ABSTRACT

DUNATOV, LINDA J. An Exploration of Emerging Professional Identity in Women Osteopathic Medical Students: Does Gender Matter? (Under the direction of Dr. Susan J. Bracken.)

The purpose of this narrative inquiry study was to gain a richer understanding from the perspective of gender about how third and fourth year women osteopathic medical students at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM) constructed their developing professional identities as future osteopathic physicians. This study sought to address the gap in the relevant literature regarding the influence of gender on the development of medical students' professional identities as physicians and to offer a medical student perspective on how they were constructing their developing professional identities as future physicians. Participants, through their own words, revealed that gender, particularly gendered personal identities and gender dynamics, significantly influenced the construction of participant professional identities as future physicians.

The personal narratives written by these women evidenced common themes concerning their efforts to blend their personal identities as women with their emerging professional identities as osteopathic physicians. As the study findings indicated, these women students relied heavily on their clinical faculty as role models, mentors, and guides; they negotiated the intersection of their personal and professional identities; they selected residency specialties that they felt would accommodate a blend of their personal and professional identities; they believed that if they were male they would not have the same worries about when to have children; and they coped with experiences of gender dynamics

that included gender discrimination, sexual harassment, and being subjected to gender stereotypes by others.

A key aspect of this study is that it offered a glimpse into how study participants formed their emerging professional physician identities. Participants' narratives shared that when these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students. In their accounts, study participants linked their gendered identities as women with the professional identities they were actively shaping as future osteopathic physicians. For participants, the influence of gender was most profound in their selection of future residency specialties as residency choice generally identifies a physician's future career specialty, which is an important dimension of a physician's professional identity. Further, participants believed that if they were male, they would not be faced with the same type of concerns or decisions.

Viewed from the critical theoretical stance of poststructuralist feminism, participant narratives disrupted the traditional understanding that the professional identity of a physician is genderless. In contrast, this study found that participants' gendered personal identities strongly influenced what they felt they could or could not do with regard to their future medical careers and developing professional identities. The relevance of this study's findings is that the guise of a genderless medical education program is unmasked to reveal that the professional identity of physicians is not neutral or genderless.

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An Exploration of Emerging Professional Identity in Women Osteopathic Medical Students: Does Gender Matter?

by
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DEDICATION

This work is dedicated with love to the memory of my mother, Amalia Dunatov, and offers testament of a promise kept. My memories of my mother act as a constant source of inspiration to be myself.

BIOGRAPHY

After earning my Bachelor of Science Degree in Medical Technology, I attained a Master of Education Degree in Higher Education. I received both degrees from the University of Washington. I worked several years as a registered medical technologist and, in time, became an educator and administrator of a medical technology program at Thomas Jefferson University in Philadelphia. I eventually became Assistant to the Vice President for Health Sciences at SUNY – Stony Brook where I served as a planner and health policy analyst.

My career brought me back to Seattle where I worked for more than a decade as Administrative Director of Academic Affairs for the University of Washington School of Medicine's WWAMI Program. I went on to serve in the role of Assistant Dean for Graduate Student Affairs at the University of North Carolina Charlotte. In 2009 I became the Associate Dean for Student Affairs at the University of Pikeville – Kentucky College of Osteopathic Medicine in Pikeville, Kentucky.

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I am especially grateful to the third and fourth year medical students (Adele, Carly, Chloe, Eva, Lana, Lynn, Marielle, Michelle, Renee, Tori, and Vicki) of the Kentucky College of Osteopathic Medicine (KYCOM) who generously shared with me their personal stories of their medical education experiences that shaped their emerging professional identities as future osteopathic physicians. I proudly acknowledge that these women have graduated and have advanced to graduate training in various residency programs. I look forward to their future contributions as women osteopathic physicians to the profession of osteopathic medicine.

I offer special thanks and appreciation to Boyd R. Buser, D.O., FACOFP, who as Vice President for Health Affairs and Dean of KYCOM at the University of Pikeville, generously allowed me the opportunity to conduct this study with KYCOM women medical students in order to pursue my personal and professional goals.

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CHAPTER 1. INTRODUCTION

The purpose of this narrative study was to gain a better understanding of how women osteopathic medical students constructed their professional identities as physicians. Medical education is held to be gender neutral and genderless, yet gendered outcomes are evident (Risberg, 2004; Riska, 2000). My study utilized qualitative research methods to explore the gendered nature of professional socialization through a narrative inquiry involving women medical students who were in their third and fourth years at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM). Poststructuralist feminism served as the study's theoretical framework.

The aim of this chapter is to provide an overview of this study through a discussion of the study's background and rationale, problem statement and research question, and research framework.

Background and Rationale for Study

Background

My research focus on exploring the gendered nature of medical socialization arose from my initial interest in investigating the well-documented, persistent underrepresentation of women physicians in executive leadership roles in academic medicine (AAMC, 2009; Carr, Friedman, Moskowitz, & Kazis, 1993; Morahan & Richman, 2001; Reed & Buddeberg-Fischer, 2001; Yedidia & Bickel, 2001) and other professions (Ely & Meyerson, 2000a, b; Kanter, 1977/1993; Moore, 1983, 1987; Sandler, 1986, 1992; Valian, 1998). This gender gap in corporate, academic, and professional leadership roles has been described as a

glass ceiling (U.S. Department of Labor, 1995). A glass ceiling refers to the invisible barriers that thwart the advancement of demonstrably qualified women from obtaining top executive leadership positions and from being paid comparably to men with similar qualifications and rank. The limitations imposed by experiences of a glass ceiling have little or nothing to do with talents inherent from an individual's gender, but rather more to do with the culture of an organization that influences everyday activities and how decisions are made (Kanter, 1977/1993).

Rationale

Given the chronic underrepresentation of women physicians as leaders in academic medicine, I decided to look at the medical school socialization experiences of women osteopathic medical students that shaped their emerging professional identities as physicians. Much of the medical socialization literature dwells on what the medical education establishment does to train its medical professionals with little research on how medical professionals themselves construct their physician identities (Pratt, Rockmann, & Kaufmann, 2006). Further, little is known about how osteopathic medical students, particularly women, go about creating and establishing their professional identities as physicians (Harter & Krone, 2001; Pratt et al., 2006). Researchers also acknowledge that not enough is known about the influence of gender on the development of medical students' professional identities as physicians (Boulis, Jacobs, & Veloski, 2001; Harter & Krone, 2001). The purpose of this qualitative research study was to address this gap in the relevant literature by contributing to our understanding of how women osteopathic medical students shape their professional identities as physicians.

Women and men enter osteopathic medical school to become osteopathic physicians or D.O.s. In their roles as student doctor trainees, these students are also initiates into the medical profession. In medical school, students experience medical socialization and acquire professional knowledge and competencies, technical skills, and professional values in order to become physicians (Becker, Geer, Hughes, & Strauss, 1961). They also begin learning the values inherent in medical professionalism that are taught in the curriculum and that they learn from the medical culture by observing and practicing patient care skills with their clinical physician faculty and role models (Conrad, 1988; Inui, 2003). "But science and skill do not make a physician; one must also be initiated into the status of physician; to be accepted, one must have learned to play the part of a physician in the drama of medicine" (Becker et al., 1961, p. 4).

Much of the medical socialization literature dwells on what the medical education establishment does to train its medical professionals with little research on how medical professionals themselves construct their physician identities (Pratt et al., 2006). With respect to osteopathic medical education, there is a paucity of research on medical student socialization and professional identity construction. Clearly, not enough is known about how osteopathic medical students, particularly women, go about constructing their professional identities as osteopathic physicians (Harter & Krone, 2001; Pratt et al., 2006).

Osteopathic Medicine and Medical Education

In the U.S., only allopathic physicians or M.D.s and osteopathic physicians or D.O.s are trained and licensed as complete physicians who may prescribe medications and practice in the full array of medical and surgical specialties (AOA, 2012). Osteopathic medicine is

similar to allopathic medicine in many respects, yet is distinctive given its underlying holistic philosophy, patient-centered approach, and focus on preventive care (Seffinger, King, Ward, Jones, Rogers, & Patterson, 2003).

The framework of osteopathic medical education parallels that of allopathic medical education (Hahn, 2009). Medical students learn how to become physicians through formal, informal, and hidden curricula while in medical school (Inui, 2003). The formal four-year medical education program consists of two years of basic science and introductory clinical science classroom instruction followed by clinical studies in patient-care settings that students undertake during the third and fourth years of the curriculum. The informal curriculum has been described as the medical school's social environment that strongly influences medical students' values and professional identity constructions (Suchman, Williamson, Liyzelman, Frankel, Mossbarger, Inui, & the RCID Team, 2004). Through these means, medical trainees gain knowledge about medicine, increase their technical competence, and develop patient encounter, diagnostic, and therapeutic skills.

Mentors and role models help novice medical students learn the professional culture of medicine and guide them explicitly and implicitly in their quest to become professional insiders (Cohen, Kay, Youakim, & Balaicuis, 2009). The medical socialization of students is strongly influenced by the profession's insiders from whom they learn the norms and culture of the profession. All of these experiences influence how these future physicians construct their emerging professional identities. Students begin to sort out the faculty who they identify as exemplars of the medical profession and who they want to be like. Accordingly, they also identify professionals who they do not want to be like (Cohen et al., 2009). In so

doing, student doctors begin shaping their professional identities from their perceptions of their social interactions with physicians, faculty, staff, patients, and other students.

Medical educators are beginning to realize and appreciate that the hidden curriculum may be the most potent tool for becoming acculturated into the medical profession. The hidden curriculum is encountered by medical students in academic and clinical settings in which the observed professional behavior of physicians and other faculty that they work with and learn from does not match the cultural, ideological, and ethical values that medical students and residents have been formally taught (Inui, 2003; Pratt et al., 2006; Suchman et al., 2004). Hidden curriculum behaviors include instances of gender discrimination and stereotyping, rudeness and denigration of others, unethical behaviors, and sexual harassment (Heru, 2005). These behaviors within the medical communities of practice significantly influence and shape the identities of male and female medical novices.

Medical socialization and professional identity. According to Niemi (1997), "(physician) identity formation consists of exploring the available alternatives and committing to some choices and goals" (p. 408). Student doctors begin to shape their professional identities as physicians from the personal meanings they construct from their experiences of medical education and the medical profession.

The medical school curriculum is thought to be gender blind and gender neutral (Risberg, 2004). Medical schools train their students to become physicians. Their programs of medical education do not explicitly train women students to become female physicians and men to become male physicians. The educational focus is training all medical students,

women and men, to become physicians. Yet, there is ample evidence that women and men experience medical school differently (Grant, 1988; Haas & Shaffir, 1991; Riska, 2000).

Medical students are more heterogeneous than they were a half century ago. Medical school demographics have changed significantly since *Boys in White* (Becker et al, 1961) was published as a study of medical school culture and professional socialization at a time when medical students were primarily white middle class males. Presently, women nearly equal men as enrolled medical students in the United States (AACOM, 2012; AAMC, 2012). Further, these students are diverse in terms of their age, race, education, marital status, and sexual orientation (Beagan, 2000).

Risberg (2004) characterized her physician identity as a neutral and genderless professional. From their learning experiences, medical students construct a professional identity of physician with the belief that it is neutral and genderless (Acker, 1992, 2006; Kaiser, 2002; Risberg, 2004). There is ample evidence that the professional identity that is modeled for students in their everyday activities of medical education is heavily influenced by male norms and standards (Beagan, 2000; Haas & Shaffir, 1991; Harrison, 1982; Risberg, 2004). In turn, these experiences influence who they become and what they do as practicing physicians (Heru, 2005; Risberg, 2004). Both women and men medical students seek to be accepted by the medical profession by adapting their personal identities to fit with the prevailing professional identity of physician that is historically masculine in origin rather than neutral and genderless (Beagan, 2000; Conrad, 1988; Kaiser, 2002).

Gender and Medicine

Our understanding of gender is socially constructed as we are doing gender constantly in our everyday lives (West & Zimmerman, 1991). We construct knowledge in relation to our experiences with others. Gender then becomes more than positivist biological sex classifications of male and female. Rather, our concepts of gender and what is expected of women and men are learned and promoted through our everyday social interactions (Lorber, 1994). Through gender socialization, we learn gender stereotypes that tend to operate to women's disadvantage socially, politically, and economically (Acker, 1992; Lorber, 1994). Gender stereotypes are based on schemas or hypotheses that define and explain what it is to be male or female. These beliefs are largely unconscious and form the context of our experiences, actions, interpretations, and judgments (Valian, 1998). We use these schemas to assess and categorize people and experiences in our personal and professional lives. These schemas influence and frequently skew our perceptions. In general, we do not merely see other individuals as persons, but as men or women. Accordingly, our socially constructed gender schemas create an expectation of behaviors and roles for women and for men (Lorber, 1994; Valian, 1998).

Medicine is a gendered profession in the United States. Women have entered the medical profession in significant numbers over the last several decades, demonstrating equal opportunity. In 2012, women constituted 46 percent of osteopathic medical students and 33.8 percent of osteopathic physicians (D.O.s) (AOA, 2012). Statistics are similar concerning women allopathic physicians (M.D.s). Women comprise 30.1 percent of all

M.D.s in 2010 (AMA, 2012) and 47.1 percent of enrolled M.D. students in 2011-2012 (AAMC, 2012).

In spite of these significant gains by women, gendered occupational patterns, evidenced as vertical and horizontal gender segregation, are apparent in both the D.O. and M.D. professions in the U.S. (Boulis et al., 2001; Harter & Krone, 2001; Heru, 2005; Risberg, 2004; Riska, 2000). Nearly 60 percent of women physicians practice in the specialties of Internal Medicine, Pediatrics, Family Medicine, Obstetrics/Gynecology, Psychiatry, and Anesthesiology (AMA, 2012). The more lucrative and higher status medical and surgical specialties are dominated by male physicians (AOA, 2012; AMA, 2012).

Students in the third and fourth year of medical school typically begin to identify their desired practice specialties and investigate residency programs in their prospective specialties as they prepare for the next phase of their medical training. Since the career choices of practicing physicians are strongly influenced by their selection of medical and surgical specialty residency programs for postgraduate medical training, the experiences of medical students that influence these decisions merit exploration (Bickel, 2001; Haas & Shaffir, 1991; Reed & Buddeberg-Fischer, 2001). Further, the specialty physicians choose for their areas of practice becomes an important aspect of their professional identity (Beagan, 2000; Conrad, 1988; Haas & Shaffir, 1991; Harrison, 1982; Harter & Krone, 2001). Accordingly, it is important to study the influences of gendered medical socialization on the professional identity development of women medical students in terms of who they are and what they do as future physicians.

Problem Statement and Research Question

To a great extent the medical socialization literature dwells on what the medical education establishment does to train its medical professionals with little research on how medical professionals themselves construct their physician identities (Pratt et al., 2006). Further, how osteopathic medical students, particularly women, go about creating and establishing their professional identities as physicians is significantly understudied (Harter & Krone, 2001; Pratt et al., 2006). Researchers also acknowledge that not enough is known about the influence of gender on the development of medical students' professional identities as physicians (Boulis et al., 2001; Harter & Krone, 2001). The purpose of this narrative inquiry qualitative research study was to address this gap in the relevant literature by increasing our understanding of how women osteopathic medical students shape their professional identities as physicians.

Research Question

Given that not enough is known about the influence of gender on the development of women osteopathic medical students' professional identities as physicians, my study's research question was as follows.

> From the perspective of gender, how do the experiences and perceptions of third and fourth year women osteopathic medical students influence their constructions of their emerging professional identities as physicians?

This study utilized qualitative research methods to explore the gendered nature of professional socialization through a narrative study involving women medical students who were in the third and fourth years of study at the University of Pikeville – Kentucky College

of Osteopathic Medicine (KYCOM). The study's findings were analyzed through the critical lens of poststructuralist feminism.

Research Framework

Qualitative Research

Researchers select an inquiry paradigm, quantitative or qualitative, that reflects their philosophical and theoretical foundations (Cresswell, 2007), which, in turn, guides the researcher's selection of methodology and approach to the question to be studied, the method of data collection, and the analysis and interpretation of the collected data (Creswell, 2007; Guba & Lincoln, 1994; Marshall & Rossman, 2006; Patton, 1990). This study was grounded in the ontology and epistemology of social constructionism, which holds that our meanings are constructed from our everyday social interactions (Gergen, 1985). Qualitative research best supports and facilitates this type of scholarly study, since this research approach utilizes naturalistic inquiry that focuses on context and is inductive and interpretive (Marshall & Rossman, 2006). In this sense, use of a qualitative research approach facilitates understanding complex social phenomena through the meanings that participants attribute to their experiences of their worlds (Patton, 1990).

Narrative Inquiry

Narrative inquiry is a qualitative research design that studies how humans experience the world and use personal reflection to give retrospective meaning to these experiences (Chase, 2005; Connelly & Clandinin, 1990). Chase (2005) defines narrative inquiry as "an interest in the biographical particulars as narrated by the one who lives them" (p. 651). Connelly and Clandinin (1990) characterize narrative inquiry as "the study of the ways

humans experience the world" (p. 2). Bruner (1991) maintains narrative forms are an everyday means of how we make sense of our worlds. We tell stories and may make excuses of what happened to us that reveal our emotions and how we feel about something that we experienced. Further, Bruner (1991) asserts that knowledge is never "point-of-viewless" (p. 2). In this manner, narratives not only reveal what happened, but, more importantly, why it is worth telling.

In accord with a research design that is grounded in social constructionism, narratives represent constructions of lived experiences. Use of narrative inquiry to collect my study data enabled me to elicit from women osteopathic medical students their reflective stories of their medical school experiences and the meanings they attributed to them (Chase, 2005; Connelly & Clandinin, 1990). Accordingly, my focus was on the meanings they constructed from their medical school experiences that shaped their developing professional identities as future osteopathic physicians.

For my study, it was essential to ascertain from the women students themselves their biographical accounts of their experiences and the meanings they attributed to these events that shaped their constructions of their professional identities as future osteopathic physicians. These women formed their professional identities as physicians from their medical education experiences that included their curricula and their interactions with teachers, role models, classmates, patients, and others (Conrad, 1988; Harter & Krone, 2001; Pratt et al., 2006). Accordingly, I felt that these experiences and their meanings could best be communicated as reflective stories authored by the study participants, which is the rationale that supports my selection of narrative inquiry as my study's research design (Chase, 2005;

Patton, 1990). Further, written personal narratives were effectively used as the data collection method to study attitudes of Swedish medical students concerning gender issues and physicians (Hamberg & Johansson, 2006).

Theoretical Framework

The study's theoretical framework draws from poststructuralist feminism. The study's data and findings were analyzed through this critical lens. Poststructuralist feminist thought added a critical perspective needed for the exploration and examination of gendered socialization practices and medical school culture that were viewed as professionally sound and gender neutral, yet served to disadvantage women students. Poststructuralist feminism provided a means for challenging patriarchal ideology embedded within the professional discourses of medicine that privilege men and reflect their lives and lifestyles while ignoring women.

Summary

This narrative study sought to contribute to our understanding of how women osteopathic medical students constructed their emerging professional identities as future physicians. It is acknowledged that not enough is known about how osteopathic medical students, particularly women, go about constructing their professional identities as osteopathic physicians (Harter & Krone, 2001; Pratt et al., 2006). Further, research is needed on the influence of gender on the development of medical students' professional identities as physicians (Boulis et al., 2001; Harter & Krone, 2001). From the perspective of gender, the purpose of this qualitative research study was to address this gap in the relevant literature by contributing to our understanding of how women osteopathic medical students shaped their

professional identities as physicians. The study's findings were analyzed through the critical lens of poststructuralist feminism.

With respect to this study of the juncture of gender and medical socialization concerning women osteopathic medical students' construction of their future professional identities as physicians, Chapter One presents the background and rationale for this qualitative research study that includes a discussion of osteopathic medicine and medical education, medical socialization and professional identity, and the intersection of gender and medicine. Chapter One also delineates the study's problem statement, research question, and qualitative research approach that utilized a narrative inquiry design and a poststructuralist feminism theoretical framework to analyze the study's data.

Chapter Two presents a review of the literature that serves as the conceptual framework for this study. This framework consists of a discussion of the social constructionist stance of this study and its correlation with how our concepts of gender operate in our everyday lives with respect to societal roles for women and men, the power of knowledge and education and who has access to it, the context of work and careers, and the disadvantages historically accorded to women. It continues with a description and comparison of the two prevailing models of medicine practiced in the U.S., namely allopathic and osteopathic medicine, together with a discussion of their parallel medical education paradigms and student medical socialization practices and evidence of gendered experiences and outcomes.

Chapter Three provides a delineation of the rationales for selection of a qualitative research paradigm and narrative inquiry design used to conduct this study along with a

discussion of poststructuralist feminism as the study's theoretical framework for analysis and interpretation of this study's data.

Chapter Four presents the study findings that derived from analysis of the written personal narratives of eleven women medical students who were in their third and fourth year of studies at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM).

Chapter Five offers analysis and discussion of the study findings in relation to the critical perspective offered by poststructuralist feminism and offers recommendations for further study as well as recommendations for improvements to the paradigm of medical education.

CHAPTER 2. LITERATURE REVIEW

The purpose of this study was to gain a better understanding of how women osteopathic medical students constructed their emerging professional identities as future physicians. Women and men enroll in osteopathic medical school to become osteopathic physicians. The medical education program that students are immersed in for at least four years is thought to be neutral and genderless (Acker, 1992, 2006; Risberg, 2004). They participate in the same medical education curriculum and meet the same academic requirements to graduate. Yet, there is ample evidence that women and men experience medical school differently (Grant, 1988; Haas & Shaffir, 1991). In turn, these experiences influence who they become and what they do as practicing physicians (Heru, 2005; Risberg, 2004; Witte, Stratton, & Nora, 2006). From a gender perspective, this study utilizes a qualitative research narrative inquiry design to explore the professional socialization of third and fourth year women medical students who are in the clinical portion of their medical school curriculum.

Much of the medical socialization literature dwells on what the medical education establishment does to train its medical professionals with little research on how medical professionals themselves construct their physician identities (Pratt et al., 2006). Medical students learn the fundamental knowledge and skills to practice medicine through their coursework and learn how to practice medicine by observing and working with other physicians while becoming immersed in the profession's culture (Becker et al., 1961; Conrad, 1988; Inui, 2003). With respect to osteopathic medical education, there is a paucity of research on medical student socialization and professional identity construction. Clearly,

not enough is known about how osteopathic medical students, particularly women, go about constructing their professional identities as osteopathic physicians and whether gendered relations influence these emerging professional identities (Harter & Krone, 2001; Pratt et al., 2006).

Conceptual Framework

This study's perspective is grounded in the ontology and epistemology of social constructionism (Gergen, 1985), which holds that meanings are constructed from social relationships and social interactions that create a shared history and culture of beliefs, values, and understandings. Social constructionism holds that we construct our reality through our experiences and our interpretations of these experiences (Burr, 1995). In order to explore how women osteopathic medical students construct their professional identities as physicians, it is important to comprehend the social and professional contexts of this process.

This review of the literature examines how our understandings of gender shape our everyday lives and affect the roles and identities available to women in Western society. Historically, women and their roles have been inferior to male roles and identities (Lorber, 1994; West & Zimmerman, 1991)). This review also looks at how the Women's Liberation Movement and feminism arose to challenge the many ways the dominant social malestream dominated and repressed women's identities (Weedon, 1987/1997). As a result, social change occurred and women gained more freedom to choose whether to take on identities and roles that previously were unavailable to them. Greater access to higher education allowed women to earn baccalaureate, graduate, and professional degrees that enabled women to have meaningful careers that include entering medical school to become

physicians (Bickel, 2000; Christman, 2003). With women now joining men as coworkers in numerous occupations and professions, women encountered gender regimes in their workplaces and gender inequities that limited their work roles and stymied their advancement (Acker, 1990; Kanter, 1977/1993).

Turning to medical education, Flexner's medical curriculum model, which is the longstanding paradigm of medical education offered in the United States, is described (Flexner, 1910). The Flexnerian model shapes both allopathic and osteopathic medical schools. Further, the medical discipline of osteopathic medicine is described in relation to mainstream allopathic medicine in terms of its similarities and its distinctiveness (Seffinger et al., 2003). In Western society, the profession of medicine arose as a male-dominated profession. Given that significant numbers of women within the last few decades have joined this once exclusive male club, evidence is presented that medicine is often experienced as a gendered profession. Accordingly, it is argued that gender also influences the medical socialization and physician identity constructions of medical students (Boulis et al., 2001; Harter & Krone, 2001; Heru, 2005; Risberg, 2004). Since the focus of this study is on women students' construction of their emerging professional identities as future physicians, particular attention is paid to the intersections of gender and medical student socialization.

