when she told him his physician would not authorize a wheelchair. Luke, Rick, and Ruth identified situations in which they questioned whether patients were giving their full effort. Luke and Rick encountered patients whose clinical presentation and performance on tests raised questions about the patient's honesty *[is the patient faking?]* (Luke) and [*patient exaggerating*] (Rick).

Truthfulness to patients by physicians and wheelchair suppliers presented dilemmas for three students. When others did not act truthfully it presented a conflict with beneficence and the need to respect the patient's relationship with others. Amy had a patient who she felt arrived with an erroneous diagnosis (*[are doctors wrong?]*). She described the case this way:

> I'm not saying that the doctor's wrong. I'm not saying that I know it's arthritis, but it's a pretty good chance that it is. … The doctor never mentioned anything arthritis wise to her, and we're almost positive it's arthritis. But how do you go about telling the patient that this is what we think it is, yet this is what your doctor thinks it is, and you have two different diagnoses.

Rick and Ruth had several patients for whom measuring and ordering wheelchairs was an important component of the physical therapy services. Rick dealt with [*wheelchair vendor acted unethically*] and Ruth with [*patient lost his wheelchair I?*] in which they questioned the veracity and integrity of the wheelchair equipment vendors or physicians. The dilemma they confronted in these situations was whether to report the incident and how much to tell the patient about the objectionable action of others in whom the patients have placed their trust.

Challenges to the Student's Truthfulness

Choosing whether to give patients bad news is the classic case of paternalism in bioethics. Three of the five students confronted the ethics of telling patients the truth about their condition. With [*patient with tetraplegia*], Rick faced whether to tell the patient the truth about his poor prognosis. Ruth confronted how to tell two patients with spinal cord injury they were not going to meet criteria that would permit them to get braces and learn to walk [*will I walk?*]. As mentioned in Chapter Four, Luke used an

example of being truthful when setting realistic treatment goals for a patient with ataxia who had unreasonable expectations for recovery.

The last example of a PT student addressing the need to be truthful in practice arose with Luke with [*billing codes and overcharging*]. As he described it:

> you've been allotted so much time to work with a patient, and you're being paid, … in 15-minute increments, which is hilarious, … for treatment. So let's say you do this treatment for two minutes, and then you do, … whatever else you do with that patient, and you charge for that two minutes… these are the kind of things that I'm… still looking at and going, "What do I do with somebody and what do I charge for?" … I see… that as just… huge.

Patient Autonomy

Autonomy includes the ability to act "(a) intentionally, (b) with understanding and (c) without controlling influences that determine action" (Beauchamp and Childress, 2001, p. 59). Respect for patient autonomy is an important ethical principle of health care in the United States, and underlies the concept of patient's informed consent. All of the students faced ethical issues that concerned patient autonomy. The situations in which the students faced ethical dilemmas with patient autonomy at the core were (a) obtaining patients' consent for physical therapy or to be treated by a student physical therapist and (b) patient autonomy compromised by the actions of others.

Two of the students faced ethical dilemmas in which obtaining patient consent for physical therapy was at its core. Luke faced [*refuse treatment, get discharged*], in which a patient who refused physical therapy might be discharged from the rehabilitation unit. With [*patients decline treatment*], Luke saw two patients who could benefit from physical therapy, but the patients did not want it. In the case, [*Christian Scientist and no treatment*], Cathy faced two different ethical dilemmas, one of which was the patient

declining to participate in physical therapy. In each case, the student felt there was some potential benefit of physical therapy for the patient. Each of them confronted whether they should respect the patient's wishes versus try to convince the person to initiate treatment.

During an interview with Amy, the question arose as to whether the CIs or the students were explicitly obtaining patient consent to be treated by a student, including specifically identifying them as students or interns. During the focus group with the CIs, I asked the three CI participants how they obtained patients' consent for the student to be involved in their physical therapy. The three CI's who participated in the focus group all described a process in which the student introduced himself or herself to the patient as an intern and introduced the CI as someone who was there to assist. They did not say they asked an explicit question seeking the patient's consent to be treated by the student. Amy's description of the process was similar to the CI's:

> *Interviewer*: And I would conclude from that that you haven't asked?
> *Amy:* Hmm-mmm.
> *Interviewer*: The way you're introduced as to patients that you just described for me, "This is Anne, she's the physical therapist. I'm Amy I'm the physical therapist student. We're going to be working with you." Is that how it goes?
> *Amy:* Uhm.. as far as even later down the road?
> *Interviewer:* No. I mean as that first introduction—
> *Amy:* As that first? Yes.
> *Interviewer:* that's how it goes?
> *Amy:* Yes. That's how it's been. I haven't taken on-- I've done an all-- the whole Eval[uation] but she's been sitting there with me. Uhm.. she'll usually break down all the numbers. Uhm..
> *Interviewer:* And there's not a question to the patient?
> *Amy:* A question?
> *Interviewer:* "Is that okay?"
> *Amy:* Uhm.. not- not a direct, "Is this okay with you" question uhm.. but it's a- it's an indirect way of-- I'm trying to think how it's actually been phrased. I don't feel-- I feel, like, it is. We are asking but not in a direct way where we s-- you know, "Is this okay that me, the student, you know, will be working?"

Luke said that Len would affirmatively ask a question to get patients consent for him to perform a particular technique.

With [*patient refuses PT student*], Amy had a situation in which a patient refused to work with her because she was a student. This presented Amy with the dilemma of whether she should ask the patient why she refused to work with a student, a choice she said she weighed, but did not pursue.

Patient Autonomy Compromised by Others

As mentioned above, there were two dilemmas Cathy confronted in the case, [*Christian Scientist and no treatment*]. Here is her description of the other dilemma:

> She was primarily being followed by the attending and the resident in the medical team. … over the weekend the decision somewhere along the lines had been made to crush certain medications and mix them into her food and administer them that way. And the way I saw it, it was that was going behind her back or… trying to almost trick her into taking her medication, … when she had so adamantly refused over and over and over and really getting back to the fact that she's a Christian Scientist. And so when I saw that being documented...that immediately kind of sent up a red flag. Is that really what's going on? … that morning the nurse had refused the patient her breakfast until she took her medication stating that, "You can't have any breakfast until you take your meds." And the patient ... finally ceded and said, "Okay, fine. I'm starving." And she took- ... without being mixed in the food ...she took the pills. And that kind of disturbed me as well. And ... the nursing notes didn't necessarily reflect that happening, but per verbal report ...the psychiatrist was writing it in and then a further note reconfirming that, "Please continue to crush meds into food and attempt to administer that way."

In this situation, the student was confronted with what her role was and what responsibility she had given that others were in control of the patient's medications.

Patient Privacy

Respecting patient privacy or confidentiality is a legal and an ethical concern in health care (Beauchamp and Childress, 2001). Ruth was the only student who identified ethical dilemmas concerning privacy, [*privacy in the gym*]. They both involved patients

who did not speak English and trying to maintain patient privacy in a large gym setting where auditory privacy was not possible.

Justice

The students faced dilemmas that can be categorized as distributive justice issues. Distributive justice concerns the means by which scarce resources are fairly allocated among people with valid and competing claims on those resources (Beauchamp and Childress, 2001). The most common occurrences that raised these concerns were patients who failed to keep appointments. Other ethical dilemmas that resulted in decreased patient's access to services were caused by (a) clinic operations, (b) the actions of physicians, or (c) the closure of other clinics. Three of the five students faced dilemmas about patients who failed to keep appointments and three students faced dilemmas that concerned restricted access to services for the other reasons.

In physical therapy, a common distributive justice issue arises when there are insufficient numbers of physical therapists to provide services to all patients. The most common response an outpatient clinic makes to equitably meet the competing claims to physical therapy appointments by deserving patients is a policy that limits the number of appointments a patient misses before physical therapy is discontinued. If followed, this policy makes the appointment time available to other patients who require physical therapy. Amy related that when patients did not keep an appointment, it meant that appointment times were not available to people who might have kept the appointment and who were denied the benefit of promptly receiving physical therapy. Amy, Rick and Ruth faced the question of whether they should routinely discharge patients who failed to keep appointments or whether they should call the patient to see if the patient would

commit to attending physical therapy (Amy: *[eager patient misses appointments];* Rick: *[Keep appointments or discharge*]*; and* Ruth: [*come back for wheelchair*].)

There were three other types of ethical issues that presented distributive justice problems. Rick described how clinic operations affected access this way:

> …because the inefficiencies here, all they do is they just reduce the patients that could come through here, so I guess in a manner that indirectly impacts my ability because just I don't see people, so if I don't see people I can't do anything. So I guess in that manner yeah, inefficiencies here impact what I do, if that makes sense

Ruth encountered physicians who inappropriately referred patients to physical therapy who would not benefit, thus decreasing available appointment times for patients with a need. At his clinic, Luke and the other physical therapists were discussing how to manage an increasing demand for services because other rehabilitation units in the area closed. One solution they considered was a reduction in treatment times for patients. The students merely mentioned these situations briefly and Ruth and Rick discussed their feelings of frustrations over these barriers to access to physical therapy

Altruism

One student discussed altruism as the central virtue he was concerned with in an ethical situation. Rick had the choice to act altruistically with [*patient visit on last day*]. He judged that while a single physical therapy visit might not offer the patient a significant physical benefit, it would be a "morale booster" for her, and, thus, was worth the inconvenience it caused him.

Caring

While all of the students talked about caring or described aspects of their action that could be construed as caring, only Cathy explicitly gave examples of dilemmas in

which there were barriers to her ability to act with caring, [*the patient with leukemia*] and [*the patient with urinary incontinence*]. She described situations in which she came to the patient's room to provide physical therapy and found the patient in need of a clothing change, or in the bathroom in need of assistance, both of which are traditionally nurses' responsibilities. She weighed whether she should assist the patients, an action that would make her late for other patients, or seek the help of nurses, an action that could be a problem for these patients if the nurses were occupied with other patients.

Student-Specific Ethical Issues: Negative Role Models

Three students encountered situations during the clinical internships in which the CI or another PT acted in such a way that the student viewed that person as a negative role model. That experience would only concern ethics if the student perceived there was a need to act to preserve some moral principle or professional duty, but did not take action. For Amy, this situation arose in [*PT does not give a home program*]. During her discussion of this case, Amy weighed whether or not it constituted an ethical issue, but decided it did because of the importance she placed on patient education as part of the moral role of physical therapists. As Amy said:

> It's morally right for me… to do that [give a home program] for every patient… she obviously doesn't feel that way, which is…fine, it's … something that I think is right to do."

Cathy experienced it with her CI in [*nurses need help*]. When she summed up her feelings about this case she said:

> It's part of just the underlying value within the profession. I mean we're here as people to help other people, whether it's staff that need our assistance or patients and physical support, emotional support, whatever that may be. … we're called to help and especially since they made the page more then once. I mean the first time when - and Claudia went through the explanation on why you have to take into consideration … she made very valid points and really did have to consider.

> I mean if it had just been the two of us and one nurse in there I would have said there's no way, I'm going to get hurt trying to do this, I can't unless you find more help I can't be of service to you. But we were called to help and we were kind of ignoring it.

During their focus group, Luke and Amy identified experiences of individual PTs who acted as negative role models during the internship for this study and previous internships. Amy observed PTs who used a less effective exercise technique. Luke encountered PTs whose interpersonal communication style with patients was derogatory or judgmental in his view.

Summary

The participants in this study confronted ethical dilemmas that touched on the major moral principles and duties that are commonly discussed in the bioethics literature (Beauchamp and Childress, 2001; Purtilo, 2005a). Dilemmas with beneficence as a central tenet were encountered in each setting in which this study occurred. The dilemmas about beneficence arose from the policies or practices of third parties, particularly payers, or from patient's and family member's preferences. Preventing harm as an aspect of beneficence only occurred with Cathy in the inpatient setting. Dilemmas that concerned veracity were seen in each setting with all of the students, whether that entailed truth telling with patients or between other health care providers and physical therapists or patients. Patient autonomy issues also arose in each setting and were reported by all of the students. Most often these issues concerned a patient's choice to participate or not in physical therapy and how strongly the PT student should try to influence the patient in that process. Patient privacy only surfaced as an ethical issue with one student in the outpatient setting in which there was a large, open, gym-like setting with little opportunity to gain privacy. Justice issues arose in the outpatient

settings and were most commonly framed around patients who did not keep appointments. The participants described these situations using clinical or lay language and did not use the ethical terminology of moral principles or duties. Three students encountered CIs or PTs whose behavior presented ethical issues for them.

Research Question Two

Research question two asked how students reasoned through the ethical dilemmas they encountered. This question explores the processes students' used leading up to their social negotiation of action in their role as moral agents in ethical dilemmas. That socially negotiated action is the focus of the last two research questions. In this section, I will first report the types of internal processes the students used in their ethical reasoning, such as thinking-in-the-moment and reflection. I will then describe the findings relative to the purpose these internal processes served in the students' reasoning. The constraints the students faced, reported in Chapter Four, were important elements in these internal processes and are referenced here when applicable. Following this, I will explore how they used external resources and the purpose those resources served in the students' reasoning. The manner in which the CIs set the stage for the students' reasoning was described in Chapter Four and is mentioned here in relationship to the CIs as an external resource. These findings are then summarized before the remaining research questions are considered.

Internal Processes: Types

There were two major types of internal reasoning processes evident among the students: (a) thinking that occurred spontaneously when faced with ethical issues, what I refer to as thinking-in-the-moment; and (b) reflection, thinking that occurred throughout

the temporal aspects of ethical situations and that was introspective in nature. All of the students described using both of these internal processes.

Thinking in the Moment

The students' thinking-in-the-moment focused on: (a) the question "What is going on?"; (b) weighing options so they could answer the question "What should I do?"; and (c) an internal conversation in which they noticed their initial impressions, feelings or judgments changing through the thinking process. I will describe these three foci of their thinking in the moment in that order.

Three students', Cathy, Rick, and Ruth, described thinking-in-the-moment concerning the question "What is going on?" As an example, Rick said:

> I kind of thought he maybe was exaggerating some of his signs and symptoms and I kind of labeled him right away

All of the students described thinking-in-the-moment about the question, "What should I do?" As an example, Amy said:

> Despite the … discharge policy, two no shows, there is part of me that thought, well, you know, if I am going to make an exception for one, why not make an exception for all. That's not quite fair. However, there is that other part of me that despite knowing the rules, knowing that, you know, two no shows, that's it. I still went ahead and tried to call him.

Luke, Rick and Ruth described how they experienced a change in their point of view as they were thinking. For instance as Rick continued the discussion above, he said:

> But then I said in my head "Okay, I can't label him right away." And so by the end of the session I was like "Okay, this guy's legitimate," but a little part of me said "Okay, there's still something weird about it." Because when I first saw him I was like "There's something not right here."

Ruth's description was similar when she described a change from judgment about a patient who failed to keep appointments to understanding that there may have been

reasons for his behavior. Luke also reported a similar phenomenon in [*he has HIV infection*]. He also described this type of process when confronting the woman in [*patients decline treatment*].

Reflection

The students' described (a) reflecting about themselves in relation to other people; (b) introspective reflections about themselves; or (c) reflections in which they associated the current experience with past experiences or imagined an experience of the situation.

Reflection: The Student in Relation to Others.

All of the students discussed reflecting about themselves in relation to other people. The students reflected about (a) their biases, (b) their practices, and (c) the actions of others.

Explicit comments about reflections concerning students' biases initially arose in journals and in one interview. The interviews provided an opportunity to explore the journal entries further. Luke and Ruth wrote journals about biases they noticed in themselves. Luke wrote about his biases in [*he has HIV infection*]. Ruth described her biases based on patients' age in [*will I walk?*]. Rick found himself labeling patients with complicated medical problems and when considering [*patient exaggerating*].

Two students discussed reflections in which they questioned their options for action or actions they had taken. For example, in the previous quote from Luke when he dealt with [*over utilize or under utilize*], he reflected on why he did not give every patient four visits and recognized the dilemma it presented for him.

Students reflected on the impact other people's actions had on patients. Cathy spent time reflecting about physicians and nurses in the case [*Christian Scientist and no treatment*]. Rick reflected on his feelings with [*unethical wheelchair vendor*].

Reflection: The Student's Reflections on Self.

All of the students reflected on aspects of how they saw themselves in light of the ethical situations they encountered. These reflections concerned the constraints to action described in Chapter 4, particularly their values. As an additional example of reflecting on self, Amy said, when weighing her ability to provide the best care to a patient:

> … my internal struggle was just the fact that I didn't want to come across as I didn't know what I was doing…but I continually told myself well, I had the background…as long as I'm not doing anything that is going to hurt them and everything I'm doing is for reason and is the way to go to help them get better.

Only Ruth talked about reflecting on past experiences in relation to ethical issues she faced. She was talking in general about weighing how much a power scooter or wheelchair might increase their reliance on these devices and related that to her experiences working with children:

> I've worked with a lot of kids, and so seeing a child that's given a chair who … could potentially walk if the intensive therapy were given, and instead they put him in a chair just because it's easier on the parents and it's easier on the school teachers and those sort of things, that's when it tends to frustrate me, it isn't so much from this experience as from previous experiences with that.

Ruth also talked extensively about her experiences being told she would never be able to drive because of visual impairments and she should attend special classes because of a learning disability. These experiences influenced how she talked to patients about their aspirations and hope.

Amy reflected on herself in the patient's situation that was typified by statements like "if I were them… ." The following quote serves as an example:

> … these words have not come out of my mouth and there's part of me that I think that no matter what it would come down to the fact if I were them I would go get a second opinion. I would at least make an inquiry as to what my options are and not just listen to one doctor.

Function of Internal Processes in Reasoning

The internal processes were the primary means through which students explored the virtues, values, and moral principles that influenced their eventual actions when confronting situations with ethical issues. All of the students explicitly discussed instances in which they privately explored the virtues, values and moral principles that were influencing their reasoning. Their private thinking about these constraints included ruminations about honesty, providing optimal care, patients' right to choose the health care they received, respecting patients, and the responsibility the students had for patients.

Three students wondered if they should truthfully express their viewpoint or opinion to a patient about a discharge, the patient's prognosis, or if the type of equipment the student recommended differed from what the patient wanted. As an example, when Rick confronted [*patient with tetraplegia*], he described his thinking-in-the-moment this way:

> I was thinking in my head "This is what I need to tell the guy," but I was thinking until I got the kind of go from Rhoda I was like "Am I the proper person to tell him this, does his physician need to tell him this, why doesn't he know this already?" But I kind of felt like I was thinking I need to tell him.

Rick perceived this situation challenged his ability to be compassionate and honest with this patient. As he wrote in a journal:

> I think that being straightforward was the best thing for the patient. However, I felt that I was as compassionate as possible so that I could be objective but also compassionate to the situation. I can already feel that I am becoming more comfortable with my patients and dealing with situations like these

Honesty and providing optimal care figured in Amy's reasoning with the [*are doctors wrong*?], as described in Chapter Four.

Considerations of focusing on the patient's functional needs were also evident in the students' internal processes. Luke reflected on his tendency to set lower goals for patients because they were on inpatient rehabilitation versus focusing on what the patient was able to do and needed for his life. Cathy described her private thinking when she confronted [*doctors discharge too soon*]:

> I felt concerned because that is a neglect of safety for the patient and sending these patients home without proper medication to control these physiological issues, it just- I wondered if it's a matter of it saves time being able to do it with this automated type cuff but is it worth the couple of seconds or a minute that it saves if it's not accurate

Cathy also used internal processes to weigh respect with [*racially biased patient*]. She said:

> I do recall having sort of - had a monologue with myself thinking, what he just said kind of bothers me, but he was so nice about it so I'm kind of torn, do I be upset or do we just keep going?

Amy weighed justice issues and whether she should follow rules in the case [*eager patient misses appointments*]. She reflected on whether it was right thing to do when she did not follow clinic procedure after a patient failed to keep several appointments, but she called them and made another appointment.

As noted in the discussion of internal constraints in Chapter Four, patient autonomy was also a prominent topic of the students' private reasoning process. These reflections and internal thinking concerned Amy's case, [*patient refuses PT student*], Cathy's case, [*Christian Scientist and no treatment*], and Luke's cases, [*refuse treatment, get discharged*] and [*patients decline treatment*].

The students also used internal processes to consider how the actions of others affected patients. This type of private thinking led the students to place the actions of others in relation to their own values, virtues or moral principles. In the case, [*unethical wheelchair vendor*], Rick exhibited a patient-centered focus and awareness of the patient's feelings:

> The most horrible thing about it is that … he's a good guy and he does need this chair. His old chair is kind of falling apart on him. He's the one that suffers, you know? … I mean he sits in his chair all day so he's the one that's getting hosed in the situation. And that's really frustrating.

Amy engaged in similar reflection with [*are doctors wrong?*]. As she commented about the patient, "She's miserable." Cathy weighed patient autonomy issues and the importance of faith in [*Christian Scientist and no treatment*].

There were two aspects of the students' internal processes related to their self-perception and reasoning about ethics. One aspect was their awareness of their feelings when they encountered an ethical dilemma. Another aspect was their acknowledgement of their personality traits and how those influenced their reasoning and the impact they had on patients.

All of the students, except Luke, explicitly described an internal feeling of a conflict or struggle at work as an initial reaction to an ethical dilemma. When students were questioning the patient's honesty, they reported feeling suspicion, doubt, and mistrust. Rick and Ruth described vague feelings that something was not quite right at the outset of the ethical dilemma. Ruth and Amy talked about their feelings of frustration when the situation was not going as they expected it to. When speaking of [*patient with leukemia*], Cathy talked about how it "tugged at my heart" and led her to wonder what would happen with the patient's family.

As discussed in Chapter 4, the students' self-confidence was important. In addition to the examples provided there, Ruth discussed how her inexperience led her to waver between confidence and uncertainty in [*try to get the right wheelchair*]. When Amy confronted [*patient refuses PT student*], she reflected on her confidence, her ability to meet the patient's needs for physical therapy and her role as a student:

> I didn't want to come across as I didn't know what I was doing, … as long as I'm not doing anything that is going to hurt them and everything I'm doing is for a reason and … to help them get better, …it was more just… a confidence thing. … going back to the whole guinea pig, I don't think they expected to walk in and be put with a student necessarily. … I want to do my best for them and not look like I'm worried

Amy discussed what her perceived drive for perfection meant when making decisions about what she could offer patients:

> There's nothing we can do. I've tried everything. Anne has helped collaborate, given ideas. I think he was the first one that made me truly realize that I'm not going to be this perfect PT that's going to be able to fix everyone. And um, I'm I'm I'm [stammers] one of those type a personalities, anal perfectionist. That's why I'm here, I want to be able to do that. He was the first eye opener of being here that its just, I can't do it all. Even 10, 20 years down the road, with all my experience at that point I don't think it's going to work

Amy described her past experience in relation to what she believed her patients should do:

> I was a competitive swimmer for 12 years so I've been in and out of physical therapy. I want to get better, I'm going to show up I'm going to do everything possible that I need to do.

Ruth described her reflections about hope and patient participation in physical therapy. As an example, she commented in the case, [*will I walk?*]:

> He's challenged me to think about really what I'm saying to somebody, because I feel like if I'm not careful I'm going to give him false hope, and I'm going to make him think that I'm doing something that there's no possible way I can do. And so that's really forced me then to think about how I talk to everyone.

Ruth discussed her thoughts about herself in relation to her patients failing to keep appointments and what she should do:

> I had a lot of no shows in the past couple weeks and it's just I then start to question what am I doing that patients don't want to come and don't-- I mean what in my personality makes people not want to come see me? Is it something I'm doing wrong that I need to change?" …so when patients stop coming … it's hard because I don't have a chance to say "What was the problem?:"

Other self-perceptions that the students reflected upon and thought about were described in Chapter Four, in the findings about constraints. The students' perceptions about effort, energy and time and their perceived roles as students in the hierarchical medical system were addressed in that chapter.

Three students described processes through which they experienced a shift from focus on self to a focus on the patient when they confronted their biases about a patient. Rick described this process when he realized he was making a limiting judgment based on his first impression about a patient:

> I just told myself, I was like-- when I saw him I was like "Oh boy, here we go," and then I was like "Well, he's here, this is my job, I'm learning," and I was like "This is just my thought, let's find out what's really going on." I mean that's kind of what I told myself, yeah, I was like well, I've just got to put my feeling behind and try …

He described a similar transformation in his thinking when he realized his opinion that a power wheelchair was best for a patient did not matter if the patient would not use it with the situation [*polio and power scooters*]. Ruth's description was similar when she described a change from judgment about a patient who failed to keep appointments to understanding that there may have been reasons for his behavior.

Reflection about a transformation in personal biases was evident in three students' internal reasoning processes. Ruth explicitly wrote about bias she noticed in herself about patients' age in the case, [*will I walk?*]

> Rhoda got me thinking about this [patient's] chances of walking and I realized that I have a large bias where I look at a young man and assume that they are a better candidate then this older man even though he has more muscle recovery and may be the better candidate in the long run.

Rick found he labeled patients based on the nature of their problems::

> I've never categorized [patients] like this before. … I've never been in an area where it's just like you have patients that like fall into those groups.

He went on to describe how he perceived the impact of that labeling and was able to put it aside. Luke reflected about [*he has HIV infection*] and wrote, "It is difficult to keep the diagnosis out of my head." He described how he struggled with his concerns over his personal safety, though he recognized the risk was minimal, and the needs of the patient for physical therapy. He finally resolved his dilemma when he internally reasoned through his underlying value system:

> Part of it is the integrity. I'm here to do a job. …part of it is concern for the patient. …here I am, making this judgment on somebody I've never even met, before I even walk in the room….let's go in the room and at least give it a shot. …just this is what I've chosen to do.

In the case, [*patient with fibromyalgia*], Ruth wrote in her journal:

> I had a [patient] come in today with a list of medical problems a mile long. The list included some of my favorite diagnoses (note this is a sarcastic comment) [parenthetical comment in original] such as fibromyalgia. While I understand that this is a valid medical diagnosis I always feel frustrated when I see it because typically it is associated with a very passive personality and the [patients] I have worked with that diagnosis tend to act as if the diagnosis determines their life instead of vice-versa.

In this instance, in the parenthetical aside, she recognized a bias she has about patients with this particular diagnosis. In this case, she did not resolve her recognized

stereotyping about patients with this diagnosis, but did shift to a patient-centered focus that resulted in the patient receiving the equipment she required.

External Resources

Besides using thinking in the moment and reflection when they faced ethical issues, the students explored the ethical situations with other people or other types of resources. The external resources the students used were (a) the CI, (b) other PTs, (c) other students, (d) their family members and significant others, and (e) the research literature and academic learning. The role of these external resources in the students' ethical reasoning is described in the order listed above.

Clinical Instructors

The CIs were the people the students used most frequently in their exploration of what to do when faced with ethical issues. I will first describe the interactions between CIs and students, including the purpose, nature and outcomes of those interactions. I will then examine the CIs as role models in specific situations. The purpose or outcomes of the interaction with CIs included (a) seeking and receiving advice, (b) solving problems collaboratively, (c) the CI stepping in and taking action, (d) the student being told what to do, (e) receiving explanations, or (f) seeking and receiving support, confirmation and consolation.

Seeking and receiving advice

Three of the students or CIs described seeking and giving advice as the primary way in which they interacted when faced with an ethical dilemma. As an example of the importance of this process, Rhoda said:

> They're just trying to reinforce their ability to make a decision without me, … So I'm more just trying to give … each of them positive reinforcement of, "Yeah, that

> sounds like a good decision," or "Okay." You know, just sort of affirming that they did the right thing when I'm really not all that concerned about the actual action that they took.

This advisement sometimes occurred contemporaneously during an interaction with the patient, the CI and the student. Rick and Rhoda discussed this type of interaction with [*patient with tetraplegia*] and, with Rhoda's advice, Rick ascertained he was the person who had to tell the patient about the lack of potential for improvement. This interaction is explored further in relation to the fourth research question.

More often, the students and CIs described interactions in which the CI offered advice without patients present. This might have been in preparation for an interaction, as when Cathy was preparing to approach the physicians about [*Christian Scientist and no treatment*]:

> I was kind of preplanning how I was going to present what I wanted to say and the issue that I felt that needed to be addressed just so that I- you know, I said, "If I present it this way, does that sound okay? I don't want to come across offensive or, you know, accusatory." And she [Claudia] said, "No. That sounds good. … let me know how it goes."

Amy sought the advice of Anne about [*discharge with Medi-Cal*].

There were times when the student and CI spoke after the event to prepare for the next time the student encountered a similar situation and offered consolation about the failure to change the physician's decision in [*doctors discharge too soon*]. Claudia described the situation this way:

> For that patient it was more just kind of an advisor on my part. So she told me about it… patient's already gone though, and just had to say, yes this is what it's like, however, you know, you did your best, you did, …you did your part of the job, and the doctor didn't consult you for anything else and let the patient go. So there was nothing else you really could do except write the patient for outpatient referral which she then did.

There were instances in which the student or CI discussed having an interaction in which the advice took the form of a collaborative problem-solving process. This type of collaboration occurred with Rhoda and both Rick and Ruth. The clinical situations involved justifying a particular mobility device that met the patient's needs. In one instance, Rhoda described how she walked Rick through the particular questions about a third party payer's rules about the qualifications for a specific wheelchair when the wheelchair the patient and family needed may have exceeded what those rules allowed. In another situation Rhoda learned that Ruth was making biased decisions in the case, [*patient's education level and wheelchair*]. In this situation, Rhoda stepped in and guided Ruth through the decision-making process by exposing the student to her biases by asking the patient to perform a task the student did not think the patient was capable of performing. As a result of this guided problem solving, the student ordered the optimal wheelchair.

Stepping in and Taking Action

Four of the CIs or students described situations in which the CI stepped in and took action. The need for the CI to act instead of guiding the student toward action occurred when the CI's prior knowledge and understanding of the situation demanded it or the CI judged the student was not responding adequately. In the case [*unethical wheelchair vendor*], Rhoda stepped in and took over because she had seen the patient prior to the beginning of Rick's internship. She accepted responsibility for resolving the situation with the patient and this was a complicated situation that Rhoda felt was beyond the capacity of a student to address.

There were times when the CI stepped in and acted when the student was hesitant to do so. This occurred with Ruth in [*will I walk?*]. Rhoda stepped in and explained everything to a patient about what he would need to accomplish in order to walk.

In the case, [*patients decline treatment*], Len said the student's hesitancy led him to step in. Len noticed that the patient did not really want to receive physical therapy, but, as Len said, "I don't think he was catching on to that." As he described the situation:

> Well, he kept pausing and … [was] drag[ging] on and at that point ... I interrupted. I think what I said [to the patient] was that it looks like you're doin' fine at home and you're doin' okay with all your mobility and … it seems like you don't feel you need therapy … she said yes and … so we discharged the patient

Len said, after the patient left, they had a discussion about the encounter, as Len related:

> Well, I told him, … "You want to do what's best for your patient," and … sometimes your patients don't want it, and you just have to accept it. …you can encourage them as best you can, and that's about really all you can do. ... he asked what I would do in that situation, and- I told him, "Just encourage her, and let her know that she'd be safer if she did a little bit of balance training…"

In this particular example, they moved from the CI stepping in on behalf of the patient when the student did not respond adequately, to advice for future direction.

As a final example of a CI stepping in and acting when the student was hesitant, Claudia took action in the case, [doctors discharge too soon], when they tried to reconcile the situation with nurses. Cathy described it this way:

> Claudia was a little bit more forward than I was with nursing … because the nurses were saying oh, no, no, blood pressure is only 157 over 82 and Claudia said no, it's not, it's in the 180s over the 100s with a manual cuff, but the nurses were just kind of disregarding what it was that we were saying.

Being Told What to Do

There were two ethical issues in which a CI told a student what to do. In the case, [*cannot treat an inpatient*], Rhoda said she told him he could not see her, because of the

existing policy. When Anne noticed Amy discussing private health information in a public place, she said she "mentioned it a couple of times" and the behavior stopped. In this situation, the student's action violated patient privacy, but there was no dilemma.

Receiving Explanations

There were times when a CI had to offer an explanation about what the student was experiencing. Two CI-student dyads described this type of exploration. With Rick and Ruth, in a general discussion about patients who did not keep appointments, Rhoda explained how the norms in the clinic affected whether patients were called after they failed to keep appointments and how the clinic's practices might vary from other clinics due to economic factors. In the dilemma [*over utilize or under utilize*], Len explained the limitations from third party payers on physical therapy to Luke. When dealing with patients with seating and mobility needs, Rhoda had to be sure the students were aware of payer regulations about what could be deemed medically necessary.

Sometimes, the CI discussed environmental or social impacts on the clinic. In one instance Len explained how the closure of several local rehabilitation units challenged their capacity to provide the necessary care for patients. Rhoda had to explain to Rick and Ruth how patients' dependence on a special transportation service that did not reliably get patients to their appointments on time affected the student's ability to provide necessary care.

Receiving support, confirmation and consolation.

The final type of interaction between students and their CIs concerned times when the CI offered support, confirmation and consolation to students about how the student was feeling in particular situations. There were only six total instances involving three

student-CI dyads in which they talked about seeking, giving or receiving support about ethical dilemmas.

When the CI offered support, confirmation, or consolation, often it was as simple, as when Claudia said in [*doctors discharge too soon*]:

> You did your end. You covered everything you were supposed to do. You talked to the nurse, and she talked to the doctors.