Commonly, women physicians experience vertical and horizontal gender segregation in the roles they assume in the profession of medicine (Bickel, 2000; Risberg, 2004; Riska, 2008). Accordingly, it follows that gender influences may have an effect on the educational experiences of women medical students that shape their developing identities as future

physicians (Witte et al., 2006). Researchers acknowledge that not enough is known about the influence of gender on the development of medical students' professional identities as physicians (Boulis et al., 2001; Harter & Krone, 2001). This study sought to address this gap in the relevant literature by adding to our understanding of how women osteopathic medical students construct their emerging professional identities as physicians and the extent to which gender relations influence these constructions.

Further, this study's theoretical framework drew from the criticality of poststructuralist feminism. The study's data and findings were analyzed through this theoretical lens. Poststructuralist feminist thought added a critical perspective needed for the exploration and examination of gendered socialization practices and medical school culture that were viewed as professionally sound and gender neutral, yet women and men both experienced medical school and medicine differently (Witte et al., 2006). Poststructuralist feminism provided a means for challenging male-oriented ideology and social discourses that knowingly and unknowingly privilege men and male norms as the accepted standard for the medical profession.

Gender

Our concept of gender is socially constructed (West & Zimmerman, 1991). We constantly create and re-create our understandings of gender through our everyday activities. We are so accustomed to gender's permeation of our lives and routine behaviors, that often we are oblivious to it.

> Talking about gender for most people is the equivalent of fish talking about water. Gender is so much the routine ground of everyday activities that

> questioning its taken-for-granted assumptions and presumptions is like thinking about whether the sun will come up. (Lorber, 1994, p. 13)

Accordingly, we construct knowledge in relation to our experiences with others. We construct meanings and make sense of our experiences through our interpretations of them (Bruner, 1991). Gender then becomes more than positivist biological sex classifications of male and female. Rather, our concepts of gender and what is expected of women and men are promoted through our everyday social interactions (West & Zimmerman, 1991).

Further, we are situated within various social structures that include family, church, schools, colleges, and workplaces that have their own histories and traditions (Lorber, 1994; Weedon, 1987/1997). In western civilization, our social order and social institutions are constructed based on our understandings of gender. We are socialized in their practices and values that convey what is expected and right. From these social interactions, we learn what is normal or natural. These understandings form the basis of our social culture (Bruner, 1991; Schein, 1985). Historically, men are held as socially dominant authority figures, while women support men in these roles. Weedon (1987/1997) argues that the social discourses that assert behaviors, rules, and norms for social interactions are powerful determinants of common-sense thinking and the belief of what is natural and right.

Gender Stereotypes

Through gender socialization, we learn gender stereotypes that tend to operate to women's disadvantage socially, politically, and economically (Acker, 1992; Lorber, 1994). Gender stereotypes are based on schemas or hypotheses that define and explain what it is to

be male or female. These beliefs are largely unconscious or taken for granted and form the context of our experiences, actions, interpretations, and judgments (Valian, 1998).

We learn about being boys and girls and, in turn, we learn what women and men should be (Valian, 1998). From infancy, we learn social expectations of behavior for girls and boys and women and men through our everyday activities. Young girls play with dolls, dress in mommy's clothes, and serve their friends tea and cookies, while young boys play with militaristic action figures, tools, and trucks. These common behaviors reflect gender stereotypes of women as mothers and caregivers and men as patriarchal authority figures, warriors, protectors, and financial providers. A common gender schema is that females are nurturing, expressive, and relationship-oriented, while men are independent, task-oriented, and authority figures. Another gender stereotype is that leaders should be men (Kanter, 1977/1993).

We use gender schemas to assess and categorize people and experiences in our personal and professional lives. In general, we do not merely see other individuals as persons, but as men or women. Our socially constructed gender schemas create an expectation of behaviors and roles for women and for men (Lorber, 1994; Valian, 1998). These schemas influence and frequently skew our perceptions. In the world of work, our notions of gender operate

> as a complex social process enacted across a range of organizational phenomena, from formal policies and practices to informal patterns of everyday interaction, which appear to be gender-neutral on their face, yet

> reflect and maintain a gendered order in which men and various forms of masculinity predominate. (Ely & Meyerson, 2000b, p. 590)

Accordingly, we live and work in social structures that claim gender neutrality, yet sustain experiences of gender inequity that privilege the white heterosexual male majority and disadvantage all who do not fit the characteristics of this majority, particularly women.

We learn from our cultural socialization to accept such behaviors and understandings as normal. In turn, these understandings form our prevailing social discourses that ascribe meaning to our lives and influence our actions. We take these things for granted, because it is the way things have always been done. Accordingly, a conviction that something is natural or normal, denies it is a construction with a history behind this thinking and, more importantly, denies the possibility of change. On the other hand, understandings gained through social constructionism must be constantly maintained and re-affirmed in order to persist. Our experiences of our everyday social reality are ongoing and dynamic, which introduces the possibility of change.

Feminism

Historical Archetypes

The feminist movements arose to redress the multiple ways that our male-dominated world subordinates and disadvantages women. Western society is constructed as a patriarchy. Historically, its power culture consists of white heterosexual men. Our social structures and understandings of knowledge derive largely from the Eurocentric patriarchy that serves as the foundation of our societal culture (Harding, 1996). A patriarchy is a system of power relations whereby the interests of women are subordinated to those of men (Lorber,

1994; Weedon, 1987/1997). In the social order of patriarchy, men are dominant and serve as social authority figures and leaders. Women's roles are to support men. This gender socialization model is an ancient social paradigm (Harding, 1996). Since ancient times, men were accepted as rational beings who possessed the ability to reason and therefore to know, while women were held to be without reasoning abilities and thus inferior to men. Aristotle argued that it is the duty of men to control women in that man's ability to reason carries with it the authority to control women and all else (Harding & Hintikka, 2003). In this ancient, albeit resilient, paradigm, only men were viewed as Subject. Women were viewed as Other, were typically characterized by and limited to their domestic roles, and were devalued. In other words, it was women's natural responsibility to assume roles that were subordinate to and supportive of men.

Historically in Western society, men created the language, the structures, the rules, and the roles assigned to the male and female genders for social participation. This gendered paradigm has been termed the malestream (Code, 1991). Malestream theory is the rhetoric of 'natural' male supremacy that sustains the power structures that preserve male privilege and repress women in this world. Perpetuation of the malestream unleashed a maelstrom of feminine resistance (Weedon, 1987/1997) to these ancient gender regimes (Acker, 1992, 2006).

Counternarrative of Feminine Resistance

Feminism is a political movement that aims to alter existing patriarchal power relations that repress women and privilege men. These power relations are found in all social structures of life including family, education, work, and culture. Feminism's goal is social

change. The Women's Liberation Movement gained prominence in the 1960s and 1970s (Weedon, 1987/1997). This Movement sought to eradicate forms of discrimination against women, promote equal rights for women, and correct injustices against women. In time, other feminist perspectives arose to voice distinctive and sometimes critical points of view, such as radical feminism and different forms of cultural identity feminisms. While there are various interpretations and perspectives of feminism, all forms share the common view of the world as patriarchal expressed through a masculinist culture that devalues and marginalizes women (Weedon, 1987/1997).

Ultimately, feminists sought the right for women to be recognized and to participate as equals with men. Moreover, women sought to emancipate their identities and to be free to be themselves without the burdens of socially-imposed gendered identities that limit their freedom and social opportunities (Weedon, 1987/1997).

Knowledge as Power

Feminists seek to unmask the illusion that the dominant cultural groups "have the one true story about themselves and the natural and social worlds around them" (Harding, 1996, p. 449). In an ideal world, all individuals and societal groups should be free to seek knowledge and be empowered to act, to seek, to experience, and to question.

Some resources for developing knowledge are only available to those in dominant positions within a culture (Harding, 1996). Further, having knowledge can privilege those who possess it. Voices of subordinate social groups, such as women, are discouraged and silenced. Knowledge and the ability to generate knowledge are powerful. Being denied

access to knowledge and the resources to generate it imparts and maintains powerlessness and subordination. Harding (1996) argues that

> the extent that women and men are assigned different activities and experiences, those activities and experiences will provide resources and limitations for developing knowledge about different aspects of nature and social relations with which they interact . . . our positions in social hierarchies, as well as the content of what we do, enable and limit what we can know. (Harding, 1996, p. 448)

Social Emergence of Women

The Women's Liberation Movement empowered women to move beyond their customary social identities to seek social roles traditionally held by men. Women began to enroll in higher education in significant numbers during the 1960s and now women dominate student enrollments at all levels of higher education (Bickel, 2000; Christman, 2003). Many women enrolled because of personal desires to become educated and to join the world of work in occupations that previously were not accessible to women. Women sought jobs to facilitate their self-development, to support their desired lifestyles or, at a minimum, to gain jobs that paid enough for them to support their families and households. Women took on different social roles and aimed and trained for the positions that men traditionally held. Women entered male-dominated professional areas as outsiders and worked hard to fit in and prove their worth. Women persevered to overcome past limitations and establish that the best man for a position could be a woman. Yet, women experienced gender inequities in

their workplaces that often limited the types of work available to them as well as their advancement opportunities (Kanter, 1977/1993).

Gender Regimes at Work

Gender regimes are evident in our workplaces (Acker, 1992, 2006). Acker defines gender regimes as the incorporation of gender processes within our workplaces. These gender processes include organizational policies and rules, divisions of labor, symbols and images, personal interactions, and constructions of self as a "gendered, organizational performer" (Acker, 2006, p. 197).

Gender regimes vary with the times as well (Acker, 2006). The United States has experienced a range of gender regimes that have been described by such metaphors as the concrete wall, the glass ceiling, and the labyrinth (Eagly & Carli, 2007). According to Eagly and Carli (2007), the concrete wall refers to the not-so-distant past when women lacked access to public roles. More recently, the glass ceiling is a socially constructed phenomenon that limits women's executive opportunities in male-dominated organizations and professions (U.S. Department of Labor, 1995). While a few women have assumed chief executive posts, these instances remain rare and women's underrepresentation at the executive level continues in male-dominated occupations, professions, and organizations (Catalyst, 2007; Eagly & Carli, 2007). Some believe that the metaphor of the glass ceiling as an absolute barrier to executive roles is outdated, since clearly some women have found paths to the top. Eagly and Carli (2007) prefer the metaphor of the labyrinth to describe the typically circuitous paths that many career women encounter that offer both obvious and subtle barriers that arise from women's gender. In contrast, Eagly and Carli (2007) observe that the career

advancement path followed by men tends to be more linear and direct. For women, this route is commonly filled with various obstacles, some clearly marked and others not, detours, backtracks, and sharp curves. What is clear is that women's workplace experiences differ from those of the male majority, white heterosexual men (Eagly & Carli, 2007). The glass ceiling and labyrinth metaphors offer a rich characterization of the typical road for working women within gendered organizations and professions.

Gendered Organizations

Workplace gender inequities are manifestations of socially constructed cultural beliefs and social power relations that tend to privilege men and disadvantage women (Acker, 1992, 2006; Kanter, 1977/1993). Evidence mounts that women and men experience their workplaces differently, including opportunities to advance to senior leadership posts (Acker, 2006; Kanter, 1977/1993). Gender inequities are widespread and occur in business (Catalyst, 2007), in academia (ACE, 2007; Sandler, 1986), and in medicine (Bickel, Wara, Atkinson, Cohen, Dunn, Hostler, Johnson, Morahan, Rubenstein, Sheldon, & Stokes, 2002; Yedidia & Bickel, 2001).

Kanter (1977/1993) was among the first to report the underrepresentation of women in executive roles in 1977 and attributed this phenomenon to socially constructed understandings of gender and leadership that determined who could lead and women's place within organizations. While organizations are believed to be gender neutral and asexual, gender inequities are attributed to the gendered structures and practices of organizations that cause these environments to be termed gendered organizations (Acker, 1990; Kanter, 1977/1993). Historically, middle class white men created organizations and jobs that reflect

the values, norms, and lifestyles of the white men that these organizations commonly employed (Acker, 1990). Acker (1990) posits that the abstract concept of a job was constructed for a worker who only exists for the job. Women workers, most of whom "have legitimate obligations other than those required by the job, did not fit with the abstract job" (Acker, 1990, p. 149).

This abstract notion of a job assumes a gendered organization of domestic life and occupational responsibilities in such ways that "those who must divide their commitments are in the lower ranks" (Acker, 1990, p. 150). This theory corroborates Kanter's (1977/1993) finding that women were more likely to be clustered in the lower realms of organizational hierarchies. Similarly to the experiences of women in other fields, women physicians experience gendered occupational patterns (Bickel, 2001; Heru, 2005; Risberg, 2004) in that men are more likely to occupy leadership roles and work in higher status medical and surgical specialties, while women tend to be segregated in lower status primary care specialties (Bickel, 2001; Boulis et al., 2001; Harter & Krone, 2001; Risberg, 2004).

Further, if gendered relations are evident in the career choices and ranks of women physicians, it is also of interest to question whether gendered relations influence how women physicians construct their professional identities. Research involving women M.D.s suggests that women M.D. physicians strive to assimilate the male-dominated culture of allopathic medicine in order to gain professional acceptance and to fit in (Babaria, Abedin, & Nunez-Smith, 2009; Harrison, 1982; Kaiser, 2002). The construction of a physician identity by women osteopathic medical students has been understudied and examination of this process with regard to the influence of gender relations has not been reported. This study seeks to

address this gap in the relevant literature by offering a glimpse into the construction of professional identities as future osteopathic physicians by third and fourth year women students at one osteopathic medical school, the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM).

As background to this study, it is essential to review the relevant literature that pertains to how osteopathic medical students, particularly women, are trained to become osteopathic physicians, how these student doctors develop their professional identities as osteopathic physicians, and evidence of gendered patterns within the osteopathic medical profession.

Becoming an Osteopathic Medical Physician

Osteopathic Medicine

Osteopathic medicine arose in the United States as an alternative to mainstream allopathic medicine that is practiced by M.D.s (Hahn, 2009). Osteopathic medicine is characterized by a patient-centered approach with a focus on preventive care and restoration of normal physiologic function (Seffinger et al., 2003). Osteopathic medicine's approach to patient care is holistic and unlike allopathic medicine's tendency to focus on treatment of patient symptoms (Hahn, 2009).

Osteopathic medicine is practiced by Doctors of Osteopathic Medicine (D.O.s). In the United States, D.O.s and M.D.s are the only physicians who are licensed to practice medicine in the full array of medical and surgical specialties and subspecialties and to prescribe medicinal drugs (Krueger, Dane, Slocum, & Kimmelman, 2009). Osteopathic medicine is similar to allopathic medicine, yet also different in that osteopathic medicine is

grounded in a specific healing philosophy. Osteopathic physicians are trained in a system of medical education that parallels the educational paradigm used to train M.D.s. Women have entered both medical disciplines in significant numbers over the last few decades (AMA, 2012; AOA, 2012). In both disciplines, women physicians experience horizontal and vertical segregation, which suggests that both osteopathic medicine and allopathic medicine can be characterized as gendered professions (Boulis et al., 2001; Harter & Krone, 2001).

Origins. Following the deaths of three of his children from spinal meningitis in the late 1800s, Andrew Taylor Still, M.D. became dissatisfied with the practices of Western mainstream (allopathic) medicine (AOA, 2012). After intensively studying anatomy, pathology, and numerous healing practices, Dr. Still developed osteopathic medicine, which pays particular attention to the musculoskeletal system and adheres to a distinct philosophy.

The practice of osteopathic medicine is based on a holistic philosophy of physical, mental, emotional, and spiritual health. Dr. Still's extensive study of anatomy and pathology "found that in all forms of disease there is mechanical interruption of normal circulation of body fluids and nerve force to and from cells, tissues, and organs" (Seffinger et al., 2003, p. 6). Uniquely, osteopathic physicians use palpatory diagnosis and physical manipulation of the body to restore bodily structure and function to "give freedom to nerves, blood, secretions and excretions" (Seffinger et al., 2003, p. 4). The goal of osteopathic manipulation is to remove impediments to the optimal function of the body's systems and, in so doing, to restore and maintain a state of health and well-being. Osteopathic medicine's focus is on preventive care (Seffinger et al., 2003). Accordingly, a key focus of osteopathic medical

training is on primary care that includes the specialties of family practice, internal medicine, and pediatrics (AOA, 2012).

Medical Education

The medical education continuum for both D.O. and M.D. physicians parallel each other (Hahn, 2009). Both allopathic and osteopathic medical education consists of four years of medical school or undergraduate medical education; at least three years of residency training or graduate/postgraduate medical education, which involves specialization within a particular field of practice; and continuing medical education, which enables physicians to keep current in new developments and practices within their medical specialties and meet professional and state licensure requirements (Hahn, 2009).

Osteopathic medical schools are comparable to allopathic medical schools albeit with certain distinctions. The infrastructures of allopathic and osteopathic medical schools are similar with respect to admissions, the structure of the curriculum, and student culture, and distinctive with regard to mission, philosophy, curriculum content, and type of faculty (Krueger et al., 2009). The D.O. and M.D. programs are both four years in length with the first two years of the curriculum generally devoted to studying the basic sciences that then serve as the foundation for clinical studies in patient-care settings that students undertake during the third and fourth years of the curriculum. Allopathic clinical training is generally conducted in academic medical centers and teaching hospitals, whereas osteopathic medicine, with its focus on primary care, utilizes more community-based hospitals and outpatient clinics for its clinical training. Interestingly, at Michigan State University both osteopathic and allopathic medical students together take the first and second year curriculum

with the same faculty and then diverge for their clinical training during their third and fourth years. For the clinical years, allopathic and osteopathic medical students at Michigan State University complete their training in different hospitals (Krueger et al., 2009). For both D.O. and M.D. medical education, graduates generally continue into residency programs of at least three years to train in a medical or surgical specialty.

Learning to become a physician. The medical school educational program teaches its students what they need to know to become physicians. The first and second years of medical school are typically conducted as classroom-based instruction. A first year medical student is a novice learning the fundamentals of basic and clinical sciences. Any clinical interactions, such as obtaining patient histories and performing basic patient clinical examinations with patients, are under strict supervision from physician faculty and often involve use of robotic or educational human models. First year students have little or no autonomy. During the second year, students begin to increase their clinical skills by working with a physician, who is a clinical preceptor. During this clinical preceptorship, students observe and work with their physicians as they begin to interact with patients.

Medical students rotate through required and elective medical and surgical specialties during their third and fourth years of medical school. These clinical education experiences allow students to learn about these specialties through "hands-on work" in patient care settings under the supervision of physicians who serve as clinical preceptors and professional role models. Students learn to practice medicine by observing and working with these physicians. The third year generally consists of required clinical rotations in internal medicine, pediatrics, family medicine, obstetrics and gynecology, surgery, and psychiatry

(Krueger et al., 2009). By the end of the third year, medical students are narrowing their choices of career specialty in preparation for applying to residency programs for their postgraduate medical education.

The fourth year is comprised of clinical electives that support and enhance student selection into residency programs in their desired medical specialties. During this last year of medical school, students decide on a career area to pursue for selection of a residency program for their postgraduate training. In preparation for graduation, medical students focus on gaining expertise within a specific area of medicine, take on more responsible clinical duties, and function more independently. Graduates commonly enter postgraduate training as physicians for three years or more as dictated by the specific medical discipline (Krueger et al., 2009).

Medical Professionalism

Students enter medical school to learn how to become physicians. Upon admission to medical school, medical students also become novice entrants into the medical profession. As a profession, medicine is defined by specialized knowledge and skills that are practiced only by individuals who have completed an approved program of education and training and have demonstrated their competence to practice medicine through a process of professional examination and licensure (Baker, 1999). The medical profession also regulates the conduct of its members. The physician's highest commitment is to the care of his/her patients in the spirit of beneficence, nonmaleficence, confidentiality, and altruism. The unique element of the medical profession is the clinical relationship physicians have with their patients. Inherent to this relationship is the vulnerability of patients. Power is very one-sided in this

relationship. Medical professionals are powerful because of the medical knowledge and skills that they possess that those who are not medical professionals lack (Brien, 1998). Because of the trust that society and individual patients place in the physicians who care for them, the moral obligations and responsibilities of physicians to always act in the interest of their patients is great.

Medical Socialization

In medical school, medical students experience medical socialization and learn the knowledge, technical skills, and professional values that they must possess in order to become physicians (Becker et al., 1961). They also begin learning the values inherent in medical professionalism that are taught in the curriculum and that they learn from the medical culture by observing and practicing patient care skills with their faculty and physician role models (Conrad, 1988; Inui, 2003). "But science and skill do not make a physician; one must also be initiated into the status of physician; to be accepted, one must have learned to play the part of a physician in the drama of medicine" (Becker et al., 1961, p. 4). By learning how to behave and comport themselves as physicians, medical students begin to construct their professional identities as physicians (Becker et al., 1961; Conrad, 1988; Harter & Krone, 2001; Niemi, 1997).

Identity kit. Medical students learn how to become physicians through their assimilation into the culture of the medical profession. Through this process of social construction, medical students strive to become accepted as insiders by the profession. A new perception of self is emerging during their medical education. In addition to learning human anatomy and physiology, how to use diagnostic instruments, and how to interact with

and interview patients, they also learn how to use the cultural tools of the medical profession that include language, skills and techniques, demeanor, and dress (Conrad, 1988; Haas & Shaffir, 1991). Accordingly, these students begin to absorb the medical profession's language and ways of thinking (Niemi, Vainiomäki, & Murto-Kangas, 2003).

As medical school begins, students wear white jackets that signify their identity and role as medical students.

> Then, equipped with their identity kit, students begin to learn and express themselves in the medical vernacular, often referred to as "McBabble" or "medspeak." Distinctive dress, badges, tools and language provide the student with symbols which announce their role and activity. (Haas & Shaffir, 1991, p. 70)

Use of these identity symbols heightens the students' association with the medical profession and distances students from the lay public.

Professional identity. According to Niemi (1997), the process of "(physician) identity formation consists of exploring the available alternatives and committing to some choices and goals" (p. 408). Student doctors begin to shape their professional identities as physicians from the personal meanings they construct from their interpretations of their medical education and medical profession experiences. Medical students learn how to become physicians through formal, informal, and hidden curricula (Inui, 2003). The formal curriculum is the basic science and clinical courses that medical students take in medical school to learn patient care skills and the informal curriculum has been described as the medical school's social environment that strongly influences medical students' values and

professional identity constructions (Suchman et al., 2004). Through these means, medical trainees gain knowledge about medicine, increase their technical competence, and develop patient encounter, diagnostic, and therapeutic skills. Another important aspect of a physician's identity is the specialty chosen for future practice that is generally predicted by the residency program placement obtained for postgraduate medical education (Beagan, 2000; Conrad, 1988; Haas & Shaffir, 1991; Harrison, 1982; Harter & Krone, 2001).

With regard to construction of a professional identity, curricula, specialty choice, experiences, and mentors are viewed as the key influences (Cohen et al, 2009; Conrad, 1988; Harter & Krone, 2001; Inui, 2003). Mentors and role models help novice medical students learn the professional culture of medicine and guide them explicitly and implicitly in their quest to become professional insiders (Cohen et al., 2009). Students' medical socialization is strongly influenced by the profession's insiders from whom they learn the norms and culture of the profession. All of these experiences influence how these future physicians construct their emerging professional identities. Students begin to sort out the faculty who they identify as exemplars of the medical profession and who they want to be like. Accordingly, they also identify professionals who they do not want to be like (Cohen et al., 2009). In so doing, student doctors shape their developing professional identities from their perceptions of their social relationships with physicians, faculty, staff, patients, and other students.

The progress of medical students' journey to become accepted as insiders within the medical profession advances with each year of medical school (Krueger et al., 2009). During this time, medical students are knowingly and unknowingly constructing their professional identities as future physicians (Conrad, 1988; Haas & Shaffir, 1991; Niemi, 1997; Risberg,

2004). The test for many medical students is experiencing whether what they are taught in their classrooms is practiced in the clinical settings (Babaria et al., 2009; Haas & Shaffir, 1991; Inui, 2003).

> (Medical) students continually observe doctors' working habits, listen to their philosophies of medical practice, take note of their competencies and incompetencies, and reflect upon the nature of their own present and future relationships with patients. (Haas & Shaffir, 1991, p. 77)

Medical educators are beginning to realize and appreciate that the hidden curriculum may be the most potent tool for becoming acculturated into the medical profession. The hidden curriculum is encountered by medical students in academic and clinical settings in which the observed professional behavior of the physicians and other faculty that they work with and learn from does not match the cultural, ideological, and ethical values that medical students and residents have been formally taught (Inui, 2003; Pratt et al., 2006; Suchman et al., 2004). Hidden curriculum behaviors consist of unprofessional and unethical behaviors that may include inappropriate relationships with patients, colleagues, staff, and students; forms of sexual harassment; rudeness and denigration of others; and any expressions of hostility toward others (Heru, 2005). These behaviors within the medical communities of practice influence the professional identities of male and female student doctors.