Luke felt frustrated in [*over utilize or under utilize*], and Len told him,

> … the system isn't fair always and- and you got to work around it and you basically have to tell your patient to be a squeaky wheel about it. … you can't, …do everything for them."

Rick received positive feedback from Rhoda after his encounter in [*patient with tetraplegia*]. He said she told him:

> You handled that pretty well, she's like "considering what you had to tell the guy," she's like "that's what you have to do," she's like "you want to be realistic but you also want to be optimistic."

As an example of the limited discussion between CIs and students when the CI offered support, when I asked Luke about how far his discussion with his CI went over dealing with difficult patients, he said:

> I don't think it's gone this deep. Like … you [interviewer] say there's a, there's a surface conversation going on.

Role Models

The CIs served as important role models for the students and influenced how they reasoned through ethical issues. I previously discussed the importance of the CIs as role models in order to set the stage for the student to act as a moral agent. In addition to that preparatory role, there were specific ethical situations in which the CI was a role model. Students described watching the CI with a patient, and then trying to use those

observations in similar situations. Ruth watched Rhoda talk to a patient with obesity who wished to have a power scooter, but the CI told the patient she could not order it because it would not be advisable for her to become reliant on a wheelchair. Ruth later encountered a similar situation, but reached a different decision,

> I'd actually seen my CI in a similar situation, but she had made a different decision than I did-- partly because the patient could still ambulate and survive without the device, but I had … that as a model, and I talked to her [Rhoda] about it, and then made the best decision I could, knowing that it wasn't the ideal situation for this patient.

Amy watched how her CI told a patient his insurance only authorized a limited number of visits and used that process when speaking to patients in similar situations.

During his third individual interview, while discussing influences on his practice and way of relating to patients, Luke recalled how a previous CI was a powerful role model for treating patients without bias. As he said:

> he manages to walk in there every day, sit down with whoever the patient is… they can be aggressive, combative, and he always managed to be caring, which stunned me, because honestly in that situation I would struggle, I would have a hard time …

Cathy discussed the ways in which Claudia acted as a role model when dealing with stressful patients, such as a patient with leukemia and the patient's in prison custody.

Other Physical Therapists

The students also interacted with other physical therapists in ethical dilemmas. These physical therapists (a) provided advice, (b) took action on behalf of the student, and (c) provided special expertise. They also served as negative role models for one student.

In two instances, the CI was not in the clinic and another PT offered the student advice. It is standard practice in physical therapy clinical education to designate other

physical therapists to act as the CI when the regular CI has a day off. One time a PT advised Ruth how to best handle a patient whose veracity they were questioning. Amy turned to another PT in the case [*patient refuses PT student*] to try to understand if it was something she had done that triggered the patient's reaction. In [*get help to do the test*], Ruth thought she should have sought the advice of another physical therapist who was assigned to supervise her. As she described it:

> I had one time where it was a day that my CI was not at the clinic and we had a different clinician supervising us … I tried to talk to that person but they were supervising me and another student, and that other student needed help as well … But I realized it was my fault for not saying "Okay stop, I need help." And I was able to-- I mean, it wasn't a situation that was life or death or, …I was able to … do what needed to be done.

One student talked about using other physical therapists because of their expertise. On the advice of her CI, Cathy sought out the PT supervisor to discuss [*Christian Scientist and no treatment*].

In the situation, [*unethical wheelchair vendor*], a physical therapist stepped in on behalf of the student after multiple telephone calls from the vendor when Rhoda was not in the clinic.

Luke was the only student to relate other physical therapists as negative role models to specific ethical dilemmas he confronted, in this case [*is the patient faking?*]. He related:

> I've seen them [other PT's] walk in with an initial like a negative "Come on, just-just get out of bed already," you know, kind of approach and just observing that I felt uncomfortable, whether or not it was the correct approach for the patient or not. I felt uncomfortable observing that. … so, you know, that discomfort kind of just pushes me in the other direction as far as being a therapist.

Other Students

Two of the student participants discussed how other students were important to them when they faced ethical dilemmas. A classmate provided Amy with an outlet to gain general support and confidence. As she described it:

> I have one classmate who I talk to probably, I'd say at least twice, three times a week. …we both have that lack of confidence as, I think, just about any student will at…this point, especially since we only have three weeks left and we're getting out….- … she'll say things to make me feel better just as … "Oh, you're doing fine," … "Don't worry"… it's just we both help each other out, despite knowing exactly how we feel.

Rick and Ruth, because they were in a collaborative clinical education model with one CI, and both had questions about patients who may not give their full effort, worked together to try to test whether a patient could "fake" a particular test result.

Family and Significant Others

With the exception of Luke, the students reported having conversations with members of their families and significant others. Families and significant others provided support and the opportunity to vent their feelings. As three students related during the focus group:

> Rick: Mine [family] was just emotional support.
> Ruth: Mine was more… the emotional support. Just the, you know, decompress, let everything out so that you didn't let your emotions build up and get frustrated.
> Cathy: I would agree with that, and kind of the vent factor and, you know, just a little bit of reassurance that everything was okay, it would work out.

In a different vein, Cathy talked about how she and her boyfriend would talk and work through situations:

> I would always kind of tell my boyfriend whatever crazy story had happened that day. At that point, that did come up. And he sort of played, …devil's advocate with me, because he didn't want me to get in trouble for, you know, sticking my nose in where it didn't belong

She then said,

> I think it helped for me to kind of hack it out with someone that was in a neutral or removed, objective setting… because … they weren't clouded with the emotion of the situation and, you know, the specifics. …occasionally it would bring forward… something I hadn't thought about … just kind of keep me in check from not wanting to go grab the bull by the horns and solve the world's problems. So yeah, it definitely helped clarify things every now and then.

While Luke never mentioned conversations with family and friends, he did say he often asked himself, "What would my dad do?" as described in Chapter Four.

Literature and Evidence

Luke, Cathy, and Ruth discussed how they used the literature and classroom learning. In all but one instance, the research literature and learning from courses provided guidance on the clinical aspects of the cases in which ethical dilemmas arose. Luke and Ruth used the literature on manual muscle testing and ambulation following spinal cord injury. In [*he has HIV infection*], Luke recalled discussions in class about HIV and the concomitant safety precautions one takes.

Only Cathy recalled classroom discussions about ethical situations and guidance about legal and ethical requirements. She said that learning helped her discern the need to act in [*Christian Scientist and no treatment*]. While acknowledging the guidance her classroom learning provided, when relating the story about that patient she added:

> … nothing could have ever … presented this exact situation in a classroom setting. Well, I guess technically there's some needle in a haystack chance that it could have, but no, I've never played out anything quite like this before.

Summary of Ethical Reasoning

Students' reasoning in the ethical dilemmas they encountered was characterized by relying on external resources, primarily their CIs, for advice, consultation, guidance and problem solving. Other physical therapists in the clinic provided similar support.

Their families and significant others provided the preponderance of their emotional support during the internship with evidence that CIs played a minor role in this aspect of their reasoning. Cathy and Claudia engaged in the most collaboration and discussion about the emotional aspects of the situations they confronted. There was only one mention of learning from the classroom related to ethics that emerged during the interviews and journals. Otherwise, the students mentioned the learning from literature and classroom learning in regards to the clinical aspects of the case. These external resources guided the students through their possible actions and helped them understand the external constraints they were confronting.

The students' internal resources were extremely important in their ethical reasoning. They exhibited thinking-in-the-moment and reflection about a range of thoughts, feelings and imaginings about the situations in which they found themselves. It was through access to their internal resources that their values and beliefs were acknowledged and applied to the ethical dilemmas. These internal processes were also the way in which the students acknowledged biases and came to resolution about how to alter the affect those biases had on the choices they were considering. The students also reflected on and thought about their self-perceptions and acknowledged how those self-perceptions influenced their reasoning. The students' perceptions about the effort and energy they were willing to expend in a particular situation and the limits that time imposed on them were also dealt with via their internal processes. The students' internal reasoning through thinking and reflection helped them answer the questions, "What is going on?" a line of thought that was typically triggered by a feeling, sometimes a specific feeling and other times a vague sense of unease. There was evidence of a shift in

the students' thinking from student-centered concerns to patient-centered concerns in their internal processes, particularly with student bias.

Research Question Three

Introduction: The Analytic Framework

The third research question asks, "How are PT students' descriptions of their approaches to patients associated with their experience of their role as moral agents?" During data analysis, two elements of an analytic framework emerged that describe the findings relative to this research question. One element is Martin Buber's I-It, in contrast to the consideration of the other person in relationship, I-You (Buber, 1970) (see Figure 3). Findings related to this first element were characterized by patterns that served as indicators of the students' approaches to their relationship with patients that corresponded to Buber's formulation. The second element is the nature of the students' ethical reasoning as an indicator of how they fulfilled their responsibility as moral agents. This element of the analytic framework is an adaptation based on two studies (Edwards, Braunack-Mayer, & Jones, 2005; Edwards, Jones, Carr, Braunack-Mayer, & Jensen, 2004).

In this section, I will first describe each of these two elements of the analytic framework in turn. I will then describe the findings relative to each of the physical therapist student participants in relation to both elements of the analytic framework. I will conclude with a summary of those findings.

Buber and Students' Relationship with Patients

Four patterns emerged as indicators of the student's relationship with their patients: (a) the students' use of diagnosis first language versus person first language; (b)

the extent to which the students abstracted characteristics about a patient based on causal reasoning or saw the patient as a person through interaction; (c) identified with the patient through the student's experience or identified with how patients felt; and (d) saw the patient only as a patient or saw the patient in relation to social roles, such as with family members, and in which patient's diagnosis was a minor part of the discussion. These patterns in relationship to Buber's formulation are seen in Figure 4.

Pattern 1: Diagnosis First Language or Person First Language

Sometimes students referred to the patient as the diagnosis. As examples, a student would say "the hip patient" or "he is a stroke patient." In contrast, students also used person first language, e.g. "the patient with a stroke." Person first language is the preferred speech pattern (Davis, 2006). Diagnosis first language can be thought of as shorthand for the patient as the diagnosis or object, not as a person with an illness, and is consistent with Buber's I-It. Conversely, person first language can be thought of as a shorthand way to refer to the person who happens to have an illness or medical diagnosis.

Pattern 2: Abstracted Characteristics or Patient as Person

During data analysis, a theme emerged in which students abstracted characteristics about patients based on the student's interpretation of their behaviors without exploring the reasons or context of those behaviors. I considered this pattern to fall into the stance of Buber's "I-It," the person as object or removed from relationship. As an example, Amy said,

> We tried 10 different ways to explain it to the patient, but he would not listen. He kept trying to interject to disagree with us

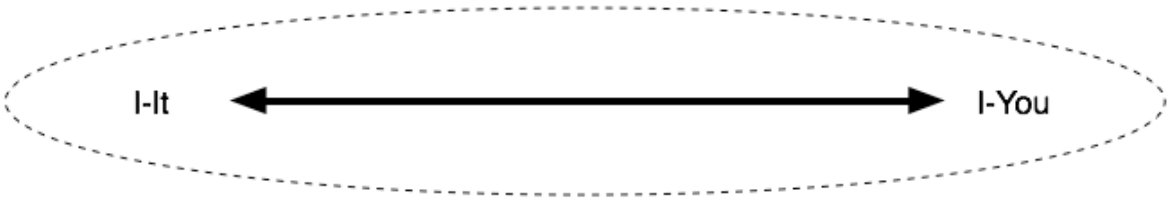

Figure 3. The Continuum from I-It to I-You (Buber, 1970).

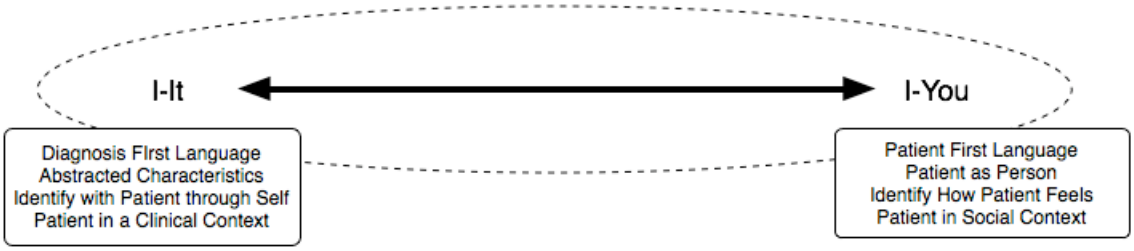

Figure 4. The four patterns associated with the continuum from I-It to I-You (Buber, 1970)

Students who did not exhibit this pattern would inquire about why the patient might be acting in a particular way or would notice the behavior without making a judgment or creating a reason for the behavior.

This pattern was also apparent when considering bias. As previously described, Luke, Cathy, Rick, and Ruth made explicit references to experiencing bias toward patients based on abstracted characteristics. In each of these instances, the student recognized their bias as such and the students talked about how they reasoned through those biases so they could impartially provide physical therapy to the patients. Thus, these students described a transition from an abstracted characteristic in "I-It" toward "I-You" in how their bias changed.

Pattern 3: Identify with Patients Through Self or Identify How Patients Feel

There were students who could describe how patients felt based on their interactions with them, for example Cathy spoke about [*Christian Scientist and no treatment*] and ran down several things she said:

> She would say, "quit asking me stupid questions"… and "I'm not dumb"… and "I refuse your service"… and "you have no right to be here" … and "go do something else." …She would just get very agitated, very angry

Alternatively, the student saw the patient as herself or in situations she experienced. An example would include Amy's comments "if I were her…" that were mentioned above. In the first, the student heard the patient's statements and recognized the patient's feeling behind those statements, while in the second the patient is seen as an object of the student's view of herself.

Pattern 4: Patient is Only a Patient or Patient in a Social Context

In the fourth pattern the students talked about patients in relation to social roles, such as with family members, or described the nature of their interaction with the patient. In these instances, the student's descriptions were not clinical, i.e. the patient's diagnosis was a minor part of the discussion. This pattern was also evident in how students described their relationship with their patients in response to a standard interview question. In this pattern, the focus is on relationship, I-You, as opposed to diagnostic label, I-It.

The types of reasoning evident among the students

The clinical reasoning model from two studies is relevant (Edwards, Jones, et al. 2004; Edwards, Braunack-Mayer, & Jones 2005). I have adapted a portion of the model those authors used as a basis for analyzing how the students approached their ethical reasoning. See Figure 5.

Amy

Amy's relationship with patients.

Amy's overall pattern on Buber's continuum shifted more toward I-It.

Amy was the student who most commonly used diagnosis-first language when referring to students. Of all of the observed incidents of diagnosis-first language, 52% (29) were attributed to Amy. Amy only used person first language twice in journal entries. Of all references to patients using either form, 94% of Amy's were diagnosis first.

Amy talked about abstracted characteristics of six patients, making ten statements of this form. Among them were statements such as:

> He either doesn't understand or doesn't really want to uh **actively** [emphasis in speech] participate
>
> If you are not going to put forth the activity or the effort and really do the exercises what's the point?

Only Ruth referred to patients in this fashion more often than Amy. Amy was the one student who did not show evidence of changing her viewpoint from abstracted characteristics to a more holistic viewpoints or acknowledging how her point of view influenced her and reflect on how she might change.

In the one instance in which Amy explored a patient's reasons for actions, the case [*massage not exercise*], she said:

> I walk out at the end of the day just frustrated because I don't feel like, one I'm getting through to the patient and two I don't feel like everything that I'm doing is necessarily helping him because he either doesn't understand or doesn't really want to uh actively [emphasis] participate. So it's, it's it's it's [stammers] challenging to me. It's patience, that - that I feel with him or what I – need to work on.

In all of the statements using abstracted characteristics, she is constructing reasons about patients' behaviors without considering how she contributed to the situation or describing how she sought to understand the patients' points of view about those behaviors. Her exploration includes evidence of reasoning from her abstracted characteristics about the patient. Her reflection suggests she must tolerate those reasons that she formulated as opposed to trying to understand why patients react as they do.

Amy talked about identifying with patients through herself by comparing their behavior to hers when she said:

> Me going in there and saying, listen, I- I am a competitive swimmer. I have shoulder pain. I need it to stop. I need to get back to doing what, you know, what my coach wants me to do. Can you help me. Uhm.. That's- I guess that's kind of what I expect each time I have an evaluation,

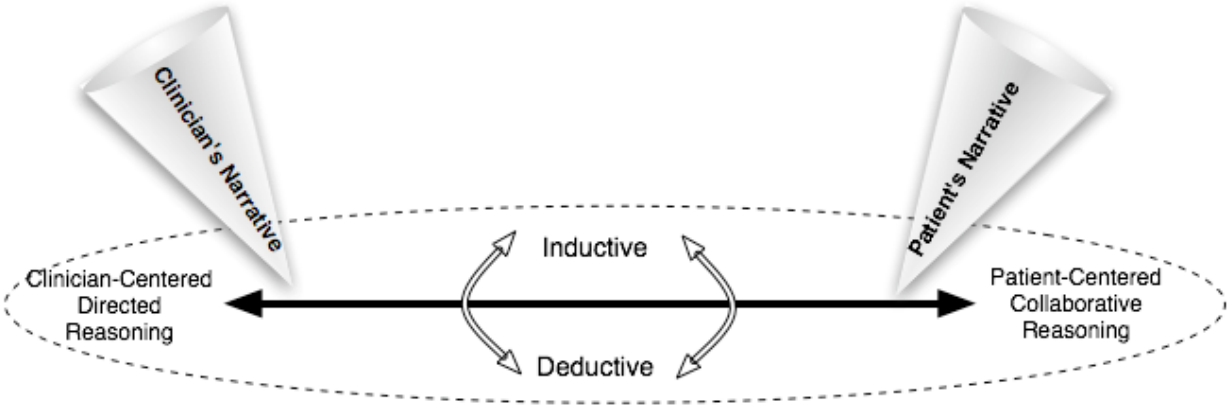

Figure 5. The ethical reasoning model. A continuum from patient-centered, collaborative reasoning through clinician-centered, directed reasoning and the dialectic between inductive and deductive processes. (Adapted from Edwards, 2000; Edwards, et al., 2004; Edwards, et al. 2005)

She also hypothetically placed herself in the patient's position and projected what she would do as the patient. For example, when she questioned the physician's diagnosis in [*are doctors wrong?*] she said "if I were them I'd go get a second opinion." She talked about the patient who refused to have a student work with her in a similar manner.

When talking about patients in a social context she said, "I love people. I'm a people person. I love patients. That's why I went into this field" and described her patients as friends, qualifying that it was not outside the clinic. She also stressed the importance of patient education and getting them to understand the nature of their problem and how she was approaching it. In her view, when she spent the time on patient education, there would be more interaction and the patients would give more effort because they understood the reasons behind the physical therapy. Her discussions of conversations with patients described social banter.

Amy's ethical reasoning patterns.

The relative absence of patient-centered collaborative reasoning on the part of Amy was evident when she assumed moral agency. While she said she wondered what patients were thinking or why they acted as they did, she did not describe situations in which she engaged patients in a discussion when there were ethical issues at hand. An example was her discussion in [*massage not exercise*] in which the patient "would not listen" and she discharged him.

She had a patient with a total knee arthroplasty with whom she enjoyed working and said:

> And when she leaves at the end of the treatment, "you're doing a good job, you're really doing a good job. I'm pleased with the progress I've made" It's just this confidence booster, and as a student it's nice to have. Um, - I'd I'd like more of those, kind of interspersed throughout the day (laugh) … But she's, she and I talk

> about our weekends, she's just a great person. We get along very well. And on top of it, I seem to be making her feel better. It's just an overall good experience

Her description focuses more on herself and the effect she has than on the patient. A combination of satisfaction with her contribution to the patient's clinical progress and the personal reward she receives from the patient's praise are central in this description.

At one point she said "I try to put myself in her shoes." Amy used "putting myself in their shoes" as a metaphor for how she described physical therapy so that the patient understood it, as opposed to the more common usage as a metaphor for understanding the patient's feelings or experiences. Her emphasis is consistent with her values of patient understanding of the rationale for physical therapy and on patient education.

Principle-based reasoning was evident when she was talking about how she decided what to do when patients refused to participate in physical therapy, whether or not she would seek authorization for more physical therapy, and when patients failed to keep appointments. When she debated whether to call a patient who had missed several appointments, her conflict centered on her adherence to the clinic's policy. With few exceptions, she did not have discussions with her CI about ethical issues.

Luke

Luke's relationship with patients.

Luke tended to fall more often toward the I-You end of the continuum. When all of the incidents of students using diagnosis first language are considered, Luke had a total of eight incidents out of 56. There were 16 incidents of person first language among the students and Luke used that language eight times (50% of total). Of all of his references to patients using either form, he used 50% for each.

Luke made statements using abstracted characteristics about one patient who worked with him during his internship, the lowest incident rate among the students. This statement was about a patient who he characterized as "very determined, very driven to progress" While this is a positive abstraction, nevertheless, it reflects attributing a reason for the patient's behavior to the patient without exploration. Luke spoke about his initial biases in the case, [*he has HIV infection*]. As previously noted, he used internal resources to reason beyond that bias and adopt a different stance toward the patient.

When speaking of the way he identified with patients, he tended to talk about identifying with the patients' feelings. Luke described his reaction to a patient with multiple sclerosis this way:

> this patient was always kind of able to just laugh or joke about things that personally I would be incredibly frustrated with.

Luke talked about patients in a broader social context, for example he was talking about a patient who recently lost her husband, and said:

> I don't think she would've taken well (to)… this is my job, I have to come in here, I have to do these certain things, and then I'm gonna leave, you know, without ever having any kind of a communication interaction 'cause she- she was somebody that's kinda lonely, uhm.. her husband passed away, uh.. she's been living by herself, so I mean for her to be able to talk to somebody is just uhm.. it's almost a necessity when she's around, I would- I would say. So that was- that was a-- like I said, it's hard to do a- a good thorough [evaluation] while you're having a conversation, to keep it focused.

Luke spoke about the importance of communication and establishing rapport in order to be effective as a physical therapist. He felt that he would be more likely to accomplish the patient's goals for leading the type of life they wished if the patients knew he was concerned for them.

Luke's ethical reasoning patterns.

Luke used principle or procedural reasoning and collaborative reasoning with patients and families. Two examples were the case [*family with a four-wheel walker*] and [*patients decline treatment*]. In the first situation, collaborative, patient-centered reasoning predominated from the beginning and in the second situation, he was able to shift from clinician-centered to patient-centered reasoning with his CI's guidance and then followed through with patient-centered reasoning the second time he encountered a similar case. He was cognizant of the moral principles and values that were important in these situations and used those in his reasoning. Principle-based reasoning predominated when he faced situations in which clinic and payer rules were important and when patient consent issues were important.

Cathy

Cathy's relationship with patients.

Cathy fell most often toward the I-You end of Buber's continuum. Cathy used diagnosis first language twice, the lowest frequency of any student. She used person first language twice when it was appropriate. She only used four references to patients with either form, with two of each.

Cathy made eight statements based on abstracted characterizations concerning three patients, falling in the middle of the students in this regard. The following are examples:

> I can't even remember exactly what she said, but she was angry and she was just kind of being malicious.
>
> he was [*pause-brief*] very - I wouldn't say very close minded, almost close minded in some regards when I was trying to give him options on how to incorporate exercise into his day

> The woman was very emotional and depressed… She feels helpless and hopeless since her prognosis is not good

Her abstracted characterizations were about why patients felt or acted as they did.

Like Luke, Cathy talked about identifying with the patients' feelings. For example, Cathy wrote about [*woman with leukemia*]:

> After several sessions with this patient, I found myself thinking about how I would feel in her position and I can only imagine how difficult this is for her.

When considering patients in a social context, Cathy spoke about that same patient this way:

> She was in her early 40's and she had a young child, she had a six year old little girl and just that alone really made me think because for a woman her age with a young child to be in the condition that she's in and the doctors were really talking about hospice care, I mean it - just it tugged at my heart. It really made me kind of think, I'm a daydreamer, and I was thinking off into what's going to happen to this family and whether she gets better or not just the immediate, her immediate attitude about where she is and how her daughter is falling in and out of the mix here, because I believe she was also a single parent.

Cathy emphasized the importance of establishing a personal connection and trust in order to improve the outcomes from physical therapy. She was careful to say that the relationship was not one of friendship; she said it went beyond a strictly professional relationship, but she was unable to describe it precisely.

Cathy's ethical reasoning patterns.

Cathy used principle based reasoning and patient-centered collaborative reasoning. With Cathy, patient-centered collaborative reasoning predominated in her treatment of [*the patient with leukemia*], and how she listened to what the patient wanted, how she responded with caring, and how she considered that patient's right to refuse to participate in physical therapy. This encounter is described in depth in the findings of

research question five. It was also evident in her discussions about the case, [*Christian Scientist and no treatment*]. Her reasoning incorporated respect for the patient's faith and recognition of how it was perhaps reasonable, from this patient's experience, to be angry with anyone who was working with her as a health care provider. In the situation [*racially based patient*], she described a particular patient who made an impact on her because he made comments that might be perceived as sexist or racist, but did so with a pleasant smile and tone of voice. In this situation there was evidence of the reasoning that supported her ability to work with this patient despite what he was saying:

> I do recall … a monologue with myself thinking, what he just said kind of bothers me, but he was so nice about it so I'm kind of torn, do I be upset or do we just keep going? So most of the time I just let it pass and I take into account that when patients are here they are very far removed from their usual lifestyle and especially when there are so many cultural differences and being in the hospital everything is very across the board plain Jane and it's going to happen a certain way and there's usually not a whole lot of room for change and allowance for certain cultural differences, especially when it comes to eating, and that being the case I understand that patients being put in those kinds of situations can, you know, maybe not have the same attitude and personality that they do when they're out in their own environment …it's an adjustment and a lot of people don't adjust well while they're here.

Principle based reasoning predominated when she had to make decisions that involved clinic operations, for example in *[nurses need help*], she thought about her duty to help nurses. When she had to consider how to handle the situation [*nurses and blood pressure cuffs*], she used collaborative reasoning to explore the situation with her CI about individual patients but not about the systemic practice. She was cognizant of the important moral principles of the case, but personal narrative predominated and she chose not to act.

Rick

Rick's relationship with patients.

Rick tended to shift between I-You and I-It when relating to patients. Rick used diagnosis first language in one form or another 13 of the total of 56 incidents, 23% of the total and was the student who used that language second most frequently. Five of his 13 incidents were about groups of patients, e.g. polio patients. Rick used person first language once, the lowest frequency. Among his references to patients using either form, he used diagnosis first language 92% of the time.

Rick made three statements using abstracted characteristics about three patients, the second lowest frequency of any student. As examples, he said:

> …just the patient that I feel like wants to milk the system and get everything.
>
> They wouldn't even know what they were there for, I mean, even after you explained it, they wouldn't know what the purpose of therapy was
>
> No one cares for you except yourself, you know, and no one's gonna make sure that you're okay or you're this or you're that except yourself.

In the first and second statement the abstracted characterizations are about the patient's motivation, in the third it is about whether the patient cares for himself. In an example of the potential to refer to a patient in this fashion, but did not, Rick talked about a person he worked with who had gang tattoos:

> he's a young guy, he's really fit, and he wants to walk again and just totally gung-ho. And he was shot like three times, and he has gang tats all over his arms, and like if I saw this guy in the street before his, you know, just walking down the street before his injury, I'd probably try and like go in a store or leave, or here he comes, he's like he nicest guy, the most agreeable person you've ever met in the world, and he's totally excited, he wants to work in therapy.

When considering the way in which he identified with patients, it was previously mentioned how Rick saw that the patient was suffering in the case [*unethical wheelchair vendor*]. He related in a similar way to [*patient with tetraplegia*].

When considering the patient in a social context, Rick wrote about a patient's view of his problem in this fashion:

> I had an interesting change of events with one of my patients … the change with this patient happened when, without prompting, the patient went into a speech about himself and what he has become. He basically said that he has let his injury take him over and "made him what he is now". He complained about being "clumped with the other retards", a statement that he quickly retracted, and clarified that he was frustrated with himself and the "system" that, in his mind, bolsters the idea of ineptness. He stated that he gave up on himself and this is why he dresses and acts the way he does. I did not know where to go with this but I thought I would focus on the positive. He stated that he wanted to change and he wanted to go back to work as a professional.

Rick spoke of the importance of respect that develops between the patient and the physical therapist. He felt this respect contributed to more positive patient outcomes and participation in physical therapy. He also spoke of how the physical touch that occurs between PT and patient is an important part of building rapport and relationship.

Rick's ethical reasoning.

Rick used all of the forms of reasoning. Instances in which collaborative, patient centered reasoning predominated include [*patient with tetraplegia*], the patient with a gunshot wound and gang tattoos mentioned above, and his experiences with [*polio and power scooters*], in which he recognized their wishes to minimize the social stigma of disability associated with wheelchairs.

Rick used both collaborative and principle-based reasoning in conjunction when acting as an advocate on behalf of patients. One example is the [*unethical wheelchair*

vendor]. He used student-centered narrative reasoning in the case of [*wheelchairs the patients want*] and [*keep appointments or discharge*].

Ruth

Ruth's relationship with patients.

Ruth tended to shift between I-You and I-It on the continuum. With two incidents, she had the second lowest frequency of the use of diagnosis first language and used person first language three times, the second most frequent occurrence.

Ruth used abstracted characteristics about eight patients, making nine statements about them in this fashion. This was the highest occurrence of this pattern among the students. Examples from her include:

> …it's a lack of their own motivation seems to be stopping them from achieving those goals.
>
> …obviously this guy doesn't care at all
>
> I am having a lot of problems with patients that don't seem to respect and value my time, their time or work to improve

Ruth described how she shifted from abstracted characteristics in a biased way, to a person-centered consideration when she talked about a patient who spoke Spanish in this way:

> … just he kind of speaks broken English, and I grew up in the Midwest [laughs], everybody there speaks English basically. But he didn't necessarily have a job that involved really a lot of person to person contact before this, that he might not have been a very active person, he might not have taken care of himself, because he's a young guy that had a stroke. And find out that he works selling gym equipment, he can tell me more about our exercise equipment in there than I would ever know … those were assumptions I made about him without knowing anything about him, just flash look at him, I go "This is a guy that seems to have a hard time speaking English, had a stroke very young, so he must've been unhealthy and he must not have had a job that involved communicating with other people." And I don't know if what seems like broken English is a result of his stroke, and then so that was kind of a erroneous assumption on my part, or if it's

> just that he communicates better in Spanish …I was making assumptions just looking at him that weren't necessarily true.

Her most common way in which she identified with patients was in the context of wanting to help patients maintain hope, based on her past experiences.

When speaking of patients in a social context, her orientation was evident when speaking of [*will I walk?*], particularly about the young man who played college football. Ruth said that respect for each other and the patient's confidence in her were interrelated in that they helped establish trust between the patient and herself. She said that the relationship was not one of friendship, but one of "this is how you do what you need to do sort of relationship." She explicitly described her relationship with patients as an important element to support positive patient outcomes related to their function in their lives.

Ruth's ethical reasoning.

Ruth used all of the forms of reasoning. For example, with [*will I walk?*], particularly the College-age patient. She collaborated by engaging the patient to understand his personal situation. She used principles and rules by weighing what was optimal care, considering the research evidence, and comparing his abilities with the clinic's standards for issuing braces and beginning gait training, and assuring he had a choice in his care. She recalled her personal narrative about hope when thinking about his desire to try to walk. There was also evidence of that combination of reasoning when she discussed her work with [*patient with fibromyalgia*].

In one situation, [*come back for wheelchair*], she started with patient-centered reasoning to negotiate agreement and ended with student-centered reasoning when he did

not keep the appointments and she had to tell him that his physical therapy was being discontinued.

Summary of Findings Relative to Patterns of Communication and Relationship

Distinct differences emerged in the data concerning how these students described their approaches to patients using Buber's I-It and I-You. If imagined as a continuum constructed from these five students, Amy would more often fall near the I-It end of that continuum, Cathy would fall near the I-You end of the continuum, and the other students between them. (see figures 3 and 4) There were corresponding patterns in how they fulfilled their role as moral agents based upon an analytic framework using approaches to reasoning. All of the students used combinations of inductive, narrative reasoning and deductive, principle-based reasoning (See figure 5). The difference was apparent in the type of narrative reasoning they used. Amy had a tendency to use clinician-centered reasoning whereas Cathy had a tendency to use patient-centered reasoning. Luke, also tended to use patient-centered reasoning more frequently. Rick and Ruth had tendencies to fluctuate between clinician-centered and patient-centered reasoning. Thus, when student's fell toward the I-You end of Buber's continuum, there was a tendency to use patient-centered reasoning and when a student fell toward I-It, there was a tendency to use clinician-centered reasoning. The student's who tended to move between I-It and I-You most often also had tendencies to shift between clinician-centered and patient-centered ethical reasoning.

Research Question Four

Research question four asked what the relationship was between PT students' social negotiation of action with their CIs and the PT students' role as moral agents. The

prior section regarding the second research question discussed the findings relative to how the CIs served as resources for students in ethical dilemmas. I will now discuss the findings that pertain to how the CI and student negotiated action when the student had the opportunity to act as a moral agent. The findings in this section are devoted to ethical dilemmas in which the CI and the student acted jointly in such a way that affected the student's assuming the role of moral agent. The findings in this section are discussed in the following order: (a) situations in which the students and CIs shared moral agency; (b) students expressing moral agency through the role of advocate; (c) the CI creating opportunities for the student to act as a moral agent; and (d) social negotiation of action with the patient present.