Osteopathic physician identity. The construction of a professional identity as a physician has been studied from various perspectives that include competency development (Jarvis-Selinger, Pratt, & Regehr, 2012; Pratt et al, 2006); psychological internalization of a physician identity from various master narratives that include the "healing doctor" (cure the

sick) narrative, the "detached doctor" (objective, uninvolved demeanor) narrative, or the "privileged doctor" (status) (Monrouxe, 2010); and adoption of an aloof, objective physician persona that characterizes the biomedical model of mainstream allopathic medicine (Apker & Eggly, 2004).

The literature concerning medical student construction of a professional identity derives largely from the M.D. world. The profession of medicine vows adherence to the virtues of beneficence, nonmaleficence, confidentiality, and altruism, which suggests humane attitudes of caring and compassion for patients. Yet, the prevailing allopathic physician identity has been described as being largely influenced by adherence to the biomedical scientific model that focuses on the use of technological interventions in the care of patients (Apker & Eggly, 2004). The literature describes this physician identity as a competent medical professional who is emotionally detached and implements medical interventions (Apker & Eggly, 2004; Conrad, 1988; Coombs, 1998; Harter & Krone, 2001). According to the literature on this topic, the dominant M.D. physician identity leaves little room for humane caring and compassion. Coombs (1998) found that M.D. physicians are socialized against expressing one's emotions. Rather, mainstream allopathic physicians are socialized to adopt a modicum of professional detachment.

Harter and Krone (2001) conducted a study of first and second year preclinical medical students at a Midwest osteopathic medical school to examine their emerging professional identity constructions as D.O.s. This was the only study I found concerning osteopathic medical students' professional identity construction. The study's findings revealed that these students constructed professional identities as future osteopathic

physicians that embody a more holistic and patient-centered approach to patient care and fewer technological tools than their allopathic colleagues.

> The image of the ideal physician emerging from the interviews is not limited to one who knows relevant factual information and implements medical intervention. Rather, participants stressed that their capacity for caring and dialogic interactions is integral to their future relationships with patients. (Harter & Krone, 2001, p. 78)

Harter and Krone (2001) argue that their findings demonstrate the impact of ideological influences embedded within osteopathic medicine's professional socialization discourses. These authors assert that for M.D. physicians "the technological imperative as practiced and developed through the scientific method is a strong ideological force influencing our health care system – including the professional identities of health care practitioners" (p. 79). Accordingly, allopathic physicians are more disease-oriented and tend to focus on the presenting problem (Hahn, 2009). Adhering to the holistic philosophy of osteopathic medicine, D.O.s address the patient's problem, but also look at other aspects of the patient's life and lifestyle that may be associated with the presenting problem. Harter and Krone's (2001) study participants also emphasized the importance of the relationship between patient and physician and their aim of a balance between emotional expression and clinical objectivity.

Harter and Krone's (2001) findings cannot be considered to be representative of all osteopathic medical students. Moreover, as the participants were in their preclinical years, it would be of interest to ascertain whether these students and other osteopathic medical

students would offer differing perceptions during or after their experiences of third and fourth year clinical education. According to Inui (2003), experience in clinical settings becomes the reality test in that physician behaviors that contradict the profession's ideology are more likely to be encountered in these venues via the hidden curriculum. Regardless, more research is needed to more fully comprehend the nature of osteopathic medical students' construction of their developing professional identities.

Solidarity or pressure to conform. Upon entrance to medical school, medical students as aspiring physicians or student doctors enthusiastically seek to become insiders within the medical profession's community. Their journey involves introduction to rituals, symbols, and ceremonies that are unique to medicine and its practitioners. For example, it is now common practice among most U.S. medical schools to conduct a white coat ceremony to initiate medical students into the medical profession (Wear, 1998). White represents purity, healing, and the professional ideals of the medical profession that focus on compassionate caregiving. The white coat is the quintessential symbol of a physician and conveys to patients, staff members, and the lay public the wearer's identity as a physician. Medical students wear short white coats or jackets indicating their novice status, while physicians wear long white coats. Wearers of the white coat share a professional solidarity as members of the medical community.

Communities also have rules and norms of initiation and participation and rites of passage. All physicians must graduate from a medical school. Medical students must learn huge amounts of didactic material and are subjected to huge pressures to perform and succeed. The medical school experience has been described as a *meat grinder* (Conrad,

1988) where students are ground up and transformed into doctors and as a *pressure cooker* (Cohen et al., 2009) with respect to high study and work demands, diminished personal leisure time, and an eroding sense of personal identity. Learning how to become a physician is also becoming part of an organizational hierarchy in which medical students as initiates are at the bottom, are powerless, yet are expected to be knowledgeable and wise. "The anxiety of not knowing anything or not knowing enough is common among medical students" (Conrad, 1988, p. 326). Faculty, especially in clinical settings, can be quick to criticize medical student errors and lack of knowledge (Haas & Shaffir, 1991). These behaviors often are evident in the practice of clinical rounds where faculty lead medical students through a bedside tour of patients while interrogating terrified medical students about the patients' conditions and treatment plans and publicly rebuking the students if they give a wrong response. This clinical teaching ritual is known as pimping (Conrad, 1988).

The idealism that many medical students possess upon entering medical school tends to be dampened by the rigors and rigidity of medical school and medicine (Wear, 1998). The pressures to conform and succeed are great. Students learn quickly how to succeed and advance by gaining the approval and support of those who can affect their reputation and advancement. It becomes important to appear knowledgeable even if one does not feel knowledgeable. These survival techniques, for such practices as pimping, have been variously termed strategies of impression management (Conrad, 1988) and adoption of a cloak of competence (Haas & Shaffir, 1991) and are deemed essential to student success.

Kaiser (2002) argues that "the authoritarian and hierarchical institution of medical school … encourages students to adopt rigidly-defined professional identities" (p. 95) that

stifle or replace their personal identities. Being relatively powerless, students realize they must appease those in a position of power or dominance such as a resident or a physician faculty member. Given this uneven power dynamic, it is not unusual for those in the subordinate position, such as medical students, to adopt the language and behavior of the dominant members, which in this instance would be the faculty (Kaiser, 2002). Therefore, women, being different from the powerful male majority, must assimilate and adopt male-oriented professional behaviors that are deemed to be indicators of competence and success. In this way, women knowingly or unknowingly become co-opted by the profession's culture, rules for participation, and norms for success (Hager, 2007). Harrison (1982) characterized her transformation into becoming a physician as "every time I walked into a hospital, I changed without wanting to. I became cooler, more removed, less human, more antiseptic" (p. 19). Yet, "I was an insider … (and) … was ashamed of the power I felt" (p. 32).

In order to explore the professional identity constructions of third and fourth year women osteopathic medical students from the perspective of gender, it is necessary to also examine the gendered relations experienced by women medical students during their medical education and women physicians in their practice.

Women in Medicine

The classic *Boys in White* (Becker et al., 1961) reports the findings of an ethnographic study conducted in 1956-1957 of medical students (M.D.) enrolled at the University of Kansas Medical School for the purpose of describing student culture in medical school. The authors begin their book with the following description of the medical school admissions interview in relation to the culture of the medical profession.

> The interview is a serious affair. At stake is one's opportunity to enter one of the most honored and – at present in America – most lucrative of the professions. They comport themselves on this solemn occasion not as boys but as men. The teachers of medicine who interview them … ask themselves and one another, "Will this bright boy really make a medical man?" For medicine is man's work. It is also woman's work, and there is no theme of human history more interesting than the changes in the respective roles of man and woman in looking after those who are sick or in labor. But in this country, although an increasing proportion of the people who have a part in the medical system are women, the medical profession itself remains overwhelmingly male. In this book, we shall talk mainly of boys becoming medical men. (p. 3)

More than fifty years later, women have entered the U.S. medical profession in significant numbers, yet male-domination of the profession continues. Further, medical school culture remains oriented to male norms (Grant, 1988). Medicine has been criticized as "glorifying machismo" (Heru, 2005, p.21) and requiring students to fit a male-oriented mold. Risberg (2004) reports that when female medical students were asked to characterize a female physician role model, the consensus description was "competent, rational, authoritative and decisive … but still a woman" (p. 20). Risberg (2004) concludes that these medical students described a physician but not a woman. This gendered construction of physician identity suggests that physician identity is constructed from the dominant male norms within the medical community of practice, since the profession's standards are an

indicator of professional competence and success (Apker & Eggly, 2004; Beagan, 2000; Conrad, 1988; Harrison, 1982).

The dominant social discourses that assert behaviors, rules, and norms for social interactions within the medical profession are powerful determinants of what is normal and expected (Coombs, 1998). A gendered discourse operates within the medical profession that is socially constructed (West & Zimmerman, 1991). With respect to the profession of medicine, members construct knowledge in relation to their experiences with others. They are socialized in the profession's dominant discourses, practices and values that convey what is good and right.

Women have entered the medical profession in significant numbers over the last several decades, demonstrating equal opportunity to enter this profession. Beginning noticeably in the 1970s, growing feminization of the medical profession is largely attributed to three factors (Boulis & Jacobs, 2008). First, the Women's Movement successfully secured equal opportunity for women on many fronts that included higher education. Second, social change occurred concerning the gendered roles for women that enabled more women to pursue careers outside of the home. The third factor was a growth in enrollment capacity of U.S. medical schools that enabled women to enter in larger numbers than ever before without displacing men in medical school admissions.

In 2012, women constituted 46 percent of osteopathic medical students and 33.8 percent of osteopathic physicians (D.O.s) (AOA, 2012). Statistics are similar concerning women allopathic physicians (M.D.s). Women comprise 30.1 percent of all M.D.s in 2010 (AMA, 2012) and 47.1 percent of enrolled M.D. students in 2011-2012 (AAMC, 2012). In

comparison, in 1980, women comprised 11.6 percent of M.D.s (AMA, 2012) and 5.6 percent of D.O.s (AOA, 2012).

In spite of these significant gains by women, gendered occupational patterns, evidenced as vertical and horizontal gender segregation, are apparent in both the D.O. and M.D. professions in the U.S. (Boulis et al., 2001; Harter & Krone, 2001; Heru, 2005; Risberg, 2004; Riska, 2008). Women D.O.s and M.D.s tend to practice in the lower status primary care specialties, while male D.O.s and M.D.s are more likely to practice in the higher status and more lucrative medical and surgical specialties (AOA, 2012; AMA, 2012). Acker's (1990) concept of a job that assumes a gendered organization of domestic life and occupational responsibilities in such ways that "those who must divide their commitments are in the lower ranks" (p. 150) corroborates explanations provided by other researchers of why more women physicians tend to be found in primary care specialties that are held to be more flexible in allowing these women to also respond to concurrent domestic responsibilities (Bickel, 2001; Heru, 2005; Risberg, 2004).

Gendered profession of medicine. Given that more female than male physicians must factor in family responsibilities when selecting their career specialties and women physicians do not evidence the same degree of professional advancement as their comparably qualified male colleagues, medicine in the U.S. is a gendered profession. In a survey designed to elicit gender effects on career choices and the ability to reach career goals, male and female medical students agreed it was a disadvantage to be female (Reed & Buddeberg-Fischer, 2001). Gendered occupational patterns are evident within the medical profession in spite of a significant influx of women into the physician community (Risberg, 2004). The

significant entry of women into the medical profession began in the 1970s when women entered medical school in considerably larger numbers (Bickel, 2000; Reed & Buddeberg-Fischer, 2001). The profession of medicine remains a man-made world in which the rules for participation and definition of success were created and are sustained by men. While women may have attained equal access to a medical education, equal opportunity for women within the medical specialties and in leadership roles remains elusive.

Horizontal gender segregation is evidenced by the distribution of women physicians into medical specialties (Bickel, 2000; Risberg, 2004). Society urges women to succeed in career choices and roles while assigning them primary domestic and childcare responsibilities. Domestic responsibilities and circumstances heavily influence the medical careers of women physicians (Bickel, 2000; Reed & Buddeberg-Fischer, 2001). Unlike their male colleagues, women physicians must often divide their time and attention between career and domestic responsibilities. Further, family responsibilities often influence women physicians' choice of medical specialty to fields that are family-friendly with predictable hours conducive to family responsibilities. Gender influences the choice of a residency specialty for many women as they struggle to blend domestic roles with their medical careers (Bickel, 2000; Boulis & Jacobs, 2008; Mobilos, Chan, & Brown, 2008; Riska, 2008). It is also reported that there is a tendency among the younger generation of physicians, both male and female, to select specialties with controllable lifestyles (Sanfey, Saalwachter-Schulman, Nyhof-Young, Eidelson & Mann, 2006).

Seeking a work-life balance is not unique to women physicians and is a common experience of women in other professions (Bracken, Allen, & Dean, 2006; Kanter,

1977/1993; Sandler, 1992). However, it is acknowledged that physicians, particularly women physicians, face the most difficult challenges to successfully balance their professional and personal lives given medicine's traditional work ethic and hours (Bickel, 2000; Boulis & Jacobs, 2008). The traditional 24/7 work ethic in medicine holds that the patient comes first and family is sacrificed in order for physicians to do their jobs and care for their patients (Bickel, 2000). Clearly, women medical students and physicians are more likely than their male colleagues to compromise their choice of a specialty in order to attain a work-life balance (Bickel, 2000; Boulis & Jacobs, 2008; Drinkwater, Tully, & Dornan, 2008; Lambert & Holmboe, 2005).

These findings further confirm Acker's (1990) theory that "those who must divide their commitments are in the lower ranks" (p. 150) and Kanter's (1977/1993) finding that women were more likely to be clustered in the lower realms of organizational hierarchies. Similarly to the experiences of women in other fields, women physicians experience gendered occupational patterns (Heru, 2005; Risberg, 2004) in that men are more likely to occupy leadership roles and work in higher status, more lucrative medical and surgical specialties, while women tend to be segregated in lower status primary care specialties (Boulis et al., 2001; Harter & Krone, 2001; Heru, 2005; Risberg, 2004).

Further, women physicians must also weigh male-dominated specialty cultures that can be hostile to women, such as has been reported for the surgical specialties (Bickel, 2001; Harrison, 1982; Heru, 2005). Boulis et al. (2001) provide another perspective that women tend to select specialties with a significant presence of women physicians to lessen the likelihood of encountering hostile work and professional environments. Whether to maintain

a balance of family and career or to avoid hostile workplace environments, women tend to be clustered in the lower status primary care specialties of family medicine, general internal medicine, and general pediatrics (Bickel, 2001; Harrison, 1982; Heru, 2005). More often than not, male physicians are not faced with these limiting factors. Medicine does not offer its male and female physicians the same level of playing field.

Gendered Medical Socialization

"I am solely a professional – neutral and genderless." (Risberg, 2004)

Medical students are more heterogeneous than they were a half century ago. Medical school demographics have changed significantly since *Boys in White* (Becker et al., 1961) was published as a study of medical school culture at a time when medical students were primarily white middle class males. Presently, women nearly equal men as enrolled medical students in the United States (AACOM, 2012; AAMC, 2012). Further, these students are diverse in terms of their age, race, education, marital status, and sexual orientation (Beagan, 2000). All medical students enter medical school to learn how to become physicians. The medical curriculum that all students engage in is purported to be gender blind and gender neutral (Risberg, 2004). From their learning experiences, medical students construct a professional identity of physician with the belief that it is neutral and genderless (Acker, 1992, 2006; Kaiser, 2002; Risberg, 2004). Women and men share equal opportunity to enter medical schools to train as physicians, but the professional identity that is modeled for them in their everyday activities of medical education is heavily influenced by male norms and standards (Beagan, 2000; Haas & Shaffir, 1991; Harrison, 1982; Risberg, 2004). Both

women and men are faced with adapting their personal identities to fit with the prevailing professional identity of physician (Beagan, 2000; Conrad, 1988; Kaiser, 2002).

Evidence suggests that the medical school experiences of women and men students are often different (Bickel, 2001; Coombs, 1998; Haas & Shaffir, 1991). Historically, medical students were almost exclusively middle class white males from educated, affluent families; the same social and cultural background as most medical faculty and administrators (Becker et al., 1961; Grant, 1988). Both women and men adapt their personal identities to fit with the prevailing professional identity of physician (Beagan, 2000; Conrad, 1988; Kaiser, 2002). It is a given that individuals who share a culture are more likely to have a sense of belonging, while those who are from different social and cultural groups may feel alienation and a lack of acceptance (Schein, 1985). Women medical students are more likely than men to experience instances of overt and subtle forms of gender discrimination and harassment and being gender stereotyped into career specialties (Beagan, 2000, 2001; Bickel, 2001; Grant, 1988; Witte et al., 2006).

Gender discrimination. Both women and men report instances of gender discrimination and sexual harassment during their medical education; yet, these experiences are more common with women (Babaria et al., 2009; Beagan, 2000; Bickel, 2001; Grant, 1988; Witte et al., 2006). Instances of these experiences include stereotypical comments, sexual overtures, offensive, embarrassing, or sexually explicit comments, inappropriate touching, and educational inequalities (Witte et al., 2006). Students have also described a "culture of guyness" encountered on clinical units (Babaria et al., 2009, p. 864). This characterization suggests "that the culture of medicine valued stereotypically male

characteristics more than female characteristics" in terms of interactions with colleagues, conversations, and so on (Babaria et al., 2009, p. 864).

Commonly, when students experience instances of gender discrimination or other uncomfortable situations, these students usually endured these in silence so as not to risk offending physician faculty and attending physicians who could adversely affect their student evaluations and futures (Babaria et al., 2009). The impact of asymmetrical power relations is evident in these reported experiences.

Further, in the study conducted by Witte et al. (2006), both male and female medical students reported educational inequalities in their clinical experiences. For example, women patients, especially those seen in obstetrics and gynecology clinical settings, often would refuse to be attended by male medical students. On the other hand, female students reported instances of being ignored by male attending physicians who preferred teaching male medical students. However, this study also reported instances where male students received more favorable treatment from both men and women attending physicians and the same for women students. It seems instances of gendered favoritism may be difficult to avoid. However, this study's focus was directed to the impact that these experiences exert on women medical students and how these experiences shaped their constructions of their future professional identities.

Accordingly, women who enter medicine are presented with the dominant medical school culture that reflects the norms, values, and expectations of the educated, middle class white males who shaped it. Given that this research studied third and fourth year women osteopathic medical students to explore how their experiences and perceptions have shaped

their constructions of their emerging professional identity as future osteopathic physicians, a gendered perspective was used to critically analyze the findings. In so doing, it is hoped that this study offer a glimpse into the experiences that influenced these women students' constructions of a physician identity and the extent to which gendered relations played a part.

Summary

The purpose of my research was to explore women medical students' immersion in a program of osteopathic medical education that is held to be gender neutral (Acker, 1992, 2006; Risberg, 2004). Yet, there is ample evidence that men and women experience medical school differently (Beagan, 2000, 2001; Bickel, 2001; Risberg, 2004). My research utilized qualitative research methods to explore the gendered nature of professional socialization that begins in medical school. Female and male students enter medical school to learn how to become physicians. The curriculum is held to be gender neutral. Men and women students participate in the same medical education curriculum and meet the same academic requirements to graduate. From their first experiences of medical school at their orientation programs, medical students begin the process of constructing their professional identities as future physicians and novice entrants into the profession of medicine (Haas & Shaffir, 1991). The focus of this research was exploring how the experiences of women osteopathic medical students shaped their emerging professional identities as physicians from the perspective of gender.

This study was grounded in the ontology and epistemology of social constructionism (Gergen, 1985), which holds that meanings are constructed from social relationships and social interactions that create a shared history and culture of beliefs, values, and

understandings. This review of the literature examines how our understandings of gender shape our everyday lives and affect the roles and identities available to women in Western society. Historically, women and their roles have been inferior to male roles and identities (Lorber, 1994; West & Zimmerman, 1991). This review also looks at how the Women's Liberation Movement and feminism arose to address the many ways the dominant social malestream dominated and repressed women's identities (Weedon, 1987/1997). As a result, social change occurred and women gained more freedom to choose whether to take on identities and roles that previously were unavailable to them. Greater access to higher education allowed women to earn baccalaureate, graduate, and professional degrees that enabled women to have meaningful careers that include entering medical school to become physicians (Bickel, 2000; Christman, 2003). With women now joining men as coworkers in numerous occupations and professions, women encountered gendered barriers that limited their work roles and stymied their advancement (Acker, 1990; Kanter, 1977/1993).

While students as medical novices enter the medical profession as outsiders (Cohen et al., 2009), their medical socialization is strongly influenced by the profession's insiders who interact with medical students as their faculty, leaders, role models, and mentors. Medical student socialization entails learning specific skills and techniques, tools, language, demeanor, and dress. It also involves assimilating into a male-dominated medical professional culture that entails student construction of a new professional identity (Haas & Shaffir, 1991).

Much of the medical socialization literature dwells on what the medical education establishment does to train its medical professionals with little research on how medical

professionals themselves construct their physician identities (Pratt et al., 2006). With respect to osteopathic medical education, there is a paucity of research on medical student socialization and professional identity construction. To date, a review of the pertinent literature found a single study on professional identity construction among osteopathic medical students during their pre-clinical years of medical education (Harter & Krone, 2001). No studies were found regarding osteopathic medical students' professional identity construction either during the clinical years or concerning whether gender relations influenced medical students' professional identity construction. The purpose of this study was to address this gap in the medical socialization literature.

CHAPTER 3. METHODOLOGY AND THEORETICAL FRAMEWORK

The goal of this chapter is to describe and explain the research framework used to conduct this study, which includes the study's rationale, the question that guided my research along with my justifications for selecting a qualitative research paradigm with narrative inquiry as my design, my research setting and participants, my data collection method, my role as researcher in relation to my participants, and my approach to data analysis that drew from this study's theoretical framework that guided my critical scrutiny and interpretation of findings.

Purpose of this Study

The purpose of my research was to gain a better understanding of how women osteopathic medical students constructed their emerging professional identities as future physicians through their participation in a program of medical education. While medical education is held to be neutral and genderless (Acker, 1992, 2006; Risberg, 2004), gendered outcomes are evident (Bickel, 2001; Risberg, 2004). My study utilized narrative inquiry as its qualitative research design to explore the gendered nature of professional socialization from the written accounts of women medical students who were in their third and fourth year of studies at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM). Much of the medical socialization literature dwells on what the medical education establishment does to train its medical professionals with little research on how medical professionals themselves construct their physician identities (Pratt et al., 2006).

The intent of this narrative inquiry is to add to this body of knowledge. There is a paucity of research on osteopathic medical student socialization and professional identity

construction. Little is known about how osteopathic medical students, particularly women, go about creating and establishing their professional identities as physicians (Harter & Krone, 2001; Pratt et al., 2006). Researchers also acknowledge that not enough is known about the influence of gender on the development of medical students' professional identities as physicians (Boulis et al., 2001; Harter & Krone, 2001). This study sought to address this gap in the relevant literature by contributing to our understanding of how women osteopathic medical students form their professional identities as physicians.

Research Question

Given that not enough is known about the influence of gender on the development of women osteopathic medical students' professional identities as physicians, my study's research question was as follows.

> From the perspective of gender, how do the experiences and perceptions of third and fourth year women osteopathic medical students influence their constructions of their emerging professional identities as physicians?

This study utilized qualitative research methods to explore the gendered nature of professional socialization through a narrative study involving women medical students who are in their third and fourth year of osteopathic medical school. The study's findings were analyzed through the critical stance of poststructuralist feminism.

Research Design

Qualitative Research

Drawing from the writings of Bruner (1991), Guba and Lincoln (1994), Marshall and Rossman (2006), Patton (1990), and Riessman (2003), I characterized my qualitative

research study as a narrative inquiry consisting of construction (data collection), deconstruction (data analysis), and reconstruction (interpretation of findings). I chose qualitative research as the research genre that best supported and facilitated this scholarly inquiry, since its research approaches occur in naturalistic settings and are context-based, intuitive, and interpretive (Marshall & Rossman, 2006). Further, qualitative research was well suited to the social constructionist orientation of this study, and to the study's analytical and interpretive focus on gender (Creswell, 2007; Guba & Lincoln, 1994; Marshall & Rossman, 2006; Patton, 1990). This study sought to learn from the participants' interpretive narratives about the experiences that shaped their constructions of their emerging professional identities as future physicians.

Within the context of this study, I hoped to discern the extent to which the dominant professional discourses and culture of the osteopathic medical profession shaped these women's emerging professional identities as physicians. The study data revealed that these women medical students recognized and reported that their gendered identities, social roles, and gendered experiences influenced the development of their professional identities. Further, their professional identity constructions indicated their adherence in general to the dominant professional and social cultural discourses.

Background. Simply stated, the purpose of conducting research is to discover information that answers a question (Patton, 1990). The predominant research paradigms utilize either quantitative or qualitative methods to conduct scholarly inquiry (Marshall & Rossman, 2006). Patton (1990) distinguishes qualitative from quantitative inquiry as follows.

> The advantage of a quantitative approach is that it's possible to measure the reactions of a great many people to a limited set of questions, thus facilitating comparison and statistical aggregation of the data. This gives a broad, generalizable set of findings presented succinctly and parsimoniously. By contrast, qualitative methods typically produce a wealth of detailed information about a much smaller number of people and cases. This increases understanding of the cases and situations studied but reduces generalizability. (p. 14)

Quantitative researchers conduct scientific inquiry through experiments that are controlled and randomized. Their results are then analyzed for reliability, objectivity, and replicability in order to generalize the results to larger groups and populations (Patton, 1990). Alternatively, qualitative research reflects diverse ontologies and epistemologies that seek to understand the meanings that individuals construct with respect to their experiences of their worlds (Baptiste, 2001). Qualitative research approaches and methods arise largely from social science and humanities disciplines that include anthropology, philosophy, sociology, history, psychology, and education (Guba & Lincoln, 1994; Marshall & Rossman, 2006). Qualitative inquiry is naturalistic, focuses on context, uses multiple approaches, and is fundamentally interpretive (Rossman & Rallis, 2003). Further, the researcher is the primary instrument for data collection; data analysis is inductive; and the results of qualitative inquiry are richly descriptive (Merriam, 2002).

Philosophical foundations. The inquiry paradigm that researchers use reflects their philosophical and theoretical foundations (Cresswell, 2007). Multiple philosophical

orientations underpin qualitative research studies and scholars differ on the identification and classification of these philosophical orientations. Guba and Lincoln (1994) describe four philosophical paradigms that include positivism, postpositivism, critical theory, and constructivism. Creswell (2007) discusses the paradigms of postpositivism, social constructivism, advocacy/participatory, and pragmatism and adds several interpretive communities that include postmodern perspectives, feminist theories, critical theory and critical race theory, queer theory, and disability theories.

Experimental studies conducted by quantitative researchers reflect a scientific or positivist ontology (Marshall & Rossman, 2006). Alternatively, qualitative research reflects diverse ontologies and epistemologies (Baptiste, 2001) as found in the several descriptions that follow. A postpositivist qualitative study adheres to a more scientific orientation with a focus on empirical data collection and cause and effect analysis and interpretations (Creswell, 2007). A critical theory perspective is often associated with the Frankfurt School theorists and Marxist philosophy (Kincheloe & McLaren, 1994). However, critical orientations are also found in feminist studies (Guba & Lincoln, 1994; Olesen, 1994) that examine social culture and social norms that disadvantage women; in postmodern studies that question concepts of a single reality; and in poststructural research that scrutinizes social discourses held to be normal and natural phenomena rather than social constructions (Harding, 1996; Weedon, 1987/1997). Critical orientations may seek individual or group empowerment, social emancipation, and ultimately social change. A social constructionist (or constructivist) viewpoint recognizes that the meanings individuals and groups give to their experiences are products of their social interactions (Gergen, 1985) and "share(s) the

goal of understanding the complex world of lived experience from the point of view of those who live it" (Schwandt, 1994, p. 118).

Regardless of which paradigm(s) a researcher uses, the choice made influences the researcher's methodology and approach to the question that is to be studied, the method of data collection, and the analysis and interpretation of the collected data (Creswell, 2007; Guba & Lincoln, 1994; Marshall & Rossman, 2006; Patton, 1990). As noted earlier, qualitative research suited the social constructionist stance of my study as well as the study's hermeneutic narrative inquiry design.

Qualitative methodologies. A plethora of methodological approaches arising from various disciplines exist within qualitative research with different scholarly perspectives on classification schemes that seek to order and make sense of these methods (Creswell, 2007; Marshall & Rossman, 2006; Merriam, 2002; Patton, 1990). These methods generally rely on three types of data collection: in-depth interviews, direct observation, and document analysis (Patton, 1990). Several of the more commonly accepted qualitative research approaches include ethnography, narrative inquiry, phenomenology, and grounded theory. Ethnography developed from anthropology and sociology to study and observe the experiences of individuals within the context of their society and culture (Creswell, 2007; Patton, 1990). Narrative inquiry is essentially hermeneutic and draws from the lived experiences of study participants rendered in their own words through interviews, letters, or other documents and draws from the humanities (Bruner, 1991; Chase, 2005; Connelly & Clandinin, 1990). Phenomenology is strongly rooted in philosophy with its analytical focus on understanding the essence of a lived experience (Creswell, 2007). Grounded theory studies evolved from

anthropology and sociology with the aim of understanding and interpreting the cultural practices and patterns of groups (Creswell, 2007). Researchers use a grounded theory approach to build theory that is derived inductively from the collected data (Marshall & Rossman, 2006).

Rationale for My Study Design

For this study of KYCOM third and fourth year women medical students, I selected qualitative research as my research paradigm with narrative inquiry as my research design and poststructuralist feminism as my theoretical framework. My research study sought to collect and analyze information that addresses the following question.

> From the perspective of gender, how do the experiences and perceptions of third and fourth year women osteopathic medical students influence their constructions of their emerging professional identities as physicians?

We know that the inquiry paradigm that researchers use reflects their philosophical and theoretical foundations (Cresswell, 2007; Guba & Lincoln, 1994), which, in turn, guides the researcher's selection of methodology and approach to the question that is to be studied, the method of data collection, and the analysis and interpretation of the collected data (Creswell, 2007; Guba & Lincoln, 1994; Marshall & Rossman, 2006; Patton, 1990).

Accordingly, I believed a narrative inquiry design situated within the paradigm of qualitative research best suited this scholarly inquiry, which was grounded in the ontology and epistemology of social constructivism (Bruner, 1991; Gergen, 1985). Marshall and Rossman (2006) maintain that qualitative research occurs as naturalistic inquiry that focuses on context and is inductive and interpretive, which supported my desire to learn about how

women osteopathic medical students shaped their professional identities as future physicians. In this sense, this qualitative researcher sought to understand the complex social phenomena of constructing a physician identity through the meanings that this study's participants attributed to their experiences of their worlds (Patton, 1990).

My rationale for selecting qualitative research for my study aligned with these assertions. Given that my study's perspective was grounded in social constructionism (Gergen, 1985), it followed that my study's participants were becoming osteopathic physicians by learning through a process of social construction. The focus of this study was learning about gender's role in the professional identity shaping experiences of women medical students in the male-oriented profession of osteopathic medicine.

For my study, it was essential to ascertain from the women students themselves their personal accounts of their experiences and the meanings they attributed to these events that shaped their constructions of their professional identities as future osteopathic physicians. Use of narrative inquiry encouraged the study's participants to engage in reflection to sort out the experiences that they identified as important in shaping their professional identities as future physicians. Through a process of retrospective meaning making, the study's participants revealed the seminal experiences that influenced their constructions of their professional identities to date (Chase, 2005). As Bruner (1991) asserts, knowledge is not "point-of-viewless" (p. 2). These women formed their emerging professional identities as physicians from their social frameworks that included their medical education experiences with teachers, role models, classmates, patients, and others (Conrad, 1988; Harter & Krone, 2001; Pratt et al., 2006). Their professional identities also related to the dominant discourses

of the osteopathic medical profession and society in which they were situated. Polkinghorne (1996) maintains that individuals normally incorporate into their identities the dominant story of the culture.

Consequently, this study examined the extent to which these women assimilated the dominant discourse within the medical profession that a physician is neutral and genderless (Risberg, 2004). As Lorber (1994) and Valian (1998) hold, we are often unaware of how societal gender schemas shape our behaviors and our experiences. This study also explored whether these women medical students were influenced also by the social roles and identities they assumed from their gender and whether these women's experiences of their medical education were different because of their gender. Since this study used a gender perspective to examine their personal narratives, the degree to which the participants assimilated, resisted, or reconstructed the dominant professional culture and social culture was of interest. Accordingly, I felt these experiences and their meanings would best be communicated as participant narratives that portrayed their reflections and interpretations of their professional identity-shaping experiences, which was the rationale that supported my selection of narrative inquiry as my study's design (Chase, 2005; Patton, 1990).

Further, I used poststructuralist feminism as my theoretical framework to analyze my participants' stories and to interpret and restory the data obtained from the study participants' personal narratives in response to my study's research question. While narrative inquiry encouraged my study participants to reflect, select, and interpret their meaningful experiences, my role as researcher was to analyze and interpret their narratives from a gender perspective using the critical theoretical stance of poststructuralist feminism. This critical

lens was used to examine the extent to which the women medical students' narratives reflected, resisted, or recreated the dominant cultural discourses of the male-oriented osteopathic medicine profession and of society.

Narrative Inquiry

Narrative inquiry is a qualitative research design that from a social constructionist stance enables individuals to construct their interpretations of reality (Bruner, 1991). Connelly and Clandinin (1990) also characterize narrative inquiry as "the study of the ways humans experience the world" (p. 2). This method of inquiry is interdisciplinary in its historical development and utilization (Marshall & Rossman, 2006). According to Chase (2005), a narrative is the narrator's story that consists of retrospective meaning making of past experiences.

A narrative is a distinct form of discourse that can be oral, visual, or written; it can be a short tale about a life experience, event, or person; it can be a longer account of an important aspect of one's life, possibly a turning point or an epiphany; or it can be one's life story (Chase, 2005). Diaries, journals, field notes, interview transcripts, email messages, photos, stories, letters, and metaphors are all forms of personal narratives (Connelly & Clandinin, 1990). Narrative stories such as myths, parables, and fables are commonly used to convey knowledge and moral lessons in cultural contexts (Crossley, 2002). Reflection and interpretation are at the heart of this form of inquiry. It allows the author to convey what happened and why it is worth telling (Chase, 2005; Connelly & Clandinin, 1990). A narrative is also a co-construction in that it is interpreted by its audience, which further

enhances its power to convey meanings from the author and also elicit meanings from its recipient(s).

"People live storied lives and telling and retelling one's story is a fundamental way that an individual makes sense of her experiences" (Paulus, Woodside, & Ziegler, 2007, p. 299). The power of a story is what it reveals concerning how the narrator creates and reshapes personal identity (Riessman, 2003). Riessman (2003) maintains that "narrators interpret the past in stories rather than reproduce the past as it was" (p. 341). Using Riessman's (2003) perspective, ascertaining factual truth from the narrator is less salient than comprehending the meanings that the narrator attributes to these life experiences, especially in the dynamic way that these meanings are altered by subsequent life experiences. Polkinghorne (1996) observes that there may be important differences between the story as it is lived and the story as it is told. "Told stories omit details and condense parts ("flattening"), elaborate and exaggerate other parts ("sharpening"), and make parts more compact and consistent ("rationalization") (p. 366). The essence of narrative inquiry is its hermeneutic quality that marks both its construction and its comprehension (Bruner, 1991). A narrative is constructed by the author in terms of the knowledge s/he wishes to convey and is interpreted or co-constructed by the reader, viewer, or listener according to their personal perspectives.

Narrative inquiry gives voice to the participant's point of view and interpretation of given events and experiences. The importance of narratives for researchers is that these represent an important form of discourse that narrators construct of their personal experiences, perceptions, and interpretations of socially situated realities (Marshall &

Rossman, 2006). In effect, narrators allow the researcher a glimpse into their lives or into a culture or other life experience that otherwise often would remain private. For example, narrative inquiry was used by second-wave feminist scholars to give voice to and empower women, who several decades ago were socially invisible (Olesen, 1994; Marshall & Rossman, 2006). The use of this research method in feminist and critical theory studies has been credited with advancing equal opportunity for women in our society by making the meaningful stories and lives of disadvantaged women visible.

Given my narrative inquiry study, I looked for the meanings that my participants attributed to their experiences and how these perceptions shaped their emerging professional identities as future physicians with analytical reference to their gendered social roles and identities as women and as third and fourth year medical students at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM). For example, why did the participants relate these particular experiences? Why were these meaningful? Specifically, my interest was in learning how their identities as student doctors and future practicing physicians shifted over time and the extent to which gender was visible or invisible in these experiences. Discovering and exploring "turning points" in my participants' stories might reveal patterns of identity formation and transformation within the study group.

Further, this study enabled the examination and analysis of multiple personal narratives. A potentially powerful source of information is the extent to which participant narratives agree, disagree, or offer alternative perspectives and why. Professional identity construction among women osteopathic medical students in their clinical years of study,

which is their third and fourth year, previously had not yet been reported (Harter & Krone, 2001). There was much to be learned from the participants in terms of the types of experiences that shaped their professional identity constructions, the degree to which these reported experiences were the same and the extent to which these were different and why. This study explored virtually uncharted territory with the potential for revealing important information about the medical socialization of osteopathic medical students who were future D.O.s. that can have future implications for education and professional development.

Research Setting and Participants

The setting for this study was the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM), a small osteopathic medical school located in the Appalachian area of rural eastern Kentucky. At the time of data collection in 2010 – 2011, medical school enrollment totaled 303 students. KYCOM senior administrators that include the dean and his associate deans totaled six. Of these, only one administrator was female. Women comprised 46.7 percent of students and men, 53.3 percent (University of Pikeville, 2013). In 2011, KYCOM employed 17 full-time faculty members who taught courses in years one and two of the medical curriculum (University of Pikeville, 2013). Of these faculty members, men hold a significant majority; there were only four women with full-time faculty appointments of whom only one was a physician who taught clinical courses. Participants reported that they encountered more female physician faculty during years three and four at the hospitals and clinics they were assigned to for their clinical rotations. In 2011, KYCOM's clinical rotations involved the participation of 922 clinical physicians as faculty preceptors, of whom 20 percent were female (University of Pikeville, 2013). Also, at

that time, the institution was named Pikeville College and the medical school was named Pikeville College School of Osteopathic Medicine (PCSOM).

Participant pool. The NCSU Institutional Review Board approved my research plan for this study (Appendix A). The fourth year class consisted of 70 students that included 30 women (University of Pikeville, 2013). Initially, the study's research plan identified women in the fourth year class as the study's potential participants, since these students would be approaching their graduation. Sampling was purposive and included use of a snowball technique to obtain other participants (Miles & Huberman, 1994). I emailed an invitation (Appendix B) to the fourth year women to participate in this study first in December 2010 and again in January of 2011. Five women volunteered to participate and signed a consent form (Appendix D) that included a participant activity for which the outcome would be a personal reflective narrative written as a letter to a fictitious new woman medical student. I believed the reason for the sparse participation was that all fourth year students were immersed in applying to residency programs for their postgraduate specialty training that included travelling to residency interviews in addition to completing all remaining requirements for graduation. Also, one participant removed herself from the study citing lack of time. I was left with four fourth year women participants.

Given the lower than desired number of participants, I consulted with my doctoral advisor. My advisor informed me that I needed a minimum of ten participants for my study. I requested permission to add third year women to the participant pool, since they had already garnered the experience of completing more than half of their third year clinical curriculum. The third year class totaled 64 students of whom 33 were women (University of

Pikeville, 2013). I emailed an invitation (Appendix C) to the third year women to participate in this study in February of 2011. Seven of the third year women medical students volunteered to participate and signed a consent form (Appendix E).

In total, eleven women students volunteered to participate in this study; four were fourth year students and seven were third year medical students. These participants completed their first two years of coursework at the Pikeville campus and then were assigned to different clinical education sites within Kentucky and in neighboring states to complete year three and four clinical courses. Since students were assigned to different clinical education sites throughout the region, authoring a personal narrative offered an advantage since this task could be completed by the student participants at their geographical locations. Participants were sent the preliminary findings to member check for accuracy and completeness. All were invited to participate in follow up conversations via telephone or in person. Seven students, one in the fourth-year and six in the third-year, participated in follow-up conversations.

Reflexivity

I have been the Associate Dean for Student Affairs at KYCOM for more than four years. My role is to facilitate and promote the well-being and success of our medical students. I also am responsible for medical school admissions, student financial aid, student records, student organizations and clubs, alumni, and student policies and publications. I am familiar with the target participants for this study, namely, the women students who were KYCOM third and fourth year medical students at the time of data collection. Since most third and fourth year medical students are assigned to clinical sites away from Pikeville to do

their clinical rotations, I have minimal contact with them during their clinical years except for email and phone communications and occasional visits by these students to the Pikeville campus.

Further, as one of the medical school associate deans, I serve as a member of KYCOM administration. I am mindful of the responsibilities of my position and their potential impact on students. While my responsibilities affect these students, I have little interaction with third and fourth year students. My responsibilities are more related to applicants and incoming students and first and second year students who are on campus attending classes. At KYCOM, other deans, particularly those who oversee academic affairs and clinical sciences, have greater impact than I on fourth year students because of the roles of these deans in preparing letters of student evaluation and recommendations to program directors for postgraduate appointments in residency programs. Getting an appointment in a desired residency program is a focal point of the fourth year for medical students as it is a key determinant of career choice, specialization, and location.

My relationship to participants. Since I studied medical students at my institution of employment, I was mindful of the visibility of my position and the import of my responsibilities on KYCOM students. My role is to facilitate and promote the well-being and success of our students. I also am responsible for medical school admissions, student financial aid, student record services, student organizations and clubs, alumni, and student policies and publications. I knew the target participants for this study, namely, the women students in their third and fourth years of medical school at KYCOM. However, most third and fourth year students were assigned to clinical sites away from Pikeville for their third and

fourth year clinical rotations. As a result, I had minimal contact with participants during the course of this study except for email and phone communications and occasional visits by these students to the home campus.

In qualitative research, it is not uncommon for researchers to use their institutional settings to conduct their studies. This researcher stance is particularly found with studies that examine the effects of organizational culture on its members, such as in this proposed study. In other words, the researcher already is or becomes an "insider" to better examine and comprehend the everyday activities and experiences of the participants within the study's specific cultural setting (Adler& Adler, 2003; Guba & Lincoln, 1994; Marshall & Rossman, 2006). With this circumstance in mind, I followed the same standards that other qualitative researchers would use to account for their roles and positioning within the research setting. Further, my responsibilities as a researcher to my study participants, North Carolina State University's Institutional Review Board guidelines, to my doctoral program, and to my employer required that I conduct myself responsibly and ethically throughout this study to ensure the rigor of my data collection methodology and subsequent findings.

My goal with this study was to complete the dissertation that is required to earn my Ed.D. degree in Adult and Community College Education at North Carolina State University and to contribute to the fund of knowledge concerning the professional socialization of women osteopathic medical students.

Ethical and Political Considerations

As researcher, I followed the professional ethical guidelines for the conduct of qualitative research (Punch, 1994). Participation of KYCOM women students in this study

was strictly voluntary. Participation or non-participation did not affect students' academic or enrollment status in any way. Participants could remove themselves from this study at any time without prejudice. Since I was known to these medical students in that we share membership in the same osteopathic medical school, according to Adler & Adler (2003), I benefited from access to the target group of participants and the likelihood of gaining their participation. All participants were informed about the nature of the study that included a clear explanation of my interactions with them and how I would maintain their confidences and protect their anonymity (Punch, 1994). All students who volunteered signed an informed consent form (Appendix D and Appendix E) to participate (Marshall & Rossman, 2006).

Confidentiality. In order to ensure the robustness of the personal narratives authored by the study participants, I alone as researcher knew their identities and had access to their complete narratives and records of in-person, telephone, or email communications. Participants were assigned pseudonyms to protect their privacy for reporting and publication purposes (Marshall & Rossman, 2006). I was responsible for maintaining participant confidentiality and anonymity in whatever means I used to report or publish these data. This trust also included sensitivity to sharing anonymous remarks with school classmates, faculty, staff, administrators, and trustees who might be able to identify the source(s).

Possible discovery of unethical or unprofessional experiences. I was also cognizant of the fact that through my participants' narratives of their medical school experiences, I could learn of incidents that were unethical, undesirable, personally repugnant, etc. that possibly involved administrators, faculty, staff, or other students with whom I was familiar. The instance described by a participant in this study of sexual harassment was

reported to me and dealt with by another KYCOM associate dean prior to commencement of this study. I also understood my reporting requirements to the North Carolina State University Institutional Review Board if I should discover acts of this nature as part of this study's data collection. I also was aware that I could not use participant letters as the basis for initiating actions in response to a discovery of unethical or unprofessional experiences. Participant narratives did not reveal any new acts that were unethical, illegal, or that placed an individual's safety or well-being at risk.

Data Collection

Overview. In a study situated within social constructionism (Crossley, 2002; Gergen, 1985), the advantage of a narrative inquiry design is that it allows participants to construct in narrative form their storied renditions of meaningful life experiences (Connelly & Clandinin, 1990). For this study, target data involved the medical education and socialization experiences of women medical students and the meanings they associated with these experiences (Marshall & Rossman, 2006; Polkinghorne, 1996). We commonly engage in storytelling in our everyday lives. We convey to our friends, family, and colleagues our feelings concerning everyday experiences. In a study that is exploring how their experiences of gender may influence how women osteopathic medical students shaped and constructed their professional identities as future physicians, the study's narrative inquiry methodology and data collection plan enabled the women participants to relate their social and professional cultural experiences within an osteopathic medical school's educational environment and their influence on shaping their emerging osteopathic physician identities.

Personal narratives. Narrative inquiry research methods can take a variety of forms such as interview transcripts, email messages, document analysis, and personal letters (Connelly & Clandinin, 1990). I had invited all sixty-six of the KYCOM third and fourth year women medical students to participate in my research study. My primary data collection plan consisted of asking my study participants to write a letter to a fictitious entering woman medical student to share their experiences of medical school with the aim of contributing to the new medical student's success in becoming an osteopathic physician (see Appendix C and Appendix D).

Accordingly, this narrative exercise was intended to elicit personal, interpretive stories of meaningful life experiences from the study participants (Bruner, 1991; Chase, 2006). Riessman (2003) maintains that the power of a story is what it reveals concerning how the narrator creates and reshapes personal identity. Further, it allows the author to convey what happened and why it is worth telling (Chase, 2005; Connelly & Clandinin, 1990). According to Richardson and St. Pierre (2005), writing that derives from personal reflection is a form of narrative inquiry that offers a rich occasion for self-knowledge and meaning making.

The use of personal narrative writing as a research data collection technique has been championed in medicine by Rita Charon (2004). Charon has used personal narratives written by patients to facilitate their healing and with physicians to improve their care of patients. Charon maintains that when physicians write about their practices and the emotional and personal attributes of their care of patients, it helps physicians to more "quickly and accurately hear and interpret what a patient tries to say" (Charon, 2004, p. 862). The act of

personal refection that occurs in this type of writing provides narrative authors the opportunity to garner new insights and perspectives. Moreover, personal written narratives were effectively used as the primary data collection means in a study of Swedish medical students to elicit their attitudes toward gender issues and the careers of physicians (Hamberg & Johansson, 2006). Accordingly, I chose letter writing as my narrative method of data collection because I believed it offered the study participants the opportunity through a process of personal reflection and self-examination to construct and document their stories of becoming osteopathic physicians. Writing for an anonymous audience also encouraged openness in their writings. In so doing, this letter writing exercise could also be viewed as a study participant's construction of her emerging professional self (Richardson & St. Pierre, 2005). These personal stories provided a rich resource for data analysis and interpretation.

Further, this narrative inquiry method also accommodated the very full and busy schedules of third and fourth year osteopathic medical students immersed in clinical rotations of instruction in various medical specialties. My data collection plan was influenced by the pragmatic principle of do-ability. My intent was to select a plan that works within the time constraints and locations of my participants as well as my own professional responsibilities and personal financial resources. Fewer fourth year women students than third year women students volunteered to participate in this study. I attributed this lack of participation to the immersion of fourth year students in the time-consuming residency application process that involved travel to interviews with prospective programs along with completing all curricular requirements for graduation.

Study data. I asked each of the eleven participants to reflect on the medical school experiences that were the most meaningful to them and to their developing professional identities as future physicians. Then, participants wrote a letter (5-10 pages) to an incoming woman student in which they shared their experiences as well as what they believed would contribute to her success in becoming a D.O. Following my analysis of their personal narratives, I invited all participants to member check my preliminary findings and to participate in an informal follow-up conversation via telephone or in a face-to-face meeting.

My study focus on gender was not explicitly stated in the instructions for this exercise, yet I realized it was possible that the women who volunteered to be study participants could infer this from the information provided on the informed consent form. Regardless, I hoped to ascertain whether these women medical students would identify the influence of gender relations on their medical school experiences. Since gender is often taken for granted in its effect on our everyday experiences (Lorber, 1994; Valian, 1998), the omission of explicit gendered characterizations might not be surprising and might also be revealing with regard to how these women constructed their emerging professional identities as physicians (Risberg, 2004). In accord with the study's research question, participant narratives were analyzed from a gender perspective. I sought to identify gender's influence explicitly and implicitly on their experiences and professional identity constructions.

Issues of rigor. Connelly and Clandinin (1990) suggest criteria, some borrowed from other scholars, to assist the researcher with conducting a good narrative inquiry. These criteria include adequacy, plausibility, and a reminder to the narrative researcher "to be prepared to follow their nose" (Connelly & Clandinin, 1990, p. 7). Also, these authors

cautioned to avoid an illusion of causality, where a sequence of events has the appearance of causality. Connelly and Clandinin (1990) suggest that a way to avoid an illusion of causality is to distinguish "storied time" from "discourse time," which in simpler terms means distinguishing events as lived from events as told.