Students and Clinical Instructors Sharing Moral Agency

Four of the student-CI dyads reported situations in which they shared moral agency in some manner. In these situations, the CI guided the student toward action. A common ethical dilemma Amy, Rick, and Ruth encountered was focused on patients who failed to keep appointments. In these situations, the CIs reminded the student of the clinic's policies on this matter, and worked through the situation with the students and the student then made a decision about what action to take. Rhoda described her conversation with Ruth this way:

> she (Ruth) came to me today like… "Do I call him again and schedule another appointment with him?" I said, "Well what do you think?" She said, "Well, he told me how much he wanted to come and then he didn't show up and he didn't call and nothing happened, so Now what?". (Rhoda): "Why don't we let him call?" (Ruth): well what are our options?" (Rhoda): "Well, we could do nothing or we could call him. What do you want to do?" Ruth: "Well let's see if he calls us, okay."

Anne used a similar process with Amy when a patient failed to keep appointments. In these instances the discussions centered on what the student wished to do based on the particular concerns of the patient. The moral principle of justice was not explicit in the conversation, but was operating in the background with the students' thinking and reflecting.

In the case, [*patients decline treatment*], Luke and Len encountered a similar situation with two different patients at different times. When considered together, these two cases illustrate the temporal nature of the student's growth toward acquiring moral agency. In the instance with the first patient, Luke's reasoning was primarily influenced by his desire to give the patient the best possible care given the patient's risk for falling. With this patient, Len intervened to assure that the patient's right of autonomy in health care was respected when Luke seemed reluctant to do so. Len role modeled patient-centered reasoning, in which he noted the patient's doubts about physical therapy and recognized her narrative. They subsequently discussed the ethical issues and Len allayed Luke's concerns about the patient's safety. When Luke subsequently encountered the second patient who did not wish to continue physical therapy, Luke was able to discharge the patient without consulting with his CI. Thus, Luke and Len socially negotiated action that balanced beneficence with patient autonomy. Luke then assumed moral agency without consulting the CI and made a decision in which he considered the same moral principles.

In the case [*over utilize or under utilize*], Luke was not sure how to explain the insurance company's limits on care to a patient. He consulted with Len and used an explanation he received from Len. In this situation, after the consultation with Len, Luke

assumed the role of moral agent that the CI would have otherwise taken directly with this patient.

As a final example of social negotiation of action with shared moral agency, Rhoda intervened in the situation [*patient's education level and wheelchair*]. Ruth briefed Rhoda on the situation, as Rhoda described their conversation:

> She [Ruth] said, "… she wants to have a manual chair and so I was just going to get her this one." I said, "Well, can she push the chair?" Because that could certainly make a difference in what category of chairs she's eligible for. [Ruth said]: "Well, I don't know. She only has a fourth grade education." [Rhoda continued] "So what? Can't little fourth graders push a chair?" I didn't say that but I said, "Well, let's at least give her the opportunity and just see what happens."

Then, as Rhoda described it, they watched her propel the chair, discussed her abilities with her caregiver and concluded that she would be able to propel a wheelchair. In this situation the student's bias was a barrier to beneficence. The CI first uncovered Ruth's unrecognized bias through patient demonstration and, as a result, that bias was no longer a barrier to the patient receiving the correct wheelchair.

Students Expressing Moral Agency as Advocates

Two ethical dilemmas arose in which the student's responsibility to act as a moral agent was not clear or direct. The student had responsibilities for the patient and could evaluate the situation and the need to act, but others were primarily responsible for fulfilling the responsibilities as moral agents directly with the patients. In these situations, the students' expression of moral agency occurred via a role as an advocate on behalf of the patient.

The ethical dilemma Cathy encountered in which she acted as an advocate was [*Christian Scientist and no treatment*]. The other dilemma involved Rick and [*unethical wheelchair vendor*]. Because both of these situations involved numerous other people

and were complicated situations, the CIs were closely involved. Ultimately, when it came time to act, both situations involved negotiation between the student and the CI about what action the student should take.

There were three decisions Cathy and Claudia had to make in the dilemma they encountered: (a) whether Cathy would intentionally keep this patient on her schedule; (b) whether they had responsibility to act; and, (c) if they answered the second question affirmatively, what to do about the physicians and nurses giving medication to the patient. The first decision is important because it set the stage for the second by determining whether Cathy remained involved in the patient's care.

In the first decision, Claudia said,

> I actually let her choose. I told her there is two options -- the two options I could think of was, one, we leave it as is, whoever gets assigned the patient gets them and just really talk to whoever gets that patient for the day. … The second option, since this patient was just very touchy was to have her assigned to the patient, talk to the supervisor, and make sure she kept getting assigned to this particular patient to follow through and maybe if seeing the same patient on a daily basis would create a rapport with the patient and allow for better compliance with therapy.

Cathy chose to remain involved and keep the patient on her schedule. Given that decision, Claudia and Cathy were confronted with the second decision: was this a situation in which they should be involved? As Claudia described it:

> When Cathy initially brought this issue up . . .my first thought was that it's not a physical therapy issue . . . but then again . . . as a health care provider, it is mandatory to report neglect, abuse, etc . . . so doesn't this count? Until the patient is conserved, her word should still count . . . a patient should be able to refuse medical treatment if sound of mind until proven otherwise.

From Cathy's point of view,

> I first brought up the issue with Claudia [and] said, "Okay this is what I read in the notes. This is what appears to be going on," kind of, "I don't feel comfortable just ignoring. I don't think that this is necessarily okay." I'm of the Catholic faith and faith is something that's important to me and although she has these

> psychiatric issues, … she does not have a conservator… So in light of everything else going on with her, I still didn't feel that was justification for fooling her into consuming medication that she was refusing. And so Claudia said, you know, "Okay, yeah, I agree. You know, it's a good idea, you know, a good catch and it's a good idea to contact the doctors and make sure that, you know, are they aware that she's a Christian Scientist, you know, and are they are aware of that even?" And I said, "Well, they've documented in their notes as well that yes, this patient states that she's a Christian Scientist, you know, requesting with social work to contact someone from the faith to corroborate her longstanding beliefs and attempt to bring in a healer to speak with the patient of the Christian Scientist belief.

Each of them reached the conclusion this was a situation in which they should assume moral agency and take action. Claudia gave the choice about what to do to Cathy, which was to call the doctor, and Claudia confirmed she would have done the same thing. Cathy spoke to the physicians to convey her concerns about what she saw transpiring in the case. During Cathy's conversation with one of the doctors, the doctor acknowledged the ethical problem and said they were trying to resolve it, but were still going to give her medications because of her medical condition. Claudia summarized the situation with Cathy:

> We've talked about … potentially what we can do now. One, leave it at that, because yes, it is the doctor's decision and the doctors fully know what they're doing and why they're doing it. Second thing we can also bring it up to the ethical committee but the doctors were already thinking of that, so instead of jumping ahead of the doctors, we decided together that let the doctors do it on that end. They know it exists, they are thinking about it already, so it's kind of up to them to take that step.

And they talked to the supervisor in the physical therapy department to confirm they had completed all of the necessary action.

There were several phases to what transpired in this situation: (a) they discerned the nature of the ethical dilemma, (b) explored and analyzed the dilemma, (c) reached a decision, (d) negotiated action, (e) acted and (f) reflected on that action and the results.

Throughout, the constraints on their actions were evident to both of them. Those constraints included personal values, such as faith, and who had authority and responsibility to act directly on behalf of the patient. There was evidence of reasoning based on the moral principle of patient autonomy, the student's value of faith, narrative reasoning about the ways in which the particular needs of this patient were expressed, and reasoning about the proper procedures to follow.

Rick and Rhoda assumed moral agency in the case [*unethical wheelchair vendor*]. Rhoda took over the formal complaint process with the third party payer because of her prior involvement with the patient and the complicated nature of the situation. She described the reason for her action and how she involved Rick this way:

> Rhoda: it's really my job to make sure that the patient gets fitted properly to the equipment and he can use it, and because that's not something that a vendor's doing. So I think he's Rick sort of seeing all that play out.
> Interviewer: It sounds like your intention is for Rick to see that that's part of your role as a physical therapist.
> Rhoda: Right.
> Interviewer: So if he were to encounter that same kind of situation, he would be aware this is something I need to do and take responsibility for it.
> Rhoda: Right. And that there's things you can do.

The findings relative to how Rick further assumed moral agency with this patient pertain to the next research question and are reported there.

There was one ethical dilemma that Cathy and Claudia encountered in which the need to act as advocates was evident, but their advocacy was futile. This ethical dilemma occurred several times with [*doctors discharge too soon*]. Claudia said they had fulfilled their obligation by reporting the patient's blood pressure changes with walking directly to the physician, and discharge was ultimately the physician's decision. They made a

referral to outpatient physical therapy to be sure the patient had ongoing care. Claudia described how she explained the outcome to Cathy:

> "Okay, this is how it is." It wasn't, "No, we can't do that," because on our end, we did everything we could do. We talked to the doctor …[about] why it potentially was not a good idea to… have a discharge quite so soon. … You can't change a doctor's mind when they say, "This is what it's going to be."

Because the student and CI could not influence the physician's decision, Claudia walked Cathy through the situation and they arrived at the action Cathy would need to take to assure patients were as safe as they could be when discharged. The student and CI took action that compensated for their perceived inability to prevent harm and provide the best care possible for the patients in the circumstances. Claudia, when discussing this situation in the focus group, said by talking it through together Cathy would know what steps to take next time. Claudia addressed Cathy's residual feelings that arose in this suboptimal situation for the patients.

Truthfulness: Social Negotiation of Action with the Patient Present

In the many ethical situations in which the students and CIs socially negotiated action, one that presented unique constraints occurred with Rick and Rhoda with [*patient with tetraplegia*]. Rhoda described how she was attuned to the sensitivities of the situation:

> I was deciding whether or not I needed to take Rick away from the patient to discuss it or not because I knew that, if we didn't state things a certain way… the patient was going to get upset because the patient was certainly looking for a specific answer.

Rhoda described the ensuing interaction in which Rick discerned what the patient's expectations were this way:

> Rick was adept enough to sort of know that and we kind of talk in-- not code but he communicated with me in a way that we didn't really have to come out and

> say, "No, there's nothing for this patient. We can't do anything for him. This is his status." So I think he kind of said, "Well, I've completed my evaluation and I've noticed that his sensation is at this level and his strength is at this level and, you know, I think he should continue with his range of motion. Do you agree with that or should I look at anything else?" And I just said, "Yeah, I think … that's where things are at and we can certainly offer some more background information to him, some education."

In this way they worked out what they needed to do. When Rick talked about the interaction with this patient and Rhoda he said:

> After I spoke in code with Rhoda for a while and figured out that I was the one that needed to tell him that he's not a candidate and that I needed to educate him more on his condition, … I got the kind of go from Rhoda I was like "Am I the proper person to tell him this, does his physician need to tell him this, why doesn't he know this already?" But I kind of felt like I was thinking I need to tell him. So when Rhoda was like "Yep, that's what you need to do," I just went for it.

At this point in the interaction, both of them exhibited internal, thinking in the moment that was mutually facilitated by their interactions through the patient.

As she reflected on this situation during the first interview, Rhoda described a process through which she became confident in Rick's abilities and trusted him to effectively handle a sensitive interaction with this patient. Because he demonstrated the ability to address the clinical and interpersonal dynamics of the situation, she said, "I was letting Rick try to run the whole session."

As the visit progressed, her confidence in his ability was boosted because he was checking in with her about his options without alarming the patient unnecessarily. During her discussion of this situation, Rhoda noted that Rick's need to confirm actions with her was common among the students at this stage. When they do so, she said,

> At times, I try to be more elusive than others and not give them very much information to try to help them, just come to the conclusion on their own and, in the end, I can say I think that's a good idea or why don't you consider this?

In our interview, Rick reported that while all of this was occurring, he was also thinking about how the patient must be feeling, how he might react to hearing bad news, and what obligations he had to tell the patient the truth.

Afterwards, they had a debriefing session, which Rhoda described this way:

> I said, If you feel like you need to talk to me not in front of the patient, you know, either give me a non-verbal or just say that, make some excuse up that you have to go find something in the back and I'll follow you and take that cue." I said, "I didn't interrupt you because I thought you were handling it very well and your interaction with the patient was good and the patient was responding…well, to it, wasn't breaking down or anything like that." So I said I let it go.

She described her rationale for the importance of trying to keep the conversation, and thus the negotiation, in the patient's presence:

> I think sometimes when you do leave the patient and it's kind of obvious, the patient's wondering what's going on and thinks, you know, especially if you go in the back and talk about something and come back out and say, "Oh, well, I'm sorry, we don't have anything to offer you," and you send them on their way… they… can get suspicious about that so I try to, if we can, keep the communication in front of them, keep them involved in the conversation …

Given the dilemma of a patient who hoped for positive news but none was forthcoming, Rhoda was able to advance the student toward accepting the responsibility of a physical therapist, including moral agency. While doing so, she was able to maintain her essential fiduciary responsibility for the patient through the student. By acting capably, Rick provided the catalyst for the development of Rhoda's trust in him. There was also evidence in this situation of how Rick and Rhoda thought to themselves in the moment, and that internally negotiated action was then evident in their interaction with one another. Rhoda and Rick continuously adapted to the nuances of the situation, and negotiated ethical action and agency. Rick and Rhoda engaged in reasoning that encompassed reasoning about the interaction, teaching and procedures, including who

should assume moral agency and what the ethical action entailed. They also used patient-centered, narrative reasoning in their considerations of this patient's beliefs, hopes and expectations and how he might react to hearing bad news.

Summary: Social Negotiation of Action with CI and Student

The manner in which the CIs established trust with the students, their ability to accept uncertainty, and their assurance the student was able to meet the patient's needs constrained the CIs actions and provided a critical foundation for the students' ability to act as moral agents. In the most common pattern of socially negotiated action, students consulted with the CI, the two of them engaged in a process that led them to a decision about the right thing to do, and the student acted. During that process the CI and student did not explicitly use the language of ethics, e.g. naming moral principles or identifying an ethical problem-solving process. However, there was evidence of a practical consideration of moral principles underlying their decisions. The student and CI engaged in a process in which they socially negotiated action that was consistent with their interpretation of the principles relevant to that case. In addition to a practical consideration of moral principles underlying the socially negotiated action, the students and the CIs engaged in reasoning about the particulars of the case using the narratives of patients, students, and CIs. While there was evidence that Cathy and Claudia used a systematic approach to address the ethical dilemma with [*Christian Scientist and no treatment*], they did not explicitly describe it as such. In order to fully understand whether the students and CIs used systematic ethical decision-making processes, the findings relative to the next research question must be considered.

Research Question Five

Introduction

The fifth research question considered "What is the relationship between students' social negotiation of action with their patients and their role as moral agents. This research question focuses on the socially negotiated action between patients and students when the student assumed moral agency when there were ethical dilemmas. There are two key questions to consider under this research question: "On what basis does the student act?" and "How does the student act?" There are two key considerations embedded in the first question. The first consideration is to what extent are principles, duties and values important to the student when determining what to do. The second consideration is to what extent does the student act based upon the particular circumstances of each patient and the context of the situation. The second question, "How does the student act?" asks what does the student ultimately do as a moral agent. This section is organized according to the second question, how the student acted as a moral agent, in the following order: (a) the student chose not to act; (b) the student compromised and adapted to constraints; (c) the student acted as an advocate; (d) the student expressed caring; and (e) the student assumed moral agency directly with patients and caregivers. These are organized in this order along a continuum from inaction through action. The first question mentioned above, the basis for the students' actions, is considered within each section that describes how they acted and in the summary of the findings on this research question.

Student Chose Not to Act

Three students chose not to act as moral agents even though they discerned the need and had responsibility to act and could evaluate the results of their actions. The constraints described in Chapter Four played a prominent role in whether the student chose not to act.

Cathy considered whether she should take action in the case [*nurses and blood pressure cuffs*]. She explored this situation in general with her CI and the other physical therapists. She notified nurses and physicians of the discrepancy when she had concerns about specific patients. When considering whether she should raise concerns about the possible negative effect on patients because of the systematic practice, she concluded:

> as a student-- … [p]art of me feels like I'm not here to push buttons, I don't want to stir something up that would cause upset on the floors … and potentially reflect on the physical therapy department as a whole.

Her desire to avoid conflict was supported by her perception that speaking up could negatively affect the teamwork between the physical therapists and nurses. Cathy also chose not to act in the situation, [*nurses need help*]. In this case she followed Claudia's lead and waited even though she felt uncomfortable doing so and thought they had an obligation to respond to the nurses' call for help. Cathy also chose not to act by speaking about her concerns in [*nurses need help*]. Ultimately, Cathy and Claudia went to help the nurses, but Cathy was left with residual feelings about why they did not respond more quickly. She concluded this discussion by saying:

> If it were to come up again and we were to get the page I don't think I would be as… quiet and sit there. I would probably suggest that we go find out if they truly need our assistance.

Amy encountered two different ethical situations in which she chose not to act. During a past clinical experience she observed that therapists were not performing a stretching technique in a way that was consistent with recent research. She recognized that it was not as effective, pointed out the difference to the physical therapists, but adopted the less effective practice of those physical therapists. As she explained,

> … you're kind of buying [*sic*] your time until you're the PT and you can make the decisions and you can do the research and, you know, you go into it wanting to learn as much as you possibly can. If you're not learning that much and you're kind of frustrated because they don't do it this way, you know, there's not much that you can necessarily do about it, but as long as you then sit there and say to yourself, "This isn't how I'm going to be. I will change this," you know, "once I'm out on my own." And that's all you can do.

During the internship that coincided with her participation in this study, she encountered [*PT does not give a home program*]. Amy said she did not talk to anyone else, including her CI, about this situation. She indicated she chose not to act because she is a student and the physical therapist has "been working for eight years, and that's her way of doing it." She concluded by offering her rationale for why this physical therapist might not act in the way Amy thought she should. Amy hypothesized that the physical therapist thought patients might not grasp what the PT was telling them after an arduous examination and concluded, "I'm sure she has a reasonable explanation for it."

The last situation in which a student chose not to act involved Ruth and [*get help to do the test*]. Her first attempt to get help with the test she was uncertain about performing was unsuccessful, and chose to go ahead with the examination anyway. She felt the risk to the patient was not that great, but afterwards recognized it was a mistake.

In all of the above instances, the students confronted situations that ranged from the nearly trivial in the care of one patient (e.g. how long to hold a particular stretch) to

systematic practices that affected the care of many patients. With Amy, inertia stemming from her perception of her role as a student, overcame any judgment to act. It is also of note that, other than a conversation with a classmate, Amy chose not to talk about her concerns with any of the CIs or other physical therapists in the clinics. Cathy also chose not to act, and that choice was influenced by the perceived student role, a sense of inertia, and a judgment about a potential pitfall to action. Cathy and her CI discussed her concerns about the differences in blood pressure measurements from nurses and physical therapists when it came up with individual patients, but not the systemic issue. They did not address Cathy's concerns about responding to help nurses. For Ruth it was the inertia of effort and time that stopped her from acting. In each case the student realized there were ethical reasons to act, but the internal processes in which she thought about the situation, overrode the decision to act in accordance with those principles.

Students Adapt to Constraints and Makes a Compromise

Ruth described adapting action to the constraints of the system in which they were working in the case [*try to get the right wheelchair*]. In her view, the written justification sometimes stretched the truth in order to comply with payer policies, but was going to result in a patient receiving the best wheelchair. She decided that it was most important to get the best wheelchair for the patient.

Luke was faced with a problem [*mother and sons*]. He chose to find ways to adapt and minimize the distractions that arose from the children's presence without talking to the patient about it. He accepted this situation as inevitable, "if you have a mom, she's going to bring her kids in" and did not question whether there were other solutions. His assumptions about whether the patient could leave her children home led

him to conclude he had to adapt and compromise the physical therapy services to meet the patient's needs. He chose not to discuss the impact the children were having on her care with the patient. In this case, his avoidance of engaging in a social negotiation with the patient lead him to act based on assumptions and seemingly his assumption about the particulars led him to compromise his ability to provide the best care possible.

Advocacy as a special case of agency

Three of the students related situations in which they assumed moral agency by acting as an advocate for a patient or for groups of patients. When students did not have the final authority for decisions, they worked through others who did have that authority. These students still socially negotiated action, but in this case it was on behalf of patients with others.

Two students acted as advocates within the clinic. Cathy advocated to physicians and nurses on behalf of patients in the situation [*doctors discharge too soon*]. In the case [*Christian Scientist and no treatment*], she advocated to the physicians to convince them to honor the patient's right to choose to decline medication based on the patient's religious beliefs. While she did not change their practices, she did take action in the only way that she had available to her. Ruth recognized the need to improve the clinic's video translation system and to provide a Spanish version of a questionnaire for patients with spinal cord injury. Her advocacy on behalf of a population of patients to decision-makers within the clinic served to improve the care these patients received and to enact practices to preserve patient privacy.

Ruth had a unique perspective of her role as an advocate among the participants. She recognized that government regulations restricted patient's ability to get the type of

wheelchairs that best met their needs. She realized she had to advocate within the political and bureaucratic systems to try to change these regulations. She said she was involved with the American Physical Therapy Association and advocated politically on behalf of patients and the public with goal of improving patients' access to necessary care, including equipment. She reported she wrote letters to try to persuade legislators to take action in this regard. She was the only student who described advocacy in the political arena.

Rick and Ruth accepted a role to help patients learn to advocate for themselves. They saw this role as essential to the moral role of physical therapists. In the case, [*unethical wheelchair vendor*], Rick saw his role as helping the patient learn to be his own advocate. He kept the patient informed of what actions he and Rhoda took so that the patient was aware of progress on his case. Ruth provided information about current research evidence and ongoing clinical trials related to spinal cord injury and walking in [*will I walk?*] so the patients had the resources to advocate for themselves. She told about one patient in this situation:

> with this guy what I want to see him do, if he really wants to walk is, I want to see him go out and find those resources and fight and advocate for himself and get what he needs, and so trying to walk that line where it's "This is what I can give you, and then I can give you just the starting and I want to see where you take it, I want to teach you how to be able to advocate for yourself.

Ruth used her personal narrative based on her past experience with the need to advocate for herself. That personal narrative lead her to value teaching patients to advocate for their own needs because it made such a difference in her life.

Caring as a Special Case of Agency

As previously described, Cathy felt her orientation toward caring practice was compromised by the demands of time in two situations involving patients with incontinence. In the case with [*patient with leukemia*], Cathy recalled many interactions with her. This story was triggered when Cathy started to recall something the patient said that caught her off guard. As she told it:

> [I can't recall what] led the patient to say, "well try dying for once, try dying instead" and, and it just takes you back because the patient acknowledges the fact that her situation is what it is, …- she was out of the realm of looking at it in a positive light. … she was talking about how her hair fell out and so - and how ugly she was now and she hadn't even looked in a mirror and I made a comment and said, "I don't think you're ugly I think you're beautiful" and she kind of gave me a half smile and rolled her eyes like, yeah right, you're just saying that, and I did - I don't believe in lying to patients, I don't think that's going to get either of us anywhere. But she did have beauty, I mean whether it was - it's in there somewhere, it's having a hard time making its way to the surface but - … when she made the comment about getting cleaned up [from an episode of bowel incontinence] and how demoralizing it was and saying, oh nope you know what it's really - it doesn't bother us at all, we just want to get you clean and dry and comfortable and I know it's not the most comfortable situation for you to be in, but this is why - we're here to help you and we want you to be as comfortable as possible and so we're going to get this done real quick so that it's over and let your nurse know so that next time hopefully it won't take quite so long. Each time we left she thanked us graciously for working with her and for caring. She, she truly felt that we had expressed that we cared and just giving her a little bit extra time and listen to what she said and not just ignored her comments, because that's very easy to do… It's almost like they wake up a little bit and, and either look or respond in a way that says oh you actually care and you want to know what I'm thinking or what's going on with me?

There was evidence of moral agency as expressed by caring and as socially negotiated action between this student and the patient. She related how she thought about a similar situation with *[patient with urinary incontinence*]:

> The patient was trying to communicate to me that she needed new pants and… a pad… So I guess it's just a situational judgment call that I'll make…. If I have the time and it doesn't look like the patient is going to be attended to immediately, then I'll take it; whereas if nursing looks like they're gonna be able to get to her

> relatively soon, you know… and I really feel like I need to keep going, then… I'll sacrifice that little extra delay that the patient will have to wait.

In this instance the constraint on action, the perception of time, was countered by her desire to care for the patient. There was socially negotiated action between the patient, nurses and Cathy.

When Rick summarized his interaction with the patient in [p*atient with tetraplegia*], compassion was important. As he said:

> I just tried to be as objective and sensitive to his desires and his ultimate goals, I didn't want to let the guy go away like "Crap, this sucks," but at the same time I wanted to be realistic with him. So I think I was, I don't know what the word I'd use, but just kind of like nice, compassionate, and compassionate but realistic

Many of the CIs described how the students demonstrated caring in a general sense. Anne provided an example of how she saw caring present among students:

> I think just being really attentive at what they're saying, you know, actually listening to them versus being so focused on the day's tasks, uh… explaining things well, patient education, uhm… a lot of eye contact, uh… you know, just her whole demeanor towards somebody, just uhm… you know, her body language towards somebody uh… is- is usually really good. … I guess generally one's posture, just being open, you know, not so shut off and uh… leaning for-- towards them, actually focusing on them.

Anne's description captures the subtlety of caring actions that might not be described in an interview. The desire to act with caring sometimes presented an ethical dilemma, as in the case of Cathy, or sometimes provided a basis for acting, as in the case with Rick.

Acts with Moral Agency Toward Patient and Family

In the times when the student chose moral agency and negotiated action with patients, several commonalities emerged from the interviews and discussions about how the social negotiation occurred. The students described interactions that I categorized as (a) telling, (b) bargaining, (c) patients choosing, and (d) negotiating and agreeing. Within

these categories, certain patterns of reasoning as the basis for their actions were evident among the students' descriptions of what happened. (See Figure 6)

Telling

There were two students who acted as moral agents in which they told the patient what the patient must do or what the student would do. Clinician-centered reasoning characterized these situations. Amy expressed a point of view about patients who did not arrive in physical therapy with clear goals for themselves. She said:

> I've actually-- …-- we've had a lot of patients who really don't know what they want either. Which kind of makes it- which kind of makes it a little bit easier, you know, for my part because I'm not trying to strive for, you know, "This is my goal."

In her description, once she learned the patient did not have specific goals for physical therapy, she saw an opportunity to tell the patient what the goals would be. In the case of [*massage not exercise*] Amy told the patient she had to discharge him. In this instance, her feeling was based on her view that:

> He didn't understand, didn't think it was that big of a problem and wasn't really willing to work on it

In this instance, her view of educating consisted of telling the patient what the problem was. In her interpretation, the patient did not understand what she told him, and his lack of understanding resulted in him not cooperating in physical therapy, so she discharged him. In these cases the patients did not exercise their right to autonomy and Amy thought she had the responsibility to determine what the patient needed.

> With one of the patients described in [*wheelchairs the patients want*], Rick said:
>
> He starts looking around and he's like, "Well, I want one of those. And oh, I want one of those." And I'm like, "Well, do you know what they are?" He was like, "No." I was like, "Well, then you really don't need one of those things."

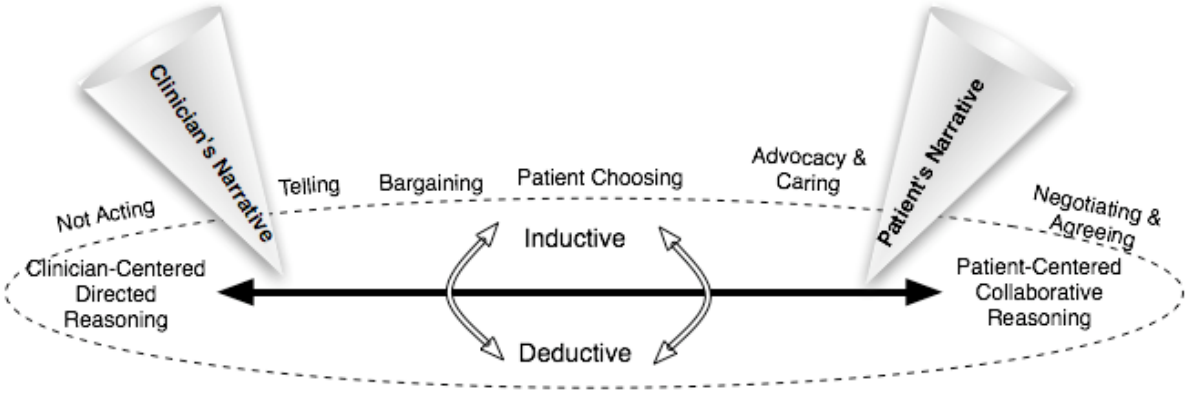

Figure 6. The ethical reasoning model including the students' actions as moral agents.

Rick told the patient what he would do based on his interpretation of the patient's actions and needs.

With another patient in that same case, there was a physician and vendor who were trying to convince the patient she needed a wheelchair with fewer features, but in fact she needed more features, so, as he described it:

> I told her just, "That's what I think you need and that's what you should get and that's what the prescription was for and that's what the physician signed off on and we signed off on." So I kind of left it at that with her.

He used an argument based on justice (the fair allocation of resources) in both cases: in the first situation, to deny a patient more resources and in the second to get the patient more resources. He did not describe collaborative, patient-centered reasoning, rather, he decided and told the patient what he would do.

Bargaining

Rick and Ruth described a process that I have characterized as bargaining with patients. Rick was dealing with the patient in [*keep appointments or discharge*], and he made a bargain with her:

> I just kind of fell back on kind of a reality check for her. I said there are people that wait months to get here and you just blew through four appointments where people could have been here. And I told her, "I was in the process of discharging you. I just forgot to do it yesterday and that's why you're here now half an hour late, or else you would have gotten a phone call saying all your appointments have been canceled." She was like, well my ride, blah blah blah. I was like, you know, I have a patient, he gets here two hours early all the time to his appointments because he knows [clinic's transportation system] sucks and it takes him forever to get here. You have to make a personal commitment if you want therapy.

In this scenario, they bargained his willingness to see her in physical therapy if she would agree to attend appointments.

In the case, [*will I walk?*], Ruth was working with one patient and said:

> he's had problems with his wheelchair tires have been under inflated since the first visit and every visit we've talked about it and it finally got to the point where a couple of weeks ago I just kind of said, you know, "you want us to order these very expensive long-leg braces for you but you don't take care of the stuff you already have"

I would describe her bargain as "if you want the expensive resources spent on you show us you deserve it, otherwise I won't order the braces." Both students used justice as an underlying internal guide and manipulative bargaining in their social interaction with patients.

Patient's Choosing

Amy, Luke, and Rick encountered situations in which they deferred the choice to the patient. Amy had two patients, each of whom she thought might benefit from one or two additional visits, but also could justify discharging them from physical therapy. In both cases she presented the options to the patient and let the patient make the choice. In her description of each situation she balanced a minimal impact on patient outcomes with respect for patient choice.

Luke confronted an issue of how aggressively he should try to convince the patient to participate in physical therapy in [*refuse treatment, get discharged*]. He recalled an internal conversation he was having as he was outside the room preparing to enter and decided she did have the right to refuse and if she did, he would respect her choice. She chose to participate, and because she was reporting that she felt tired, he adjusted his visit to meet her needs. Luke used procedural reasoning when considering the patient's right to choose and the payer rules governing the case and patient-centered narrative reasoning in his considerations about her fatigue and willingness to participate in physical therapy.

In the situation, [*polio and power scooters*], Rick learned the patients wanted power scooters because they thought it lessened the appearance of disability. In his clinical judgment, a powered wheelchair would be a better device for these patients. Because they "know what they want" and were diligent about assuring they could maneuver the scooter in their homes, he respected their choices. Rick described a patient-centered, collaborative reasoning in which he weighed patient autonomy and beneficence.

Negotiating and Agreeing

The most common form of socially negotiated action between patients and students was one in which they negotiated to reach agreement. Luke, Cathy, and Ruth described using negotiation to reach agreement with patients.

Luke discussed his role as a moral agent through negotiated action in the situation [*family with a four-wheel walker*]. He reasoned that the family brought it to the clinic because it might allow their father to get into the garden, an activity that gave him great enjoyment. The student chose to have the patient try the walker with the family present so they could judge for themselves whether that walker was best for their father. It was not the correct device, and the family was able to accept that. His use of patient-centered narrative reasoning was prominent within clinical reasoning that led him to believe little harm could come to the patient by trying the new walker.

Luke described [*is the patient faking?*]:

> I can't jump inside your body and go, you're not in any pain, stand up. … the ball's back in my court, I have to look you in the eye and say, okay you tell me that you're really hurting, uhm… that this is very difficult, now I have to come back and say, I understand all that, but we still, to get you to where you want to be, we have to do this, we have to do that, we have to do that in spite of those things. Uhm… so whether they're real or not I still have to do this and then I have to

> convince them and work with them to get them to do what I want them to do; but I … have to take … however they present and set it over here …and say, … I respect the fact that you're reluctant to do physical therapy or that your in pain, or that you hurt, can we still do this, and that's you know the only way I can look at it. You know whether you actually are or not let's refocus

In this situation he simultaneously demonstrated clinician-centered reasoning and patient-centered reasoning, both with clinical reasoning concerns foremost in his mind. There are internal processes and external processes at work and an element of providing the patient choice, via a question to the patient.