My responsibility as a researcher to my study participants, NC State's Institutional Review Board guidelines, to my doctoral program, and to my employer was to conduct myself responsibly and ethically throughout this study. I had an ethical commitment to my study participants to represent their words accurately. My intent was to ensure the credibility of the study data to facilitate their adequacy, plausibility, and transferability (Connelly & Clandinin, 1990).

Data Analysis

Overview. In order to address this narrative inquiry's research question, my challenge as researcher was to make sense of the study's data in order to transform these data into findings (Patton, 1990). Through a process of retrospective meaning making, the study's participants revealed seminal experiences that influenced their constructions of their professional identities to date (Chase, 2005). Narratives can take a variety of forms. Narratives can be oral, visual, or written; it can be a short tale about a life experience, event, or person; it can be a longer account of an important aspect of one's life, possibly a turning point or an epiphany; or it can be one's life story (Chase, 2005). In this instance, the study's narrative data drew from the life stories of the participants, who were women osteopathic medical students in their third and fourth year of medical school. Their stories described the social and medical education experiences that shaped their emerging professional identities

as future osteopathic medical physicians. Analysis of these personal narratives focused on social and professional constructions of physician identity. Further, a gender perspective that drew from the theoretical perspective of poststructuralist feminism was used to critically examine these personal narratives. A discussion of this study's theoretical framework follows.

Analytical meaning making. Data analysis is iteratively working with the data in order to make sense of and ascribe meaning to the information.

> Data analysis is a systematic search for meaning. It is a way to process qualitative data so that what has been learned can be communicated to others. Analysis means organizing and interrogating data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or generate theories. It often involves synthesis, evaluation, interpretation, categorization, hypothesizing, comparison, and pattern finding. (Hatch, 2002, p. 148)

According to standard principles of qualitative research, data analysis is inductive and intuitive (Marshall & Rossman, 2006). I sought to ascertain the meanings these women ascribed to their personal stories that made their stories worth telling. In my view, the data analysis and interpretive phases of this study involved processes of deconstruction and reconstruction. During data analysis, I became immersed in the study data in order to make sense of it through an intensive process of deconstruction. Eventually, I interpreted the study's collected data and restoried these interpretations as the study's findings (Patton, 1990).

A key step for a qualitative researcher is to immerse oneself into the data; to familiarize oneself with its contents repeatedly and intensively (Marshall & Rossman, 2006). In ways, this process resembles deconstructing a narrative into smaller, more manageable pieces, seeking to discern thematic patterns, and forming categories; repeating this process with each participant narrative. Then, examining all participant narratives for similar patterns and themes as well as differing schemas combined with seeking meaning from these patterns, themes, and interpretive categories. Finally, a process of reconstruction by the researcher characterizes the interpretation phase of the study and the construction of the deconstructed data into a different form.

Coding. The process of coding is instrumental to the data analysis phase of qualitative research as it enables the researcher to begin assigning meaning to the collected data (Riessman, 2003). For this study, I focused on identifying the data categories from my participants' narratives that characterized these women's perceptions and experiences that guided their constructions of their emerging professional identities as future physicians. My analysis drew from the literature relevant to this study as described in this study's conceptual framework (Miles & Huberman, 1994). Specifically, my initial schemes were influenced by the literature on medical education, women in medicine, and poststructuralist feminism. As my analysis intensified, coding shifted to an open coding approach that drew from the participants' own words.

The purpose of this narrative inquiry study was to gain a richer understanding from the perspective of gender about how third and fourth year women osteopathic medical students at the University of Pikeville – Kentucky College of Osteopathic Medicine

(KYCOM) constructed their developing professional identities as future osteopathic physicians. Accordingly, the critical perspective of poststructuralist feminism was used to further interrogate the open coding analytical framework to determine whether participant experiences and perceptions were affected and influenced by the interactions of their gendered personal identities with their emerging professional identities as future osteopathic physicians. Since this study was conducted with a gender perspective, this critical stance questioned whether these women medical students were in any way limited, disadvantaged, or adversely affected by their perceptions and experiences of their program of medical education and whether their gender was a factor.

Analysis of Participant Narratives

My analysis of participants' narrative data was intense, time consuming, and involved several stages of data inquiry. I received written narratives that were in the form of a letter to a fictitious entering female student from eleven participants. Letters ranged in length from 5 to 15 word-processed pages and averaged 8.3 pages. Participant narratives totaled 91 pages.

Stage One. I began my analysis of participants' personal narratives through immersion in the data by reading and rereading each narrative several times. As data analysis began, literature-based codes guided the initial analyses that drew from medical education, women in medicine, and poststructuralist feminism. Through this initial stage of data immersion, I looked for gaps, patterns, and outliers. I assessed how the emerging patterns and observations were similar and different among the participant narratives (Baptiste, 2001). I identified several emerging themes that included the social expectations for women, participants' desires to be wives and mothers as well as osteopathic physicians,

support systems and resources available to women medical students and physicians, and gendered advantages for men and disadvantages for women in the medical profession.

I met with my doctoral advisor to discuss these initial themes. We determined a strategy to use to interrogate the data further, which first included a more detailed analysis of participant narratives. Then, once preliminary findings were formulated, the next step would be to invite participants to member check the study's preliminary findings and respond to follow up questions.

Stage Two. In order to begin making sense of the narratives, the data were disaggregated into more manageable pieces and assigned codes according to a meaning that I assigned (Schwandt, 2007). I used NVivo 9.1 software to deconstruct the study's narrative data through a process of tagging and coding. The process began with tagging, in which content areas were named and tagged as large descriptive categories. With further analysis, these large data chunks were refined into more specific categories called codes. As this process continued, I began to derive meanings from themes and patterns that started to emerge (Ryan & Bernard, 2000). As a result of this intense process of analysis, my initial themes shifted and others emerged.

I found that participant narratives shaped the coding through the participants' own words. I relied on an open coding approach as indicated by the study data (Miles & Huberman, 1994). I was particularly struck by the fact that common themes were surfacing as participants' narratives were deconstructed and coded. The coding thematic structure that evolved was as follows:

Gender	Professional Identity
Leadership	Relationships

Learning	Residencies
Medical School Experiences	Role Models
Memorable Quotes	Specialty Choice
Mentors	Stress
Metaphors Used	Success

Drawing from poststructuralist feminism, I utilized this critical theoretical stance to analyze the coding themes that emerged from the participant narratives. I used this critical perspective to further interrogate the open coding analytical framework to determine whether participant experiences and perceptions were affected and influenced by the interactions of their gendered personal identities with their emerging professional identities as future osteopathic physicians. This theoretical framework questioned whether these women medical students were in any way limited or disadvantaged due to their gender. Given that the structure of traditional undergraduate and graduate medical education originally was shaped to accommodate the lives of male medical students, I sought to ascertain whether participants' development of their emerging professional identities was genderless or influenced by gender. I found that gendered experiences and perceptions were embedded throughout the narrative coding themes. Participants compellingly revealed that their gendered personal identities strongly influenced their developing professional identities as physicians in training.

Stage Three. I shared my preliminary findings with my doctoral advisor and received approval to proceed with the next stage of my analysis. I contacted participants to invite them to member check my preliminary findings and to engage in a follow-up conversation. Of the eleven participants, seven responded and agreed to participate. For the

follow up, six respondents were third year medical students and one, who was a fourth year student at the time of data collection, had graduated and was in the initial months of her residency program. Four follow-up conversations were conducted by phone and three were face-to-face meetings. Follow up conversations were informal and were guided by the following questions.

1. What was your reaction to the preliminary findings?
2. If you had the opportunity to redo your medical education, what might you do differently and what type of services, resources, or experiences would you have liked to have access to?

The patterns and common themes that were identified as findings for this study are discussed in detail in Chapter 4.

Limitations of the Study

Given this study's limited number of study participants at one osteopathic medical school in the U.S., the findings from this study described the experiences of its participants and may not be generalized to all women who are osteopathic medical students or to all male students or to allopathic medical students, male or female (Marshall & Rossman, 2006). However, this study's findings offer a glimpse into and increase our understanding of how women medical students' experiences of their osteopathic medical education shaped their emerging professional identities as future osteopathic physicians. While gender was the primary focus of this study, it was acknowledged that intersections with issues of class, race, ethnicity, lifestyle, or other categories of difference might also influence student professional identities as osteopathic physicians. Yet, these other identity categories would not be a focus

of this study's analysis. It is hoped that these findings will be informative and contribute to the general literature and research on this topic.

Strengths and Potential Benefits of Study

The literature concerning medical student socialization carries many accounts of student experiences that are viewed as gendered (Bickel, 2001; Grant, 1988; Risberg, 2004; Riska, 2000, 2008) and as unwelcome, harsh, hostile, rude, and harassing (Grant, 1988; Haas & Shaffir, 1991). Women medical students can experience diminished educational opportunities or interactions with attending faculty physicians (Babaria et al., 2009; Witte et al., 2006). Women medical students and physicians are prone to harassment in many medical environments (Bickel, 2000; Heru, 2005; Risberg, 2004). Further, women medical students and physicians are more likely than their male colleagues to limit their career options to accommodate the social and domestic responsibilities that arise from their social and gendered identities as women (Bickel, 2000, 2001; Boulis et al, 2001; Boulis & Jacobs, 2008; Drinkwater et al, 2008; Lambert & Holmboe, 2005; Sanfey et al, 2006). One of the rationales for undertaking this study was to learn if and to what extent KYCOM women students reported similar understandings and perceptions from their medical school experiences and, importantly, the influence of their perceptions and experiences on their developing professional identities as future osteopathic physicians. Clearly, the results of this study carry the potential of providing important information to KYCOM leaders that may have implications for future modification of institutional policies and practices concerning students and faculty, curriculum content and methodology, student support services, and instructional activities and venues.

Moreover, if women students at KYCOM were experiencing gendered career choices or hostile behaviors in their medical education, there exists the likelihood that women students at other osteopathic medical schools were as well. There are potential benefits to be shared with other medical schools but also within the osteopathic medical profession. While this study is a humble beginning, its findings will suggest further areas of research to be conducted to more fully elucidate our understanding of medical student socialization and professional identity construction. For example, the scope of research could be broadened to include additional medical schools and to examine more carefully a number of issues related to the socialization experiences of women medical students concerning whether gender differences exist in how men and women osteopathic students experience medical school, the impact on the osteopathic medical profession in terms of its members, and specialty selection.

Theoretical Framework

The purpose of my dissertation research was to gain a better understanding of how women osteopathic medical students constructed their emerging professional identities as future physicians. My research utilized qualitative research methods to explore the gendered nature of professional socialization through a narrative study involving women osteopathic medical students who were in their third and fourth year of medical school at the University of Pikeville - Kentucky College of Osteopathic Medicine (KYCOM). Female and male students enter medical school to learn how to become physicians. The curriculum and graduation requirements are thought to be gender blind. Yet, there is ample evidence that women and men experience medical school differently (Bickel, 2000; Grant, 1988; Haas &

Shaffir, 1991). I believe much could be learned from how third and fourth year women osteopathic medical students constructed their professional identities as physicians.

This study's perspective was grounded in the ontology and epistemology of social constructionism (Gergen, 1985). Further, this study framed its analysis from the theoretical perspective of poststructuralist feminist thought. Poststructuralist feminism is a type of feminism that draws from poststructuralism. While multiple interpretations of feminism exist, all feminisms share the common purpose of altering the power relations of Western society's dominant patriarchy that disadvantage women and privilege men (Luke & Gore, 1992; Harding, 1996). The focus of poststructuralism is to deconstruct "taken-for-granted historical structures of socio-cultural organizations within which various versions of the 'individual' have been inserted and, importantly, on the language and theoretical structures with which the individual and the social have been written" (Luke & Gore, 1992, p. 5). Accordingly, poststructuralists would challenge the gendered identities and roles that society constructs as natural for women and men. In the context of this study, poststructuralist feminists would argue that society recognizes the professional identity of a physician is depicted by male-oriented standards and expectations as the professional norm. As a result, women who enter the medical profession are assumed to accept and assimilate this model of professional identity in order to fit in and be accepted within the profession (Bickel, 2000; Beagan, 2000; Risberg, 2004).

Poststructuralists focus on meaning-making and how these meanings are signified and conveyed. As a result, poststructuralists focus their analysis on language and its various uses (Calás & Smircich, 1992). Poststructuralists use the process of deconstruction to unmask

truths imposed by patriarchy's power relations and its positivist epistemology (Lather, 1992). Deconstruction involves the analysis of binary opposites to demonstrate how one side of the pair is valued and the other devalued (Calás & Smircich, 1992). Examples include reason versus emotion, male versus female, gender neutral versus gendered, authority versus nurturing, and professional objectivity versus emotional sensitivity. Consider an example from the medical profession. The professional symbol of the white coat is viewed as genderless and is worn by both men and women. It signifies becoming a physician. Yet, viewed from another perspective, the white coat is male in origin. A poststructuralist feminist interpretation of this professional symbol that is thought to be genderless is that women to be accepted and successful in the medical profession must adopt, adapt to, and meet male-derived norms for professional acceptance and success.

Poststructuralist feminist thought adds a critical perspective needed for the exploration and examination of gendered socialization practices and culture of medical school that are taken for granted and that may disadvantage women students. Poststructuralist feminism provides a means for challenging the patriarchal ideology that privileges men while devaluing women and also offers a useful framework for "understanding mechanisms of power in our society and the possibilities of change" (Weedon, 1987/1997, p. 10). The medical patriarchy maintains a dominant hegemonic discourse that lends meaning and value to existing organizational structures and practices as good and natural, while dismissing alternative explanations as irrelevant or bad. Bierema (2003) argues that success in male-dominated organizations involves modeling one's actions

upon those who are successful. In this context, masculine traits facilitate the advancement of women in medicine.

Poststructuralist feminism exists to challenge the patriarchal status quo and to deconstruct its ideology, structures, and practices. The aim of deconstruction is to disrupt that which is taken for granted and to keep things in process (Lather, 1992). Accordingly, poststructuralists reject the "truth of science and the fixity of language" (Luke & Gore, 1992, p.5). Poststructuralism does not hold a foundational epistemology as all truth claims are contingent and ambiguous rather than fixed and knowable. In contrast, poststructuralist feminism holds an epistemology built solidly on the feminist standpoint of a politics of identity that challenges the masculinist culture of identities that derive from notions of gender, class, race, and other differences (Luke & Gore, 1992). Bierema (2003) maintains that there is a hidden curriculum at work in most male-dominated organizations that reproduces the existing power structures. In other words, while articulating goals for gender equity and a more inclusive and diverse medical profession, the profession's hidden curriculum knowingly or unknowingly acts to reinforce and maintain the male-dominated power structure that counteracts the participation of those who are unlike the male majority, particularly women.

In essence, poststructuralist feminism seeks to deconstruct societal truths and notions that value the masculine as the social benchmark and hold feminine as the devalued other. Bierema (2003) argues that success in male-dominated organizations involves modeling one's actions upon those who are successful. In this context, masculine traits facilitate the advancement of women at work. Career success is dictated by assuming masculine

attributes, stereotyping gender roles and following a set of rules for success that result in the acculturation of women into a male-oriented work culture.

Specifically, poststructuralist feminism challenges asymmetric power relations that involve our understandings and practices of gender. The means for accomplishing this feat is through an examination of gender regimes (Acker, 1990) that exist as meanings linked to organizational practices and the myriad ways that gender is embedded within organizational and professional symbolic and discursive practices. "It recognizes that power is located in systems of shared meaning that reinforce mainstream ideas and silence alternatives. Thus, if it is assumed that understandings of gender equity are unitary and shared, little effort will be made to promote further change" (Hoeber, 2007, p. 261). Using this guise, it seems many women are unwittingly co-opted to engage in their own oppression.

Summary

The purpose of my dissertation research was to gain a better understanding of how women osteopathic medical students constructed their emerging professional identities as future physicians through their participation in a program of medical education. Medical education is held to be neutral and genderless (Acker, 1992, 2006; Risberg, 2004), yet gendered outcomes are evident (Beagan, 2000; Bickel, 2001; Risberg, 2004). My study utilized qualitative research to explore the gendered nature of professional socialization through a narrative study involving women medical students who were in their third and fourth years of osteopathic medical school. Much of the medical socialization literature dwells on what the medical education establishment does to train its medical professionals

with little research on how medical professionals themselves construct their physician identities (Pratt et al., 2006).

Given that not enough is known about the influence of gender on the development of women osteopathic medical students' professional identities as physicians, my study's research question is as follows.

> From the perspective of gender, how do the experiences and perceptions of third and fourth year women osteopathic medical students influence their constructions of their emerging professional identities as physicians?

This study was grounded in social constructionism (Gergen, 1985) and utilized a narrative inquiry design to explore the gendered nature of professional socialization with women medical students who were in their third and fourth years of osteopathic medical school.

In the context of this study, women medical students in the clinical portion of the medical school curriculum were asked to write a letter to an entering woman medical student about how to be successful in medical school through advice on how to prepare to participate and succeed in this environment. Importantly, the critical analysis of participant narratives focused on making gender visible in their narrative descriptions, explanations, conflicts, and contradictions. Clearly, not enough is known about why gender inequities persist within the medical profession. The understandings derived from this research may facilitate the transformation of how men and women are educated to become doctors by unmasking the gendered discourses and practices that resist change within the medical profession's patriarchy and sustain a culture of gender inequity.

Given my narrative inquiry design, I examined the meanings that my participants attributed to their medical education experiences and how these shaped their emerging professional identities as future physicians. My interest was in learning how their identities as student doctors and future practicing physicians shifted over time. Writing one's story is an approach used in narrative inquiry (Chase, 2005) that I used with my participants. I asked eleven voluntary participants to do the following activity.

> As you complete the final (or third) year of your osteopathic medical education, please reflect on what has been the most meaningful to you and to your developing professional identity as a female osteopathic physician. Please write a letter (at least 5-10 single-spaced pages) to a fictitious incoming woman student in which you share your experiences, stories, and reflections as well as offer suggestions and advice to guide this novice female student on her journey through medical school to become a D.O.

Discovering and exploring "turning points" in the participants' stories revealed patterns of identity formation and transformation within the study group and the extent to which gender influences were evident.

My responsibility as a researcher to my study participants, North Carolina State University's Institutional Review Board guidelines, and to my doctoral program was to conduct myself responsibly and ethically throughout this study. I made an ethical commitment to my study participants to represent their words accurately. I also recognized the boundaries of my roles as a KYCOM administrator and as a researcher regarding this study. Student participation in this study was strictly voluntary and did not influence student

status in any way regardless of participation. Further, credibility of the study data was ensured to facilitate their adequacy, plausibility, and transferability (Connelly & Clandinin, 1990).

My analysis of the study's narrative data encompassed several stages that involved initial identification of major themes that was followed by more intensive data analysis to more thoroughly interrogate the data through a process of tagging and coding; identification of preliminary findings that participants were invited to member check; and follow up conversations with participants.

Further, this study framed its analysis from the theoretical perspective of poststructuralist feminist thought. Poststructuralist feminism is a type of feminism that draws from poststructuralism. Poststructuralist feminism seeks to deconstruct societal assumptions that value the masculine as the social benchmark and hold feminine as the devalued other. Bierema (2003) argues that success in male-dominated organizations involves modeling one's actions upon those who are successful. Career success is dictated by assuming masculine attributes, stereotyping gender roles and following a set of rules for success that result in the acculturation of women into a male-oriented work culture.

Specifically, poststructuralist feminism challenges asymmetric power relations that involve our understandings and practices of gender. The means for accomplishing this feat is through an examination of gender regimes (Acker, 1990) that exist as meanings linked to organizational practices and the myriad ways that gender is embedded within organizational symbolic and discursive practices.

CHAPTER 4. FINDINGS

To learn more about how third and fourth year women osteopathic medical students at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM) were constructing their professional identities as future osteopathic physicians, this narrative inquiry study addressed:

> From the perspective of gender, how do the experiences and perceptions of third and fourth year women osteopathic medical students influence their constructions of their emerging professional identities as physicians?

Each woman medical student participant was asked to reflect on the experiences that to date were the most meaningful to her and to her developing professional identity as a future female osteopathic physician. Each of the eleven study participants conveyed her personal story as a written narrative that was in the form of a letter to an entering female medical student. The intent of the letter was for each participant to share her experiences, stories, and reflections as well as offer suggestions and advice to guide a novice female student on her journey through medical school to become a D.O. Their letters were 5 – 10 pages in length. I also invited my participants to member check my preliminary findings via phone conversations or in-person meetings. Seven participants discussed with me their opinions of the study's preliminary findings. Collectively, this study's women medical students offered a strong female voice and perspective on how gender influenced their emerging professional identities as future osteopathic physicians. My analysis of participant narratives was guided by the study's research question and the theoretical framework of poststructuralist feminism. Study findings indicate that gender clearly influenced how these

women medical students were shaping their professional identities as future osteopathic physicians.

Five major themes emerged from my analysis of participant narratives, which are educational impact of clinical physician role models, intersection of personal and professional identities, effect on residency program specialty choice, pressure of "Fertility Factor," and experience of gender dynamics. First, physician faculty, particularly women physicians, who served as clinical preceptors during these students' third and fourth year clinical rotations served as role models and influential sources of learning. From these clinical physicians, the study participants learned how to become osteopathic physicians and practice medicine. These physicians also served as role models for the professional physician identities that these women medical students were actively constructing. Second, women medical students negotiated their future physician professional identities with their personal identities and their desired social roles as wives and mothers. A number of participants indicated that the women physicians they worked with during their clinical rotations showed them how to balance their professional and personal lives. Third, participant negotiation of professional and personal identities also influenced their career choices as indicated by the fields they selected for their postgraduate residency programs. Fourth, nearly every participant cited the pressure of the "Fertility Factor," which a study participant described as the concern shared by many women medical students, especially those who are not yet married, that they could miss out on being married and having children. During medical school, these women put their lives on hold so they can learn what was required of them to become osteopathic physicians. Yet, their biological clocks continued

ticking, their eggs aged, and their risk for having babies with birth defects increased as they aged. These women medical students believed that the pressure of the Fertility Factor that they felt generally was not shared by their male classmates. Fifth, gender dynamics were clearly evident in the medical education experiences that shaped these women medical students' emerging professional identities as future osteopathic physicians. Their narratives described their personal experiences of being treated differently due to their gender, gender discrimination, sexual harassment, and gender stereotypes.

I believe the narratives written by my study's participants revealed that their stories were not just about young women becoming osteopathic physicians, but more about how these young women medical students were striving to realize their gendered personal identities as maturing young women while also constructing their emerging professional identities as future osteopathic physicians. All participants acknowledged that the rigorous curriculum of medical school was stressful and demanded their time and attention. While most students anticipated the rigors of medical school studies, few realized the difficult and often life-changing decisions that would be required of them. In my view, medical student Chloe characterized this dilemma best.

> The decision to become a doctor initially was easy . . . something I have wanted to do most of my life---although the real life decisions that come along with this career are not ones I anticipated.

Who are these women medical students who participated in my study? I have created profiles of each participant that characterize who they are and reveal their perceptions of key

experiences that influenced how they were shaping their professional identities as future osteopathic physicians.

Participant Profiles

My study's participants were eleven women students enrolled at the Kentucky College of Osteopathic Medicine (KYCOM), which is part of the University of Pikeville in Pikeville, Kentucky. Pikeville is located in southeastern Kentucky in the midst of the Appalachian coal mining enterprise. Pikeville has approximately 6500 residents and is the county seat of Pike County. KYCOM third and fourth year women students who volunteered to participate in this study, authored narratives that drew from their personal experiences and reflections, and offered suggestions and advice to guide a novice female student on her journey through medical school to become a D.O. As shown in Appendix 1, at the time of data collection, all participants were between the ages of 24 and 29, four were married, and none had children. Six women were from Kentucky. Further, six women participants reported that their hometowns were rural and medically underserved; of these, three hometowns were located in the Appalachian region of Kentucky.

Individual profiles of the study participants follow. These profiles describe the women participants at the time they wrote their personal narratives. Each participant has been assigned a pseudonym to shield her identity and ensure privacy.

Adele

Adele was a native of Kentucky's Appalachian region. Adele shared that when she was a first year medical student she realized that a successful physician must be committed to lifelong learning in order to provide high quality care to their patients. She also wrote about

learning to be a doctor and how her initial exposure to the clothing and tools of the medical profession, i.e., the white coat and the use of a stethoscope and other medical tools, made her feel like the physician she was learning to become. Learning clinical skills that included taking patient histories, performing physical examinations, and learning how to diagnose and treat patients with osteopathic manipulation anchored Adele's developing identity as an osteopathic physician.

She married another KYCOM medical student during her second year of studies. She was able to juggle planning for a wedding along with managing her intense stress of medical studies through the assistance of family members who oversaw planning of wedding logistics on her behalf. She acknowledged that she was able to get through this by asking for help; something that she admitted was new for her as well as difficult to do.