Ruth negotiated agreement with patients in [*will I walk?*]. She described it this way:

> I've actually shown him "This is where your score is, … so let's talk about how we make your arms stronger, how we increase your endurance, how we increase your VO2 max …so let's look at resources for you where you live…we're putting him in the braces and we're teaching him how to walk but at the same time … he's been sitting around for a year. So we've got to help him figure out how to get it back, and trying to give him encouragement but say "This is really hard work, and I know it's really hard work, this is not going to get you walking normally… it's going to be swinging your legs through and it's going to be very energy intensive and probably something that's going to take a lot of building up for you to be able to do it every day. But it gets you out of your wheelchair, and it gets weight-bearing for your legs, … I've told him I can't predict the future, "I can't tell if your muscles are going to come back and you're some day going to be able to walk normally, but this is the way you can walk right now… this is what I can teach you right now.

She also described this patient's history as a football player at a community college, his relationship with his father and his brother, and his adjustment to living with a spinal cord injury. In this discussion, she negotiated based upon clinical aspects of the case, incorporated narrative reasoning with a persistent focus on clinical aspects of the case, and tried to help him maintain hope, part of her personal narrative. She described a process of negotiation that relied on data and realistic optimism combined with placing responsibility with the patient as to whether the patient would reach the stated goals. Her

approach was consistent with her experiences as a child with visual deficits, the importance of self-advocacy, and her view of the importance of hope. With another patient in [*will I walk?*], Ruth had to discharge him from physical therapy. In that case she showed him the data from his tests, as she did with the previous patient, and discussed the ramifications. She said, "We kind of talked about this and he was okay with it."

Ruth encountered one situation, [*patient with fibromyalgia*], in which the patient declined to consider an option other than a power wheelchair. As Ruth concluded:

> In the end it was-- I mean, the only other option was to have her not be able to even get around her own home so at least with this device she'll be able to access that and, you know, she's going to have the best quality of life that she can have. It's just I don't feel that I did anything to-- I mean, I kind of maintained the status quo instead of helping her get better.

She had a primarily clinical reasoning focus in which the patient's function was the primary concern over her personal narrative of the impact of assistive devices on independence.

The final example comes from Cathy and her work with [*Christian Scientist and no treatment*]. Cathy confronted a conflict over a patient's right to decline physical therapy, a treatment that would benefit her. Cathy described a visit with this patient:

> She was sitting with a chaplain when I entered the room and … the chaplain, helped the patient to understand that me, as the physical therapist, had nothing to do with the medication because initially, when I came in the room, the patient did get upset. You know, "She's one of the ones I'm fighting with," when there had really been no arguments between the two of us up to that point … She wouldn't let me be present while she was doing [the exercises] after I initially taught them to her… the chaplain was really trying to adamantly express that me, as a physical therapist, I'm separate from everything else that she does not trust right now, trying to get at least some kind of positive relationship established again 'cause we did have a small one. It kind of comes and goes.

In this situation, the student and patient previously negotiated an agreement over what would meet the patients needs, and it was the chaplain, as a third party, who was able to help the patient gain trust in Cathy. There was evidence of collaborative reasoning in this situation.

Summary: Students' Social Negotiation of Action and Moral Agency with Patients

The last research question considered the relationship between the students social negotiation of action with their role as moral agents when faced with ethical dilemmas. The students chose not to act, adapted to constraints, acted as advocates, expressed caring, or directly negotiated action with patients. Within the final category, their actions occurred on a spectrum from telling through bargaining, giving the patient choice, and negotiating agreement. The students used clinician-centered versus patient-centered ethical reasoning approaches. (See figure 6)

Three students chose not to act, albeit in distinctly different situations. Each student discerned the presence of an ethical dilemma, but perceived limitations to action because of her role as a student. A desire to avoid conflict and a sense of inertia constrained action. The three students had little interaction with others when considering what to do.

The two students who chose to adapt within the constraints they perceived operating in the cases they encountered, did so using different reasoning processes. Luke made assumptions instead of engaging in a discussion with the patient and Ruth decided it was more important to get the proper wheelchair than to precisely follow the rules. Because she felt she was not able to act with complete veracity and meet patients' needs, she advocated to change the payer's rules to favor the patients.

Four of the students expressed moral agency through the role of patient advocates or facilitating the patient to act as an advocate for his or her needs. In the cases with Cathy, Rick and Ruth, each of them recognized and responded to the particulars of the individual patient's personal narratives. They did not describe collaborative reasoning with the patient that lead to the decision to act as advocates. Rather, in every case, their decision was based on the perceived moral principle or value at risk in the situation. In the case with Cathy ([*Christian Scientist and no treatment*]) and Rick there was extensive collaborative reasoning with their CIs as described in relation to the third research question.

Only one student explicitly described an ethical dilemma regarding caring toward patients. Cathy demonstrated sensitivity toward the two patients' personal narratives, collaborative reasoning, and a strong moral orientation toward caring. She recognized situations in which her desire and ability to care for the person could be compromised by time constraints from her schedule.

The students and CIs described a continuum of behaviors when students assumed moral agency and socially negotiated action with patients. With the three students who described telling or bargaining, there was evidence of clinician centered reasoning and an absence of collaborative reasoning with the patient. All five students described using processes of deferring choice to the patient or negotiating agreement with the patient. In all of these cases, there was evidence of collaborative reasoning with the patients. In each case when the student deferred the choice to the patient, the student respected the moral principle of patient autonomy over beneficence. In no case did the student describe making decisions that would have harmed the patient by virtue of deferring to

the patients' autonomy. Besides using collaborative reasoning, the three students who clearly described socially negotiated action and acted as moral agents also described being attuned to the patient's narrative in each situation. Respect for the patients' narratives informed the students' actions in these situations. Each student also used principle-based reasoning in each case.

CHAPTER 6: FINDINGS IN RELATION TO COMPLEXITY SCIENCE

Introduction

Complexity science, particularly the perspective of complex responsive processes (Stacey, 2001), is an important component of the theoretic framework for this research. Through data analysis and interpretation, findings emerged that are related to other aspects of complexity science. In this chapter, the findings are reported and discussed from the perspective of relevant aspects of complexity science. First, the findings are considered from aspects of complex responsive processes that emerged from the data, but are not directly related to discussion of the research questions that follows in Chapter Seven. The phenomenon of emergence is foundational to complexity science and is closely related to complex responsive processes. The findings related to emergence are considered following the discussion of complex responsive processes. Next, findings related to the students and their clinical instructors (CIs) as complex adaptive entities in far-from-equilibrium states are explored. Those findings lead to a discussion of dissipative structures and attractors, both of which were evident in this study.

Complex Responsive Processes

Recursive, Reflexive, Self-Referential, and Narrative Structure

Stacey (2001) makes the case that individual, reflective thinking of self-consciousness and social interaction among people are different aspects of the same complex interactive process. He described complex responsive processes as "recursive, reflexive, and self-referential" (p. 140) out of which new meaning, themes, knowledge and understanding of self emerge. Stacey also posited that in communicative interactions, people constantly create a narrative structure to their experience. From the

internal reflections on these experiences, including what the person did, is doing, and wants to do, people re-create their narratives to help them make sense of the world. Thus, they are constantly recreating their identity and reinterpreting their understanding of the world in these narratives. The research findings support his description of complex responsive processes and the role of narrative.

As examples of its recursive nature, Amy and Ruth revisited the concerns over patients who failed to keep appointments and what action they should take in their journals, descriptions of their reflections about their experience, and several discussions with their CIs. The importance of reflexivity was evident as all five students used reflective thinking about past events and how those shaped their future thinking and action. Sometimes, student's interactions were literally self-referential, as when Amy compared her participation level as a patient in physical therapy to some of her patients. Students who discussed their CI as a role model and who emulated the CI were envisioning themselves as the role model, also a self-referential process. When Luke described how he handled patients when he doubted their veracity, he based his perceptions on his own responsibility to accept the patient's behavior and statements as authentic. That self-reflection was focused inward to self, not outward to the patient. How these recursive, reflexive, and self-referential processes resulted in new meaning, knowledge and themes is discussed below. The students told the story of what happened to them in their discussions during the interview and also in their descriptions of how they thought about and reflected on their experiences. In some cases these narratives of their experience were told and re-told several times. The prime example of this was Ruth's relating her experiences of hope with her patients. She recounted her theme of

hope often during her interviews and in her journals. She related her past experiences of hope as a child to her present experiences with her patients, wherein she felt responsible for their hopefulness, and in her future imaginings as someone who wanted to preserve people's hope for improvement and achieving their goals.

Findings Applied to Five Features of Complex Responsive Processes

Stacey (2001) described ten features of the complex responsive processes perspective, five of which are germane to this research study. Those relevant features are: (a) identity and meaning emerge from interactions; (b) people communicate their intent to one another and in so doing establish cooperative ways of acting; (c) there is a simultaneous public-private dialectic at work in which action is directed inward to the individual and outward to other people (Stacey described this as two separate features. I have combined them into one feature for ease of explanation.); and (d) all action occurs in a historic context that enable or constrain current action. Examples of each of these are considered in this order.

The students' creation of their identity and the meanings they ascribed to their identity was evident in the findings reported in Chapter Four. As one example, Amy discussed her identity as someone who does the utmost to help every patient. She described processes in which her identity was challenged by patients who thought they knew what was best or who did not respond positively to the treatment she provided. She talked about a shift in her identity to someone who would not be "perfect," meaning someone who was always able to cure patients. Cathy discussed the importance of trustworthiness as being a responsible and dependable member of the health care team. Her identity as a trustworthy person gained meaning and was further defined in the case

[*Christian Scientist*] *and* [*no treatment*] and another time in [*nurses and blood pressure cuffs*]. For Cathy, the former situation also reinforced her identity as a member of a faith community and that identity reinforced her need to act. For both of these students, there were also concurrent internally directed and outwardly directed processes at work, consistent with the third feature of complex responsive processes.

The second feature concerns the communication of intent and through that communication of intent, cooperation between people occurs in sophisticated ways. Claudia described how an observation of Cathy's facial expressions when she saw a patient in jail custody led her to be sure the student had the opportunity to work with a patient in custody and communicated that intent to the student. Claudia allowed Cathy to create her own understanding of the experience and saw evidence of that new understanding when Cathy subsequently described her experience to her boyfriend. Rick and Rhoda each described the interaction with *[patient with tetraplegia]*. In this situation, Rhoda subtly communicated her intent to have Rick continue to be the primary person to interact with the patient while the visit occurred. Their descriptions provide evidence of the ensuing, subtle shifts in cooperation during the interaction among them.

The third feature concerns the public-private dialectic that is inherent in complex responsive processes and the inward and outward direction of action. The above examples from Amy, Cathy, and Rick and the specific findings in Chapters Four and Five provide examples of this feature. All five students described the private processes of thinking-in-the moment and reflective thinking. The situation *[patient with tetraplegia]* provides an example of the private-public dialectic that Stacey (2001) described. Luke's and Rick's descriptions of their internal processing about patients whose veracity they

doubted while simultaneously proceeding with the physical therapy visit provide another example of this dialectic at work.

The fourth feature concerns the historic context of interactive processes that enable or constrain action. Amy's identity as an athlete and former patient in physical therapy provided an important historic context for her. She noticed internal conflict when patients appeared not to give their full effort in physical therapy or did not seem to enjoy physical therapy as much as she did when she was a patient. She described the difficulty she had understanding the behavior of patients whose participation level was not what she expected based on her experience. As mentioned above, Ruth's history as someone who experienced health care practitioners' and educators' reactions to her as a person with a visual impairment and diagnosed learning disability influenced how she approached issues of hope with her patients. Her history influenced her opinion about the use of assistive devices, and several times during the interviews, she mentioned how an assistive device can be construed to decrease a person's independence not increase it. Another aspect of the importance of an historic context was evident in Luke's reflections about patients with limited numbers of visits and how that influenced his thinking and actions about patients who did not have such limits. In this case, the historic context was a much shorter time frame than those described by Amy and Ruth.

Espoused Values Becoming Functional Values

Another aspect of the perspective of complex responsive processes is the means through which espoused values become functional values through interactions among people. During these interactions, conflicts inevitably arise as to the meaning of that value in everyday action (Griffin, 2002). As part of a standard question, the students

talked about the values that were important to them in their practice as physical therapist (PT) students and, eventually, as PTs. In each case, the students confronted conflicts about those values in practice.

Amy described how patients are at the center of her work, including her desire to give each patient the best possible care. She acknowledged the conflicts that arose when patients wanted something that differed from what she thought was optimal care, as happened with [*massage not exercise*], even though she knew it was not the optimal treatment.

Luke stressed the importance of integrity, which he defined as "…wanting to do the best that you can…" He encountered a conflict around this value when he was to see the person in the case [*he has HIV infection*], and that caused him to pause and consider whether he could give that patient his best because of his biases about the diagnosis. He described an internal process through which he arrived at a decision to move beyond his bias and treat the patient in the way he would any person.

Cathy described honesty as an important value. Her ability to make that honesty functional in her practice was challenged by the case *[racially biased patient]*. She had to reconcile whether to be honest about how she was offended by his statements or to let it pass.

Rick also valued honesty in his role as a PT, and he described that honesty included being realistic with patients about their potential or what he was finding. In the situation concerning *[patient with tetraplegia]* that was described above and in Chapter Five, he confronted a conflict about how honest to be with the patient and wondered why he was the person who had to tell the patient that there was no potential for improvement.

Ruth expressed a value of hope and optimism for patients. She experienced a conflict about this value when she recognized biases she had when she set lower expectations for a patient with a spinal cord injury based on the patient's age even though his physical abilities exceeded those of younger patients. Through her interaction with younger, less able patients and her personal reflection, she learned how to be optimistic and realistic with her patients based on ability, not based on stereotypical views of age.

Emergence

Emergence is an important element of complexity theory. Goldstein (1999) defined it as "the arising of novel and coherent structures, patterns, and properties during the process of self-organization in complex systems" (p. 49). Emergent phenomena are commonly described as being greater than the sum of the parts. Stacey (2001) discussed the emergence of identity and knowledge through complex responsive processes among individuals and groups. He maintained that it was through the interactions themselves that meaning and identity emerged. Stacey discussed the importance of diversity and difference in creating transformative communication that leads to emergence.

Difference and Diversity

There were examples in this study where differences and diversity led to the emergence of new understanding. Rick treated a patient with gang tattoos who had sustained a spinal cord injury. His experience with this patient and his private reflections on that experience led him to new knowledge and meaning and a transformation of his identity. The same occurred when Ruth encountered a patient following a stroke with severe hemiplegia and who was Spanish-speaking. She discovered her prejudgments about this person were not consistent with her subsequent experience with him. She had

the unexpected realization there were strong parallels between the patient's and her grandfather's approaches to rehabilitation following his stroke. Luke confronted his bias about a person with HIV infection, leading him to new understandings about his fears and his responsibilities as a PT. Cathy faced biases about people in prison custody who required physical therapy, leading her to engage her boyfriend in a discussion about how they deserved the same care as any other person.

In each of these circumstances, new knowledge and sense of identity for each student was created through their private and public communication. When these separate findings and experiences are taken together, new understandings about the importance of experience, reflection, honesty with oneself, and the ability of people to overcome bias emerge that are perhaps more significant than any one of these experiences considered by itself, a feature consistent with the phenomenon of emergence.

Residuals

Residuals from the ethical dilemmas students dealt with can also be considered as emergent phenomenon. Residuals arose after the ethical dilemma was ostensibly over, but the students were left with hurt feelings, unmet expectations, disappointment or unanswered questions.

Amy dealt with residual feelings after *[patient refuses PT student]*. Another time, with [*eager patient misses appointments*], she did not follow the clinic's rules and called a patient to establish a new appointment following several missed appointments. In this circumstance she dealt with her residual feelings about breaking rules. Luke faced residuals about *[patients decline treatment]*. In his case the residual was concern for the patients' safety and whether he was as effective as he could have been as a PT. Cathy

reported residuals of dissatisfaction when, after discussing her concerns in [*Christian Scientist and no treatment*] with the physician, she learned the doctors were not going to change their treatment regimen. Rick and Ruth faced residual feelings of frustration and discouragement when patients were denied access to necessary services or the patient declined to receive necessary services.

From the students' perspective, these phenomena would not be predicted from the experience itself. The students reflected on their feelings about their experiences in the context of these residuals, and this reflective communication led them to emergent understandings of themselves as PTs. The findings related to these residuals and how the students addressed them are consistent with the novel nature of emergent phenomena.

Complex Adaptive Entities Far from Equilibrium

Complex adaptive entities are concerned with the macro patterns from interacting agents and are often studied via computer models using digital signals to simulate the emergent properties (Goldstein, 1999; Stacey, 2001). The foundational characteristic of complex adaptive entities is self-organization, the ability to be creative, self-generating, and adaptable (Goldstein). Stacey used the analogy of complex adaptive entities to explain how people, interacting in private and public, using symbols of language, gestures, and abstract thinking, are self-organizing entities.

High levels of nonlinear interactivity characterize complex adaptive entities with multiple positive and negative feedback loops among the agents (Richardson, Cilliers, & Lissack, 2001) As complex adaptive entities move far from equilibrium, the likelihood of frequent small events rarely having large effects or of the rare occurrence of catastrophic events are both possible due to system robustness (Kauffman, 1995;

Richardson, Cilliers, & Lissack; Stacey). In far-from-equilibrium states at the edge of chaos, a system must have stability to maintain itself and flexibility to allow it to organize and respond to changes (Taylor, 2001). System stability is preserved at the edge of chaos through redundancy, loose coupling, and the power law (Kauffman, 1995; Stacey, 2001).

Stacey (2001) provided examples of the application of each of these three properties in relation to interactive communication. He suggested that redundancy is evident in human communication in the manner in which people tend to repeat the same messages in multiple ways over time. Loose coupling suggests that people are able to create meaning from communication even though each particular word or concept might not be fully understood. There are two aspects to power law and stability to consider. The first is that change or improvement initially occurs rapidly as resources are committed to that improvement, but then change slows because it does not continue in a proportional, linear manner. The second is that there are few, large-scale catastrophic events and multiple, small events either of which could be triggered by similar sources (Kauffman). The first property is evident in the way in which people learn with large increases in learning on initial exposure that slowly taper such that additional resources do not necessarily result in proportionally greater learning. The second property is evident in human communication where small misunderstandings occur frequently and may cascade into unpredictable paths or may not be noticeable, while large-scale misunderstandings typically occur infrequently (Stacey).

The research findings relative to these three properties: (a) self-organization, (b) nonlinear interactivity, and (c) far-from-equilibrium states in complex adaptive entities

are explored. Examples from the research findings, particularly relative to the specific features of each characteristic are discussed.

Self-organization

Self-organizing entities are creative, self-generating, and adaptable. Len, when discussing how he prepared the student for a PT's responsibilities said, "…I think it's letting them go…letting them experiment and letting them learn the way they learn best." His approach to how he functioned as a CI is consistent with what one would expect of a self-organizing entity. In the situation, [*unethical wheelchair vendor*], Rhoda was adaptable in how she assumed responsibility for what had transpired in the past, yet ensured Rick continued to have responsibility with the patient. In this fashion, they negotiated action between them and each took responsibility for generating actions that would address the patient's needs and resolve the issue with the vendor. Ruth's description of how she dealt with patients in *[will I walk?]* provided several examples of the mutual creation of new possibilities within the communication between two complex adaptive entities. Cathy provided an example of the self-generated responsiveness when she described her interaction with the woman with leukemia who said to her, "…well, try dying for once." This patient's frank expression of her emotional state led Cathy to an in-depth exploration of her work as a PT with someone with a terminal illness, particularly of the meaning of caring.

Nonlinearity

Nonlinearity with positive and negative feedback loops is also characteristic of complex adaptive entities (Richardson, Cilliers, Lissack, 2001). While negative feedback loops are dampening with the intent of maintaining equilibrium or the status quo, positive

feedback loops are reinforcing, tending to increase actions. Several of the events these students encountered could be construed as nonlinear, including Cathy's interaction with *[Christian Scientist and no treatment]*, Ruth's time with the college-aged, former football player with a spinal cord injury, the episode Rick faced with *[unethical wheelchair vendor]*, the patient Luke worked in *[patients decline treatment]*, and Amy's encounter with *[patient refuses PT student]*. Each event took the student, and usually the CI, into unplanned areas that resulted in learning and helped the student reshape his or her identity. In the situation with Rick, positive feedback loops that included his indignation about the way the vendor acted and the impact those actions had on the patient, played an important role in his action. Rhoda also provided a positive feedback loop by maintaining his responsibilities with the patient and thus propelling him to advocacy and engagement with the patient. Ruth experienced the negative feedback loop of the scientific evidence regarding *[will I walk?]*. This loop dampened her enthusiasm with several of these patients leading her to question whether she was giving them false hope. With one patient among this group, she experienced positive feedback loops of the patient's enthusiasm, effort, his age, past athletic ability, and the parallels she drew from her experience with her grandfather's rehabilitation. Each of these reinforced her hopes for him to meet standards in order to begin gait training.

Far-From-Equilibrium States

The PT students functioned in far-from-equilibrium states. Their normative experience in the academic classroom setting is far different from the contextual learning that occurs in the clinical environment. Even though by the time they participated in this study, all of the students had prior clinical experiences, each of these clinical experiences

was unique. Additionally, these clinical experiences, as one of the last two in their entry-level education, occurred in the transition from being student to becoming a PT.

In this far-from-equilibrium state, students would be expected to exhibit stability and instability. The students experienced stability when the CIs supported their decisions. As an example, Rhoda affirmed the students were making the best decisions when they came to her for advice. When the students weighed whether they could provide optimal care to patients given their status as novice practitioners, the student's perceived ability, reinforced by the CIs' comments and delegated responsibility, also provided stability in an unstable terrain. Amy talked about how she confronted instability when she said patients must feel like "guinea pigs" when they work with students and Ruth talked about her uncertainty over how to adequately perform a diagnostic test with a patient. In these instances the students experienced stability and instability as they approached the patients they needed to care for.

Amy and Ruth commonly discussed how they drew upon past experience, either as a patient in physical therapy or as a granddaughter whose grandfather was receiving physical therapy. That historic stability assisted them through times they experienced instability with patients, for example when Amy had patients who were not participating in physical therapy in the way she expected based on her personal experiences as a patient. Luke was concerned in *[he has HIV infection]*, giving him an experience of instability. His recollection of his academic learning about the disease and his thinking about his values with respect to integrity with patients provided stability in an uncertain situation. That stability was countered by his fears about personal health risks and biases

about the patient's lifestyle that might have resulted in the HIV infection, thus introducing instability.

Redundancy, Loose Coupling, and Power Law Relations

In these far-from-equilibrium states the private and public communication exhibited redundancy, loose coupling and power law relations. Redundancy was evident when Luke and Len worked with patients in *[patients decline treatment]*. They had multiple conversations about how to handle the situation, Len stepped in and spoke to the patient about how her desires could be met so Luke could hear how he addressed those needs. Later, Luke addressed the same issue with another patient and then described his interaction to Len. Claudia's description of why she had Cathy work with a patient in prison custody provides an example of loose coupling. Claudia was very clear in her mind about why she arranged the experience, but was not explicit with Cathy. Claudia subsequently heard Cathy talk to her boyfriend about the experience. Cathy described what she learned through her experience in ways that were consistent with Claudia's intention, but reflected her own interpretation of her experience.

An examination of the types of ethical issues and dilemmas these student and their CIs experienced illustrates the nature of the power law. There were few large-scale events, such as *[Christian Scientist and no treatment*], [*unethical wheelchair vendor*], and [*patient with tetraplegia],* that challenged a student's ethical reasoning and action. These students experienced a multitude of small-scale events, those that might typify a PT's everyday experience in the clinic. Events such as patients who failed to keep appointments, patients who wanted a device or treatment that differed from what the PT thought was best, patients whose behaviors caused the PT to question the patient's

veracity, and concerns about limits on care by third parties were common. Kauffman (1995) described the power law in terms of grains of sand falling onto a sand pile. Most often, a single grain caused a small avalanche of sand down the pile and at other times, a single grain caused a large-scale avalanche. Much like the grains of sand, any of these events, a large-scale ethical dilemma or a smaller scale ethical issue, were triggered by the experience of a single patient, who, on the surface appeared no different than any other patient.

Dissipative Structures

Dissipative structures, those that consume energy, are a feature of complex systems functioning far from equilibrium (Richardson, 2004; Richardson, Cilliers, & Lissack, 2001). The energy differential between the complex adaptive entity and the environment can result in the entity maintaining itself within the system or making qualitatively transformative changes in itself. Dissipative structures were originally described in relation to thermodynamics and chemistry and are often characterized by bifurcations in which new energy states are available to the system in order to maintain stability (Prigogine, 1996). Even though they arose in the physical sciences, Prigogine held that dissipative structures and the "choices" at bifurcation points are of broad interest and "…can be considered the source of diversification and innovation. … We see that human creativity and innovation can be understood as the amplification of laws of nature already present in physics or chemistry" (p. 70-71).

The students functioned far-from-equilibrium and faced bifurcation points, places where they could not go forward on the same path, but rather had to choose a new path that required different energy levels. Cathy confronted two such situations and I will use

those to illustrate the application of the concept of dissipative structures in this research study.

In the case, [*nurses and blood pressure cuffs*], there were several aspects to the situation that she described in her journal and final interview. Ultimately, she chose a dissipative structure, a new energy state, in which she had to reflect on and address the conflict internally. She did not choose a new energy state in which she would have experienced an energy level that would have resulted from escalating her concerns to other people.

In the second illustrative situation, [*Christian Scientist and no treatment*], Cathy had to decide whether to raise her concerns about medical treatment for this patient. This situation is described more fully in Chapter Five. Once she realized what was occurring she knew she could not ignore it and moved forward to explore her alternatives and eventually took the action of discussing her concerns with the patient's physician. Her decision forced her to explore the ramifications and possible actions with supervisors, her CI, her boyfriend, and via self-reflection. As was reported in the findings relative to this student's moral role and values, this episode permeated her sense of what was important to her in her practice as a PT. In this case, she faced a bifurcation point in which she was faced with a choice to move to a new level of action that would require more energy or to ignore the situation that would require a different level of energy.

These two different situations with one student illustrated the nature of dissipative structures. It is evident that the student faced a choice and no matter what she chose, she had to confront the effect of her choice. She could not go back, only forward.

Attractors

Attractors were first described in mathematics and physics as probabilities of particular energy states occurring within a system (Richardson, 2005). These state cycles are attractors and can be mathematically modeled. In computer models of networked systems, multiple trajectories can flow into the same state cycle (Kauffman, 1995). Kauffman used the analogy of a lake and the water drainage system into that lake as an attractor and the basin of attraction. Some examples of attractors in general systems are point attractors (a pendulum coming to a stop with the force of gravity) or a torus attractor (a doughnut-shaped cyclical movement pattern). In a complex adaptive system the set of attractors evolves over time and many different attractors are possible at any moment. These attractor possibilities include strange attractors; the most commonly known strange attractor is the Lorenz attractor (Gleick, 1987). These attractors are another emergent property of complexity.

Stacey (2001) discussed attractors in relation to complex responsive processes and maintained they are constituted from the pattern of interactions that occurred, not from within the individual agents. Similarly, Dimitrov (2003) held that strange attractors correspond to new meanings that become reality in the experience of individuals with other people. Mathematically, in far-from-equilibrium states, strange attractors can lose stability and suddenly disappear, assume new shapes, merge, or split. Again, drawing a parallel to strange attractors, Dimitrov suggested that the possibility of new meanings occur when people are engaged in activities to develop deeper levels of understanding, characteristic of a far-from-equilibrium state.

If one considers the clinical internship as a bounded system, then there is one attractor state the students wanted to achieve: successfully completing the internship and becoming a PT. During these clinical experiences, the students described states of awareness that parallel attractors. These states sometimes resembled closed system attractors and others resembled strange attractors that arise in the search for new meaning. The reality of the internship experience is that there are multiple possible attractor states at any moment and the students moved on trajectories among those states, sometimes settling on attractor basins and sometimes on strange attractors.

In the findings on internal constraints in Chapter Four, some of those constraints seemed to enable the student to seek new meanings while others seemed to restrict that ability. Constraints, such as a student's perception that she preferred to avoid conflict, lacked self-confidence, lacked time, or did not wish to expend additional energy, all seemed to contribute to a student not seeking new learning. As discussed above, the students' perceptions of the limits on them in their role as students in the clinic also functioned as a basin attractor. These constraints resemble basins of attraction more like a point or torus attractor.

The students' values and virtues that they felt were important to their lives, such as honesty, respect for patient autonomy, justice, or faith, seemed to be enabling constraints. These constraints provided a foundation from which the student could explore new meanings. These values and virtues can be conceived of as the force moving the student on trajectories toward strange attractors, i.e. the search for new meaning.

The findings that concern the resources students used to reason through ethical situations illustrate the importance of reflection and student's internal questioning when

they thought in the moment as events unfolded. When students questioned what they should do or considered what was going on, they encountered the forces of strange attractors, leading them to new meanings and new ways of considering their actions. This occurred when students questioned (a) whether patients were being forthright; (b) what to do when a patient made disparaging, racially stereotyped comments; (c) what responsibility he had to provide physical therapy for a patient with HIV infection; or (d) what his role was in telling a patient the truth about his prognosis. In each case, the student came to a new understanding about himself or herself and made a transition to a different way of being with patients.

Summary

The perspective of complex responsive processes, as formulated primarily by Stacey (2001), formed a critical element of the theoretic framework of this study. Using Stacey's descriptions of the elements of complex responsive processes, there was evidence that the students' identity, meaning and knowledge emerged through their private and public interactions. There was ample evidence that the process was recursive, reflexive, and self-referential. The importance of establishing an intention to stimulate sophisticated cooperation, an ongoing public-private dialectic, and historic context to the communicative process was illustrated through examples culled from the research findings of this study. The importance of communicative interaction, in which the meaning of values are challenged during the clinical experience, is the means through which those values become functional and shape the identity of the student as a PT.

Other concepts from complexity sciences provide additional perspectives and understanding of the results of the study. The phenomenon of emergence provides an

understanding of the importance of a holistic, long-term view of the development of ethical reasoning among students in the clinical setting. The CI is instrumental in supporting the emergent nature of transformation and the social construction of meaning during the clinical experience. Diversity, difference, and residuals make important contributions to the emergence of what it means to be an ethical PT. Diversity and difference afford students the opportunity to confront their existing sense of identity and understanding of the people around them. When examining the research findings from the perspective of complex adaptive entities that functioned far-from-equilibrium, an appreciation is gained of the inherent forces of stability-instability and positive-negative feedback loops in the students' clinical experiences. The importance of the CI, as part of the complex adaptive entity, in fostering creativity, self-generativity, and adaptability was evident. Dissipative structures and attractors provide an appreciation of the constraints that influence student's ability to act when faced with ethical problems, including those forces that function as barriers and those that function as facilitators of action. An understanding of these two concepts helps portray the significance of a student's energy, effort and perception of time during the clinical experience as drivers of the choice to act affirmatively or passively through inaction.

The next chapter will discuss the findings from the research relative to the theoretic framework and the related literature. Complex responsive processes will be revisited from the perspective of whether it, and by extension, complexity science are sufficient to understand physical therapy students as moral agents. These findings related to complexity science will be reviewed and incorporated into that discussion.

CHAPTER 7: DISCUSSION

This chapter begins with a brief summary of the findings. I will then discuss the importance of the findings, including the relation of those findings to the literature. This discussion is organized by the order of the research question. Because the third, fourth, and fifth research questions were closely related, they are discussed together.

Summary of Findings

The ethical dilemmas the physical therapy students encountered during their clinical internships occurred within the common aspects of physical therapy practice that are encountered on a daily basis. The students and clinical instructors (CIs) used clinical and lay language, as opposed to bioethics language, to describe these ethical dilemmas. They reasoned through the dilemmas using internal processes, such as reflection, and via external communication with their CIs, other clinicians, family members and friends. These processes helped the students explore and interpret the nature of the ethical dilemmas and transformed their understanding of their experiences and their identity. There were patterns in how the students related to patients that can be characterized as a continuum between Buber's (1970) I-It on one end and I-You on the other. Where students fell within that continuum was associated with how they assumed responsibility as moral agents. Students who had tendencies toward the objectified stance of I-It used more clinician-centered reasoning processes and those whose stance tended to fall more toward I-You were inclined to use more patient-centered, collaborative reasoning processes. Most often, the CIs provided advice and consultation to the students when they acted as moral agents within ethical dilemmas. Occasionally, due to the complicated nature of the situation or to ensure that a patient received the best care, the CI stepped in

and acted as a moral agent in lieu of the student. The students exhibited a range of actions as moral agents with patients. They acted as agents by telling the patients what they could do, bargaining with the patient, giving the patient choice, and negotiating an agreement. Advocacy and caring were also expressions of moral agency. There were limited situations in which the student chose not to act.

Research Question One

The first research question in this study investigated the types of ethical issues the students encountered while on their clinical internships. I will discuss the findings in relation to the language the participants used to describe ethical dilemmas, the narrative structures the participants' used, and the nature of the ethical dilemmas they encountered, including ethical lapses.

The Descriptive Language Used for Ethical Dilemmas

While the ethical dilemmas these students encountered were categorized and considered in relation to the common moral principles and virtues of bioethics (Beachamp and Childress, 2001) for the purposes of reporting the findings in this study, the participants did not use the terminology of ethics to describe the ethical dilemmas. The participants described the events, conflicts, barriers to actions, and the people involved using clinical and lay language. This finding was similar to that of a study of physical therapists (PTs) (Finch, Geddes, & Larin, 2005). As noted in Table 6, the empiric studies investigating ethical issues in physical therapy tended to classify these issues in a clinical context. The nature of the ethical issues described in Table 6 are compared with the findings of this study below.

Table 7

Summary of Literature on Ethical Issues in Physical Therapy

Guccione (1980)	Triezenberg (1996)	Barnitt (1993, 1994, 1998)	Barnitt & Partridge (1997)	Greenfield (2003, 2006)	Carpenter (2005)
Choice to treat terminally ill patients			Choice to treat when patient competence in question		
Fiduciary responsibility concerning patient wants and patient needs		Priorities in treatment; difficult patients	Family demands for treatment	Goal conflicts between patient and PT; emotional support after goals met; patients don't adhere to guidelines	
Economics and third party payers	Fees, Fraud, Conflict of interest	Allocation of resources		Economics, financial constraints	Resource allocation
Health care practitioners (Reporting unethical)	Reporting ethical lapses of others	Unethical colleagues; Truth telling with the health care team	Disagreement among health care team members		Miscommunication among health care practitioners
	Clinical competence	Ineffective treatment,		Evidence in practice	Justifying care when there is little

Guccione (1980)	Triezenberg (1996)	Barnitt (1993, 1994, 1998)	Barnitt & Partridge (1997)	Greenfield (2003, 2006)	Carpenter (2005)
		efficacious treatment			evidence
	Patient rights (Informed consent, confidentiality, Bias, sexual abuse, limits of relationship)				
	Supervision of technical and support staff				

There were two instances in which the student readily identified situations as ethical dilemmas and placed them in an ethical framework. These were the situation Cathy encountered with [*Christian Scientist no treatment*] and Rick's experience with the [*unethical wheelchair vendor*].

The standard interview questions and guidelines for the journals avoided using terms such as ethical dilemmas or ethical problems until the third interview. That was an intentional design modeled on a previous study (Carpenter, 2005) to help the students and CIs think broadly about the nature of the ethical issues they faced and to reduce the cognitive impact of words such as "ethics" or "ethical." This way of framing the questions and discussion during the interviews and in the guiding questions for the journal may have contributed to the nature of the language the participants used to discuss the ethical dilemmas. During the third interviews, when I asked for the participants' descriptions of morals and ethics and specifically asked them to describe an ethical dilemma they encountered, some participants had difficulty responding as characterized by long pauses and frequent disfluencies and fillers.

Participants Use of Narrative Structure in Relating the Ethical Dilemmas

The students, and sometimes the CIs, told about the ethical situations in the form of a narrative. Cathy, Rick and Ruth showed a stronger tendency to relate the events as a narrative than the other two students. The summaries found in Appendix H do not do justice to the stories as told by the participants. Their stories had a beginning, middle and end, they discussed the characters that were involved, they talked about the events within the story, and they told the story from their perspective. These features are similar to descriptions in the literature (Gilbert, 2002). An interpretive narrative was the underlying

qualitative method in Greenfield's work (2003; 2006). The findings of this study suggest that students thought of the ethical dilemmas in a narrative framework consistent with complex responsive processes (Stacey, 2001). There was also a recursive nature to the narratives, with some participants recounting different aspects of the story over different interviews or in journals. Appendix H notes where the stories surfaced. There were also several incidents that were interconnected thematically and, when that was the case, the summaries in Appendix H include the various stories.

Depending upon the student, a patient's clinical presentation might have been an important feature of the description of the ethical case or a relatively minor part in how the student told the story about the situation. Students who had a tendency to place the patient in a broader social context, e.g. Luke and Cathy as described in the findings for research question three, were less likely to have the clinical aspects of the case figure prominently in their narrative. One study (Barnitt & Partridge, 1997) that compared PTs' and occupational therapists' ethical reasoning found the PTs tended to use a biomedical, clinical perspective when talking about the ethical dilemmas more often than the occupational therapists. The findings of the current study suggest that the person's professional practice may only be one factor relating to how PTs think about ethical dilemmas.

Nature of the Ethical Dilemmas

It is important to acknowledge the nature of the ethical dilemmas the students and their CIs encountered. Nearly all of the dilemmas revolved around the common experiences of student PTs in the clinic, such as (a) providing effective care to patients given the student was a novice practitioner, (b) how to negotiate what a patient desired

with what the therapist thought was necessary, (c) how to justify care given the limits from outside parties, (d) how to deal with patients who failed to keep appointments, and (e) how to interact with the patient who is suspected of not being forthright. These dilemmas represent the ethical aspects of everyday physical therapy practice. The two ethical dilemmas that Cathy and Rick experienced that they easily recognized as such were rare experiences for these students. In fact, these two students acknowledged that they finally had an ethical dilemma to discuss when they occurred. More typically, the students struggled to identify experiences that might have had ethical implications. As Glaser (2005) wrote, in a translation of Wittgenstein, "the aspects of things that are most important to us are concealed under their simplicity and their every day nature (One cannot notice the thing because it is always right in front of our eyes.)" (p. 172). These findings are consistent with the nature of power law relations in complex adaptive entities as discussed in Chapter Six (Kauffman, 1995; Stacey, 2001).

There are three areas of literature that merit comparison in relation to the first research question: (a) the ethical situations that student PTs face; (b) the ethical situations encountered by PTs and in rehabilitation settings; and (c) the ethical situations that nursing and medical students experienced.

The Ethical Situations of Student Physical Therapists

There were two studies that reported the ethical situations that student PTs faced during clinical experiences (Geddes, Wessel, & Williams, 2004; McGee & Ogger, 2000). McGee and Ogger classified their findings using the results from the study by Triezenberg (1996), as summarized in Table 6, and found the ethical situations matched his four categories. In many regards, the type of ethical issues reported by these authors

were similar to those reported in the current study. These similarities included the professional responsibility to respect individuals (patient-centered, holistic, and avoiding bias and stereotyping), allocation of resources, advocacy, and informed consent. The students in the current study did not witness ethical issues around derogatory comments from others as was reported in these studies.

Both sets of authors (Geddes, et al. 2004; McGee and Ogger, 2000) also reported what McGee and Ogger classified as "student issues," those that related to the unique aspects of being a student, such as lack of adequate supervision and negative role models from other clinicians. In this study, three students encountered PTs who were negative role models. McGee and Ogger reported on the ethical problems students had because of inexperienced CIs. Despite the inexperience of the CIs in the current study, that issue did not arise among the participants in this study. However, two student participants discussed prior clinical experiences in which they experienced poor supervision or quality of care by their CIs, a finding consistent with McGee and Ogger. The students in McGee and Ogger's study felt that the power and authority from the evaluative nature of clinical education was an ethical issue. In the current study, only one student discussed adapting her treatment to match those of her CIs while on a prior internship due to power issues. None of them spoke of the power and authority that arises from evaluation in clinical education.

The Ethical Situations Encountered by Physical Therapists and in Rehabilitation

It is instructive to compare the ethical situations these students faced with the literature on the ethical situations of PTs. Table 6 summarizes the findings of these studies by author and category of the ethical problem (Barnitt, 1993, 1994, 1998;

Carpenter, 2005; Greenfield, 2003; Guccione, 1980; Triezenberg, 1996). Two studies from the literature provided a list of the ethical issues confronted in multi-disciplinary rehabilitation settings (Kirschner, Stocking, Wagner, Foye, & Siegler, 2001; Redman & Fry, 1998). Consistent with all of the cited studies, the students encountered ethical issues that arose from policies of third party payers and the clinic's financial policies, but these policies and practices were not one of the most common sources of ethical problems the students encountered. An ethical issue the students in this study encountered that falls within the overarching issue of fiscal constraints on practice is the concern over access to care and justice issues that they encountered. The questionable practices of colleagues arose in one way or another in each of the studies cited above as it did in this study. The students in this study experienced other practitioners whose decisions negatively affected patient care or whose practices were of questionable clinical efficacy. Similar to most of the studies, the most common ethical issue the students encountered in this study concerned beneficence issues, such as clinical competence, balancing what patients or families wanted against what the PT thought was effective, and treating patients without bias.

One study (Barnitt, 1994) focused on truth-telling as an ethical problem, including not disclosing the diagnosis or prognosis to the patient, telling lies to protect the patient from distress, or telling lies to cover up for others or a variety of other reasons. One student had to deal with the ethical dilemma of telling the patient the truth about his prognosis consistent with Barnitt. The students confronted situations in which it appeared patients or others were not acting truthfully and had to confront the behavior

and their reactions to it. That latter ethical issue differs from the findings about truth telling that differs from Barnitt's study.

Only Triezenberg (1996) mentioned the ethical problems associated with informed consent and patient confidentiality. The students in this study faced issues concerning informed consent, primarily with patients consenting to be seen by the student. These findings about soliciting and receiving informed consent from patients for students to provide physical therapy care were similar to the findings of another study (Delany, 2007). In that study, the process of informed consent was thought of as providing the patient explanations rather than offering the patient a choice of treatment. In this study, the process of consent was more explanatory in nature in the way the CI introduced the student to patients, not one in which the patient was offered the choice.

Four studies identified ethical issues that were not observed in this study. Triezenberg (1996) reported on the ethical issues surrounding supervision of PT assistants and unlicensed personnel. Kirschner, et al. (2001) reported a similar finding plus the use of group therapy models. Given the settings in which the students practiced and their role as students it is not surprising these students did not encounter these issues. The CIs in this study did not discuss issues about delegation to support personnel as an important element of their practice and none of the sites where the clinical internships occurred were amenable to group therapy models. Two studies (Carpenter, 2005; Greenfield, 2003) reported the issue of justifying care where there is little published evidence for that care. While two students discussed past CIs who did not seem to use the literature, no student described an ethical dilemma based on the conflict reported in those studies.

There were two studies that focused on caring and the ethos of PTs (Greenfield, 2006; Stiller, 2000). These authors reported that caring and helping are integrated into PTs' practice and are integral to their moral orientation. While the ethics of care were not a particular focus of this research there are findings that support its importance in the practice of PT students. The students all described an orientation toward providing the best possible care as an important moral orientation. All of the students described actions that could be described as constituting caring practice. In particular Cathy described two situations in which caring practices were evident that are not considered part of the normal scope of work of PTs. All of the CIs described people who entered physical therapy as having an orientation toward helping and described behaviors among the students that they characterized as caring. Caring has been described as eye contact, touch, a telephone call to see how the person is doing and other simple acts (Phillips & Benner, 1994). These acts are physically oriented or perhaps too subtle to be evident in journals, interviews and focus groups, but would be evident in field observations.

The Ethical Situations of Medical Students and Student Nurses

The studies involving medical students typically involved large numbers of students and were survey studies or analyses of written journals or case reports. These studies reported a high prevalence of ethical lapses among medical students, residents and attending physicians. The small, purposive sample of PT students most likely was one reason there was not the same scale of ethical lapses evident in this study. No similar, large-scale studies of PT students have been conducted. The findings from medical students that are of note relative to this study concerned medical students' fears about speaking up given the hierarchy within which they worked, decision making in

ambiguous situations, and conflicts between the goals of medical education and patient care (Christakis & Feudtner, 1993; Hicks, Lin, Robertson, Robinson, & Woodrow, 2001; Homenko, Kohn, Rickel, & Wilkinson, 1997). The student PTs in this study experienced each of these issues.

There was only one study in the literature regarding student nurses and ethics that was similar to the findings in this study. Cooper, Taft, and Thelen (2005) reported ethical issues related to how families and patients influenced the care that could be provided and patient autonomy.

Ethical Lapses

Ethical lapses have been reported in the literature about PTs (Barnitt, 1993, 1994, 1998; Barnitt & Partridge, 1997; Guccione, 1980), physical therapy students (Takahashi, 2004), nursing students (Lemonidou, Papathanassoglou, Giannakopoulou, Patiraki, & Papadatou, 2004), and medical students (Bissonette, O'Shea, Horwitz, & Routé, 1995; Feudtner, Christakis, & Christakis, 1994; Hicks, Lin, Robertson, Robinson, & Woodrow, 2001; Homenko, Kohn, Rickel, & Wilkinson, 1997). The ethical lapses among the students in this study were lapses of choosing not to take action despite the discernment of ethical issues, i.e. lapses in moral courage (Rest & Narváez, 1994). These ethical lapses will be discussed below in relation to research questions three, four and five. It could be that the small sample size and the nature of the purposive sample make it more unlikely there would be ethical lapses. It is possible that ethical lapses occurred, but the students hid them. The fact that the students disclosed their biases, their choices not to act when faced with ethical dilemma, and their frustrations with several situations

suggests that they were forthright with their experiences and would not intentionally conceal ethical lapses.

Research Question Two

There were two key patterns in how the students reasoned through the ethical issues they confronted during their clinical experiences. As Stacey (2001) described, there were private, internal communicative processes and external, social communicative processes, which were different aspects of complex responsive processes. These different aspects of the students' ways of relating are illustrated in Figure 7. When considering the students' descriptions of their internal processes, particularly their thinking-in-the-moment, the students would describe it as an internal monologue and read like a conversation with self.

As Stacey described, the internal processes tended to be more inwardly directed while the external processes were publicly, or outwardly, directed. I will first discuss the internal processes and the related literature and then the external processes and the related literature.

Internal Processes

The students used reflection and thinking-in-the-moment to explore their feelings, the interpretation of their values and morals in the context of the ethical dilemmas, and their self-perceptions. Because the ethical dilemmas occurred in a clinical context, the students also reflected on clinical aspects of the case, such as assuring a patient's safety or the goals that the student was setting. In this way, the internal processes contributed to the students' formation of their identity and contributed to their creation of meaning from their experiences.

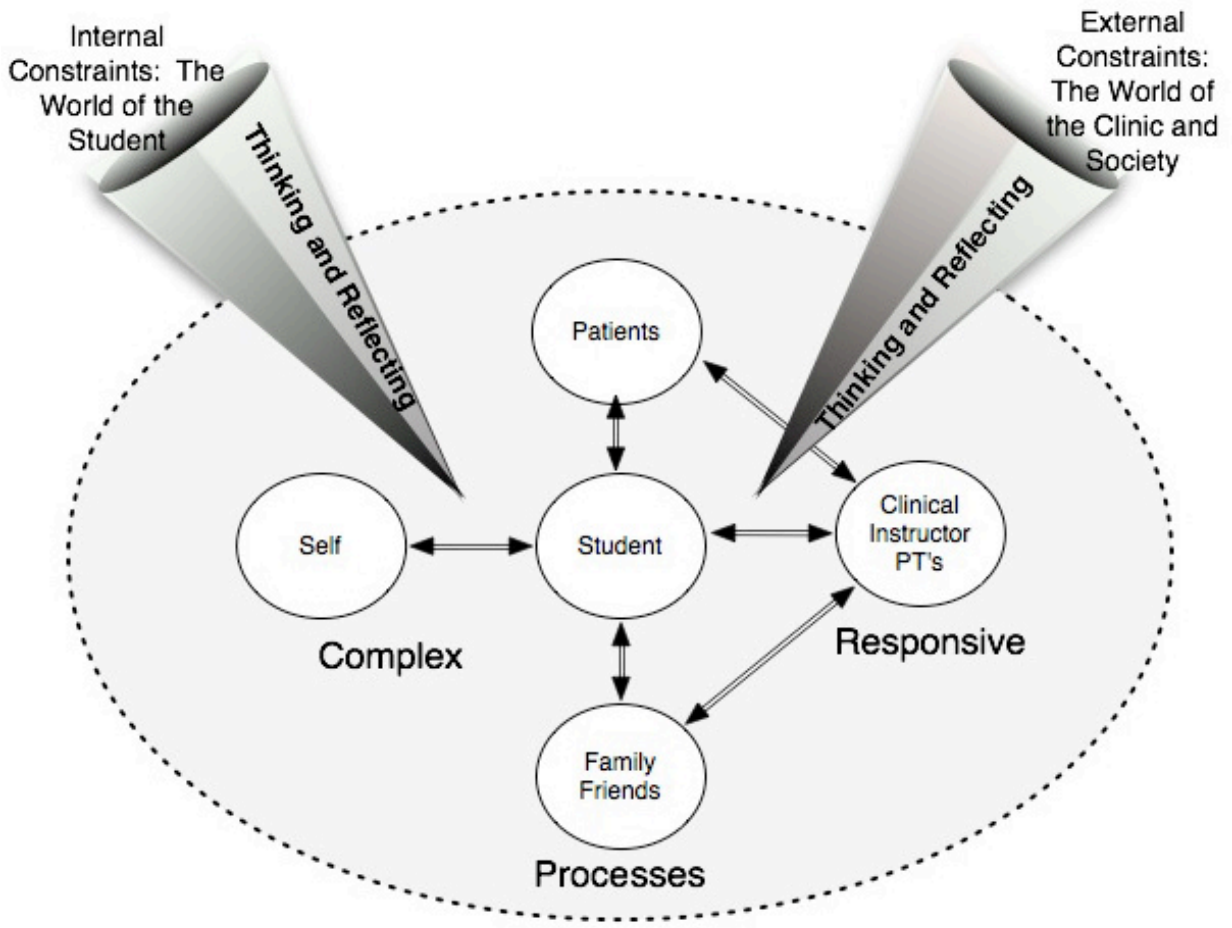

Figure 7. The nature of the complex responsive processes of relating in which internal and external constraints are brought into the students' internal communicative processes with self and external communicative processes with others (Stacey, 2001).

During their internal processes, primarily reflection, students discerned something was amiss that required their attention. Often, these triggers of discernment were the students' feelings, such as frustration, alarm, suspicion, doubt, confusion, or sadness. If they said they felt a conflict, it was described as a vague, nearly intuitive sense, that something was wrong. These findings are consistent with an article that discussed the importance of emotions in moral reasoning (Greenfield, 2007) and are consistent with other research (Barnitt & Partridge, 1997; Mostrom, 2005). While Stacey (2001) wrote that these private processes were more often self-directed, the students took note of patients' feelings, and then, in a self-reflexive fashion, noticed their reactions to those feelings.

It was through these internal processes that the students explored several aspects of their identity, including those that served as constraints to their action. The students took note of the moral values and virtues that were important to them in a contextual manner. They reflected on and thought about what it meant to be honest, trustworthy, or to have integrity, when they faced challenges to their ability to act consistently with those values in the face of ethical dilemmas. How they related their past experiences to the current situations was evident in their reflections, a finding consistent with a study of PTs (Barnitt & Partridge, 1997). They also confronted their biases through internal thinking and reflecting. It seemed as if the students did not have an identity as someone with biases. When they experienced themselves feeling biased toward a patient, it was an important incongruity with their identity that they had to reconcile. The students described internal conversations and reflecting in which that reconciliation occurred. McGee and Ogger (2000) reported a similar finding in regard to recognizing and

responding to bias about patients, but did not describe the transformative process the students in the current study described. Students confronted their self-perceptions, such as confidence, uncertainty, or hopefulness, through these internal interactions. The students also explored the question, "What should I do?" via these internal processes. They questioned themselves, reflected on the actions of others, and made judgments about the course of action they would take. This study extends the limited findings about PTs to PT students and provides new understanding about the importance these internal communicative processes play for PT students' ethical reasoning.

The other internal constraints that they explored in via their internal communicative processes were the energy they had to invest in the situation, and their perceptions of power, authority, and responsibility. While they discussed external constraints, such as payment policy, most often with their CIs, they used internal processes to reflect on the meaning of those constraints and how they affected their practice. As discussed in Chapter Six, both reflection and thinking-in-the-moment sometimes functioned to create basin attractors (Kauffman, 1995), holding the students in a place of inaction based on their internally mediated interpretation and understanding. At other times, they functioned to create strange attractors of the search for new meaning (Dimitrov, 2003; Stacey, 2001). Their internal communicative processes primarily took on a self-reflexive, internal nature as described by Stacey, but also served as a means by which the external world was brought into the student's world, e.g. when students reflected on patients' feelings or when external constraints were introduced by CIs.

There were two studies that included findings relative to reflection in ethical dilemmas students face (McGee and Ogger, 2000; Mostrom, 2005). McGee and Ogger's

findings in this regard are mentioned above. Mostrom included data from journals in which students reflected on their feelings, those of their patients, and what they learned about themselves during their clinical experiences. These reflections resemble those in the current study. Neither study analyzed the role these reflections played in the student's ethical reasoning. Jensen and Richert (2005) used reflection to explore students' learning following encounters with standardized patients enacting ethical scenarios, but those were reflections on their learning following the encounter. One study found that thinking and reflection played an important part in PT students' professional socialization during clinical experiences (Plack, 2006). That study did not examine ethical dilemmas. Given the absence of literature noted above, this study provides new information about how PT students use external and internal resources as they reason through ethical dilemmas. This study also provides an important starting point for further investigation of these aspects of ethical reasoning among students and PTs.

External Processes

Students' also used external, social processes to explore their reasoning. The CIs were the external resource they used most frequently. They also relied upon other PTs, family members, fellow students, and the literature or their classroom learning. PTs and practicing clinicians in rehabilitation settings used peer interaction and consultation (Finch, Geddes, & Larin, 2005; Redman & Fry, 1998; Wise, 2000). The studies that examined nursing and medical students found they consulted with their clinical supervisors (Cordingley, Hyde, Peters, Vernon, & Bundy, 2007; Homenko, Kohn, Rickel,

& Wilkinson, 1997; Kelly, 1992; Turner & Bechtel, 1998) and their peers (Cordingley, et al.; Kelly; Bechtel & Turner).

In the current study, the CIs first choice was to guide the student toward action instead of telling the student what to do or stepping in and acting on their behalf. The CIs said one of their core purposes was to help the students learn to make independent decisions. Other PTs were either substitute CIs on the regular CI's day off or served an advisory capacity because of their special expertise or supervisory role. Family members and classmates provided support and an outlet for the students to express their emotions and feelings about their clinical experience a finding similar to that of Wise (2000) in physical therapy and Kelly (1992) in nursing.

The interactions with CIs and other PTs served exploratory and interpretive purposes. They provided advice and consultation to help the student explore what actions they might take and what resources were available. The students explored external constraints on their action through their CIs and other PTs. These external constraints included third party payer rules and clinic policies and the environmental context of the clinic.

The CIs also functioned as role models for the students. Role models were important for student PTs (Mostrom, 2005) and nursing students (Kelly, 1992). The way in which the CIs and students described the CI as a role model could also be considered exploratory in nature. They both said that, through role models, students learned (a) how to interact with patients, (b) how to communicate to patients about specific topics, such as third party payment procedures, and (c) how to apply what they observed in different situations. The CIs said they wanted the students to observe how they listened to

patients, demonstrated caring, and advocated for patients. The CI and other PTs served an interpretive purpose when they gave advice based on their expertise, for example when they were helping the student understand a complicated problem. They also helped the student interpret the social or cultural phenomena that were important in the situation. When the CI or other PT acted in lieu of the student, either the situation was complicated and the CI had prior experience with it, or the CI noticed the student was hesitant and unsure of what to do and it was effecting the patient. The CI tended to act in lieu of the student earlier in the clinical experiences. Like the family members and classmates, the CIs, also served a supportive role for the students or consoled them when necessary, but the CIs did this with much less frequency than they provided others types of guidance and than what the students received from family members and fellow students.

With the exception of support and consolation, the CIs tended to provide procedural and pragmatic advice that was action oriented. The support and consolation tended to be statements from the CI, as opposed to questions posed to the student, e.g. "how are you feeling about this?" As one student remarked and was evident in the data, the CI and student did not have in-depth explorations of the ramifications and subtleties of the ethical situations they were facing. Several students said the research interviews were unusual because they afforded the opportunity to talk about the ethical issues in depth.

The students recalled classroom learning and the literature in ethical situations, but it served a narrow focus. With one exception, these students used these resources to understand the clinical aspects of the ethical situations they faced. An example was Luke's recall of his learning about HIV infection. One student mentioned how her class

in ethics helped her discern the need to act in a situation. Cordingley, et al. (2007), reported that medical students consulted written materials to help them with ethical situations.

Resources notable for their absence in the students' ethical reasoning were the American Physical Therapy Association (APTA) Code of Ethics and academic faculty members. Cathy mentioned the importance of the APTA "motto" of "do no harm," in reality a misstatement because the APTA does not have a motto. Anne mentioned the APTA Code of Ethics in a general way in relation to her thinking about ethics and morals, but not in relation to specific situations. The PTs in one study reported they consulted with experts at the APTA when confronting ethical issues (Wise, 2000). No student or CI mentioned consulting academic faculty members, including the person on faculty who serves as the academic resource during the students' clinical experiences.

The students in this study used similar external resources as those described in the literature. This study expands the understanding of the purpose and nature of the advice and consultation these students received beyond what is found in the literature. The existing literature in physical therapy or with nursing students and medical students does not delve into the purpose and nature of the resources student PTs or PTs use while reasoning through ethical dilemmas. I was unable to find literature that addressed the internal processes students or PTs use to reason through ethical dilemmas. In this regard, this study provides new information about how PT students use these external and internal resources as they reason through ethical dilemmas. It also provides an important foundation for further investigation of these aspects of ethical reasoning.

Research Question Three, Four, and Five

In this section, I will first analyze the relationship between the continuum of I-It and I-You (Buber, 1970) and ethical reasoning described with research question three (see figures 3 and 5) and what that relationship suggests about moral agency. I will then discuss the particular nature of the relationship between the CI and student in fulfilling the role as moral agent. I will conclude with a specific discussion of the findings from these three questions in relation to the literature.

Buber and Ethical Reasoning

As it relates to the third research question, I reported there were two corresponding continua evident: one corresponding to Buber's (1970) I-It and I-You and the other corresponding to clinician-centered and patient-centered approaches to ethical reasoning. Students who had a tendency to approach their patients more closely to Buber's I-It also had a tendency to use clinician-centered approaches to ethical reasoning and those who tended to fall more closely to Buber's I-You had a stronger tendency to use patient-centered approaches. The findings from research question five suggested that there was a continuum of action the students took with patients in their roles as moral agents. This continuum, going from telling the patient what to do at one end, corresponding to I-It, through negotiating agreement at the other, corresponding to I-You. Thus there appears to be a relationship among these three continua (see Figure 8).

The question remains, though, as to what the relationship between these continua is. I will make the case that the findings from the final four research questions, beginning with a consideration of how the students used internal and external resources when reasoning in ethical dilemmas through these last three questions, provide evidence that

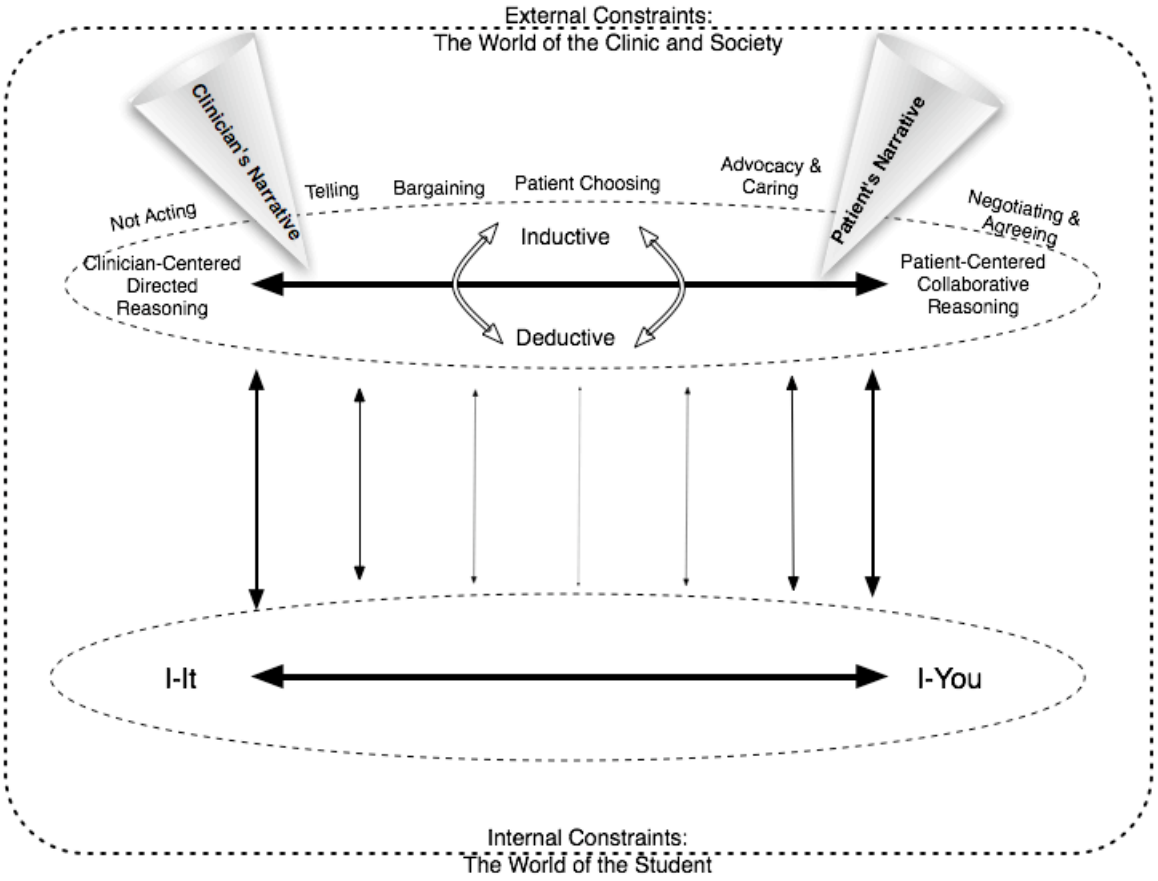

Figure 8. The relationship between the continuum of I-It through I-You and the ethical reasoning continuum occurring in the context of the internal and external constraints.

the perspective of complex responsive processes provides the connection. However I will argue that the perspective of complex responsive processes is not sufficient to explain the ethical behavior of these physical therapy students. To make this argument I will first consider complex responsive processes of relating and Buber in relation to ethical behavior among the students, then I will consider the special case of bias, and finally I will discuss the findings relative to unethical behavior.

Complex Responsive Processes, Buber and Ethical Behavior

The findings of this study imply that complex responsive processes of relating are epistemic, while the ethical foundation for behavior is ontological. The findings from this study suggest that Buber's *I-Thou* (1970) provides the ontological foundation for the students' ethical comportment. Extending the argument to the cases of bias and unethical behavior leads to a deeper understanding of the relationships among Buber, the perspective of complex responsive processes of relating, and moral agency within the context of this study.

Stacey insisted that complex responsive processes of relating provide the necessary explanation for ethical action. He maintained that cooperation, interaction, and identification with another person occur through the private and social interactions among people and lead to a social construction of the person's sense of self in relation to society that underlies ethical action. Concerning unethical conduct he wrote:

> What of competition, aggression, and downright refusal to cooperate? What about unscrupulous acts of communication to secure individual interests at the expense of the collective? What about joint destruction and the incredible cruelty humans are capable of? What about abusive relating? *Any explanation that does not encompass these widely experienced destructive aspects of human action, is, I think, of little use.* [Emphasis in original] (Stacey, 2001, p. 147-148)

Thus, Stacey argued that complex responsive processes of relating provide the explanation of ethical and unethical behavior.

Stacey wrote that the nature of human interchange is characterized by turn taking, whether it occurs in individual minds or during interactions between people. He emphasized that the nature of the interaction occurs in a distinctly historical and personal context that is unique to each interaction based upon the unknown or unexpected responses of people to one another during the interaction. He maintained that ideological themes, such as formal authority or social norms, govern who may and who may not take a turn, and leads to inclusion and exclusion. Within Stacey's formulation, in order for the interaction to continue, people must be accountable to one another. Thus, mutual accountability and turn taking make power both an important enabler and a constraint during interactions. He contended that inclusion and exclusion are the inevitable result of all human interaction resulting from the ubiquitous power relationships inherent in communication. Stacey insisted that categorizing people into the excluded or included membership groups is an integral part of the pattern forming processes in communication. People create power relationships in their private, reflective thinking and in public interactions with others. He concluded that a person feeling the threat of exclusion would experience "existential anxiety" (p. 149) and trigger the means for that person to deal with the anxiety. Stacey's main concern was groups of people that experience exclusion dynamics, and he concluded that there are emergent communication patterns that are socially unconscious and self-organizing that lead to socially manifested exclusion dynamics. In his formulation, patterns of exclusion dynamics result in categorizations that emphasize differences and minimize similarities among the groups

involved. Stacey concluded that these emergent phenomena from communication patterns in groups explain the destructive aspects of human interaction.