During her medical education, Adele wrote that she learned a great deal from the physicians whom she worked with. She experienced physicians who modeled negative and positive behaviors as they interacted with patients, staff, and colleagues. From these experiences, she learned that she wanted to become a compassionate physician. To Adele, a compassionate physician was one who put the patient's needs first, actively listened to patients talk about their lives and their complaints, and talked with them about their treatment plan. Adele expressed that the compassionate physician she wished to become would also serve as a teacher to her patients to help them improve their lifestyles and their health.

Also, observing the long hours worked by many of the clinical physician faculty that Adele worked with and the negative effects these hours had on their family relationships and obligations, she was determined to maintain "a good balance of work, play, and love" in

order to avoid burn out and be able to fully experience the family she and her husband hoped to have. Further, Adele identified that development of good communication skills was key to becoming the compassionate physician she wished to become whether this was used to talk with patients, listen to patients explain their complaints, or teaching other individuals.

Adele also identified several instances of gender bias that she experienced. A memorable example stemmed from listening to a conversation between her male clinical preceptor, a physician overseeing her clinical instruction, with another male physician who was a surgeon. She states,

> Both gentlemen began speaking about the number of women who were being accepted into medical school. That's when the orthopedic physician voiced his rather uncouth opinion. He thought that only a few number of women should be selected for medical training because "women only want to work part-time." At that moment, I felt the hairs on the back of my neck stand on end.

Also, Adele reported that in their small town community, when she and her medical student husband met new people she found that

> . . . if they knew that we had moved into town to complete medical school, they automatically assumed that my husband was going to be a doctor and not me. In fact, my neighbors still call my husband 'doc' and they call me by my first name.

Adele also encountered gender stereotyping when it came to her chosen specialty of psychiatry. Adele wrote that family and friends repeatedly questioned her choice of

psychiatry as a good fit for a woman, fearing she would be unable to handle unruly patients. Adele also acknowledged that a male psychiatrist with whom she worked assumed she would focus on child psychiatry because "so many women enjoy working with kids" (his words).

Carly

Carly was a Midwestern girl who set her sights on becoming a physician during high school. Her parents always encouraged her that she could accomplish anything she set out to do. Further, she had attended an all-girls private high school where women were empowered to be their best and were not constrained in their career pursuits by their gender. So, in Carly's words, she decided to "go big or go home" in her choice to become a physician.

Carly found that being a medical student, male or female, was a challenge given the amount of work and learning that all students are required to do. In her assessment, when she entered medical school "she didn't see (herself) as being any different than any of the other students in my class, no matter what gender or ethnicity. We were all starting from the exact same place." First and second year medical studies were difficult, but she passed all her courses. Also, she noted that most of her class and club officers were women. Carly admitted that she did not find this fact extraordinary as she had become "accustomed to seeing many female leaders."

Once Carly entered her clinical rotations, she discovered women physicians who showed her how it was possible to balance family and career. She observed that there was not one way to do this, but rather she found multiple examples. Carly realized that individuals lead different lives and define success in their own way. For Carly, success is

"being able to have a well-balanced life between work and play, along with a job that I enjoy and time to spend with my family to really create and foster good relationships."

Carly maintained that while the balancing act is required for women in any profession, she recognized that being a woman in the medical profession that is dominated by men holds some disadvantages for women. The examples she cited were of professional identity and professional culture.

> Being a woman in the health field, there are some people who will see you and automatically think that you are a nurse, physician's assistant or nurse practitioner. . . . At times it can seem like some of the male physicians still think of practicing medicine as being part of the "good ole boys' club". Some of the physicians, especially some of the older males seem to have a "brotherly" bond that is fairly exclusive of females.

With this in mind, Carly concluded that

> . . . it is just a matter of how you personally choose to deal with it and how you will let it affect you. . . . I think all people have to face issues in this way, not just women and not just physicians.

Chloe

Chloe was from a small town in central Kentucky. Chloe's developing professional identity as an osteopathic physician centered on attaining a balance of her personal relationship and desire for a family with her professional career goals. Chloe's narrative described her perceptions of how she was learning to succeed in medicine as a woman.

Chloe had not encountered a gender barrier during her high school and college years. She also stated that she did not really notice gender barriers during her first two years of medical school. She reported that her male classmates would often joke that women "not being able to handle the strain of surgery or other demanding specialties," would instead enter family practice and pediatrics. Chloe admitted that this gender stereotype of women not being able to handle certain specialties nearly drove her to prove her male classmates wrong.

In her third and fourth year clinical rotations, she also experienced that it was more difficult for women medical students to establish comfortable professional relationships with their clinical preceptors regardless of their gender. Chloe found that "for the most part both male and female preceptors felt more comfortable joking and telling jokes with male students." She stated that she found if she worked hard and proved herself, she would eventually earn credibility and gain respect from her clinical faculty. Chloe also described a male clinical preceptor who apparently "used his position to take advantage of female medical students or so it seemed."

> He would place female students in uncomfortable conversations, insist you have dinner after clinic to discuss patients and even to invite the female students over to his house to fill out their evaluation. No student male or female wants to ever confront their preceptors---not only because we don't want to cause turmoil but also we have to spend a great deal of time with our preceptors and causing problems would only make this time spent working

> awkward. We would worry we would get a bad grade or the physician would over work us or purposely give us difficult cases.

Chloe's decision to become a physician was an easy one that she made early in her life. However, she discovered that the "real life decisions that come along with this career are not ones I anticipated." Chloe was engaged to be married. She and her future spouse, who is not in the medical profession, were pressured to find the right time to have children. Chloe observed that her male classmates and colleagues do not experience this stress in the same way.

> (Men) can marry younger women once they have finished medical school or residency and not really have the worry about having kids early. Even those men who marry women of their same age, the planning isn't quite as difficult given the female has a flexible schedule.

> Further, Chloe discussed the "intimidation factor" that women medical students and physicians encounter in forming and maintaining romantic personal relationships. Based on her experiences, she concluded that many men are threatened by women who are or will become physicians due to the prestige of these women's future professional careers, earning power, social status, etc.

Chloe acknowledged that deciding on a specialty was particularly difficult for her. She loved the time spent in the operating room, had good surgical technique, and was considering surgery as a career specialty. However, she found "that the lifestyle of a surgeon wasn't a match for the life that I wanted to have outside of medicine." She wrote that she

was strongly influenced by the lives of the surgeons she worked with during her clinical rotations. She further acknowledged her choice would have been different if she were male. Instead of surgery, Chloe chose pediatrics as her future specialty. She loved working with children and found that the schedule could be much more flexible. Further, Chloe believed that "she could also get my fix for procedures if I specialized (in a pediatrics subspecialty)."

Chloe concluded that women medical students and women physicians have several hurdles to overcome.

> First, to prove we are just as hardworking and competent as our male counterparts. . . Secondly, we must overcome the lack of professionalism from some male physicians. Thirdly, we must deal with the issues of family planning and the sense of a lack of self-accomplishment by our spouses.

Eva

Eva was a woman of color from a Southern city. Coming to Pikeville, Kentucky to enroll in medical school was a significant change for her. She stated that "I was ready for the change and I can honestly say it has changed my life forever." During her first year of medical school, she drew solace from the classmates in her study group who she thought were her friends. Most were males. She struggled to fit in. She found other women classmates would join the group and then separate themselves after a short time, either they dropped out or were left out. She attributed these disappointments to "stressed out medical students," who did not always treat each other well. Some of these behaviors affected and hurt her, but she eventually managed to find a female classmate who became her study

partner and friend. She wrote about how important it was to have a study partner and friend she could count on.

Eva also was elected to various leadership roles during her first and second year. During her second year, she became president of a student club. She succeeded a male student and reported that she had a lot of cleaning up to do. Eva inherited documents that were incomplete and in disarray as well as a club that was lackluster in its activities and programming. She was proud of the fact that she organized the affairs of the club and successfully led the development of new professional events and outreach activities during her year as president. She observed that "after a full year in the organization, I realized . . . why women are known as organizers, multitaskers, and task finishers versus the male counterpart." She believed these characteristics were what made women excellent leaders. Eva also was proud of the fact that the president of the medical school student government was a woman and many of the presidents of the other student professional clubs were women. Overall, Eva noted that women student leaders exerted a strong influence on her medical school.

Eva wrote about her academic struggles during first and second year and how two female medical school faculty members inspired her to believe in herself and her ability to be academically successful. Eva persisted, was academically successful, and is grateful to these women for their belief in her ability to achieve and succeed. Eva acknowledged that she is "not used to failing . . . but had to remember that I am in one of the most prestigious professions which include the cream of crop from all across the U.S."

Eva's transition to her third year clinical rotations was mixed. She described it as "a roller coaster." She has earned A's for her clinical rotations and positive comments from her clinical preceptors about her clinical abilities and interactions with patients. Eva firmly believed that she has earned these grades and evaluation comments. However, she failed her first board exam and was studying to retake it and pass.

During her third year of clinical rotations, she found five women at her clinical education site from whom she drew strength and inspiration. Two were medical students, two were osteopathic physicians, and one was an allopathic physician.

> They all taught me something unique. I learned from L never to give up and keep going no matter how dark it may look, thus perseverance was reignited. Dr. C taught me that your plan is God's plan, so no matter how off track with the paper you think you are just remember God has the ultimate plan. At one point I was upset with myself because I was off a couple months and felt bad by falling behind but I know in God's plan, I'm right on time. I'm uniquely made, uniquely created, and as such, uniquely I will complete this journey in a unique way.

Lana

Lana was not from Appalachia. She was from the rural South. She married the man of her dreams the weekend prior to her entry into medical school. According to Lana, "I wanted to have it all, a successful career, four children and an adoring husband who was also successful."

Like many medical students, Lana had wanted to become a physician since she was a child. She worked hard at her undergraduate college studies so she could be a successful applicant to medical school. "I had to be damn near perfect if I wanted to get into med school and if I couldn't get in, I had no idea what I would do."

Once accepted into medical school, Lana struggled with her first year studies and got through it with much effort. She found she was losing her own identity, which troubled her. She could not do the things she truly enjoyed. "I was working so hard, I needed to get out of school as soon as possible to have a baby. . . . I wanted a sense of myself back." She found second year of medical school studies made more sense to her and she did better academically.

Not surprisingly, because of Lana's academic difficulties during year one, Lana was terrified to start her third year clinical rotations. She soon learned that her physical beauty garnered favorable attention from some of her male physician clinical preceptors.

> I was assigned to an MD attending who, shall we say, admired me. Constantly, he told me I was beautiful which was refreshing and flattering at first but then it got a little creepy. That is one good thing about being a woman in medicine, if you are at all attractive, men will notice it and it will make your life easier.

Lana revealed that she competed in beauty pageants since she was a child. Her mother taught her "that beauty is an asset to a woman and I believe it to be true. (She believes) it helps a lot with (her) confidence."

Lana found the osteopathic physician she wants to become during her Family Practice clinical rotation. Lana described this woman as a physician who is very dedicated to her patients and ensures that her patients know to maintain their health and avoid disease. According to Lana, this model physician "has not lost herself. She is very humble and her own personality shines through during her time with patients." Lana also plans to become an osteopathic Family Practice physician who interacts with her patients the same way this woman D.O. did with her patients.

For Lana, her individual identity as a woman was just as important as that of the professional identity of an osteopathic physician she was learning to become. While her focus now was on becoming a family practice physician, she regretted not yet becoming a mother. She wrote that she was very aware of her "aging eggs" and planned to have a baby as soon as she could.

Lynn

Lynn was a young woman from the rural South whose life was influenced by a quote she cited from Theodore Roosevelt that states, "Far and away the best prize that life has to offer is the chance to work hard at work worth doing." Lynn wais guided by her belief that "I have determined the difference I want to make in the world and know that I have the dedication and compassion to achieve my goals." Lynn's goal was to become an osteopathic Family Practice physician working in a rural area.

Reflecting back on when she first started medical school, Lynn admitted that she "would have wanted to know that you put your life on hold. That you take on responsibility that made you choose between your family and patient. Family was the most important thing

in my life." She married during her second year, unexpectedly became pregnant during her third year and miscarried, and subsequently and silently battled depression during her fourth year. Lynn revealed that "if the miscarriage had taught me anything it was that I wanted to be a mother more than anything. I wanted my own family more than I wanted to be a doctor."

Lynn also believed that medical school was not the same experience for men and women. She felt that when men have children with their partners, they did not have to worry about ticking biological clocks or balancing family responsibilities with their professional duties.

> Going to medical school for a female is a much more intense decision than for a male. I am a little bit older than some of my other peers. My biological clock has been ticking, my family has been sick, my husband needs me to be a good wife. . . If I were male, my spouse would carry the baby and I would never deal with morning sickness, my house might be cleaner, and I might not feel obligated to be the caretaker of my family.

Lynn also experienced instances of gender discrimination from female hospital staff and from patients. Being misidentified as a nurse rather than as the medical student she was became particularly irksome. Lynn insisted, "I AM NOT A NURSE!!!" She cited numerous instances of patients referring to her as a nurse even after she identified herself as a medical student. She even witnessed this occurring with a female physician, who turned beet red when she politely corrected the patient.

Lynn predicted that patients, staff, and the public will continue to predominantly view the professional identity of physicians as male. However, knowing this, her hope was that she would "handle all with the poise and grace expected of a lady."

Marielle

Marielle was a young woman from Eastern Kentucky. When she was accepted into medical school, she knew the course of study for the first two years would be tough. However, Marielle maintained, "They lied. It is much harder than you can ever imagine. I would tell my friends and family that medical school is a legal form of torture. Everyone would laugh. . . but me." Marielle shared that by the end of her second year, she was burned out and had lost her zeal for medicine. Yet, she found that even if you've "lost whatever flame of passion you had for medicine, it's possible to rebuild it."

> The flame starts to grow when your patient calls you doctor and you let it slide rather than correcting them. When you take care of them in worst of moments and still comfort them. When they trust you with their life, you know you're in the right leather seat, doing the right thing.

Toward the end of third year, medical students prepared to apply for postgraduate residency programs and to select the specialty they wished to pursue. Marielle described her decision process regarding choosing her future career focus in this manner.

> I think the question we should all be asking is who (rather than what) we want to be when we grow up. Who do I want to be when I grow up? I want to be like the doctors I have worked with. . .

Marielle believed that becoming a physician was an ongoing lifetime process. She acknowledged that

> No matter what age I am I will have growing to do, I hope by the end of my growing journey that I have achieved all of the aspects that will make me who I want to be rather than what I want to be.

She offered advice to future medical students "to not listen to anyone else. It's best to make your own mistakes, take your own adventures, and discover yourself in the process."

Michelle

Michelle was a city girl from the Northeastern United States. Her purpose in becoming a physician was "to integrate (herself) into peoples' lives and somehow make the lives of those I help a bit easier." She did not enter medical school directly upon obtaining her baccalaureate. She worked for a while, enjoyed the life of a single working woman for a year, and then embarked on her medical journey. Her first two years were fascinating as she was introduced to her medical white coat, scrubs, and medical equipment and daunting as she worked hard to learn the voluminous information expected of first and second year medical students. Michelle reflected

> . . . that it was not the first two years of medical school that formed my identity as a female osteopath, but rather this time formed me to think as a physician. . . . It would be later during my clinical training that I would form my own identity as a physician.

During her first year anatomy course, her lab team of five classmates named their donor body Ronald. They called themselves Team Ronald as an expression of their

solidarity and gratitude to Ronald for helping them learn the architecture of the human body. They became good friends who offered each other encouragement and support. It was through her work with Team Ronald that Michelle discovered her career interest. "We each had our nitch (sic) as far as dissection and mine was the fine dissection in very small places. It was the first time that I thought that perhaps someday I would be a surgeon."

During second year, Michelle married a classmate and began life as a wife and medical student with a medical student husband. Their families took on the major wedding planning responsibilities, which allowed the couple to focus on their studies. Together they studied long hours, but always allowed time for fun and enjoyment. Michelle reflected "I try to remember how stressful the coursework must have been, but being newly married to my best friend somehow overshadowed all the difficult things about that time." Toward the end of her second year, Michelle admitted that she became restless to begin her clinical education.

Her third year clinical rotations provided her the opportunity to explore her future identity as an osteopathic physician.

> This time of clinical training is when I learned what it means to be a female osteopathic physician. I learned from talking with women in medicine and how they balance their own lives. . . I started to form my own identity from what I saw in other doctors and from what I liked and did not like from their practice and patient care. The advice I have gotten from other women has helped me a great deal.

She realized that while she was drawn to surgery, she feared the demands of a surgeon's work life would conflict with her plans for children and the type of family life she desired. She also was attracted to both Family Practice and Internal Medicine, which she felt allowed more flexibility to have the balance of family and career she and her husband desired.

Michelle revealed that her parents have served as important role models to her. They have successfully balanced their careers with raising a wonderful family. She concluded her narrative with the statement "I am a future family physician." Months later, in my follow up conversation with Michelle, we talked about her placement in a surgery residency program offered at the same hospital at which her husband will enter the residency program he sought. Michelle's future physician identity is now "I am a future surgeon!"

Renee

Renee was from a small town in central Kentucky. She described the first two years of medical school as extremely tough. Keeping up with studies was a full-time effort that strained the relationship she had with her boyfriend of several years. Her romantic relationship ended during second year. Renee was mindful of why she was in medical school and appreciated the fact that she was admitted, while many other applicants were not. This realization and her appreciation of this very special opportunity sustained her and carried her through the difficult times.

Renee was a young woman who held a variety of student leadership roles. Renee believed these roles taught her how to better deal with her colleagues and improved her time management abilities. She also valued the opportunity her leadership roles provided her to

interact with women osteopathic physician leaders from all areas of the country who demonstrated for her what it can be like to be a woman, an osteopathic physician, and a leader in the profession. According to Renee, these leadership experiences were important factors in her developing professional identity as a future osteopathic physician.

Renee also was encouraged by the fact that women and men entered medical school in similar numbers. She looked forward to the opportunity women physicians had to influence the medical profession. Yet, she also recognized that the medical profession was established and dominated by men. Based on her experiences Renee found that patients and the general public tended to see physicians as men. It was not unusual for Renee to experience patients who did not immediately recognize that she was a physician in training.

> They don't say it, but I feel like sometimes they try to test me in order to make sure I know my stuff. Older generations are just used to male physicians and women in medicine is a fairly new concept to them. I have walked into several patient rooms and been asked if I was a nursing student or physician assistant student, as if my saying "medical student" just couldn't be true. I try not to let that bother me and just attribute it to people's lack of knowledge about women in medicine.

Renee felt that she had to demonstrate her competence and prove herself to establish her credibility with some older male physicians, particularly her surgery preceptor who was well known and regarded for his surgical prowess.

> I was nervous about meeting my surgeon preceptor (MD). . . He challenged me, but was proud of me when I did well and answered his questions

> correctly. He expected a lot from me. . . One day he told me I was like other female (medical) students he had (taught). . . I was always well prepared and (he found) female students are usually more prepared and can answer on-the-spot questions more correctly than male students.

Renee acknowledged that she used this feedback from her surgery preceptor as motivation to keep learning and prove her competence.

Renee shared several patient experiences in which she believed being a woman provided her an advantage with patients. She cited examples from psychiatry where young women were more comfortable talking with her as a woman about the abuse they sustained from men in their lives. Also, when working with children during her Pediatrics rotation, she found that children often preferred to have her examine them rather than the male pediatrician serving as her clinical faculty, who they seemed to be afraid of.

Renee also encountered unwanted and inappropriate attention from a male physician who she was assigned to for a clinical rotation. He suggested meeting with her after hours to review patients. His behavior and conversation during work hours were often inappropriate. She asked him to stop. While she did not want to alienate this faculty member who would be grading her, she sought to keep the boundaries between professional and personal clear. She completed this rotation and eventually filed a complaint.

> Because I really didn't want other students to feel as uncomfortable as I felt while on rotation with this preceptor, I ended up turning him in. This preceptor added worries to my plate that no student should have to deal with. He was inappropriate and unprofessional. Although it was very scary for me

> to turn him in and get involved with that process, I felt like it was my responsibility to speak up so that at least female students aren't placed with this preceptor anymore. Now that the situation has been dealt with and it is over, I can look back and say I did the right thing. I feel good about my decision to do something about this preceptor.

Renee also wrote that romantic relationships were tough for women medical students. During her second year, she broke up with her long-time boyfriend. He was in a different field, felt threatened by her future career as a physician, and disliked the fact that her attention to her medical studies limited the time that she spent with him. Moreover, after her break up, Renee did not find dating to be rosy, "I thought being a hard-working, dedicated medical student would be attractive!! But, to some men, this is too much to handle."

In spite of the encouraging and discouraging experiences that Renee wrote about, she remained convinced that becoming an osteopathic physician in the field of pediatrics was the right choice for her. She planned to keep her eyes on the prize and looked forward to having a fulfilling career and the opportunity to touch the lives of many children and families.

Tori

Tori was a young woman from the Central Appalachian area of Kentucky. She characterized medical school as a series of challenges that forced her to juggle her studies with her personal relationships. She was engaged when she started medical school, but she and her fiancé called off their engagement during her first year of school. The stress of not having her available to him as he was accustomed caused their relationship to deteriorate.

She succinctly captured the demise of their relationship, “When I signed up for the ‘med school thing’ I knew exactly what I was getting into; he did not.”

Tori shared that her development of her professional identity was enhanced by the women physicians she met through her student leadership roles, at professional meetings, and on clinical rotations. She stated, “I find it inspiring to work alongside females who have accomplished my lifelong dream.” Tori met the physician she aspires to be on her Family Practice rotation. She was a KYCOM graduate who became a mentor and role model for her.

> This physician gave me the inside information on how the hospital operated, which consulting physicians were easy to work with, how to write impressive notes, and countless other procedures. . . . I even purchased a clipboard just like the one she used. The relationship she develops with each patient is astounding and I hope I can strive to be the physician she is today.

Tori wrote about the “Fertility Factor,” which she described as the concern shared by many women medical students, especially those who were not married, that they would miss out on being married and having children.

> During my OB/GYN rotation I could hear the annoying ticks from my biological clock. I even helped deliver multiple babies from girls I graduated with from high school. It made me question if I was even supposed to go into medicine. Should I already be married, own a home, and have several kids?

Tori concluded that becoming an osteopathic physician was the right choice for her. She was from a large family and very much wants her own family one day. Yet, she yearns for the

day she “will be on stage wearing a black robe, with fabulous high-heeled shoes, holding a diploma” in her hands that lists her name and the words Doctor of Osteopathic Medicine.

Vicki

Vicki and her family had deep roots in Appalachian Kentucky. Her desire to become a physician began during her elementary school years. She went to college near her small hometown and benefitted from the mentorship and encouragement of her faculty to pursue her dream of becoming a physician. Vicki stated that she found similar support from several KYCOM medical school faculty members during her first two years. She believed that she was influenced by all in the type of physician she plans to become. Vicki “aspires to take a little of these people and build them into my character.”

Vicki also identified some experiences with gender discrimination during an elective plastic surgery rotation done away from her rural core rotation site at a large metropolitan academic medical center.

> I (was) the only female on the service. While working along side two . . . male students . . . I felt I was in constant competition with them. The male residents were seemingly more interested in the male students, usually offering them more time in the OR, while I got office duty. I also noticed that the residents and attendings alike were more personable with the male students. They never really engaged in conversation with me or got to know me as a future fellow physician.

Vicki acknowledged that this experience was a rare experience for her of gender discrimination. Yet, it influenced her choice of residency program by confirming her desire

to choose Family Practice and then plan to establish a practice in a small town or rural area, preferably in her hometown. Vicki summed this up in her own words, "I felt like I knew in my heart where I needed to be and what I needed to be doing. I felt like I needed to give back to the people that have given to me."

Findings

This research study sought to learn more about how women osteopathic medical students constructed their professional identities as future osteopathic physicians. My narrative inquiry study was designed to elicit the study participants' personal reflections on their experiences of their KYCOM medical education that were the most meaningful to them and their developing professional identities as future female osteopathic physicians. They conveyed their reflections as letters (at least 5-10 single-spaced pages) to a fictitious incoming woman student in which they shared their experiences, stories, and reflections and also offered suggestions and advice to guide this novice female student on her journey through medical school to become a D.O. Participant narratives were analyzed within the theoretical framework of poststructuralist feminism to address the study's research question.

> From the perspective of gender, how do the experiences and perceptions of third and fourth year women osteopathic medical students influence their constructions of their emerging professional identities as physicians?

The narrative profiles offered in the preceding section highlighted each participant and provided a glimpse into the individual experiences of each participant and her perceptions of these experiences. In turn, these participants' internalization of their experiences and perceptions influenced how these women medical students negotiated the shaping of their

emerging professional identities as future osteopathic physicians with their personal identities as women. While each narrative was unique, common themes were evident.