As Stacey suggested (2001), the students in this study enacted their history and continuously considered and reformed their identity through their internal and external communicative processes (see Figure 7). However, the findings relative to how the students approached their patients, as described in research question three, suggested there is an underlying stance toward patients along a continuum of Buber's I-It and I-You that was an emergent phenomenon. That is, their underlying stance was greater than the sum of the parts contributing to these students' conceptualization of their approach to patients, and was not consciously considered by the students through communicative processes. In the analytic framework that I used for this study, there were four characteristic patterns that were evident in how the students related to patients. The students described all forms of communication, including their thinking, conversations, and actions that could be characterized according to these four patterns. Given the researcher's perspective, I could assemble those patterns into a coherent whole that the students did not conceptualize. I suggest that this conceptualization was not part of their conscious sense of identity, but was evident in their communicative interaction. Even though I asked them to talk about how they viewed their relationship with patients, the responses were characterized by descriptions of whether it was a friendship, spending time and listening, social banter, and serving the patient's interests in life by helping them meet their functional goals. Those underlying, unconscious perceptions reflect a stance that corresponds to Buber's understanding of relationship and provide the ontological basis for understanding students' ethical behavior.

It is from this stance that the students then proceeded to act ethically as moral agents, with differences in how they reasoned through their responsibilities as moral agents that corresponded to their underlying ontological stance toward patients, vis-à-vis Buber. When acting as moral agents, there was clear evidence that through complex responsive processes of relating, both private and public, the students' identities as moral agents emerged and had meaning. The perspective of complex responsive responses provided an epistemological basis for the students' role as moral agents. These communicative processes were evident in how they reasoned through internal and external constraints, negotiated action with their CIs, and acted as moral agents with their patients in the face of ethical dilemmas (see Figure 9).

The Case of Bias

I will now turn my attention to the special case of bias among the students. In this study, from the PT students' perspective, the "other" they most frequently encountered was the patient or the CI. The potentially destructive communication of stereotypes and biases was evident among all of the students relative to patients. As examples, recall that Amy described bias toward patients who did not participate in physical therapy (though she was the one student who did not recognize it as such and, as a result it was not reported as such in the findings), Luke described bias toward a patient with HIV infection, Cathy described bias toward a patient making racially derogatory comments, Rick felt bias toward patients with complex problems and who seemed to behave dishonestly, and Ruth expressed bias toward patients with a particular diagnosis. With the exception of Amy, each student described internal processes that led to recognition of

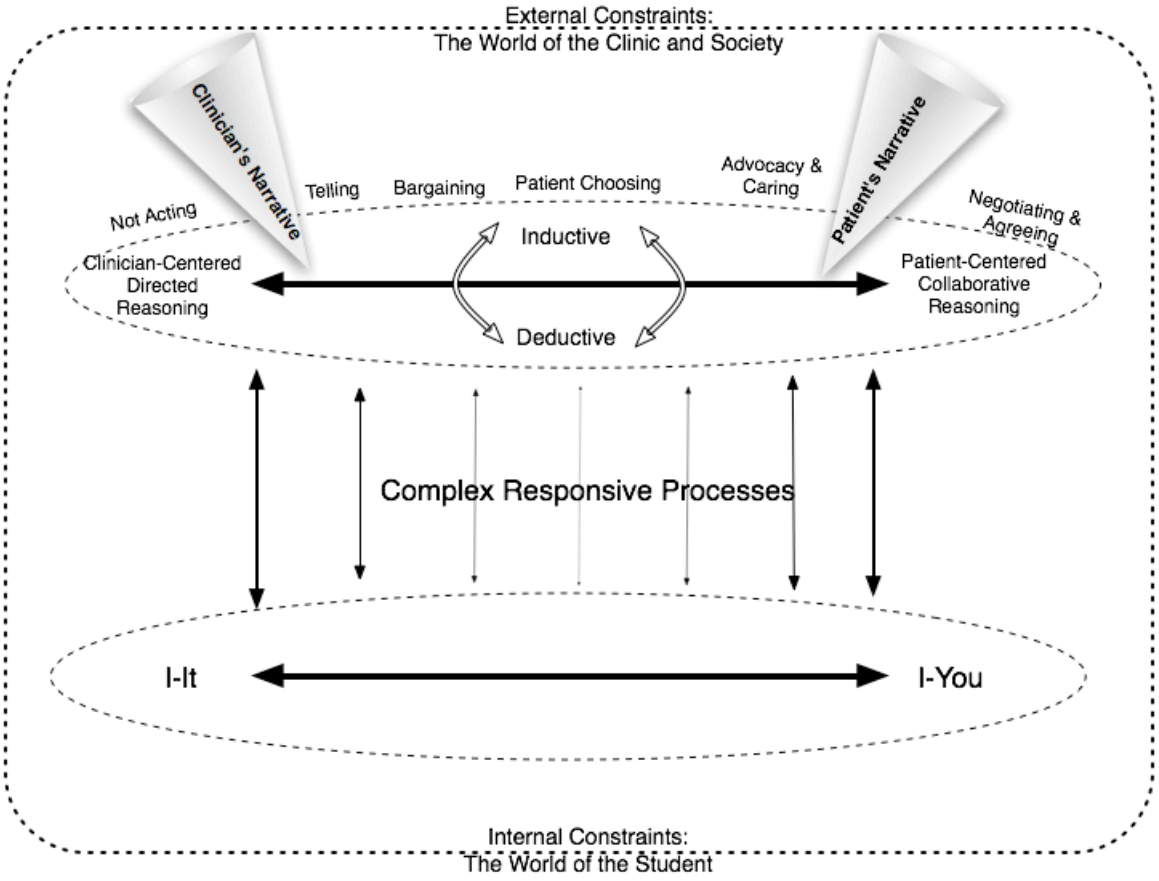

Figure 9. Complex responsive processes as the connection between the continuum of I-It and I-You and the continuum of ethical reasoning.

their bias and described the way in which they made choices to set the bias aside and provide the care the patient required. In each instance, these four students underwent a transformation in which he or she recognized the patient as a unique individual with whom they had entered a relationship. This transformation is consistent with a shift from I-It to I-You in Buber's formulation (Buber, 1970). Amy did not describe a similar internal transformative process in relation to patients who did not participate in physical therapy in ways that met her idealized expectations. She maintained the objective stance toward patients, in which the patient remained the separate "other" with whom she could not identify to gain new understanding.

Stacey (2001) maintained that when a person or a group of people experience exclusion dynamics, there are socially unconscious and self-organizing patterns of communication that emerge. These patterns serve to emphasize differences and minimize similarities among the groups involved. In Stacey's formulation, bias, stereotypes, and power would be a result of complex responsive processes of relating.

I would suggest that the context of this study precluded exploration of the question of whether socially unconscious and potentially destructive human behavior of bias can emerge as a result of complex responsive processes of relating. The most likely explanation is one of scale. These students were functioning as individuals within a context of working with a single PT, within a group of PTs in the clinic, and within a broader group of health care practitioners and patients within the clinical setting. Thus, the students, as the primary focus of the study, did not have the opportunity to interact with other students within the environment, and thus it was not possible for the types of exclusion experiences, power, and emergent phenomena that Stacey described to

manifest themselves. When looking at the individual, it would seem the underlying ethical stance provided an explanation for the observed bias and resultant behavior.

The Case of Unethical Conduct

The final consideration in this section is of students who acted unethically. In this study, there were students who chose not to act when faced with ethical dilemmas, a different behavior than acting unethically. Acting unethically implies intentional wrongdoing from an ethical stance, i.e. succumbing to moral temptation. Choosing not to act implies a lack of moral courage when the opportunity exists to act ethically. None of the students acted unethically, but three students chose not to act when confronted with an ethical dilemma. Given the absence of unethical behavior, this analysis will proceed using the situations in which students chose not to act. As described in Chapter Five with research question five, Amy, Cathy, and Ruth all reported situations in which they discerned an ethical dilemma and chose not to act. Given that Amy and Cathy fell into this group, and tended to fall toward opposite ends of the continuum with respect to I-It and I-You, leads to the question as to whether the explanations of ethical behavior in terms of Buber hold true when choosing not to act with moral courage when faced with an ethical dilemma. In each of these cases, the student chose not to act based upon her constructed identity as a PT student, including her perspective of power and authority, through internal reflection and thinking. In Cathy's case, she interpreted the relationships between nurses, physicians, and PTs, via communication with them and observation of the way in which they interacted. These students constructed their identity and created meanings via internal communicative processes and, in Cathy's case, in external communicative processes.

In these cases, complex responsive processes provide an explanation for the students' behavior of not acting ethically. Their socially constructed identity, the historic context, and the meaning they ascribed to the events led them to defer acting, even though they saw the benefit of acting and could evaluate the results of that action. This analysis is limited by the absence of unethical behavior among the students in this study and it is based on findings associated with three students. These findings are also consistent with the case reported by Bella (2006), in which a scientist's participation in biochemical weapons research was explained via emergent phenomena in his interaction with other scientists in the research lab and the acknowledgement he received for his work. Bloch and Nordstrom (2007), using Bella's study, the work of Sen (2006), and preliminary results from the current study, concluded that Buber (1970) provides a way of understanding ethical action as it is related to identity and relationship that complexity science does not fully provide.

The Clinical Instructors Role With Students as Moral Agents

Complex responsive processes of relating describe how the CIs functioned in relation to the students as moral agents in the ethical dilemmas (Stacey, 2001). They allowed the students' to explore situations, experiment with choices, and make decisions when confronting ethical dilemmas. While doing so, the CIs provided advice, helped students interpret the external environment, and guided students through agency. The CIs described their internal reflections about the student's experience and the public communications they had with the students.

The CIs operated with one major constraint, their primary fiduciary responsibility for the patients, a finding similar to that reported in the literature (Mostrom, 2005; Scully

& Shepard, 1983). The students had to demonstrate to the CIs that they could trust them to provide adequate care to patients. When they earned the CI's trust, the student had wide latitude to act. Simultaneously, the CIs recognized the uncertainty that they were facing each day. They knew they could not predict every eventuality the student might face, but the trust they developed in the student permitted them to accept the uncertainty. Their framework of accepting uncertainty while guiding students toward agency fits with descriptions of complex adaptive entities in a far-from-equilibrium state (Goldstein, 1999; Kauffman, 1995; Richardson, Cilliers, Lissack, 2001).

It was through early clinical practice, as opposed to specific ethical situations, that the CIs developed trust in the students. During the early clinical practice experiences, the CIs used role modeling to demonstrate communication, listening, caring, advocacy, and focus on the patients. The importance of role models in this process is consistent with the literature (Cross, 1995; Mostrom, 2005; Scully & Shepard, 1983). Deliberate in their function as role models, the CIs watched for these same behaviors among the students. They felt these early clinical experiences provided the foundation for students to explore and improve their ability to relate to patients and focus on "the big picture," as Anne described it, instead of the technical aspects of clinical care.

Whereas the students' ethical reasoning was focused on themselves and the patient, the CIs ethical reasoning focused on the patient and the student. There was a self-reflexive process evident with CIs as they asked themselves what they might do in the situation and recalled their own past experiences. One other study reported these reflections by the CIs (Mostrom, 2005).

The complex responsive process of socially negotiated action between CI, student PT, and patient took many forms. It was characterized by the CIs' attunement to the fine nuances of gestures and language and their interpretation of the meaning from what they were observing and hearing.

The CIs also used internal, private processes during their interactions with students and patients. The description of Rhoda and Rick in Chapter Five provides a particularly rich example of this internal communicative process while they were jointly with a patient. In the larger picture when students were faced with an ethical dilemma and came to the CI, the CI's internal communicative process was framed by a preference for the student to make the decision. Said another way, the CIs internal communication was based on building professional responsibility among the students. This preference among the CIs was also evident in the infrequent occurrence of stepping in and acting on behalf of the student. They only stepped in when the situation was particularly complicated or, early in the clinical experience when they noted significant hesitancy to act on the part of the student. While Scully and Shepard (1983) did not use the framework of complexity science, they described a similar guiding purpose for the CIs in that study.

Discussion of Findings Relative to the Literature

This discussion will focus on two main bodies of literature related to how the students' negotiated action with patients and CIs in their roles as moral agents and how the students approached their patients. One body of literature concerns PTs' reasoning. This body of literature includes clinical reasoning among PTs, ethical reasoning and the literature on student, novice and expert PT practitioners and is relevant to this study and

merits exploration. The other pertinent body of literature concerns clinical education in physical therapy. I will discuss each of these bodies of literature in this order.

Physical Therapists' Reasoning

I will first discuss the literature on ethical reasoning among PTs, and then discuss the approaches to ethical reasoning that were evident in this study. I will then discuss the literature relative to student, novice and expert reasoning. Lastly, I will explore the literature on clinical reasoning among PTs and relate the findings of this study to that literature and then revisit the particular topic of ethical reasoning.

The sparse literature from empiric studies of ethical reasoning among PTs does not provide a consistent picture of how they reason through ethical problems. One study reported that a model of ethical decision-making was evident in PTs descriptions of how they identify and resolve ethical dilemmas (Wise, 2000). That study concluded PTs identify the problem, consider the factors that are involved, gather information and problem-solve, decide what to do, act and then reflect on the situation. The student and CI participants in this study did not explicitly describe an ethical reasoning or decision-making process they used, nor, with one exception, could a linear approach to ethical reasoning or decision-making be inferred from their descriptions. The one situation in which a process was most evident concerned [*Christian Scientist and no treatment*]. While this was the one of the few ethical dilemmas described as such by the participants, one cannot infer that physical therapy students use an ethical decision-making process similar to that described by Wise based on the one case in this study. One study (Barnitt & Partridge, 1997), discussed above, concluded that PTs tended to reason from a biomedical model, as opposed to a psychosocial model, and that emotions and history are

prominent features of their reasoning. As reported previously, the tendency among the PT students in this study relative to reasoning from a biomedical model was more closely associated with their underlying stance toward their relationship with patients. This difference provides a basis for further inquiry.

Two studies (Edwards, Branauck-Mayer, & Jones, 2005; Greenfield, 2003) had findings that indicated that PTs approached ethical problems in a fluid, non-linear fashion in which the patient's perspective figured prominently, and in which the therapist used normative and non-normative ethics. The therapists in both studies used their personal morals or virtue-based reasoning in their ethical reasoning approaches. Edwards et al. reported that PTs used casuistry, case-based and thematic ethical thinking, in their non-normative reasoning,

Consistent with the studies reported above (Edwards et al., 2005; Greenfield, 2003), the students in this study used narrative, non-normative approaches and normative approaches to their reasoning in a non-linear fashion. Students considered patients' narratives as well as their own narratives in their reasoning, as described above, a finding consistent with these studies. The student's personal narratives included their experiences growing up, the influence of family on their morals, and their experiences as PT students, similar to Greenfield's findings. The students' virtues and their duties were important as they reasoned through a case and decided what action to take. They explored their virtues and duties via their internal processes. While they were exploring these aspects of the dilemma internally, they simultaneously engaged outside resources to gather more information, typically clinical or procedural data. While they were internally asking themselves questions, such as "what is going on?" and "what should I do?" they

would sometimes ask their CI the same questions. The reasoning processes the students used closely matched those used by PTs as described in the literature (Barnitt & Partridge; Edwards, et. al; and Greenfield.)

Given the similarities among the studies described here and the findings from this study, it is instructive to relate the findings from this study to the literature on clinical reasoning among novice PTs and the ethical and clinical reasoning in PT students. As reported in Chapter Two, there are few empiric studies that address these topics in the literature (Jensen, Shepard, Gwyer, & Hack, 1992; Jensen, Shepard, & Hack, 1990; Mostrom, 2005). The two earlier studies (Jensen, Shepard, Gwyer & Hack; Jensen, Shepard, & Hack) explored clinical reasoning in orthopedic physical therapy among novice and expert practitioners using field observations. They found that the novice practitioners were guided by rules, exhibited less fluid interactions with patients than experts did with their patients, and tended to seek "right answers." Because of the different population, purpose, and design of those two studies compared with this study, the findings are not clearly transferable. However, the students in this study did seek out rules as guides to their ethical reasoning, particularly notable with Amy. The students sought to clarify the payment policies, clinic procedures, and clinical evidence to guide their thinking when they perceived those would influence their action. As opposed to "right answers" the students sought to do the "right thing" when faced with ethical problems. These differences suggest that if there are similarities among PT students' clinical reasoning and ethical reasoning, as reported in two studies (Edwards, et al. 2004; Edwards, et al. 2005), there would need to be a study that explicitly explores the clinical reasoning of PT students.

Mostrom's study explored how PT students learn ethical practice while on clinical experiences. She concluded that they could use patient-centered reasoning, tolerated ambiguity, and recognized the conflicts with institutional practices. Her findings stressed the importance of taking a holistic view of patients' experiences of illness and disability, learning to build relationships with patients, and learning to genuinely express caring. Her findings are consistent with the findings in this study relative to how students conceived their relationship with patients, particularly when that relationship recognized the holistic, empathetic view of the patient consistent with Buber's I-You (Buber, 1970). In this study, the students who took this approach to their patients more typically engaged in collaborative reasoning approaches in which the patient's narrative figured strongly to arrive at mutually agreeable solutions. The findings relative to patient-centered reasoning in this study and the study by Mostrom are consistent and important to note. These findings suggest that student PTs can be attuned to the needs of patients and seek to understand the patient's perspectives and feelings.

Once I analyzed and interpreted the findings in this study, I realized there was an alignment with two interrelated studies on clinical and ethical reasoning (Edwards, Braunack-Mayer & Jones, 2005; Edwards, Jones, Carr, Braunack-Mayer, & Jensen, 2004). Once that alignment was apparent, I used these studies as part of the analytic framework for the third, fourth, and fifth research questions for this study. In a manner consistent with the findings of these authors, the students in this study used a dialectic, iterative, non-linear process in their ethical reasoning. Within an ethical framework, the students used deductive reasoning based on the ethical principles, rules and duties that were important in the case as one part of the dialectic and inductive reasoning based on

narratives as the other. In the study of ethical reasoning, Edwards et al. (2005) only referred to patient's narratives in the inductive reasoning pole; they did not report on the presence or importance of the PTs' personal narratives in their inductive reasoning. As was evident in the current study, the student's personal narratives, instead of the patient's narrative, shaped the nature of the inductive reasoning with students when their relationship with patients was more of an objectified stance of I-It. Similarly with the findings from these studies, a holistic, biopsychosocial understanding of the patient was central to the students' reasoning processes, but only when the student adopted an approach to the patient more characteristic of Buber's I-You (1970). The difference in the nature of the inductive reasoning process observed in the students and its correspondence with their relationship with patients is an important difference between this study and those discussed here (Edwards, 2000; Edwards, Braunack-Mayer, & Jones, 2005; Edwards & Jones, 2007). That difference merits exploration to determine if clinician-centered inductive reasoning is evident in experienced PTs, or if it is a phenomenon of professional development and socialization that fades with experience.

Edwards et al. (2005) reported that the PT's ethical reasoning was also characterized by casuistry, thematic pattern recognition in an ethical case. The PTs in that study had several years of experiences upon which to draw when they encountered ethical situations, providing a basis for observing patterns and recognizing themes from those past experiences. I would hypothesize that student PTs do not have sufficient experience upon which to recognize these themes and patterns. The closest approximation in the current study to the use of casuistry was the student who recalled her experience with hope and recognized that pattern from her past and applied it in

several cases. Similarly with the difference with inductive reasoning reported above, this difference merits exploration on the same basis.

In all of these studies (Edwards, 2000; Edwards, et al. 2004; Edwards et al. 2005), the authors concluded that the PT's professional virtues and approaches to caring are formed through their interactions with patients. While they did not use a complexity science framework to interpret their findings, I would suggest their conclusions are aligned with complex responsive processes as a means through which knowledge and identity are formulated (Stacey, 2001).

Conclusions

The nature of the ethical dilemmas students and their CIs faced arose from the every day reality of physical therapy practice. Situations the students clearly identified as ethical dilemmas were rare events. Perhaps the nature of the ethical dilemmas is a reflection of the nature of PT practice, in which the concern is the patient's function in everyday life within a social context with an orientation is toward caring and helping. In a complexity science framework, the students and their CIs were complex adaptive entities functioning in a far-from-equilibrium state in which non-linearity and power law relations were evident. The ethical situations these students and the CIs faced were inextricably entwined within a clinical context. The language the participants used to describe the ethical dilemmas was not from bioethics and ethics, rather it was the language of personal narratives and clinical practice. Those personal narratives, where personal and professional history, experience, and identity melded, were evident in how the students reasoned through ethical dilemmas. When describing the moral principles, values and virtues that are part of their personal narrative during the interviews for this

study, the participants used the language of ethics. These interviews were abstract conceptualizations of meaning that occurred in the arena of participating in a research interview, not the translation of meaning into functional values of practice (Griffin, 2002).

The way in which the students conceived of their approach to patients had a profound influence on how they acted as moral agents when faced with ethical dilemmas. While a student functioned along the continuum between I-It and I-You (Buber, 1970), never fixed in one place, there were detectable tendencies toward one end of the spectrum or the other and those tendencies were associated with tendencies in their ethical reasoning.

I would conclude that I-It to I-You (Buber, 1970) provides the ontological stance for ethical action. It is through complex responsive processes that the students' constructed their identity as moral agents and the meaning of moral agency. There were constant internal and external communicative interactions among the students and the CIs through which the students constructed their meaning of the situation and reconstructed their identity. It was through these communicative processes and subsequent reflection that the student's identity as moral agents emerged.

Concepts from complexity science, in addition to those of the perspective of complex responsive processes, are woven through the experiences of the PT students and their CIs as moral agents. An understanding of the emergent nature of the students' experiences gives an appreciation for the importance of diversity and difference, in all of the meanings of those words, to trigger confrontation of pre-existing identity and the potential for re-conceptualization of that identity. The CIs played a critical role in

fostering the emergence of ethical PTs. Consideration of dissipative structures, basin attractors, strange attractors, and the power of positive and negative feedback loops provide insight into the forces that constrain action and catalyze change in the face of ethical dilemmas.

The American Physical Therapy Association has adopted seven core values (American Physical Therapy Association, 2003), including compassion, caring and integrity. These core values closely align with an I-You relationship with patients. As was observed in this study and as suggested by Griffin (2002), in order for these values to become functional and, therefore pervasive in the physical therapy profession, students and PTs need to socially construct the personal meaning of those values through their education and practice experiences.

The findings of this study, the interpretation of these findings, and the relationship with the literature on ethics and reasoning in PT provide an understanding of the role of PT students as moral agents when they confront ethical dilemmas during clinical experiences. The implications of those findings and their interpretation are discussed in the next chapter.

CHAPTER 8: IMPLICATIONS

The findings and conclusions of this study have implications for all phases of entry-level professional education in physical therapy. There are also implications for practice that can be inferred from the findings in this research. I will conclude with a discussion of future research.

The implications for education and practice discussed here are (a) the conception of the relationship with patients in physical therapy practice and its relationship to ethical reasoning and moral agency; (b) framing ethics in a clinical context while preserving its unique nature in practice; (c) the nature of ethical issues physical therapist (PT) students and PTs confront; (d) the role of academic resources during clinical experiences; and (e) the use of narrative reasoning in ethics, education, and practice. I will identify where these implications for practice and education have a foundation in complexity science. Throughout, I will emphasize the importance of communicative interactions, private and public, as characterized by complex responsive processes (Stacey, 2001), but will not always identify these explicitly.

The Relationship with Patients, Ethical Reasoning and Moral Agency

The finding in this study in which the students' relationship with patients was associated with how they approached their ethical reasoning and moral agency has profound implications in physical therapy practice and education. The nature of complex adaptive entities with emergent properties suggests a multi-faceted approach to teaching ethical reasoning and patient relationships that is holistic and particular would be beneficial.

The implications for a holistic approach are oriented toward the philosophy of practice and curricular approaches in entry-level physical therapy education. There are four interwoven threads comprising this holistic approach: (a) a biopsychosocial model of disability and of physical therapy practice; (b) the World Health Organization's *International Classification of Functioning, Disability and Health* (*ICF*) (World Health Organization, 2001); (c) approaches to clinical and ethical reasoning; and (d) approaches to relationship with patients.

According to the World Health Organization (World Health Organization, 2001), widespread adoption of a biopsychosocial model of disability would benefit patients and the people they serve, including physical therapists. A biopsychosocial model aligns with the World Health Organization's *ICF* (World Health Organization), a framework of disability and health that is being adopted with increasing frequency around the world, but more slowly in the United States (A. Jette, 2006). Moving to this model and framework would influence PTs to view patients in a broader sociocultural context, a move that could potentially align PTs with a relational stance toward patients in which patient-centered collaborative care is the norm.

There is emerging evidence in the literature (Edwards, 2000; Edwards, et al, 2004; Edwards, et al., 2005; Edwards & Jones, 2007), that experienced PTs engage in a dialectic between deductive and inductive approaches to ethical reasoning. In that inductive approach, the patient's narrative serves a critical function in bringing what is important to that patient as a person into the realm of the interaction between the patient and PT. There was evidence in this current study that PT students have the potential to exhibit a similar patient-centered approach to patients. There is an alignment among the

approaches toward ethical reasoning from the literature and in this study, the biopsychosocial model, and the ICF framework, in that they all place the patient at the center of the PTs actions. Given that alignment among the research evidence and existing models, faculty members and programs have a strong foundation on which they can base their teaching of clinical and ethical reasoning. The research evidence offered by Edwards and his coauthors and this study, suggest faculty can expect students to integrate a patient-centered approach characterized by use of a dialectic between inductive and deductive reasoning during students clinical and classroom learning experiences.

The final important thread of a holistic approach would be an explicit focus on relationships with patients that promotes a view of the patient as another human with whom the PT enters into a relationship as characterized by I-You (Buber, 1970). While explicitly recognizing the importance of an approach to a relationship with the patient as a person as central to physical therapy practice, there would be an acknowledgement of the value and function of the objective stance of I-It that supports effective diagnosis and treatment.

The four threads of this holistic approach, once adopted and integrated into a physical therapy educator's philosophy of practice and approach to entry-level education, would provide mutual positive feedback loops within the complex adaptive entities of faculty, clinicians, and students, and would support the emergence of new understanding and professional identity. Asking students to develop and articulate a philosophy of physical therapy practice during their entry-level education, to publicly claim that philosophy, and to make it available for challenge during clinical experiences and with

faculty mentors is a curricular process that would support a holistic view of the student's education for professional practice. Physical therapy educators and clinicians who have not undertaken a similar exercise could also do so. The recursive, reflective, and self-referential nature of these activities is aligned with complex responsive processes.

In addition to a holistic approach described above, a focus on the particular would begin with the four patterns of communication that were evident in the students' approaches to relationship with patients. I will address learning activities related to each of these four patterns of communication, combining the final two because the learning activities are similar. The findings from this study suggest that these learning activities would help clinicians and students avoid constructing the identity of the patient as an objectified "other" identified only as the diagnosis.

To begin, every clinician, every academician, every student, and every member of the staff of a clinic, should use person-first language that places the people who are patients first in communication about them. Adoption of this language is more than politically correct; it reflects an inherent way of thinking (Davis, 2006). A pervasive use of person-first language so it becomes an inherent way of thinking implies it would be evident in the way people speak about patients informally in a classroom or in a clinic, formally in conferences, rounds, presentations, and classrooms, and in all forms of writing, including email and on-line discussion boards. That habit of thought requires practice and feedback on the part of all concerned.

Abstract characterizations through causal reasoning by PT students toward patients without communicative interaction with the patient merits discernment among colleagues and students. That discernment and subsequent change in patterns of thinking

can be aided by learning activities that encourage inquiry and emotional curiosity about patient's lives. Examples of such learning activities include narrative and social history interviews, experiential learning with standardized patients, or purposefully selected patients in clinical education in which the effects of those characterizations are brought into focus, and the student and CI engage in an assertive, critical questioning of the students' characterization of patients. An example of the type of purposeful clinical education experience could be drawn from the experience of Cathy and Claudia, in which Claudia noticed Cathy's reaction to people in prison custody, a behavior indicative of abstract characterization, and assigned her one of these patients. Claudia's approach was consistent with loose coupling, in which she did not explicitly state her full intention behind her plan, but the desired learning was evident.

The widespread occurrence of bias among the students in this study suggests the importance of designing learning activities to address that behavior. Guided journals on topics such as descriptions of the student's ideal patient or experiences with unlikable patients during clinical experiences could trigger recognition of the student's bias much like what occurred during this study. That reflection would need to be followed by discussion and engagement about these experiences and the student's interpretation and learning. Because admitting bias and discussing it can be difficult for people, learning experiences in which the discussion occurs in dyads rather than larger groups would be helpful. Clinicians can use reflective journals of their practice experience to uncover bias and its affect on their patients.

The final two patterns of relating with patients observed in this study concerned identifying with the patient's feelings and experiences in a social context as another

human being. While the focus on function and helping is foundational to physical therapy (Stiller 2000; Triezenberg, 2005), doing so from a truly patient-centered framework may be more of an espoused value than a lived value (Jorgensen, 2000). The literature on expert PT practitioners provides evidence of a patient-centered focus on function as an important element of expert practice (Jensen et al. 2000). Such a focus brings patients' experiences in the broader context of the their lives, an alignment with I-You (Buber, 1970), into the relationship between the patient and the PT. The development of a philosophy of practice could assist with an orientation in the direction of the patient's view of function. To have a patient-centered focus on function become part of a student's socially constructed identity, learning activities that encourage inquiry and curiosity about patients' experiences could support learning in this area (Halpern, 2001). This would be consistent with the concepts of complex responsive processes. The literature on clinical reasoning supports the value of purposeful interaction between PTs and patients to gain a better understanding of the patient's life (Edwards et al., 2004). Halpern described it as an "…ongoing attentiveness to what patients communicate, verbally and nonverbally" (p. 131). These interactions occur in the fluid, ongoing conversations between PTs and patients. Thus, attention to the nature of these interactions through questions from a clinical instructor (CI) or purposeful reflection can help the student or PT have an intention toward patient-centered care. Patient satisfaction surveys that inquire about the patient's perception of the PT's focus on the functional outcomes that are important to the patient and the PT's understanding of the patient's life can also be a means to address the two final patterns of relationship with patients. There

are examples of such surveys in the literature (Beattie, Pinto, Nelson, & Nelson, 2002; Beattie, Turner, Dowda, Michener, & Nelson, 2005).

Framing Ethics

Given that the students' experience of ethical dilemmas was nearly always framed in the context of clinical practice and described in clinical and lay language, it would seem sensible to give that clinical orientation due respect, but no more. By that I am not suggesting that ethics education in physical therapy should abandon learning that increases understanding of ethical concepts, ethical analysis, the professional code of ethics, and the normative ethics of practice (Triezenberg, 1997; Triezenberg & Davis, 2000). However, I am suggesting pursuit of integrated learning strategies that cultivate ethical behavior with strategies that develop clinical practice capabilities. The findings of Jensen and Richert (2005) using standardized patient interactions in ethics education provide a model for integrated learning activities. They suggested that authentic experiences that are framed in the reality of clinical experience provide meaningful learning experiences for students while helping connect ethics with practice, instead of having it reside in the student's reality of a separate course on ethics. There are two articles (Greenfield, 2007; Misch & Peloquin, 2005) that offered educational strategies to teach empathy and the importance of emotion in ethical decision making that also offer insight into how to frame ethics within a physical therapy curriculum. These authors also stressed the importance of integrated curricular approaches and discussed emphasizing students' interpersonal communication within clinical practice courses through grading rubrics, cases, classroom discussion, and guided journals. They also suggested that

videotaped case-based role-playing among students or with faculty and students could be helpful in this regard.

Given students' experience of uncertainty and ambiguity in clinical practice and the nonlinearity of clinical learning, courses in which students must address complicated cases with underlying ethical dilemmas for which there are no right answers seem to offer a path into the experience of ethical reasoning in the clinical setting. These cases, followed with guided personal reflection, on-line discussion boards, or small group discussions, can call forth complex responsive processes of relating (Stacey, 2001) that would contribute to the student's sense of professional identity and reconstruct the meaning of their ethical reasoning.

The Nature of Ethical Issues in Physical Therapy Practice

The nature of the ethical issues the PT students faced were similar to those of PTs (Barnitt, 1994; Barnitt, 1998; Barnitt & Partridge, 1997; Carpenter, 2005; Greenfield, 2003; Guiccione, 1980; and Triezenberg, 1996). These similarities provide a sound basis for the type of ethics case scenarios that can be used to teach ethics in entry-level PT education. Ethics case scenarios can be structured about patient participation, conflicts between beneficence and autonomy, and allocation of resources. The unique characteristics of ethics with PT students concerned the perceived nature of power, authority, and responsibility among students, their CIs, other clinicians, and patients. This was observed through the inherent tension between student learning through practice on patients who deserve effective physical therapy and the experience with negative role models. These unique characteristics should be addressed in PT education and are discussed below.

The challenge in ethics education in entry-level education lies in the common nature of the ethical dilemmas PTs and PT students face. One challenge is to teach students to discern the presence of ethical dilemmas within the clinical context. Strategies such as embedding ethical dilemmas, similar to those described in this study, within written clinical cases and then asking about those ethical concerns can help students learn to discern subtle ethical dilemmas and associate them with clinical practice. Faculty can ask questions about the ethical implications in the case via guided questions in a paper, on-line formats, or classroom discussions. When these cases are included in graded assignments, rubric design that includes elements of ethical discernment and reasoning can reinforce the importance of ethics in practice.

Given that the ethical dilemmas in this study were subtle and not discussed using the language of ethics, the manner in which ethical implications are discovered and described is critical. In the clinical environment, a CI could use an inductive approach giving the student an opportunity to describe a situation with a patient that presented a challenge to their way of relating. The guided questions for the journals and the interviews could provide a basis for this line of inquiry (Appendixes E and G). As an example the interviews asked the student to describe situations in which they knew what the right thing to do was, but either something got in the way of right action or they chose not to act. The follow-up questions in the interviews included such questions as, "How did you realize there was something going on like this?"; "How did you decide what to do?"; and "What was your internal conversation like?" Beginning with the particulars of the students' experience and purposefully developing the discussion toward the moral principles and ethical issues would help students discern the ethical aspects of their

everyday experience. It could also help develop their inductive reasoning abilities if the CI made that intention explicit. CIs would have to be comfortable with an explicitly ethical line of questioning. These discussions between students and CIs could also illuminate the presence of bifurcation points in the students' experience and orient them toward the possibility of dissipative structures. Using this learning strategy over time, the CI could guide the student toward recognition of emergent themes and patterns, similar to the findings of Edwards et al. (2005) related to casuistry in experienced PTs ethical reasoning.

In a teaching model I use to accomplish the goal of framing ethics within clinical experiences, students identify ethical dilemmas in early clinical experiences using the guided journal reflections described in this study (Appendix E). Students then write the case based on the journal reflections and they write a patient-centered narrative of the case, and engage in a series of small and large group discussions with classmates about the case. Among other questions, that case analysis asks the student to address what they learned about themselves from the case and what they would do differently in an ethical situation during their final clinical internship.

There were aspects of the ethical dilemmas in this study that are unique to the student role. One of the most common constraints on their actions that these students discussed was their perception of their power, authority, and responsibility. Academic faculty can encourage students to discuss their perceptions of power, authority, and responsibility in association with clinical education experiences. These discussions would help students realize the basin attractors that might be operating in their self-reflexive frame of reference, and might lead the student toward new learning if given the

choice to confront and alter the pattern of those attractor basins. These discussions, whether through journals, on-line discussion boards, small group discussions, or large group discussions can occur before, during and after clinical education experiences. CIs can explicitly establish the expectation that students bring any concerns they have about their experiences to someone in the clinic who does not have the power to affect the student's grade or success on the internship. The academic faculty member who coordinates the clinical education courses can also inquire about such experiences and reinforce the importance of bringing student's concerns to the attention of the faculty member. Once again, if there are concerns over power and authority given a faculty member's involvement with the student's grade, then neutral parties without that power and authority need to be made available to students.

Given the power and authority relationships in clinical experiences, the issue of confidentiality when raising concerns about ethics and practice can arise. Academic and clinical policies and practices can be developed that help students adopt the norms of the profession, such as those of ethics boards and licensing boards, when it comes to complaints about colleagues. These norms suggest that anonymous complaints are not acceptable and that confidentiality about the person making the complaint will be kept insofar as it is possible, but that in all likelihood, the identity will become known to the person about whom the complaint is made. These norms can be reinforced in physical therapy education through the manner in which allegations of academic dishonesty from students are handled, and explicitly described to students as they are related to the professional norms.

An ethical dilemma in PT student clinical education arises from the fiduciary responsibility the CI has, as the patient's PT, to ensure that the patient receives effective physical therapy while simultaneously allowing the PT student, who is learning and a novice, to provide direct services. Through early role modeling, close supervision, coaching, and questioning, CIs assure the students are capable of providing the care the patient requires (Lindquist, et al. 2004; Mostrom, 2005; Scully & Shepard, 1983). The situation in which Ruth failed to seek help when she was unsure of her abilities points to the importance of clearly establishing the ground rules for students requesting supervision when there is uncertainty about administering physical therapy and what the student should do if supervision is not immediately available.

The ethical issue of affirmatively obtaining patient informed consent for a student to provide physical therapy was evident in this study and consistent with the literature. It would seem prudent to have a clear process in which patients are asked to explicitly consent or decline to have a student provide physical therapy given the emphasis on personal and patient autonomy in health care in Western societies (Schneider, 1998).

Role of Academic Resources During Clinical Experiences

The remarkable absence of the involvement of academic faculty and learning resources in this study merits consideration. That lack of involvement raises questions as to why or how that occurs and what, if anything, need be done about it. There is apparently a schism when students leave the classroom setting and begin clinical learning experiences. When students encountered a significant ethical situation, e.g. Cathy and [*Christian Scientist and no treatment*], the student and CI capably handled the situation using the clinic's resources.

Given that one purpose of clinical experiences is for the student to transition to clinical practice and these students were at the threshold of entering professional practice, perhaps it is acceptable for there to be no contact with the academic program faculty when the clinical experiences seem to be proceeding as expected. On the other hand, the student is still enrolled in the academic program and the academic faculty do have ultimate responsibility for the student and judging whether the student has met the learning outcomes of the clinical education course. It would seem that using journals or on-line discussion boards in a manner previously described, would help maintain that link between the academic faculty and the student in a way that supports the student's transition into the profession and still uses all of the learning resources available to the student.

Narratives in Ethics

Given that narrative reasoning was evident among the PT students in this study, a finding consistent with the literature (Edwards, et al., 2004; Greenfield, 2003), and the evidence that students often related their ethical dilemmas in a narrative form suggests that the narrative abilities and the place of narrative reasoning in PT education merits attention. The importance of narratives in health care, particularly medicine, has been emphasized for a number of years (Charon, 2006; Charon & Montello, 2002; Frank, 1995; Kleinman, 1998). As Charon wrote:

> Narrative competence allows all that a professional knows to be placed at the service…of this patient… It allows the doctor or nurse or social worker to provide care that strengthens and does not belittle, care that deepens and does not blunt the patient's search for meaning in the face of illness. …narrative competence can bridge some of the divides between the sick and the well, enabling all to recognize their common journey. (p. 12)

Her emphasis on illness over disease (illness being the patient's experience versus disease as a diagnostic label) has echoes of Buber's I-You. Edwards and Jones (2007) described narrative reasoning as "…understanding the patients' illness experience, their 'story,' context, beliefs, and culture. In other words, what are patients' personal perspectives…regarding why they think and feel the way they do?" (p. 195).

There are suggestions from the literature on developing narrative reasoning in health profession education, primarily in medicine. Given the depth of that literature, full discussion on developing narrative reasoning is beyond the scope of this paper. I will mention three suggestions from Charon's work. She discussed the use of literature, particularly taking note of the importance of "close reading" (p. 107) in which there is attention to subtleties of plot, frame, form, and desire, i.e. what need of the reader is satisfied. She emphasized the importance for the health care practitioner to develop attending skills in which the self is suspended and full attention given to the patient. Epstein (1999) addressed mindful practice in health care with similar concerns that merit attention for developing narrative competence. A third pedagogic technique Charon described was the parallel chart. In this process the student takes contemporaneous notes about the experience of caring for a patient, but documents what cannot be written in the medical record, for example how the student felt about the patient or if the patient reminded the student of someone. She reported, based on her review of the students' writing, that the students' felt they did not have agency in situations they encountered. Given the findings of Charon's work and the students' perceptions of their lack of power and authority as a constraint on action in the current study, illuminating that feeling of lack of moral agency among students is an important benefit of this learning activity.

Additional examples of learning activities that can build narrative reasoning are assignments in which the students take a narrative history of a person, particularly where diversity and difference are likely to lead to new learning and understanding (Stacey, 2001). Students can learn more about their personal narrative through writing their moral autobiography Davis (2006).

Future Research

There are several potential avenues for future research based on this research study. Most of the studies of the ethical situations PTs and PT students face have come from qualitative studies, small populations in survey research, or occurred more than 20 years ago. The literature from medical students concerning ethical lapses would suggest that there may be ethical situations in the experience of students that this study did not discover given the nature of its purposive sample and small number of participants. Large surveys that would inquire into the ethical situations PTs and particularly student PTs encounter based on the existing literature and modeled after those in medicine would expand the current understanding of these ethical situations. Given that McGee and Ogger (2000) described ethical issues that arose from power and authority issues with students, but the absence of similar findings in this study, future research would be warranted to explicitly explore the effect of power and authority in PT students' ethical reasoning and actions.

The findings relative to how the students conceived of their relationship with patients and how that relationship affected their role as moral agents merits further attention given that research into this question has not occurred in the physical therapy literature. Given this study's population of five PT students in well-defined clinical

environments, further exploration of the association between relationship, moral agency, and ethical reasoning among PT students would help establish the transferability of this study's findings to other contexts. Expansion of the work of this current study to practicing PTs with varying levels of experience would also be helpful. A suggested beginning would be qualitative studies of experienced PTs in which the PT and patient have a long-term relationship. The purposive sample of PTs and practice settings used by Edwards et al. (2004) provides guidance on this aspect of the methodology of such a study. Additional purposive samples of novice PTs, early-career, and mid-career PTs would also be helpful. Purposive sampling in any of these studies could help the search for confirming and disconfirming cases or patterns among any of these populations. As only one example, using patient questionnaires to locate PT participants whose patients rated as strong in interpersonal communication skills compared with those who had weak interpersonal communication skills and then purposively selecting participants from both ends of the spectrum could be illuminating.

The patient's perspective about understanding the nature of ethical reasoning, moral agency, and clinician-patient relationships was absent from the current study. Additionally, there are few studies in the physical therapy literature in which the viewpoint and experiences of patients is considered (Jorgensen, 2000; Lucke, 1998). The methodology of this current study and those mentioned above could be extended into the realm of the patients' experiences by adding field observations of the participants with patients and interviews with those patients.

In Chapter Seven, several avenues of future research were mentioned that would help establish if there are relationships between ethical reasoning among PT students to

clinical reasoning of PT students and if there are developmental patterns in ethical reasoning in the progression of student to experienced practitioner. These avenues include studies of PT students' clinical reasoning, much like those done in physical therapy (Edwards, 2000; Edwards et al., 2004; Jensen et al., 1990, 1992, 2000). There is also merit in further exploration of the nature of inductive reasoning in which the clinician's or student's narrative predominates versus the predominance of the patient's narrative. If casuistry is a common pattern of PTs ethical reasoning (Edwards et al, 2005), then exploring the development of that pattern among PT students and novice PTs merits investigation.

The findings relative to how students and CIs engaged in communicative interactions to enact moral agency and how the students acted as moral agents also have potential for further research. Some of the potential areas arise due to the limitations of the current study. In the current study, three of the four CIs had no or minimal prior experience with students and among the four of them they had between one and six years of clinical experience. Their limited experience as CIs and as clinicians is a weakness of the current study that could be remedied with a purposive sample of PT's with more experience in practice and clinical education. Four of the five students in this study were in outpatient settings. Conducting a study like the current one in long-term care, inpatient rehabilitation, and acute care hospitals would deepen understanding of these questions and increase the transferability of the findings. While one might not expect there to be regional differences in education and practice, the students were in education programs located on the West Coast and Midwest, representing three entry-level Doctor of Physical Therapy programs and the clinical experiences were all in California. A purposive

sample that includes clinical sites in other areas of the United States and with broader representation of entry-level physical therapy programs in the United States would also increase transferability of the findings.

Additional findings emerged that suggest areas for future research in two areas. The explanatory nature of informed consent processes as compared to an actual inquiry and consent process found in this study and another study in the literature (Delany, 2007), suggests the need for further inquiry into the consent process. Studies need to investigate how students learn informed consent processes, how they apply informed consent in clinical experiences, and how CIs conceive of the role of informed consent when a student is providing care to a patient. The absence of using academic faculty merits exploration as well. Studies can be designed to discern under what circumstances students, CIs, and academic faculty perceive it is advisable to contact academic faculty during clinical experiences. Further studies could investigate how that advisement occurs and how it affected the student's clinical learning experience.

Some concluding thoughts about the experience of conducting this research study merit reflection. It seems fortuitous that there was such a diverse array in which these five PT students acted in relation to their patients and as moral agents. Given there were only five students, it seems that there easily could have been less variability among them. Less variability would certainly have altered the findings. Alternatively, the work of Stacey (2001) and concepts from complexity science suggest that the nature of human interactions is ripe with the potential for diversity and unpredictable outcomes. Given there were no selection criteria for the CIs it is also notable that the students found these CIs to all be capable in their roles as CIs. This is particularly of note given that the

students related stories of past CIs who they perceived were less than effective. Given the CIs were relatively inexperienced, the students' experience of them as capable was more propitious and contributed to the findings of the study.

One cannot hope to encounter unethical actions among students when studying ethics and I feel fortunate not to have encountered unethical actions among the participants. The experiences these students had when they encountered suspected unethical actions of others provided rich data and understanding of how they reasoned through these circumstances.

Finally, the students frequently mentioned the value they placed on the discussions we had about ethics, their experiences of ethical situations, and the chance to talk to someone about those experiences. While I am glad to have afforded the students this opportunity, I hope the opportunity to openly explore their experiences with and feelings about the ethical situations they encounter becomes ubiquitous for future PT students during their clinical internships.

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APPENDIXES

Appendix A

Protection of Human Subjects Approval

Subject: IRB Application # 06-050 - Application Approved
Date: Monday, May 29, 2006 10:38 AM
From: *IRBPHS <irbphs@usfca.edu>*
To: "tnordstrom[redacted]
Cc: "bloch[redacted]
Conversation: IRB Application # 06-050 - Application Approved

May 29, 2006

Dear Mr. Nordstrom:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your application has been approved by the committee (IRBPHS #06-050). Please note the following:

1. Approval expires twelve (12) months from the dated noted above. At that time, if you are still in collecting data from human subjects, you must file a renewal application.

2. Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS. Re-submission of an application may be required at that time.

3. Any adverse reactions or complications on the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS at (415) 422-6091.

On behalf of the IRBPHS committee, I wish you much success in your research

Appendix B

Informed Consent Forms (Student and Clinical Instructor)

INFORMED CONSENT FORM

UNIVERSITY OF SAN FRANCISCO

CONSENT TO BE A RESEARCH SUBJECT
(Physical Therapist Student)

Purpose and Background

Mr. Terry Nordstrom, a graduate student in the School of Education at the University of San Francisco, is doing a study on the relationships between PT students and their patients and their clinical instructors during the students' clinical internships. The study focuses on situations that students may find difficult to solve, challenging or troubling and how they reason through these situations. These situations may be thought of as being of an ethical nature. While we are beginning to understand more about the nature of these situations, we do not have an understanding of how students address them.

I am being asked to participate because I am a student in a Doctor of Physical Therapy program on one of my final clinical internships that occur in long term care settings (e.g. acute, inpatient rehabilitation or skilled nursing facility) or in an outpatient setting.

Procedures

If I agree to be a participant in this study, the following will happen:

1. I will complete a short questionnaire giving basic information about me, including age, gender, race, clinical experience prior to entering physical therapy school and past clinical experiences.

2. I will complete two written journals per week and send them via email to the researcher. I will have the option of completing these journals on paper. These journals will probably be one-fourth to one double-spaced, typed page in length and take from ten to thirty minutes to complete. . I will complete the written journals in a place and at a time that is convenient to me.

3. I will participate in three individual interviews with the researcher, during which I will be asked about my experiences on my clinical internship. Two interviews will take about 60 minutes and one will take about 90 minutes. Interviews will occur at a time that is mutually agreed upon and in private at a place that is convenient to me.

4. I will participate in one focus group with the other PT student participants in this study when all of the students have completed their internships. This focus group will occur via video conference or in person. It will last about 90 minutes. The focus group will occur in the San Francisco Bay Area or I will participate via video conference at a location convenient to me.

Risks and/or Discomforts

1. It is possible that some of the questions during interviews and focus groups may make me feel uncomfortable, but I am free to decline to answer any questions I do not wish to answer or to stop participation at any time.

2. Participation in research may mean a loss of confidentiality. Study records will be kept as confidential as is possible. No individual identities will be used in any reports or publications resulting from the study. Study information will be coded and kept in locked files at all times. Only study personnel will have access to the files. During the focus group I will meet the other PT student participants in the study.

3. Because the time required for my participation may be from seven to fifteen hours, I may become tired or bored.

Benefits

I may directly benefit from participating by gaining a better understanding of how I reason through the type of situations discussed in this study. This study may help improve the education of PT students during the academic and clinical education phases of their program.

Costs/Financial Considerations

The financial cost to me for participating in this study are those associated with my time and perhaps the cost of travel to interview or focus group sites if I have to drive there.

Payment/Reimbursement

There will be no payment or reimbursement to the participants in this study.

Questions

I have talked to Mr Nordstrom about this study and have had my questions answered. If I have further questions about the study, I may call him at [redacted] or Dr. Deborah Bloch, who is Mr. Nordstrom's research adviser, at [redacted].

If I have any questions or comments about participation in this study, I should first talk with the researchers. If for some reason I do not wish to do this, I may contact the IRBPHS, which is concerned with protection of volunteers in research projects. I may reach the IRBPHS office by calling [redacted] and leaving a voicemail message, by e-mailing IRBPHS@[redacted], or by writing to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

I have been given a copy of the "Research Subject's Bill of Rights" and I have been given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to be in this study, or to withdraw from it at any point. My decision as to whether or not to participate in this study will have no influence on my present or future status as a student.

My signature below indicates that I agree to participate in this study.

Subject's Signature Date of Signature

Signature of Person Obtaining Consent Date of Signature

INFORMED CONSENT FORM

UNIVERSITY OF SAN FRANCISCO

CONSENT TO BE A RESEARCH SUBJECT
(Clinical Instructor)

Purpose and Background

Mr. Terry Nordstrom, a graduate student in the School of Education at the University of San Francisco, is doing a study on the relationships between PT students and their patients and their clinical instructors during the students' clinical internships. The study is particularly focused on situations that students may find difficult to solve, challenging or troubling and how they reason through these situations. These situations may be thought of as being of an ethical nature. While we are beginning to understand more about the nature of these situations, we do not have an understanding of how students address them.

I am being asked to participate because I am a physical therapist who will serve as a clinical instructor for a student in a Doctor of Physical Therapy program on one of the final clinical internships that occur in long term care settings (e.g. acute, inpatient rehabilitation or skilled nursing facility) or in an outpatient setting.

Procedures

If I agree to be a participant in this study, the following will happen:

1. I will complete a short questionnaire giving basic information about me, including age, gender, race, clinical experience as a physical therapist and past experience as a clinical instructor.

2. I will complete two written journals per week and send them via email to the researcher. I will have the option of completing these journals on paper. These journals will probably be one-fourth to one double-spaced, typed page in length and take from ten to thirty minutes to complete. I will complete the written journals in a place and at a time that is convenient to me.

3. I will participate in three individual interviews with the researcher, during which I will be asked about my experiences on my clinical internship. The interviews will take from 30 to 60 minutes. Interviews will occur at a time that is mutually agreed upon and in private at a place that is convenient to me.

4. I will participate in one focus group with the other clinical instructor participants in this study when all of the students have completed their internships. This focus group

will occur via video conference or in person. It will last about 60 minutes. The focus group will occur in the San Francisco Bay Area or I will participate via video conference at a location convenient to me.

4. **Risks and/or Discomforts**

4. It is possible that some of the questions during interviews and focus groups may make me feel uncomfortable, but I am free to decline to answer any questions I do not wish to answer or to stop participation at any time.

5. Participation in research may mean a loss of confidentiality. Study records will be kept as confidential as is possible. No individual identities will be used in any reports or publications resulting from the study. Study information will be coded and kept in locked files at all times. Only study personnel will have access to the files. During the focus group I will meet the other CI participants in the study.

6. Because the time required for my participation may be from seven to fifteen hours, I may become tired or bored.

Benefits

I may directly benefit from participating by gaining a better understanding of how I reason through the type of situations discussed in this study and how I approach my clinical teaching. This study may help improve the education of PT students during the academic and clinical education phases of their program.

Costs/Financial Considerations

The financial cost to me for participating in this study are those associated with my time and perhaps the cost of travel to interview or focus group sites if I have to drive there.

Payment/Reimbursement

There will be no payment or reimbursement to the participants in this study.

Questions

I have talked to Mr Nordstrom about this study and have had my questions answered. If I have further questions about the study, I may call him at [redacted] or Dr. Deborah Bloch, who is Mr. Nordstrom's research adviser, at [redacted].

If I have any questions or comments about participation in this study, I should first talk

with the researchers. If for some reason I do not wish to do this, I may contact the IRBPHS, which is concerned with protection of volunteers in research projects. I may reach the IRBPHS office by calling [redacted] and leaving a voicemail message, by e-mailing IRBPHS@[redacted], or by writing to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

I have been given a copy of the "Research Subject's Bill of Rights" and I have been given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to be in this study, or to withdraw from it at any point. My decision as to whether or not to participate in this study will have no influence on my present or future status as a student.

My signature below indicates that I agree to participate in this study.

Subject's Signature Date of Signature

Signature of Person Obtaining Consent

Appendix C

PT Student Participant Background Questionnaire

Name _____ Code _____

Age at last birthday: _____

What is your ethnicity? _____

Circle one: Male Female

List the type experiences you had in health care before entering physical therapy school:

Name of Facility	Job title	Type of setting*	Years	Paid Volunteer

Type of Setting:

Acute hospital, Inpatient Rehabilitation Hospital, Skilled Nursing Facility, Sub-acute unit, Home Health, Outpatient clinic, School, Other (specify). List all that apply

Prior clinical experiences during physical therapy school

Name of Facility	# weeks	Hours per day	Type of setting*	Average number of patients you saw per week

Type of Setting:

Acute hospital, Inpatient Rehabilitation Hospital, Skilled Nursing Facility, Sub-acute unit, Home Health, Outpatient clinic, School, Other (specify). List all that apply

Appendix D

Clinical Instructor Participant Background Questionnaire

Name _____ Code _____

Age at last birthday: _____

What is your ethnicity? _____

Circle one: Male Female

Total years experience as a physical therapist: _____

Entry-level degree in physical therapy (circle one):

Baccalaureate Certificate Masters Doctoral

List your prior experience as a physical therapist:

Name of Facility	Type of setting*	Dates (Mo-Year)	Years

Type of Setting:

Acute hospital, Inpatient Rehabilitation Hospital, Skilled Nursing Facility, Sub-acute unit, Home Health, Outpatient clinic, School, Other (specify). List all that apply

Appendix E

Journal Instructions for PT Student Participants

Thank you for agreeing to participate in my research study. Email journal entries are an important part of the study. Your ability to complete these journals twice each week is extremely important.

Guiding Questions: What to write about

Given the nature of the purpose of this research study, you have many options about what to write about. I will use the interviews to explore what you have written in these journals.

- You could choose to write about any of these topics at any time while you participate in this study.
- You do not need to write about all of them during your clinical internship.
- You do not need to follow any order among these topics.

Possible Topics

- Memorable Patient:
  Describe a patient who made an impact on you in any way.
- Conflicts or troublesome events
  Write about something that happened that bothered you or troubled you in some way. It could be a time you disagreed with how something was done. It could be a time where you knew what you should do, but for some reason, could not do it. It could be a situation in which someone did something that you felt was wrong.
- Critical incidents
  Describe any situation that had an impact you and what that impact was.
- Memorable teaching or learning event
  Describe a situation in which you think you learned something important.
- Reflection
  You may wish to summarize events, thoughts or feelings over a period of time. This could be a summary or review of what was important to you.

Whatever topic you choose, focus on writing what is important to you- whether it is what happened, what you thought about it, or how felt about it.

General Instructions:

When do I write the journal?

Whenever you wish during the week, just be sure to do it twice.

What format do I use?

Email is the preferred method. See below if you will complete written journals.

When do I send the journal email entry?

As soon as you have written it and have access to email.

How long should it be?

This is up to you. Generally these journals might be 60 to 300 words which is less than a quarter to about half of a typed page. Content is more important than length. I describe what to write about below.

How important is spelling and grammar?

Not at all important. I am concerned with capturing what is important to you. If I have questions about something, I can follow-up when we talk.

What about patient privacy?

The best thing is to make up a name for any patient and the significant others involved in the person's care. Give very general information about where the person lives or other personal details. Give general information about the person's diagnosis, e.g. hip fracture, stroke, terminal cancer. An example of this might be, "Joe, in his 60's, from rural California was in the hospital after a stroke." If the nature of the person's diagnosis, symptoms, or the treatment you are providing is very important to what you want to write, you should try to give only essential information. You may consult with the Center Coordinator of Clinical Education if you have questions about whether you should include specific information.

What about other clinicians' privacy?

Your CI is also a participant, so you can use his/her name. I will change your name and his/hers everywhere they are used during the study. As far as other doctors, nurses, therapists, etc. use a made up name as well to protect their privacy.

What if I accidentally use a patient's or clinician's real name?

Whenever you realize you have used a real name, let me know as soon as possible. I will black it out to make it illegible and I will insert a made up name.

Instructions for written journals:

Participants who prefer to use written journals, whether pen and paper or a computer, may do so. In this case, you will keep the journal entries with you and I will arrange to review them and photocopy them before my interviews with you.

Appendix F

Journal Instructions for Clinical Instructor Participants

Thank you for agreeing to participate in my research study. Email journal entries are an important part of the study. Your ability to complete these journals twice each week is extremely important.

Guiding Questions: What to write about

Given the nature of the purpose of this research study, you have many options about what to write about. I will use the interviews to explore what you have written in these journals. Because the focus of this study is PT students during their clinical experiences, when you write about any of these topics, focus on the PT student and your relationship with him/her.

- You could choose to write about any of these topics at any time while you participate in this study.
- You do not need to write about all of them during your clinical internship.
- You do not need to follow any order among these topics.

Possible Topics

- Conflicts or troublesome events
  Write about something that happened that bothered you or troubled you in some way. It could be a time you disagreed with how something was done. It could be a time where you knew what you should do, but for some reason, could not do it. It could be a situation in which someone did something that you felt was wrong.
- Critical incidents
  Describe any situation that had an impact you and what that impact was.
- Memorable teaching or learning event
  Describe a situation in which you think you learned something important.
- Reflection
  You may wish to summarize events, thoughts or feelings over a period of time. This could be a summary or review of what was important to you.

Whatever topic you choose, focus on writing what is important to you- whether it is what happened, what you thought about it, or how felt about it.

General Instructions:

When do I write the journal?

Whenever you wish during the week, just be sure to do it twice.

What format do I use?

Email is the preferred method. See below if you will complete written journals.

When do I send the journal email entry?

As soon as you have written it and have access to email.

How long should it be?

This is up to you. Generally these journals might be 60 to 300 words which is less than a quarter to about half of a typed page. Content is more important than length. I describe what to write about below.

How important is spelling and grammar?

Not at all important. I am concerned with capturing what is important to you. If I have questions about something, I can follow-up when we talk.

What about patient privacy?

The best thing is to make up a name for any patient and the significant others involved in the person's care. Give very general information about where the person lives or other personal details. Give general information about the person's diagnosis, e.g. hip fracture, stroke, terminal cancer. An example of this might be, "Joe, in his 60's, from rural California was in the hospital after a stroke." If the nature of the person's diagnosis, symptoms, or the treatment you are providing is very important to what you want to write, you should try to give only essential information. You may consult with the Center Coordinator of Clinical Education if you have questions about whether you should include specific information.

What about other clinicians' privacy?

The PT student you are working with is also a participant, so you can use his/her name. I will change your name and his/hers everywhere they are used during the study. As far as other doctors, nurses, therapists, etc. use a made up name as well to protect their privacy.

What if I accidentally use a patient's, student's or clinician's real name?

Whenever you realize you have used a real name, let me know as soon as possible. I will black it out to make it illegible and I will insert a made up name.

Instructions for written journals:

Participants who prefer to use written journals, whether pen and paper or a computer, may do so. In this case, you will keep the journal entries with you and I will arrange to review them and photocopy them before my interviews with you.

Appendix G

Tables of Interview and Focus Group Questions

Appendix G describes the interview questions and the focus group questions for the PT student and CI participants. Each question is associated with the related research question by number, insofar as it is possible to predict the type of data that might be found with each question. The five research questions referred to are:

(1) What ethical issues do PT students encounter during their clinical internships?

(2) How do PT students reason through ethical issues when they encounter them?

(3) How are PT students' descriptions of their approaches to patients associated with their experience of their role as moral agents?

(5) What is the relationship between PT students' social negotiation of action with their patients and their role as moral agents?

(4) What is the relationship between PT students' social negotiation of action with their CIs and the PT students' role as moral agents.

Table G1

Physical Therapist Student Semi-Structured Interview Questions and the Related Research Questions

PT Student Interview Number 1 Interview Questions	Related Research Question
(Any of these questions could be specifically guided by "Interview Guiding Journal" entries if there are any. If so, the question will be tailored to the journal entry. If not, the question will be asked as it is described below)	
A) Tell me about a patient you work(ed) with that had an impact on you. What was it that made an impact? Tell me about your relationship with that patient. Tell me about your relationship with his/her family members. How do you think this patient contributed to your learning?	3

What did you learn about yourself from this patient?

Interview Questions	Related Research Question
B1) Were there times you felt you could take action/do something, but something got in your way?	1
B2) Were there times you knew the right thing to do, but something stopped you.	1
B3) Tell me about a situation in which you felt you were able to take action/do something, but decided not to?	1
Follow-up questions for B1, B2, B3:	
How did you realize there was something going on like this?	2
What did you do?	2
How did you go about deciding what to do?	2, 3, 4, 5
Tell me about the thoughts you had about this as you were considering what to do. What was your internal conversation like?	2
What did you learn about yourself in this situation?	2, 3
What role did the patient play in how you decided what to do or what you did?	2, 3, 5
What was the role of the patient's family?	2, 3, 5
What was the role of your CI?	2, 4
What was the role of other people in clinic?	2, 3, 5
Tell me about the other people you went to about this (either here or outside of the clinic).	2
What did you talk to them about?	2
How did they contribute to how you approached the situation?	2

C) Follow-up on information from any journal entries not included in the above

PT Student Interview Number 2

Interview Questions	Related Research Question
(Any of these questions could be specifically guided by "Interview Guiding Journal" entries if there are any. If so, the question will be tailored to the journal entry. If not, the question will be asked as it is described below)	
A) Last time we talked about patients that made an impact on you. Have there been any new instances or experiences like this you would like to share?	3
Use same follow-up questions as Interview 1, A	

Interview Questions	Related Research Question
The following questions are things we talked about last time that I would like to revisit	All
B1) Were there times you felt you could take action/do something, but something got in your way?	
B2) You knew right thing to do, but something stopped you.	
B3) Tell me about a situation in which you felt you were able to take action/do something, but decided not to?	
Use same follow-up questions as in Interview 1, B1 to B3	
C) Follow-up on information from any journal entries not included in the above	

PT Student Interview Number 3

Interview Questions	Related Research Question
A) Last time we talked about situations in which you knew what the right thing to do was, but something got in the way. Have there been any similar instances since we talked last time?	All
Reminder questions as needed:	
A1) Were there times you felt you could take action/do something, but something got in your way?	
A2) You knew right thing to do, but something stopped you.	
A3) Tell me about a situation in which you felt you were able to take action/do something, but decided not to?	
Same follow-up questions as above for Interview 1, B1 to B3	
B) What do you see as the impact you have on your patients?	3
Tell me about a patient on whom you think you had an impact.	3
What was role of the CI with this patient.	5
What was role of other people in the clinic or outside.	2, 4
C) In general, how would you describe your relationship with your patients?	3
What is your approach to your relationship with your patients?	2, 3, 5
How do you think you developed your approach?	2, 3, 4, 5
Tell me about people or events that influenced this approach.	3, 4, 5
D) Tell me how you would describe morals.	All
E) What about ethics?	
Where do you think your viewpoint about morals and ethics came from?	
G) What are the important moral and ethical values, virtues or principles that you ascribe to as a person about to become a physical therapist?	All
How did these come to be important to you?	
Are there particular people or events in your life that influenced them	

Interview Questions	Related Research Question
H) What do you think is the moral role of physical therapists in today's health care environment? (Triezenberg, 2005).	1, 2, 3
I) Tell me about common situations in which you encounter the moral role of a physical therapist student.	1
Tell me about how you thought about it- approached it.	2, 3, 4, 5
What did you do?	2, 3, 4, 5
Who did you talk to or consult with about it?	2, 3, 4, 5
Were there other resources you used (like literature)?	2
J) Tell me about a situation you encountered that you saw as an ethical or moral problem.	1, 2
Tell me about how you approached it.	2, 4, 5
What did you do?	2
Who did you talk to or consult with about it?	2, 4, 5
[This situation may involve a patient directly, it may be about a patient with CI or another health care practitioner, or it may be about another health care practitioner, including the CI, in relation to other health care practitioners]	
Tell me about how the (other person) was involved.	2, 4, 5
Who else was involved in the situation and how you approached it?	2, 4, 5
Tell me about how they were involved.	2, 4, 5

Additional questions based on any journals will be included

Table G2

Clinical Instructor Semi-Structured Interview Questions and the Related Research Questions

Clinical Instructor Interviews 1 and 2 Interview Questions	Related Research Question
(Any of these questions could be specifically guided by "Interview Guiding Journal" entries if there are any. If so, the question will be tailored to the journal entry. If not, the question will be asked as it is described below)	
A) Tell me about a time (student) came to you with an issue s/he was struggling with – for example, wanted to do something; should do something; thought someone else should do something. What was your role in the situation? What approach did you take with the student to assist?	1, 2, 4
B) In general, how do you perceive this student's relationship with patients? (F/U clarifying- could be somewhere on a continuum from extremely detached and distant to overly involved). How does this compare with your relationship with patients in general? What influence do you think you had on the student in this regard?	1, 3, 4
C) Tell me about situations in which you noticed (student} doing something that you considered very positive- was consistent with your conception of what a PT should do as a professional. What was your role and influence in that situation? How did you encourage his/her behavior?	2, 4, 5
D) What about situations in which you noticed (student) doing something that you considered negatively- inconsistent with your conception of what a PT should do as a professional. What did you do in that situation?	2, 4, 5
Additional questions based on any journals will be included	

Clinical Instructor Interview 3 Interview Questions	Related Research Question
(Any of these questions could be specifically guided by "Interview Guiding Journal" entries if there are any. If so, the question will be tailored to the journal entry. If not, the question will be asked as it is described below)	
A) Last time we talked about a time (student) came to you with an issue s/he was struggling with. Have there been any instances like this since we spoke? Follow-up questions the same as in Interview 1	1, 4

B) Last time we talked about how you perceived this student's relationship with patients. Is there anything you would like to add since then?	1, 3, 4
Interview Questions	Related Research Question
C) Last time we talked about situations you noticed (student) doing something you considered very positive in role of a professional. Have there been additional instances you would like to add?	2, 4, 5
D) Same for negative examples	
E) Tell me about situations the student was involved in that you think had moral or ethical dimensions. How did you see the student handling it? What was your role?	1, 2, 4, 5
D) Tell me how you would describe morals.	All
E) What about ethics?	
G) What are the important moral and ethical values, virtues or principles that you ascribe to as a physical therapist?	All
How did these come to be important to you?	
How do you see your role as a clinical instructor in relation to students acquiring these moral and ethical ideals you ascribe to?	5
F) What do you think characterizes the moral role of physical therapists in today's health care environment? (Triezenberg, 2005)	All
G) What is the moral role of physical therapists as clinical instructors- when there is a student involved?	1, 4
How do you think a physical therapist develops this view of their moral role?	
Tell me about how you think you developed in your moral role as a physical therapist.	
Additional questions based on any journals will be included	

Table G3

Physical Therapist Student Focus Group Questions and the Related Research Questions

Focus Group Questions	Related Research Question
What do you see as your moral role as physical therapists?	1, 3
How do you think you came to adopt those moral roles?	All
Who influenced your thinking and adoption of these roles?	
How did you experience that influence?	