Participants' narratives revealed that when these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students. Their narratives indicated that knowingly and unknowingly gender factors clearly influenced how these women shaped their emerging professional identities as future osteopathic physicians. Five major themes emerged from the analysis of participant narratives. First, physician faculty, particularly women physicians, who served as clinical preceptors during these students' third and fourth year clinical rotations served as role models and influential sources of learning. Second, women medical students negotiated their future physician professional identities with their personal identities and their desired social roles as wives and mothers. Third, this negotiation of professional and personal identities also influenced their career choices as indicated by the specialties these women medical students selected for their postgraduate residency programs. Several participants compromised their choices of specialty to ensure a lifestyle that provided time for family. Fourth, nearly every participant cited the pressure of the "Fertility Factor," which a study participant described as the concern shared by many women medical students, especially those who were not yet married, that they could miss out on being married and having children. During medical school, these women put their lives on hold so they can learn what was required of them to become osteopathic physicians. Yet, their biological clocks continue to tick, their eggs aged, and the risk for having babies with birth defects increased as they aged. These women medical students believed that the pressure of the Fertility Factor that

they felt generally was not shared by their male classmates. Fifth, gender dynamics were clearly evident in the medical education experiences that shaped these women medical students' emerging professional identities as future osteopathic physicians. Their narratives described their personal experiences of being treated differently due to their gender, gender discrimination, sexual harassment, and gender stereotypes.

Within these women's narratives, the construction of their emerging professional identities as future osteopathic physicians resembled an intersection and interlacing of these themes much like threads within a tapestry. Further, I believe my participants narratives revealed that their stories were not just about young women becoming osteopathic physicians, but portrayed how these young women medical students were striving to realize their gendered personal identities as maturing young women while also constructing their emerging professional identities as future osteopathic physicians. These medical students evidenced that they were learning to become women osteopathic physicians.

Influence of Physician Role Models

Becoming an osteopathic physician. The study's participants wrote about the clinical preceptors they experienced and observed, who taught them how to become an osteopathic physician, showed them how to care for patients, and modeled the physician they wished to become. Clinical preceptors are physicians who serve as faculty to medical students and residents in outpatient or hospital clinical settings. While clinical faculty, who included both male and female physicians, were important, women physicians were particularly cited as influential role models for these women medical students.

This time of clinical training is when I learned what it means to be a female osteopathic physician. I learned many things from talking with women in medicine and how they balance their lives. *(Michelle)*

Then third year started. I remember seeing my first patient alone. I felt like I didn't belong on that little leather rolling seat. I was out of place. I fumbled through asking the right questions and definitely forgot a few important ones. In the midst of the whirlwind of feelings, when I walked out of the room, I could hardly remember anything the person had said to me. I forgot half of their complaints, their medicines, and their diagnoses. I can tell you this though, seeing your second patient is easier. It's still hard to get that leather rolling chair to fit quite right, but it does fit eventually, and when it does that little flame of passion to help others, to serve others sparks and starts to smolder again. The flame starts to grow when your patient calls you doctor and you let it slide rather than correcting them. When you take care of them in worst of moments and still comfort them. When they trust you with their life, you know you're in the right leather seat, doing the right thing. *(Marielle)*

Osteopathy is . . . something I want to use to benefit all of my patients. I feel that osteopathic manipulation is an extra tool that a physician can use to take the best possible care of his or her patients. And, by using this tool, an osteopathic physician can greatly benefit his or her patients. For this reason, I will definitely be using osteopathy when I practice medicine in the future. *(Adele)*

Dr. B was patient with me as I learned. Before I knew it, he was letting me start the procedures with the scalpel and he would step away as I closed incisions because he knew I could do it well. I became confident with the skills he taught me and I looked forward to being an integral part in each procedure. I will never forget about 2 weeks into my rotation I was suturing an incision from a procedure with a nurse standing beside me. We were just talking and I found myself not really even thinking about suturing anymore. I could not believe that I was doing this! I was playing surgeon and it was so much fun. I got to know many nurses while I was in the operating room and they would encourage me to pursue surgery because they said I was very good at it. I began to see myself as a future surgeon too. *(Michelle)*

I chose to serve on the Women's Initiatives Committee (of a national osteopathic professional organization) so I could further work and learn from female osteopathic physicians. . . . I find it inspiring to work alongside females who have accomplished my lifelong dream. *(Tori)*

I completed a Family Medicine rotation with an osteopathic female physician who was also a graduate of my medical school. She was truly a surrogate mother to me, holding my hand to help me get a layout of the hospital, letting go to help me gain the skills to survive, but pulling me back before I got into any trouble. This physician gave me the inside information on how the hospital operated, which consulting physicians were easy to work with, how to write impressive notes, and countless other procedures. I definitely

consider her a role model; I even purchased a clipboard just like the one she used. *(Tori)*

This year yielded me finding strength in 5 women in the medical field when I was independently studying for my boards. 2 out of the 3 were D.Os., 1 MD, 1 OMS-IV, and 1 OMS-III. They all taught me something unique. I learned from L never to give up and keep going no matter how dark it may look, thus perseverance was reignited. Dr. C taught me that your plan is God's plan, so no matter how off track with the paper you think you are just remember God has the ultimate plan. *(Eva)*

My leadership experiences have helped me to develop my professional identity. My leadership roles have also allowed me to network with inspiring women student doctors (DO) and women physicians (DO) from around the country. Their successes remind me to work hard and to keep pushing on towards my goals. *(Renee)*

Developing a professional identity. The women medical students in this study learned a great deal about becoming osteopathic physicians and constructing their professional identities from their clinical preceptors. These women medical students were forming their professional identities as future physicians from their experiences with their clinical faculty. The third and fourth year clinical curriculum was cited as the most influential period for constructing one's future professional identity. These students observed the good, the bad, and the ugly and decided the styles and behaviors they wished to emulate. They were influenced by both male and female physicians who they experienced

during their clinical rotations, but the career and life lessons learned from women physicians were particularly memorable.

> I must tell you that it is not the first two years of medical school that formed my identity as a female osteopathic physician, but rather this time formed me to think as a physician and respond to the demands of learning. It would be later during my clinical training that I would form my own identity as a physician. *(Michelle)*
>
> This time of clinical training is when I learned what it means to be a female osteopathic physician. I learned many things from talking with women in medicine and how they balance their lives. *(Michelle)*
>
> Coming to the end of your third year you are expected to have decided what you want to be when you grow up. . . I think the question we should all be asking is who (rather than what) we want to be when we grow up. Who do I want to be when I grow up? I want to be like the doctors I have worked with. I want to be honest . . . I want to be caring . . . I want to be smart . . . I want to admit when I don't know something . . . I want to be a good listener . . . I want to be considered family by my patients . . . I want to be trusted and trustworthy. No matter what age I am I will have growing to do, I hope by the end of my growing journey that I have achieved all of the aspects that will make me who I want to be rather than what I want to be. *(Marielle)*
>
> My identity is formed through the people that have helped me get to this point in my education; my parents, siblings, professors, friends, physicians and

mentors, and especially my patients. The patients that I have treated in my clinical training have helped me to understand what I am good at and what makes me unique as a physician. *(Michelle)*

I started to form my own identity from what I saw in other doctors and from what I liked and did not like from their practice and patient care. *(Michelle)*

During my family medicine rotation, I met the DO physician that I want to be one day. She is very dedicated to preventative medicine and makes sure her patients get it. She has not lost herself during the process. She is very humble and her own personality shines through during time with patients. She is very dedicated and close to her family. I want to be myself with patients and to be very honest with them. I am naturally very humble and have not forgotten where I come from. *(Lana)*

I felt like I knew in my heart where I needed to be and what I needed to be doing. I felt like I needed to give back to the people that have given to me. I needed to be surrounded by people that cared about me and were going to teach me to care for my patients like they had my dad. I decided that family practice in (my hometown) was the opportunity of a lifetime for me. What more could a girl ask for than to be in the community I was born and raised in, be surrounded by highly intelligent, good hearted people, people who believed I was one of the best, and, most importantly, be with the people who matter the most, my family. *(Vicki)*

Learning how to balance career with family. Clinical faculty also served as important models of career and family balance and provided examples of healthy and unhealthy career and family dynamics. One of the study participants termed finding the right blend of career and family responsibilities was her definition of success and that this definition varied from person to person.

> The lessons that I learned from this primary care doctor were numerous. However, the most important lesson he taught me, was that a doctor needs to know his or her limits. Without a good balance of work, play and love, a person is sure to burn out quickly. For this reason, I will make an extra effort to seek out a balanced schedule when I begin looking for my first job after residency. *(Adele)*
>
> I learned many things from talking with women in medicine and how they balance their lives. *(Michelle)*
>
> Now, during my 3rd year rotations I have gotten to see a different aspect of how women are able to balance all their responsibilities and be successful. Part of being successful however is different for any person you may talk to because everyone has a different idea of success. It has really become apparent to me how to pick my priorities and work toward achieving the kind of lifestyle I would like. Being able to have a well-balanced life between work and play, along with a job that I enjoy and time to spend with my family to really create and foster good relationships is my own personal opinion of success. *(Carly)*

Carly also wrote that she was fortunate to work with strong female physicians who each modeled a different approach to achieving a balance or blend of their personal and professional lives.

Carly was shown that women physicians with families could also have successful careers in the most demanding of specialties. One female physician had a room set aside in her office as a nursery where her nanny cared for her two young children. This arrangement allowed her to have her children near her during work hours and provided her the ability to see her children during the day. Another female physician was in a group practice with other female physicians who were committed to allowing time for family duties by scheduling their patients around such family duties as taking children to school and picking them up in the afternoon. Other female physicians worked 3 to 4 days per week. She observed women physicians of various specialties who successfully managed their careers with their family roles, which she found encouraging. These physicians included an internist, family physician, obstetrician, and general surgeon. The last two specialties are widely regarded as the least family friendly and the most difficult with regard to time demands that include being on call during scheduled evenings and weekends (Lambert & Holmboe, 2005; Mobilos et al, 2008).

However, another participant shared a very different experience and concluded that for her, life was less about money and her career and more about the love and joy from having a family. As a result of what she experienced, she changed her specialty choice from Obstetrics and Gynecology to Family Practice.

> I went into third year wanting to be an OB/GYN specializing in fertility, and by the end of my second day on my women's health rotation I tossed that idea. I watched for an entire month as my preceptor struggled to juggle her life with her job. I learned about the depressing truth of how her partner chose his job over his wife and son, and how they had never forgiven him for it. And as another family practice doctor with a fellowship in OB/GYN was about to lose her husband for spending too much time at the hospital. . . . I spent the majority of the month at the hospital, waiting for the chance to give a little baby a birthday. I had to send my dog to stay with my parents for the month so he wasn't neglected. Being a woman in medicine is not easy. I felt being a woman in OB/GYN was worse and I'm willing to give it up so that my life doesn't become a mom neglecting time with her kids, or a wife neglecting her husband. Neglect only lasts for so long until I'm left alone, with my job that to me should not make up the entirety of who or what I am. Thus I'm leaving fertility behind for my dog, my future husband, my future children, and for myself. Life is so much more than a job and money, and life itself is more important to me as a person and a doctor. *(Marielle)*

Intersection of Personal and Professional Identities

Women medical students were actively examining and negotiating the intersection of their socially constructed personal identities as women with their emerging professional identities as future osteopathic physicians. They wanted to fulfill their gendered identities as women by marrying and becoming mothers. In turn, they wanted to select a practice

specialty that suited them and their desire to marry and have children. Further, if they were single, they wanted to form a meaningful relationship and marry and have children.

While our prevailing culture seems to view single male medical students as highly desirable as future marital partners, the same does not always apply to single female medical students. Based on the experiences of my study participants, romantic relationships are tough for women in medical school. Two of the single women students reported breakups of long-term relationships after enrollment in medical school. For one student, an engagement ended and for the other, a two-year relationship could not withstand the pressures and constraints imposed by the demands of medical school. Further, single women wrote that it was difficult to date and form new relationships as some men appeared to be intimidated by dating a future physician. This contradicts our common cultural understanding that a future physician is considered a "catch" unless the future physician is a woman.

All agreed that deciding to become a physician was relatively easy and was decided fairly early in life. Most participants did not anticipate the life-changing career decisions that they would be making nor the impact that medical school would have on their meaningful relationships.

> The decision to become a doctor initially was easy and . . . something I have wanted to do most of my life---although the real life decisions that come along with this career are not ones I anticipated. *(Chloe)*

A number of the study's participants feared losing their personal identities and were determined to maintain their sense of self. Many acknowledged that they put their lives on hold when they entered medical school to successfully achieve its focused and rigorous

demands. Yet, the desire to be or become a wife and to become a mother remained strong and was constantly with them. They also learned about balancing these life spheres from their clinical preceptors.

> I wanted to have it all, a successful career, four children and an adoring husband who was also successful. . . . For me, it was all or nothing, become a doctor or bust. I am still very anxious to have a baby. My husband promises every day that will come in time. For now, I regret medicine a tad because we do not have a baby yet. As soon as he is born and I hold him in my arms, that will subside. *(Lana)*
>
> I started thinking about priorities in my life other than medicine. I am not only a future physician but also wife, daughter, sister, and hopefully future mother. . . . Deciding what field of medicine to pursue is not as simple as going into what you love, at least for me. . . . I wanted to find something that would allow me to have a family and be good at both being a physician as well as wife and mother. . . (My husband and medical school classmate) had already decided to pursue a demanding surgical specialty, which would be a big time commitment for him. I knew we needed to find an adequate balance for our lives and our future family. *(Michelle)*
>
> Going to medical school for a female is a much more intense decision than for a male. I am a little bit older than some of my other peers. My biological clock has been ticking, my family has been sick, my husband needs me to be a good wife. All of these things are hard to deal with while in medical school

> for a female. If I were male, my spouse would carry the baby and I would never deal with morning sickness, my house might be cleaner, and I might not feel obligated to be the caretaker of my family…somehow I don't think a son feels that pull as much as a daughter. So yes, being a female in medical school is hard and taxing. *(Lynn)*
>
> As a woman physician who wants a career, I do not want to be a stay-at-home mother and wife. I want to work and be the best that I can be. I am willing to sacrifice for my family, but I also have worked really hard for my career and don't want to just push it to the wayside. The expectations that some men have for their future wife are not expectations I am willing to fulfill. *(Renee)*

Finding the right balance of family life with work life weighs on these women medical students. As third and fourth year medical students, they are or will soon be applying to residency programs for their postgraduate training. The specialty chosen for residency training is an important part of professional identity in that it generally becomes the field in which physicians establish their future practices.

Relationship challenges. Romantic relationships are tough for women in medical school. This sub-theme also relates to fact that women medical students were balancing their personal identities with their emerging professional identities as future osteopathic physicians. One student participant already was married when she entered medical school to a man in a non-medical profession. Four of the study's eleven participants married during medical school. Of these, three married classmates and the other married a man not in the medical profession. Of the six other participants, two married men with non-medical

occupations following medical school and four participants remain unmarried. Of the latter, two of the single women students reported breakups of long-term relationships after enrollment in medical school. For one student, an engagement ended and for the other, a two-year relationship could not withstand the pressures and limitations imposed by medical school. Further, single women medical students wrote that it was difficult to date and form new relationships.

> I began medical school engaged to my boyfriend of four years. . . . When I signed up for the "med school thing" I knew exactly what I was getting into; he did not. I tried to prepare him for the rigorous schedule and explain the altered routine. He would act like he comprehended, but the weekends I couldn't come home before exams or the limited nights I could spend on the telephone all compiled into frustration and disappointment for him. We mutually broke off the engagement approximately one year after he proposed over the Thanksgiving break. My feelings of guilt for studying while ignoring my personal relationships disappeared and it was a surprisingly uplifting experience for me. *(Tori)*
>
> Medical school is a whole new life after undergraduate, graduate school, or after being in the workforce. You have to set yourself onto a new life schedule and learn to balance studying, family, leisure activities, and romantic relationships. I feel I balanced studying, family, and leisure activities well. The relationships part, not so much. I started first year with a serious boyfriend who I had been dating for about two years. We learned really

quickly that our relationship was going to have to withstand long distance, lack of time together, and lots of stress. At first things went okay, but as I became more immersed into my new life I realized more and more that my significant other didn't understand what I was going through and never would understand it. We also had issues with him feeling inadequate. He obtained a bachelor's degree and got a job right out of school. He felt insecure about me being more educated than he was and with the fact that in society's view I would hold a higher title than he would. He never felt comfortable being around my medical school friends. There was nothing I could do to change his insecurity. I realized that I was going to be associated with these people for the rest of my life and I questioned how he would deal with that if we stayed together. . . I made a really tough decision and let the relationship go. I knew that as much as he tried, he would never understand why I sacrificed so much for my future career. The breakup was tough to deal with, but I eventually dated a couple of guys in medical school and felt really comfortable about it. We were in the same place in life and I felt like they understood me and my goals more. I don't want to scare you into thinking that it's impossible to sustain a relationship coming into medical school. But, your significant other must be very willing to let you be independent and must understand the sacrifices you will have to make at times for your career. *(Renee)*

Single women wrote that it was difficult to date and form new relationships as medical students as some men were intimidated by dating a future female physician.

> As a woman physician who wants a career, I do not want to be a stay-at-home mother and wife. I want to work and be the best that I can be. I am willing to sacrifice for my family, but I also have worked really hard for my career and don't want to just push it to the wayside. The expectations that some men have for their future wife are not expectations I am willing to fulfill. *(Renee)*
>
> On a date with someone I just met, I noticed my date was very quiet. He told me, "I don't know what to say to you." I explained to him that my being a future physician is a job and no different from the job he has. I told him just as he goes to work every day, so will I. My explanation didn't seem to work. *(Marielle)*
>
> On another note, if you are on the dating scene, be prepared to deal with the downfalls of being a future physician. This fact is very intimidating to some men who have less prestigious titles. It's not that us women think we are so deserving of prestige, but it's some men's perception of us that keeps them from considering dating us. I have a lifelong friend that I grew up going to school with, that I actually dated in grade school who recently told me "we could never be together because of the status quo." Really?? I thought being a hard-working, dedicated medical student would be attractive!! But, to some men, this is too much to handle. Another reason why I believe some men are

turned off by female medical students or female physicians is because they are looking for a traditional household set-up one day. *(Renee)*

The desire to marry, have children, and raise a family also intensified for women medical students who were neither married nor in a serious romantic relationship as they approached graduation and entry into a postgraduate residency program.

> The stress we endure through medical school is indistinguishable from any other stressor. For two years straight we are pushed and pushed to learn truckloads of material, perform well on exams, boards, etc. Then, we are placed into the clinical world to apply this truckload of information in situations, which we are unfamiliar with all while trying to be personable to preceptors and patients. Fourth year---we continue this balancing act while taking Level 2 CE and 2 PE (board exams), completing ERAS, interviewing, and waiting for (residency) match results. At this point I don't think I have much emotion left after this past year of an emotional rollercoaster. The worry of most single female students is tripled at this point. Not only do they feel the need to enter a serious relationship but also the need to expedite this process in order to have children before their late 30s. *(Chloe)*

Selection of Residency Program Specialty

This finding is closely aligned with the study finding that is concerned with negotiating the intersection of personal and professional identities. Women are entering medicine in nearly equal numbers as are men. Both men and women medical students are faced with the very important decision of deciding on the specialty of medicine to practice as

a career choice, which will influence their selection of postgraduate residency programs. As in any profession, women are faced with balancing the responsibilities of family life that include time to give birth to children with the demands of their careers. Clinical rotation faculty proved to be important mentors for these medical students with regard to selection of a residency program specialty as their future career choice.

Clearly, the study's participants wanted to fulfill their gendered personal identities as women by marrying and becoming mothers. In turn, they wanted to select a practice specialty that suited them and their desire to marry and have children. The study requirements of the medical school curriculum are extremely stressful. Many of the study participants characterized medical school as a time when you put your life on hold to successfully master its academic hurdles. Participants acknowledged the added stress and pressure of selecting a future specialty for their residency program applications that would mesh with their desired personal identity and lifestyle.

> Deciding what field of medicine to pursue is not as simple as going into what you love, at least for me. . . . I wanted to find something that would allow me to have a family and be good at both being a physician as well as wife and mother. . . . I just loved my general surgery rotation . . . and the rush of excitement that I felt when I was in the operating room. But the catch is the time commitment. Some days my surgeon would be up all night or never know when he was going to be done for the day. I was not sure how I felt about this. . . . (My husband and medical school classmate) had already decided to pursue a demanding surgical specialty, which would be a big time

commitment for him. I knew we needed to find an adequate balance for our lives and our future family. *(Michelle)*

Staring my fourth year in the face is stressful. Anyone who says committing to do something for the rest of your life is most definitely crazy. I'm looking back on this past year's rotations, trying to picture myself in the lives of my preceptors. I went into third year wanting to be an OB/GYN specializing in fertility, and by the end of my second day on my women's health rotation I tossed that idea. I watched for an entire month as my preceptor struggled to juggle her life with her job. I learned about the depressing truth of how her partner chose his job over his wife and son, and how they had never forgiven him for it. And (that) another family practice doctor with a fellowship in OB/GYN was about to lose her husband for spending too much time at the hospital. *(Marielle)*

A difficult decision for me was deciding my specialty. Obviously this is a big decision regardless of gender but more so for a female student who is anticipating having children and a family. We are all young so it seems until the issue of having children is brought up. Many of us fear reaching the age in which birth defects and genetic abnormalities become more prevalent. If I had no desire to have children or a family I would have been a general pediatric surgeon or plastic surgeon. I absolutely loved the time spent in the OR and felt like I had really good surgical technique. After being called in on my general surgery rotation, my preceptor seemed rather upset and I asked if

he was okay. His reply sealed the deal on not choosing surgery. He replied, "for the past 29 years I have been here on my son's birthday and today makes 30 years." *(Chloe)*

Participants observed that the selection of a future specialty for their residency program applications that would mesh with their desired personal identity and lifestyle was quite daunting and affected women medical students more than their male classmates. Michelle and her classmate husband were both considering surgery as their preferred specialties. Notably, of the two students, she was the one seriously considering compromising her career choice in the interest of their future family plans. At no time did she indicate that her spouse considered shifting his choice to a more family-friendly specialty, which strongly suggests that gender issues affect women's careers more than men's careers and explains why issues of gender tend to be regarded as women's issues. Two other participants compromised their choices of career specialty to accommodate the family lifestyle they desired, i.e., one student decided not to select surgery and the other abandoned obstetrics and gynecology, which were their top interests and chose Pediatrics and Family Medicine, respectively, instead.

The Fertility Factor

Study participants described the pressure they felt to complete their medical training as soon as possible so they could focus on having a family. These women were already in their middle to late twenties with three or more years of residency training ahead of them.

I was working so hard, I needed to get out of school as soon as possible to have a baby. . . . I wanted a sense of myself back. *(Lana)*

Moreover, this study's women medical students readily acknowledged that the pressure they felt about planning for a family was not a concern generally evidenced by their male classmates with Michelle's classmate husband serving as a case in point.

> Our male counterparts really don't have this sense of stress. They can marry younger women once they have finished medical school or residency and not really have the worry about having kids early. Even those men who marry women of their same age, the planning isn't quite as difficult given the female has a flexible schedule. . . . Many of us fear reaching the age in which birth defects and genetic abnormalities become more prevalent. *(Chloe)*

> Going to medical school for a female is a much more intense decision than for a male. I am a little bit older than some of my other peers. My biological clock has been ticking, my family has been sick, my husband needs me to be a good wife. All of these things are hard to deal with while in medical school for a female. If I were male, my spouse would carry the baby and I would never deal with morning sickness, my house might be cleaner, and I might not feel obligated to be the caretaker of my family…somehow I don't think a son feels that pull as much as a daughter. So yes, being a female in medical school is hard and taxing. *(Lynn)*

Accordingly, these women medical students were acutely aware of their aging eggs, their ticking biological clocks, their declining fertility, and potential risk to conceive babies with birth defects. Plus, some of these women students have not yet found their mates. One participant characterized this circumstance as the "Fertility Factor." Their waning Fertility

Factor was always on their minds and, as they found, was a circumstance experienced by some of the women clinical preceptors that they worked with during their rotations.

> I know of a female osteopathic Family Medicine physician that works at the hospital who just finished several years ago with training and has been trying to get pregnant ever since she graduated. . . . We joke about the "Fertility Factor" to calm our anxieties and have come to the conclusion if we are infertile by the time we complete school, those are the situations why they developed adoption. *(Tori)*
>
> I developed a close working relationship with this female physician. She is the single mother of four children – the oldest is a 6 year old girl conceived by artificial insemination, a 3 year old autistic boy she adopted, and a set of newborn twins which she no longer has contact with the father. The closest relatives live two hours away, so if any other female is putting in the application for "Superwoman of the Year," your chances of winning against this OB/GYN are slim. She explained to me her process of reaching the decision to get pregnant with the first child. By the time you have completed medical school, residency, and possibly a fellowship, if you are female you are likely an early 30 year old and the chances of a healthy, normal pregnancy start to decrease. Since she had not found a suitable man at that point in her life, she made the choice to undergo artificial means for conception. I completely understand the pressure; there were many times during my

OB/GYN rotation I could hear the annoying ticks from my biological clock. *(Tori)*

While the stress of *baby maybe* is one that most women medical students do their best to cope with, one participant wrote about how she became pregnant unexpectedly as a third year medical student and the accompanying pain and depression that she and her husband experienced when she miscarried.