Interview Questions	Related Research Question*
What do you think will enable you to fulfill those moral roles? In what ways did your clinical experiences influence how you see yourself fulfilling those moral roles? Can you describe a time during your clinical experience where you fulfilled any of these moral roles?	All
What do you think the barriers will be to your ability to fulfill those moral roles? In what ways did your clinical experiences influence how you see these as potential barriers? Can you describe a time in your clinical experiences that you encountered these barriers. How did you deal with them when you encountered them during your clinical experiences?	All
What did you see as your moral as physical therapist students? What helped you fulfill this moral role? What were some barriers to your ability to fulfill this moral role?	All
What were some of the ethical challenges you faced as physical therapist students? How did you handle them?	All
Additional focus group questions will be generated from the journal data and prior interview question data	

Table G4

Clinical Instructor Focus Group Questions and the Related Research Questions

Focus Group Questions	Related Research Question
What do you see as your moral role as physical therapists?	1
What do you see as your moral role in relation to being a clinical instructor?	4
In what ways do you think you influence PT students towards becoming moral and ethical practitioners?	2, 4

Interview Questions	Related Research Question*
What type of moral or ethical situations do you think PT students commonly encounter?	All
When you see PT students encounter moral or ethical situations, how do you see them handling it?	All
Can you describe some of the ways you have assisted them?	4

Additional focus group questions will be generated from the journal data and prior interview question data

APPENDIX H

Ethics Stories

Amy

Massage not Exercise

This male patient had low back pain and hip pain. In Amy's view, because the patient would not acknowledge that his hip was contributing to his problem, he did not follow the instructions he was given relative to exercise. Amy said he had trouble understanding the purpose of his spinal stabilization exercises because they did not seem vigorous enough to him. She tried a massage at one visit and he enjoyed it, telling her he wanted her to do more massage. She did not feel the massage would help him as much as the active exercise, but, in her view, he did not accept the value of the exercise. Amy consulted with Anne about the patient's physical therapy and Amy said Anne was frustrated also. They discharged the patient because he was not participating in treatment. (Interview one and journals)

Discharge with Medi-Cal

During the first interview Amy mentioned problems with delays in receiving authorization for physical therapy after the initial visit for people covered by Medi-Cal. During the third interview she discussed a patient who she felt would benefit from two more visits based solely on clinical factors. The patient had Medi-Cal insurance and it would take several weeks to obtain authorization for that care. She weighed whether she should discharge him versus seek authorization for more treatment that would resume after the hiatus. She judged that he would probably improve sufficiently over the waiting time if he continued to do his home exercise program. She said Anne had discussed the

situation with this patient. She ultimately presented the options to the patient and let him decide. He decided to discontinue treatment. Amy said if he wanted to continue, she would have explored that as an option with Anne. Amy had another patient who had two authorized visits remaining, but who had met her goals and, in Amy's opinion, was ready for discharge. Amy gave the patient the choice as to whether she wished to continue physical therapy and the patient decided to stop treatment. Amy said if the patient wanted to continue for the two additional visits, she would have done so. (Interview one, interview three, and journal)

Payers Limit Visits

Amy described a general concern with patients who have insurance plans that place dollar limits on the amount of physical therapy a patient can receive. They identified patients where she and Anne had to calculate how many visits that dollar limit provided and give the patient that information. She reported on one patient with complicated problems that did not seem to have sufficient visits available due to the limits on his care. During the second interview she mentioned this patient again, and, she felt he would be discharged before exceeding the limits on care (Interview one and two.)

Are Doctors Wrong?

Amy told about two patients who faced similar issues. She started both cases by wondering if doctors spend any time with patients to adequately understand their problem and provide adequate care. In this description, she was harkening back to her experience with physicians who spent little time with her, and her physical therapist with whom she had a close relationship. Amy described one patient who has been referred to physical therapy multiple times, each time with a different diagnosis related to the hip. In Amy's

clinical opinion, the patient had hip arthritis. The doctor had not given the patient this diagnosis, nor had the patient received radiographs or a medical resonance imaging (MRI) study. The other patient was a younger person with severe hip arthritis who appeared to need bilateral total hip replacements. The doctor was refusing to do the surgery. In both cases, Amy struggled with what to tell the patients when she disagreed with the doctors' opinions. She talked about her role as a student and the doctor's role relative to medical diagnosis and management. She used the phrase, "not stepping on toes" when describing her role. She observed the physical therapist in both cases tell the patients they should get a second opinion. Amy was not sure she could do that if she had to. (Interview one)

Patient Refuses PT Student

The theme of patient consent or refusal to be treated by a student first arose in the second interview when Amy talked of experiences she had with a few patients refusing to be seen by a student. During this interview, we discussed how that consent was obtained. During this interview she expressed her confidence that she was "doing a good job," while expressing concern about the amount of money they were paying for physical therapy provided by a student, and acknowledged her inexperience, saying "unfortunately they get me." In the final interview, Amy described a situation in which she was working with another physical therapist because Anne had the day off. Amy was introduced as a student, the patient said she did not want Amy to work with her, and Amy left. Amy said she would never ask the patient why she made the choice. She discussed an internal conversation she had afterward, in which she wondered why the patient made the choice and wanted to ask her why. She asked the physical therapist why she thought the

patient's declined to have Amy involved. That therapist said she did not know why, but said the patient was "eccentric." (Interview two, interview three,)

Eager Patient Misses Appointments

The clinic has a policy that patients must be discharged after failing to keep two appointments. She had a patient who was eager to get better, but who missed two appointments. She weighed whether she should discharge him or call him to schedule more appointments. She asked herself whether she was showing a preference for this patient over others who missed appointments. She discussed her concern with Anne, who left the decision up to Amy. Amy decided to call the patient. Afterwards, she expressed concern that she did not follow rules and wondered if that was an ethical problem. (Interview three)

PT does not give a home program

Amy talked about a PT she worked with who did not give her patients a home exercise program at the first visit. Initially, Amy struggled as to whether this was an ethical concern or not. She concluded that it was "morally right" to give every patient a home exercise program at the first visit. While she saw this practice as something they should do, she chose not to say anything to this PT or to her CI because of she was a student and the PT had eight years of experience. She thought to herself that the PT must have some reason for not giving the patient an exercise program at the first visit.

Luke

Over Utilize or Under Utilize

During the first interview, Luke discussed patients whose insurance limited the number of visits and how that affected his treatment. He first told about a patient with

low back pain who needed more visits, but had to discharge him with a home program. Early in his internship, Len helped Luke learn to explain these limits to patients by having Luke watch him explain the situation to a patient. Later, Luke related the story of a patient who responded well to exercise in four visits and was able to discharge him. This led Luke to wonder whether an approach oriented towards exercise and quick discharge was the best way to think about physical therapy, while recognizing "nobody's identical." He recognized that even though he had more visits available, it was a "waste of … insurance" to use them unnecessarily. He confronted temptations to under utilize and over utilize physical therapy based on payment. (Interview one, three)

Patients Decline Treatment

Luke had a patient who was 91 years old who was referred to outpatient physical therapy with balance problems. The patient said she had a problem with balance for many years and was not interfering with her activity level. Luke was concerned because he did identify balance problems that could present a risk for the patient's safety. Len told the same story, but they differed in what transpired. Luke said he left the room and talked to Len about the patient, Len said he could discharge her, and Luke did so. In Len's version, he said he was present with Luke and the patient during the visit and intervened when he noticed Luke continuing to press the matter of receiving physical therapy while noting the patient was reluctant to do so. Len said he told the patient she did not require physical therapy and he consulted with Luke afterward about how to handle those situations and how difficult it is when you see a need and the patient is not willing to have treatment. There was a second patient who was referred to outpatient physical therapy following hospitalization for a stroke. Luke saw minimal impairments

that would require physical therapy, though there was some need. The patient did not wish to receive physical therapy because the impairments were not interfering with his life. Luke discharged the patient after the initial visit and then discussed his decision with Len. (Interview two, journal)

Billing Codes and Overcharging

Luke discussed his internal reflections and thinking about whether his physical therapy intervention merited the billing he submitted. The internal thoughts were focused on how much benefit a patient received from the visit and how much he had to watch the clock to determine how much to charge for any portion of the visit. Physical therapy billing codes are time and service based, with different prices for different types of services. He recognized that within one visit, he might provide several different services, none of which were for the minimal time allotted for that billing code. In his view, he was faced with an ethical dilemma because he should accurately bill what he provided during the visit, but billing for every service he provided resulted in excess charges for the visit. He explored how he should report these charges with Len. He arrived at a reconciliation that balanced the charges with the time he spent with the patient. (Interview one and interview three)

Refuse Treatment, Get Discharged

Luke discussed the case of a woman on the inpatient rehabilitation unit who was refusing to participate in physical therapy. The patient stated she was too tired or did not feel like participating. Luke tried multiple times to try to convince her to participate, but felt she had the right not to participate. He had a conversation with a nurse who told him it was possible if the patient continued to refuse physical therapy, she would have to be

discharged. Luke decided to attempt to see the patient one more time. He acknowledged the patient's fatigue, told her that there was a possibility she would have to be discharged if she did not participate in physical therapy, and offered to not be too vigorous with the exercise. The patient consented to participate and continued to do so on subsequent days. (Interview two)

Is the Patient Faking?

Luke talks about patients whose expressed difficulty moving seemed out of proportion to the nature of the problem. His description of these patients had several instances of speech patterns that emphasized his reactions, such as volume changes and overly drawn out words. He said it is very difficult for him to get past questions of whether the patient is "faking it" or if the patient had a negative outlook. He described a thinking process when he says he came to the realization that he had to take these patients at their word because that was his responsibility as a physical therapist. His perception of how we should respond was shaped by observing other PTs work with these patients in such a way that he felt was derogatory or did not seem to listen to the patients. He also said he realized that they are "somebody's wife, mother, daughter or brother." Luke said he did not describe these concerns with others. (Interview three)

He Has HIV Infection

Luke had a patient with HIV infection who also had a diagnosis of Guillain-Barré. He described his initial reaction to the patient's HIV infection and reluctance to see the patient based on the lifestyle choices that Luke associated with that diagnosis as well as the potential for risk of infection that working in close physical proximity to the patient might present. He described an internal conversation he had with himself in which he

weighed the risks and concerns with his duty as a physical therapy student to provide care for patients. He thought about the option of telling Len he was not able to see the patient based on his concerns, but decided not to do so. He ultimately proceeded to provide treatment because of his sense of duty and personal integrity. This patient also had Guillain-Barré, the main reason for his hospitalization and referral for physical therapy. The patient was threatened with discharge from the acute inpatient rehabilitation unit because he was not making progress. In fact, the natural progression of the disease is one of slow decline of motor function followed by recovery that proceeds at variable rates depending on the patient. Luke and the rest of the team had to advocate for the patient's continued hospitalization given the nature of his medical condition. (Interview three)

Family with a Four-wheel Walker

A family came in with a four-wheel walker with a fold-down seat that they thought would be helpful for their father. Luke thought the patient was not physically able to use this type of walker and had other plans for the visit that day. He realized they thought it would be helpful because the patient liked to garden and he would be able to get outside in the garden and take a rest on the seat. Luke decided to try the patient with the walker with the family there because there could be potential and, at the least, the family would recognize their father was not ready for this type of walker. The family observed their father was not capable of using the walker and were fine about not proceeding with that equipment. (Interview one)

Mother and Sons

Luke described a situation in which a patient arrived at her physical therapy visits with her two young sons who were quite physically active. She had trouble controlling

them because they wanted to play on the therapy equipment. Luke said the children were distracting her from physical therapy and thus she was not receiving optimal care. He tried having toys to entertain the children and moving to a private room. He said he said he realized there was nothing he could do because a mother had to bring her children with her to physical therapy. In this situation he felt he did this best he could to minimize the distraction and continue the visits.

Cathy

Racially Biased Patient

Cathy had a patient who she described as having an outwardly pleasant disposition; he would smile, talk very calmly, and express appreciation for her assistance. On the other hand, he would make racially disparaging comments about other people. Cathy struggled with how to react given she found what he was saying was objectionable, but the way he said it was not offensive. She weighed several factors, including the stress he was under in the hospital due to his illness and the nature of his treatment. She decided not to say anything to him. (Interview one)

The Patient with Leukemia

Cathy described her interactions with a young, single-mother with leukemia who was quite ill. She said the first time they saw the patient, she had been on a commode for 15 minutes and needed help cleaning up and getting back to bed. Cathy realized that she could have asked the patient to wait while the nurses came to help her because, technically, in Cathy's view, that was the nurse's job. She and Claudia decided they should help her. Cathy said this patient did not want to participate in physical therapy, preferring to stay in bed. Cathy said she and Claudia weighed how much they should do

to increase her participation. They decided to emphasize the benefit of walking so she could see outside and visit with her young daughter. There was one instance in which they came to her room to provide physical therapy and she was feeling upset about losing all her hair, was tired after a bone marrow biopsy, and her six-year old daughter was coming to visit and did not want her daughter to see her in her physical condition. Cathy had to adjust to the patient's emotional state and concerns and make a decision whether or not to pursue the physical therapy visit for the day. She said she and Claudia talked about keeping this patient on their schedule instead of having other physical therapists treat her so that they could maintain the continuity of their relationship with her given the difficulty she was having with her prognosis and effect of her illness. (Interview one)

Nurses Need Help

Cathy described a situation in which she and Claudia were at a nursing station charting and heard an overhead page requesting assistance from physical therapy with a patient transfer. They recognized the patient as someone who was extremely obese. Cathy felt they should go help because they did not have other pressing demands on their time. Claudia that indicated they could wait for another physical therapist to respond because the patient was not on the cardiac service and raised the issue that Cathy, as a student and not a staff member, had to be more careful to avoid an injury to her back. There was one more page and they continued to wait, making Cathy more uncomfortable. They responded when a nurse came into the area where they were charting, identified them as physical therapists and said she needed their help. Cathy related the need to help to her role as a physical therapist and helping other people, whether it was nurses or a patient. Cathy said they joked with the other PTs about the situation. In hindsight, Cathy

reflected that she would have preferred she spoke up to Claudia about responding more quickly because she felt they had an obligation to assist the nurses. (Interview one)

Prison Custody

Claudia and Cathy both offered the story about Cathy's experience seeing patients who were in the hospital and on prison custody. Claudia noticed Cathy's facial reaction of fear or surprise the first time she saw a patient in the hall who had on a prison jumpsuit and handcuffs with a guard. Taking note, Claudia decided Cathy would have a patient in prison custody on her schedule to give her the opportunity to see they were no different from any other patient. Cathy described her interaction with one of these patients, and that discussion focused on the patient's personal story and clinical aspects of the case. Claudia overheard a conversation Cathy had with her boyfriend, who was visiting from out of town, in which her boyfriend expressed concern about Cathy treating patients in prison. Claudia told him they were like any other patient and he should not be concerned.

Doctors Discharge Too Soon

Cathy told of several circumstances in which physicians made decisions to discharge patients, but she felt they were not ready for discharge, either because their blood pressure did not seem well controlled or they were unable to function at the level required at home. She described several situations in which she made the case to the physician that the patient should be hospitalized longer, but the physician declined and discharged the patient. In these circumstances, Cathy was acting as an advocate on behalf of the patients. When she was unsuccessful, she scheduled the patients for return visits in outpatient physical therapy. (Interview two and three)

Nurses and Blood Pressure Cuffs

When Cathy considered several of the patients who were discharged before she thought they were ready, she realized that the nurses were using automatic blood pressure cuffs while the physical therapists used manual blood pressure cuffs. The physical therapists' measurements were consistently higher than those with the automatic cuffs, indicating that the blood pressure was not adequately controlled. She described situations in which she reported the discrepancy to a nurse, who reacted by saying they should take it again after waiting several minutes. Cathy and Claudia spoke to the physicians in individual situations, as described above. Cathy's dilemma was whether she should raise the issue of the systemic practice that was potentially jeopardizing patients. She thought about her role as a student, whether she felt she could make a difference, and whether it would disrupt the relationships between the nurses and physical therapists. She interacted with her CI and the other physical therapists about the individual patients, but not the systemic practice. Ultimately, she decided not to say anything about it. (Interview two)

Christian Scientist and No Treatment

Cathy and Claudia described the situation with a patient who was a Christian Scientist hospitalized for a cardiac condition. Cathy watched a nurse interact with the patient, in which the nurse said the patient must take her medication if she wanted her breakfast, even though it was known the patient was a Christian Scientist and had declined medication. The patient said she was too hungry and took the medication so she could eat. Cathy then reviewed the chart and discovered that the physicians wrote orders to crush her medication and put it in her food because her severe cardiac condition and

they were questioning whether she was competent to make medical decisions. The patient could taste the medication leading her to be more mistrustful of the health care providers. After Cathy discovered that the patient was being medicated against her wishes, she consulted with Claudia. In her interview, Claudia said she had to consider whether this was a physical therapy concern; Cathy had the same question. They decided they did have a responsibility to talk to the physicians. Claudia had Cathy talk to her supervisors to get advice about what to do, that they would have Cathy remain involved in the patient's care, and that Cathy would talk to the physicians. Cathy said that during her conversation with the physician, she asked if they were aware of the patient's wishes and the ethical concerns this raised, the physician acknowledged the problem and said they were considering an ethics committee consultation. Simultaneously, the patient was refusing to work with physical therapy, accusing Cathy of being one of the health care providers who were giving her medications. Cathy managed the situation by giving the patient an independent exercise program and checking on her periodically. On one visit with the patient, the patient's pastor was in the room and mediated a resolution in which the patient realized that Cathy was not involved in giving her medication. In Cathy's view, this seemed to resolve the differences between them. (Interview three)

The Patient with Urinary Incontinence

Cathy described a patient with stress urinary incontinence that was triggered by coughing, and whose pulmonary condition caused her to cough frequently. As a result, the woman often was often incontinent. Complicating the situation was the fact the woman did not speak English. Cathy described a situation in which she came to the patient's room and the patient needed a change of clothes and help cleaning her. Cathy

had a very busy schedule and had to weigh whether she should stop to help the patient or ask the patient to wait for nurses. Cathy said she would check with the nurses to see if they could attend to the patient quickly and then make a decision on a case-by-case basis. (Interview three).

Rick

Patient with tetraplegia

Rick and Rhoda described a situation in which they saw a patient with a long-standing, high-level spinal cord injury who was referred for a physical therapy evaluation because he claimed he was noticing a return of sensation in his arms. Rhoda said the patient was not forthcoming initially about why he was referred to physical therapy. She had Rick perform the examination. After some time together, it became apparent that the patient hoped that, because he was noticing sensation, it meant he might recover motor function in his arms. Rick then wondered to himself why the physician did not let the patient know that there was no chance of recovering motor function and made the referral to physical therapy. Rick realized that he had the responsibility to be truthful with the patient given the trust the patient was placing in him. He said he thought about the fact that he could learn from the patient if he were to have him continue physical therapy, and that it might help the patient remain hopeful. He recognized the patient would quickly become disappointed and would not be served by continuing physical therapy. During the visit, Rick let the patient know that he would not recover arm function and advised him that physical therapy was not indicated. (Interview one)

Patient Exaggerating

Rick described a patient who he suspected might be exaggerating his symptoms. Rick noticed he had a tendency to label the patient because of his suspicions. He then described coming to a realization about what he was doing. He decided he had to set aside his reactions and learn more about the patient and what his problem was. He said he talked to his CI about his doubts about the patient.

Wheelchairs the Patients Want

Rick started off by telling of how some patients seemed to want to get as much as they could for themselves, even if they did not need it. He found that frustrating. Rick was evaluating a patient for a wheelchair and midway through the evaluation, the patient noticed all of the accessory equipment in the room and told Rick he wanted several of the items he saw. Rick noticed that the patient did not need the accessories, and decided to ask the patient if he knew what the items were. When the patient told Rick he did not know, Rick told him that he must not need them. In this situation, Rick admitted he "put [the patient] on the spot." Later in the interview he described a patient who also came for a wheelchair. In this situation, the wheelchair vendor seemed to push the patient to get a more expensive wheelchair that she did not need. Rick told the patient that she needed to get the wheelchair he recommended, not the more expensive wheelchair. Later in this interview, Rick talked about a patient with severe burns who needed a power wheelchair and who also had a need for ongoing physical therapy. She voiced agreement with his plan for both. After he made a special effort to get appointments for physical therapy quickly, she failed to keep them. He felt she was manipulating the system by agreeing to the physical therapy in order to get the power device. Rhoda advised him that he did not

know all of the facts in the case and urged him to reserve judgment about the patient. His frustration also stemmed from his view that the patient could have a functional improvement from ongoing physical therapy, but her failure to follow-through meant she was likely to be less functional in the future. This situation also presented Rick with the issue of patients who fail to keep appointments and how many times he should contact them to see if they wished to continue physical therapy.

Polio and Power Scooters

Rick had patients with post-polio syndrome who needed power mobility devices. In his judgment, a power wheelchair was optimal. The patients wanted power scooters. Through his discussion with the patients, he discovered that they wanted power scooters because there was less of a stigma attached to a person in a power scooter compared with a power wheelchair. He realized that the patients' desires for a power scooter had merit and that is what he ordered. (Interview two)

Unethical Wheelchair Vendor

Rick received a call about a wheelchair delivery for one of his patients on a day that Rhoda was off. The vendor's request seemed unusual, so Rick consulted with another physical therapist and refused to take delivery. On further investigation it seemed the vendor had possibly taken the patient's wheelchair order from another vendor without the patient's consent and once they delivered the wheelchair, the order was not complete. Rhoda took over the case because she had worked with the patient previously, had contacts within the Medi-Cal office that was dealing with the problem and the situation called for filing complaints with the payer. Rhoda had Rick continue to work with the patient so he could help the patient learn to advocate to get his needs met. Rick

expressed frustration about the delay in the patient getting the wheelchair he needed because the vendor had not delivered the proper wheelchair and was not responding quickly to correct the problem. (Interview two and journal)

Patient Visit on Last Day

Rick had a situation on his last day at the clinic in which a patient arrived late for her appointment. He weighed whether he should see her because he knew that one visit would not make a significant difference to her physically, but would be a "morale booster" for her. His reluctance stemmed from several administrative tasks he had to complete because it was his last day, and seeing the patient late would impinge on his ability to get these tasks completed on time. He decided he should see the patient. (Interview three and journal)

Keep Appointments or Discharge

Rick had a patient who failed to keep three appointments and then arrived thirty minutes late for her fourth appointment. According to policy, Rick was supposed to discharge her after three missed appointments, but he forgot to do so. He said he told her about the policy, let her know that his time was valuable, and other patients with more significant transportation barriers managed to keep appointments. He told her he meant to call her to notify her all of her appointments were cancelled. He told her that he was excited to work with her, but she had to make a promise to keep future appointments. He provided the physical therapy visit and she continued to arrive for her appointments. (Interview three and journal)

Cannot Treat an Inpatient.

Only Rhoda related the story of the patient on an inpatient unit, but whose physical therapy was disrupted by a physician's interpretation of a policy. The clinic had a policy that an inpatient could not be seen by an outpatient physical therapist in the outpatient clinic. The policy was being rescinded, but was still in effect. The patient had completed her inpatient physical therapy and was awaiting discharge placement, but was still in the hospital. The patient was referred to outpatient physical therapy. The patient came to the outpatient gym from the inpatient unit, but arrived late so they could not see her. On a subsequent day, the patient came to the gym and told them her physician told her she could not receive treatment in the outpatient gym. Rhoda investigated the situation and the physician told her directly that the patient could not be seen for physical therapy in the outpatient area. Subsequently, Rick asked if he could see the patient in her room, and was told he could not, because she was an outpatient and could not receive physical therapy in her hospital room. (CI interview three).

Ruth

Will I Walk?

Ruth had several patients who had a spinal cord injury and who wished to learn to walk with braces and crutches. The clinic had a protocol that required a certain level of physical functioning before they could proceed with gait training. Ruth found herself struggling with how to communicate the requirement to these patients when it appeared some of them had little chance of meeting the criteria. She voiced the concern that she had to help them maintain their hope. One of her patients was a college-aged man who formerly played football. She noted the patient, his father and brother often talked about

the importance of sports in their lives and realized the spinal cord injury would have a significant impact on them. She described how she gave him research studies about walking after spinal cord injury and helped him understand news stories he heard about people walking after spinal cord injury. She also had two other patients, one of whom was much older than the other. She noticed that she had a bias that the older patient was not likely to meet the clinic's criteria because of his age even though his physical functioning was closer to meeting the criteria than the younger patient was. A fourth patient was not making adequate progress toward meeting the clinic's criteria to walk and was not fully participating in physical therapy. In Ruth's judgment, his lack of participation was a major cause of his lack of progress toward the goals, and she had to discharge him with a home program even though she felt there was more benefit in continue physical therapy. In each situation she contemplated how much to encourage the patient to try to meet goals for gait training versus using a wheelchair for mobility, even though gait training might be much less energy efficient and functionally limiting. (Interviews one, two, three and journal)

Patient Lost His Wheelchair I?

Ruth related the story of one patient who claimed his wheelchair was stolen three years ago and did not replace it. He said he borrowed a wheelchair for the intervening time. There were some inconsistencies in his medical history and diagnosis that raised her suspicions, including different diagnoses on the paper work from the physician and vendor, and a different history from the patient. The physician referral was for a highly sophisticated, expensive wheelchair with more adaptations than the patient appeared to require. That referral, along with some notations on the paper work from the physician

and vendor, raised suspicions about whether the physician was acting honestly or stood to profit from the more expensive wheelchair or whether the wheelchair vendor and physician might be collaborating to profit excessively. Ruth wondered what she should do about her suspicion. Ruth had the patient try a manually propelled ultra lightweight wheelchair, which he was able to propel. The patient claimed that his ability to propel a manual chair was limited by shoulder pain. This led Ruth to order a power scooter for the patient. That option was less expensive than the power wheelchair the physician ordered. But, it appeared the patient might not require power mobility at all. She felt her decision was closer to complying with Medicare requirements than if she had ordered the wheelchair the physician ordered. She concluded that the patient found the selection of the power scooter a satisfactory option. The story ended with her saying they had to wait to receive the paperwork from the physician. (Interview one, journal)

Patient Lost his Wheelchair II

Ruth had a second case of a patient who claimed he lost his wheelchair six years ago. When Ruth tried to get a prescription for a wheelchair from the physician, the physician replied that the patient did not need a wheelchair, but the physician referred the patient for an evaluation for a wheelchair. The physician's signature on the initial referral that the patient brought with him to physical therapy differed from the name of the physician the patient said they should contact about the specific prescription. This raised Ruth's concern that perhaps the patient was not acting honestly. When they told the patient the physician would not sign the prescription, he became upset and it appeared the patient might be shopping for a doctor who would give him what he wanted. Ruth ended up questioning the patient's truthfulness. She let the patient know he should

pursue his concerns directly with the physician and, she did not hear from the patient again. (Interview two, journal)

Patient with Fibromyalgia

Ruth had a patient with a diagnosis of fibromyalgia and multiple other problems (twice Ruth said she had twenty or thirty other problems). The patient said she had to walk from her bedroom to her bathroom because her power wheelchair would not fit through the door and hall. The patient, who was accompanied to physical therapy by her husband, she her husband had to help her move in bed and with dressing. The patient was referred for evaluation for a new power wheelchair by a physician in the community as opposed to a member of the medical staff. The clinic's policy stated that a physician from the community could refer a patient for a wheelchair evaluation, but for ongoing physical therapy. If a patient needed physical therapy, the physical therapist at the clinic would have to refer the patient to a physical therapist in the community. Ruth felt the patient would benefit from ongoing physical therapy, and in fact, felt the power wheelchair would lead to more dependence on the wheelchair rather than encourage her to become more independent. Ruth wanted to not order the power wheelchair and refer the patient to outpatient physical therapy. The patient refused and Rhoda told her that the patient would not be likely to attend physical therapy given her past reliance on a power wheelchair. Despite her reservations about its negative effect on her function, Ruth ordered the power wheelchair for the patient. (Interview two and journal)

Try to Get the Right Wheelchair

Ruth reported several situations in which patients and their families requested wheelchairs that exceeded the guidelines of third party payers, particularly Medicare.

Often the family and patient's requests were legitimate and would contribute to the patient's independence. The guidelines did not permit consideration of a family member's needs when evaluating a person for a wheelchair. Ruth tried to consider each patient's needs in relation to the guidelines, but often felt she had to "fudge" the report in order to obtain the type of wheelchair she thought would best meet the patient's needs. (Interview two, interview three)

Come Back for Wheelchair

Ruth had a situation in which a patient needed repairs to his wheelchair and perhaps a new wheelchair. He failed to keep more appointments than allowed by the clinic policy. Ruth continued to schedule him because each time she contacted him he promised he would return for the next appointment. Finally, she had to discharge him despite his promises because he continued to miss appointments. (Interview three)

Privacy in the Gym

Ruth had two situations in which patient privacy could not be maintained because of the gym setting. One situation involved people with spinal cord injury who spoke Spanish. These patients had to complete a questionnaire that was not translated into Spanish, thus they read the questions to the patients. The questionnaire had several items related to the patient's sexuality and bowel and bladder habits. Ruth felt this lack of confidentiality was not acceptable, but there was no private area nearby where they could administer the questionnaire. She advocated for a Spanish translation, that was underway. In the second circumstance, the clinic had a video translation system. With this system, they could provide translation services from a remote site. Because the video system only had a headset for the patient and physical therapist, if a family member

wanted to hear what was said, they had to broadcast it in the gym. Again, the other people in the gym were privy to the private health information being transmitted over the video translation system. She and Rick tried to develop a system to protect patient privacy and allow multiple people to hear the translation, but they were unable to do so. (Interview three)

Patient's Education Level and a Wheelchair

Rhoda told of a situation in which Ruth was seeing a patient who needed a wheelchair. Ruth suggested that because the patient had a fourth grade education, she doubted she would be able to propel a wheelchair. Rhoda questioned that assumption to herself, and intervened to have the patient try propelling the wheelchair to determine if she could do so. Ruth observed the patient's success and ordered the wheelchair for the patient. (Interview one, CI only)

Patient Needs a Power Wheelchair

Ruth described patients who seemed to under perform when she was testing them to determine what type of wheelchair they needed. She questioned whether they were trying to manipulate the system to get an upgraded wheelchair they really did not need. Her dismay over these patients led her to recall a different patient who she thought needed an upgraded wheelchair, but would not give up her power scooter. Ruth was concerned because the patient's head position in the power scooter and when she drove a car caused her to be unsafe. Despite Ruth's urging and discussions, the patient would not consider changing to a power wheelchair with different support. Ruth felt she did all that she could and was resigned to the fact she could not force the patient to give up her

power scooter. Ruth jokingly said she is glad she did not have to drive on roads near where the patient drove. (Interview three)

Get Help to do the Test?

In one of her journals, Ruth wrote about a time she needed help to perform an examination on a patient because she was not sure how to do a special test properly. Rhoda was not in the clinic that day, so Ruth had another PT acting as her CI. That PT had another student that day as well. It was not until Ruth was with the patient that she realized she could not adequately perform the test. She tried to get help, but could not locate the substitute CI, so went ahead with the test. She described thinking retrospectively that she should have stopped and got help, but thought that there was little risk of harming the patient. Even so, she wrote that she would get help the next time she had this type of experience. (Journal)