> We changed our plans, made a new budget, and began planning one of the most amazing things in life. But in late February of 2010 we miscarried. My progesterone was too low. Needless to say, we were devastated. I was on my pediatric rotation and I remember standing outside a patient room and leaning against the wall crying; trying to gain strength to go in and be happy for this teenage mother and her healthy baby. I felt like I had been robbed, like God thought I might not be able to be a good mother. Thinking about my school, I wondered if that was true. But if the miscarriage had taught me anything it was that I wanted to be a mother more than anything. I wanted my own family more than I wanted to be a doctor. No, this first one hadn't been planned. (Lynn)

This study's women medical students learned that for them their experiences of medical school are not simply about learning the knowledge and skills needed to become osteopathic physicians.

> Throughout my experiences, I have come to realize more just how possible it is to balance personal and professional lives, especially as a woman. It is really based on weighing options and making priorities and sacrifices. *(Carly)*

Instead, these women medical students realized that their experiences of their medical education are about women becoming osteopathic physicians.

Gender Dynamics

There is the prevailing perception that medical school is a genderless experience, since men and women students enroll in the same curriculum and meet the same graduation requirements to become physicians. The narratives authored by my study participants revealed that they believed that women and men experience medical school differently. In their narratives, study participants revealed their gendered experiences of being treated differently than their male classmates, of discrimination, of sexual harassment, and of unwelcome stereotypes that arose from their gender.

> Going to medical school for a female is a much more intense decision than for a male. I am a little bit older than some of my other peers. My biological clock has been ticking, my family has been sick, my husband needs me to be a good wife. . . If I were male, my spouse would carry the baby and I would never deal with morning sickness, my house might be cleaner, and I might not feel obligated to be the caretaker of my family. *(Lynn)*

Gender differences. Study participants acknowledged that the pressure they feel about planning for a family is not a concern generally evidenced by their male classmates. Also, participants observed that male and female medical students were treated differently by

certain physicians, nursing staff, and other clinical staff. In general, several participants felt they had to work harder than male medical students to establish their credibility with the clinical physicians who supervised them.

> I am fortunate enough to have met someone that understands the demands of my chosen career but we are still feeling the pressure of planning for when we want to have children. Our male counterparts really don't have this sense of stress. They can marry younger women once they have finished medical school or residency and not really have the worry about having kids early. *(Chloe)*
>
> As it turned out, my surgeon preceptor was a very brilliant and confident man, but not so much conceited or over-powering. He challenged me, but was proud of me when I did well and answered his questions correctly. He expected a lot from me, but put a lot into teaching. One day he told me I was like other female students he had in the past. He said that I was always well-prepared and female students are usually more prepared and can answer on-the-spot questions more correctly than male students. This is not a proven fact, but an observation from a very well-known and accomplished surgeon. He says the women are usually more self-conscious and feel they have something to prove. He appreciates this about his female students. *(Renee)*
>
> When starting my clinical rotations I found a slight gender barrier---even with my female preceptors. For the most part both male and female preceptors felt more comfortable joking and telling jokes with male students. Obviously,

> once I established a working relationship with these physicians we were able to have a similar relationship with professional lines drawn. It was fascinating to see that I had to work harder to have a more casual relationship with my preceptor. *(Chloe)*

Gender discrimination. Several participants included in their narratives their experiences or fears of gender discrimination. For example, a participant wrote about being wary if asked about future plans for a family during interviews for residency placement.

> I have talked to several colleagues ahead of me in the time line of their education and they have noted that being a young female interviewing for physician positions after residency has been tricky. Legally, offices and hospitals can't ask you about your plans for pregnancy, etc. Although, many of my friends have noted that it is mentioned and certain comments were made about having previous physicians that took time off for maternity leave. These friends were in more family-friendly specialties and still found a small sense of discrimination. *(Chloe)*

Another woman medical student reported that she experienced several instances of gender discrimination from hospital operating room staff members.

> Whenever I was in the Operating Room, I felt the nurses and scrub techs purposefully tried to make me feel inferior. I had scrub techs refuse to gown and glove me. . . who told me I needed to learn to do it myself. However, I have never to this day seen a male surgeon in the OR gown and glove himself. I have been cursed at. . . I was constantly monitored. . . with the expectation

that I would mess up and break sterile field. After discussion with other male peers, it is evident this only happens to the female students. *(Lynn)*

Sexual harassment. Several students described instances of inappropriate sexual attention and behavior from male physicians.

I was assigned to an MD attending who, shall we say, admired me. Constantly, he told me I was beautiful which was refreshing and flattering at first but then it got a little creepy. *(Lana)*

There was one particular time in my medical school experience in which I felt very disrespected and taken advantage of because I was a female student. This time was during my OB/GYN rotation. My preceptor (DO) was a 42-yr-old newly divorced, single man. He had apparently dated younger women before and felt that it was appropriate to make passes at me while I was on his OB/GYN service. He repeatedly asked me to spend time with him outside of our hospital rounds, surgeries, and office hours. He asked me to dinner and to go out to the gambling boat with him. He pried into my personal life and asked me about my dating experiences and about "what my type" of guy was. When I answered him, I gave him every reason to believe I would never date a 42-yr-old divorced single man who was my OB/GYN preceptor. He did not care that I refused all of his advances. He kept persisting that I hang out with him or that I should reconsider what "my type" was. He would say things like "you never know what can happen" or "don't be so close-minded." He made me feel very uncomfortable and I repeatedly came up with excuses to get out

of spending time with him. Not only did this preceptor ask me out, but he also shared stories about his personal life that were inappropriate and involved things I never wanted to hear about. He eventually made it clear that he "liked me" the day before he was supposed to fill out my student evaluation, giving me my grade for the month. I responded "we should just keep this professional" and felt like I did all I could do to control the situation. But, I was still very worried about my grade being jeopardized because I had turned him down once again. As it turns out, my grade for the rotation was fine and I have not heard from this preceptor since the end of the rotation. The last day just involved a lot of awkwardness.

I have thought about this situation a lot since it happened and tried to think of ways I may have given this preceptor the wrong impression. But, I feel like I avoided most "alone time" I could have possibly had with him. I rejected every request to socialize outside of work. I was nice to him, though and just laughed off his comments at times. I never said "you're being inappropriate" or told him to stop talking about his personal life. I just averted the conversations. Maybe that's why he felt like he could talk about whatever he wanted or that I didn't care. I guess I just feared that if I said something to him he would get mad or things would be awkward. And I didn't want my grade to reflect that. I felt very disrespected by his actions and like he abused his authority as a preceptor. I still feel very angry about the way he treated me and about how uncomfortable he made me feel.

> Because I really didn't want other students to feel as uncomfortable as I felt while on rotation with this preceptor, I ended up turning him in. This preceptor added worries to my plate that no student should have to deal with. He was inappropriate and unprofessional. Although it was very scary for me to turn him in and get involved with that process, I felt like it was my responsibility to speak up so that at least female students aren't placed with this preceptor anymore. Now that the situation has been dealt with and it is over, I can look back and say I did the right thing. *(Renee)*

Gender stereotypes. Women students also reported instances of gender stereotyping in which patients, members of their community, and the general public had difficulty recognizing them as medical students and as future physicians. One student who married a classmate reported that residents in her small rural community were more likely to recognize her husband as a doctor in training rather than herself. Further, other male physicians spoke negatively about the participation and roles of women as physicians and others tended to assume female medical students would enter more female-friendly specialties.

> While in the lounge, one of my (preceptor's) old medical school classmates, who had went into orthopedic surgery, came up to us and started talking about how much medicine had changed in the last 20 years. At that point, both gentlemen began speaking about the number of women who were being accepted into medical school. That's when the orthopedic physician voiced his rather uncouth opinion. He thought that only a few number of women should be selected for medical training because "women only want to work

part time." At that moment, I felt the hairs on the back of my neck stand on end. He had negatively stereotyped females working in medicine directly in front of me. *(Adele)*

For instance, my husband and I are both going to be doctors. When we moved to a new location to start our 3rd and 4th year rotations, we met many new people at church and in our neighborhood. When meeting these new people, if they knew that we had moved into town to complete medical school, they automatically assumed that my husband was going to be a doctor and not me. In fact, my neighbors still call my husband "doc" and they call me by my first name. *(Adele)*

Also, I AM NOT A NURSE!!! If I had a dollar for every time someone called me a nurse or asked if I was in nursing school after telling them I was in medical school, I would not be worried about how I am going to pay next month's bills. For some reason, patients, nurses, and other staff think that medical school is the equivalent of nursing school or radiology technician school. That drove me crazy!! I can say I have even seen it happen to my female preceptor after she had introduced herself as a doctor. She turned beet red and tried to politely correct her patient. So I foresee that as a problem that will not go away with a long white coat. *(Lynn)*

Over and over again I have been asked by my family and friends if I really think that psychiatry is a good fit for me, simply because I am a woman. They feel that if a patient becomes unruly, that only a big, burly man would be able

> to control the situation. I've also had a male psychiatry attending assume that I would want to go into child psychiatry because, in his words, "so many women enjoy working with kids." *(Adele)*

Summary

I designed a narrative inquiry study to learn more about how third and fourth year women osteopathic medical students at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM) constructed their professional identities as future osteopathic physicians. I believe the narratives written by my study's participants revealed how these young women medical students were striving to realize their gendered personal identities as maturing young women while also constructing their emerging professional identities as future osteopathic physicians. These women wanted to be wives, mothers, and osteopathic physicians. They wanted it all and were actively exploring and weighing their options so their goals could become a reality. In turn, these participants' internalization of their experiences and perceptions influenced how these women medical students negotiated the shaping of their emerging professional identities as future osteopathic physicians with their personal identities as women. While each narrative was unique, common themes were evident.

Participants' narratives revealed that when these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students. Gender factors clearly influenced how these women shaped their emerging professional identities as future osteopathic physicians. Five major themes emerged from my analysis of participant narratives. First, physician faculty, particularly women physicians,

who served as clinical preceptors during these students' third and fourth year clinical rotations served as role models and influential sources of learning. These physician mentors taught them how to become physicians, to develop their professional identities, and different ways of blending family and career responsibilities. Second, women medical students negotiated their future physician professional identities with their personal identities and their desired social roles as wives and mothers. Third, the desire for a family also influenced their career choices as indicated by the fields they selected for their postgraduate residency programs. Fourth, nearly every participant cited the pressure of the "Fertility Factor." This term was used by a study participant to describe the concern shared by many women medical students, especially those who were not married, that they could miss out on being married and having children. During medical school, these women put their lives on hold so they could learn what was required of them to become osteopathic physicians. Yet, their biological clocks continued to tick, their eggs aged, and the risk for having babies with birth defects increased as they aged. These women medical students believed that the pressure of the Fertility Factor that they felt generally was not shared by their male classmates. Fifth, gender dynamics were clearly evident in the medical education experiences that shaped these women medical students' emerging professional identities as future osteopathic physicians. Their narratives described their personal experiences of being treated differently due to their gender as well as instances of gender discrimination, sexual harassment, and gender stereotypes.

Within these women's narratives, the construction of their emerging professional identities as future osteopathic physicians resembled an intersection and interlacing of these

themes much like threads within a tapestry. Further, I believe my participants' narratives revealed that their stories were not just about young women becoming osteopathic physicians, but portrayed how these young women medical students were striving to realize their gendered personal identities as maturing young women while also constructing their emerging professional identities as future female osteopathic physicians.

My study participants wrote that they learned from and were influenced the most by the physician role models they experienced during their third and fourth year clinical rotations, particularly by women physicians. They wrote about how they tried to picture themselves in the lives of their clinical faculty. These women observed what they liked and did not like in the behaviors and lives of their clinical faculty and chose to incorporate into their developing physician identities the characteristics that they admired and felt would work for them. These women medical students learned what it was like to be a woman physician from the women physicians that these students worked with during their clinical rotations. Study participants also wrote about their desire to become wives and mothers and osteopathic physicians. Their choice of residency programs to apply to as future practice specialties was not merely driven by wanting to do what they loved, but finding a practice specialty that would support their desired blend of personal and professional identities.

Several of these women medical students wrote about challenges that they experienced with romantic relationships. If still single, women medical students desired to find a partner and raise a family, yet they found that some men, who were not in medicine, were not comfortable being romantically involved with a future physician or playing second fiddle to these women's devotion to their medical studies. Further, the demands of medical

school challenged existing long-term relationships resulting in break-ups and also impeded forming new relationships. Several participants reported that some men were intimidated by the intelligence, career prestige, and future earnings of these women.

The study's participants also were influenced by gender dynamics that manifested throughout their medical education experiences, particularly during their clinical rotations. These women wrote about their experiences of gender differences, discrimination, harassment, and stereotypes. These women students agreed that their male counterparts generally experienced medical school and development of their professional identities differently. These women believed that male medical students were freer to choose a specialty that they loved rather than one that would enable a balance of career and family.

Further, male medical students were not subject to the Fertility Factor and did not experience the ticking biological clock or fears of waning fertility or an increased potential for birth defects that these women medical students worried about. The study participants also felt that if they were men, they would be freer to choose a specialty that they loved doing rather than identifying one that would suit their career interests and plans for a family.

Examples of gender discrimination and unwelcomed stereotypes cited by the study participants included the realization that the general public and many patients tended to stereotype the prevailing physician identity as male rather than as female. Several women medical students wrote about being mistaken as a nurse or other health professional rather than as the medical student they had identified themselves as. Further, several of the women participants acknowledged that physicians and nurses tended to prefer their male student colleagues when they were grouped with them on rotations in terms of acceptance,

comradery, assignments received, acknowledgment given, and so on. The prevailing perception of the study participants was that as women students they had to work harder to establish their credibility and earn the respect and acceptance of their clinical faculty and staff, while acceptance was assumed for their male medical student colleagues. Further, at least three women wrote about inappropriate sexual attention received from male physicians they were assigned to.

The findings derived from the narratives of this study's women medical students underscore the realization that development of a professional identity as a future osteopathic physician does not simply involve entering medical school to learn the medical knowledge and skills required to become an osteopathic physician. According to Chloe, women medical students and women physicians have several hurdles to overcome.

> First, to prove we are just as hardworking and competent as our male counterparts. . . Secondly, we must overcome the lack of professionalism from some male physicians. Thirdly, we must deal with the issues of family planning and the sense of a lack of self-accomplishment by our spouses.

This study's participants compellingly revealed that when these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students and the challenges to balance their personal identities with their emerging professional identities as future osteopathic physicians. Convincingly, most of the difficult real life decisions that were cited by these women medical students centered on gender issues, which notably influenced the construction of their professional identities as future female osteopathic physicians.

CHAPTER 5. ANALYSIS AND DISCUSSION

The purpose of this narrative inquiry study was to gain a richer understanding from the perspective of gender about how third and fourth year women osteopathic medical students at the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM) constructed their developing professional identities as future osteopathic physicians. This study addressed this research question:

> From the perspective of gender, how do the experiences and perceptions of third and fourth year women osteopathic medical students influence their constructions of their emerging professional identities as physicians?

The study findings suggest that gender issues significantly influenced the developing professional identities of the women medical students who participated in this study. These third and fourth year medical students actively sought to blend their gendered personal identities as women with their emerging professional identities as osteopathic physicians. These women aspired to be wives and mothers who also had careers as osteopathic physicians. Their desires shaped what they chose to do and what they chose not do concerning their future careers as osteopathic physicians.

Poststructuralist feminists would argue that participants' gendered identities together with society's prevailing structures of family, education, undergraduate and graduate medical education, and medical practice, strongly influenced what they felt they could or could not do with regard to their future medical careers and developing professional identities. The personal narratives written by these women evidenced common themes concerning their efforts to blend their personal identities as women with their emerging professional identities

as osteopathic physicians. The intersection of personal and professional identities was most evident in the participants' narrative accounts of their choice of specialty to pursue for postgraduate residency training, since residency training typically indicates physicians' future practice specialty (Boulis & Jacobs, 2008; Drinkwater, Tully, & Dornan, 2008; and Serrano, 2007). With regard to this study, the dynamics influencing one's choice of residency training and future career specialty were particularly important to comprehend, since choice of specialty is an essential aspect of a physician's professional identity (Beagan, 2000; Conrad, 1988; Haas & Shaffir, 1991; Harrison, 1982; Harter & Krone, 2001).

Overview of Study

My research focus on exploring the gendered nature of medical socialization arose from my interest in investigating the well-documented chronic and persistent underrepresentation of women physicians in executive leadership roles in medicine (AAMC, 2009; Carr et al, 1993; Morahan & Richman, 2001; Reed & Buddeberg-Fischer, 2001; Yedidia & Bickel, 2001). This gender gap in executive and professional leadership roles has been described as a glass ceiling (U.S. Department of Labor, 1995). The limitations imposed by experiences of a glass ceiling have little or nothing to do with talents inherent from an individual's gender, but rather more to do with the culture of an organization that influences everyday activities and how decisions are made (Kanter, 1977/1993).

Given the chronic underrepresentation of women physicians as leaders in medicine, I decided to look at the medical school socialization experiences of women medical students that shape their emerging professional identities as physicians. Much of the medical socialization literature dwells on what the medical education establishment does to train its

medical professionals with little research on how medical professionals themselves construct their physician identities (Pratt et al, 2006). Further, this study addressed the literature gap on the role gender plays in influencing construction of a professional identity as a future physician and explored how the study's women medical student participants went about forming their emerging physician identities.

This study utilized qualitative research methods to explore the gendered nature of professional socialization through a narrative inquiry design involving women osteopathic medical students who were in the third and fourth years of medical school. This study's data consisted of reflective personal narratives that were constructed as a letter to an entering female medical student. Data analysis involved an intensive process of data immersion and deconstruction that sought to make sense of and interpret meaning from the participants' own words. Additionally, analysis was guided by the study's research question, the relevant literature, and the theoretical framework of poststructuralist feminism.

Findings

Analysis of participant narratives, conducted from the critical stance of poststructuralist feminism, identified five major study findings. First, physician faculty, particularly women physicians, who served as clinical preceptors during these students' third and fourth year clinical rotations, served as influential professional role models and sources of learning. Study participants learned how to become physicians, to practice medicine, and to blend their personal and professional lives from their clinical physician preceptors, who included both osteopathic physicians (D.O.) and allopathic physicians (M.D.). These physicians served as potent role models for the professional physician identities that these

women medical students were actively constructing. Second, women medical students negotiated their future physician professional identities with their gendered personal identities and their desired social roles as wives and mothers. A number of participants indicated that the women physicians they worked with during their clinical rotations showed them how to balance their professional and personal lives and also what they should avoid. Third, their negotiation of professional and personal identities strongly influenced their career choices as indicated by the fields they selected for their postgraduate residency programs. Compromises were made between specialties that they loved and specialties that were more likely to fit their desired family lifestyles. Fourth, nearly every participant cited the pressure of the "Fertility Factor," which a study participant described as the concern shared by many women medical students, especially those who were not yet married, that they could miss out on being married and having children. During medical school and later in postgraduate training, these women put their lives on hold so they could learn what was required of them to become osteopathic physicians. Yet, their biological clocks continued to tick, their eggs aged, and the risk for having babies with birth defects rose with their increasing age as they delayed having children. Further, these women believed that their male classmates generally did not experience the pressure of the Fertility Factor in the same way that they did. Fifth, gender dynamics was evident in the medical education experiences that shaped these women medical students' emerging professional identities as future osteopathic physicians. Their narratives described their personal experiences of being treated differently due to their gender as well as instances of gender discrimination, sexual harassment, and gender stereotypes.

This study's findings indicate that gender, knowingly and unknowingly, exerts a significant influence on the study participants' formation of their professional identities as future osteopathic physicians. It was also apparent that the study findings were not independent of each other. On the contrary, I believe the findings significantly intersected, influenced, and interacted with each other. Consider that clinical physician mentors, particularly women physicians, helped the participants to gain expertise in the practice of medicine and in the development of their professional identities. Faculty mentors also served as important resources to participants concerning how to blend their personal gendered identities with their developing professional identities, to select a residency specialty, to determine when to have children, and how to navigate various forms of gender dynamics that included gender bias, gender stereotypes, and sexual harassment.

Moreover, the participants were very aware of their personal gendered identities, were cognizant that their male classmates had different experiences of medical education with respect to such issues as when to have children and their general interactions with clinical preceptors and staff, were mindful that medicine was a male-oriented profession, and accepted the constraints imposed on them as women in a medical profession historically constructed to accommodate predominantly male lifestyles. I also believe that these findings are relevant to both osteopathic and allopathic medical students and physicians. Given that there are definite ideological differences that contrast the practice of osteopathic medicine from allopathic medicine, the undergraduate and graduate educational programs of osteopathic medicine and allopathic medicine are structured similarly (Hahn, 2009).

Within this chapter, I discuss the impact of gender on the study's findings from the critical stance of poststructuralist feminism. It concludes with future considerations for the osteopathic medical profession and its women members.

Poststructuralist Feminism Perspective

In the context of this study, poststructuralist feminists would argue that the women medical student participants were unwittingly co-opted to engage in and accept organizational and professional norms that inherently disadvantaged them in relation to their male colleagues. The customary professional identity of a physician is male and is characterized by male-influenced standards and expectations as the professional norm. Women who enter the medical profession are assumed to accept and assimilate this model of professional identity in order to fit in and be accepted within the profession (Beagan, 2000; Risberg, 2004).

The aim of poststructuralist feminism is to alter the power relations of Western society's dominant patriarchy that privileges men and constrains women by deconstructing "taken-for-granted historical structures of socio-cultural organizations within which various versions of the 'individual' have been inserted" (Luke & Gore, 1992, p. 5). The socio-cultural structures in our lives are powerful determinants of how we live our lives as well as what we can and cannot do. These structures include our understandings of family, education, undergraduate and graduate medical education, the profession of medicine, and so on. Through our socialization, we learn who can participate in these various structures, the rules for participation, and the roles and identities of participants.

In this context, the purpose of a poststructuralist feminist stance for this study is to disrupt our concept of a physician's professional identity. Within medicine, the professional identity of a physician is touted to be genderless, yet as shown by the literature that discusses the experiences of women in medicine as well as this study's participant narratives, the experiences of men and women physicians are not genderless. It follows that poststructuralist feminists challenge the gendered identities and roles that society constructs as natural and normal for women and men. In relation to this study's findings, a poststructuralist feminist standpoint confronts society's customary identification of a physician as male and of the professional identity of a physician as genderless yet male-oriented.

Specifically, poststructuralist feminism challenges our understandings and practices of gender that are embedded visibly and invisibly within our social structures and professional organizations, such as medicine. Acker (1990, 1992, 2006) argues that gendered organizations are characterized by gender regimes that she defines as the incorporation of gender processes within our workplaces. These gender processes include organizational policies and rules, divisions of labor, symbols and images, personal interactions, and constructions of self as a "gendered, organizational performer" (Acker, 2006, p. 197) who seeks to fit in or resist. Gendered organizational processes have become familiar, are often taken for granted, and are commonly recognized as normal. Workplace gender inequities are manifestations of socially constructed cultural beliefs and social power relations that tend to privilege men and disadvantage women (Acker, 1990, 2006; Kanter, 1977/1993).

Acker (1990) maintains that gender regimes exist as meanings linked to organizational practices and the myriad ways that gender knowingly and unknowingly is embedded within organizational and professional symbolic and discursive practices. It recognizes that power is located in systems of shared meaning that reinforce mainstream ideas and silence alternatives. Evidence mounts that women and men experience their workplaces differently including medicine (Acker, 2006; Boulis & Jacobs, 2008; Kanter, 1977/1993; Riska, 2008).

"See No Gender"

The guise in the medical profession, osteopathic and allopathic, is that becoming a physician is neutral and genderless (Risberg, 2004). It seems many women medical students and physicians knowingly or unknowingly engage in and accept organizational and professional norms that inherently disadvantage them in relation to their male colleagues (Riska, 2008). All medical students enter medical school to learn how to become physicians. The medical curriculum that all students participate in is thought to be gender blind and gender neutral (Risberg, 2004). From their learning experiences, medical students construct a professional identity of physician with the belief that it is neutral and genderless (Acker, 1992, 2006; Beagan, 2000; Kaiser, 2002; Risberg, 2004; Riska, 2008).

Women and men enter medical schools in comparable numbers now to train as physicians (AACOM, 2012; AAMC, 2012), but the professional culture that they experience in their everyday activities of medical education is heavily influenced by male norms and standards (Beagan, 2000; Haas & Shaffir, 1991; Harrison, 1982; Risberg, 2004; Riska, 2008). Both women and men are faced with adapting their personal identities to fit with the

prevailing professional roles, work ethic, and work day of physicians that are historically oriented to men and their lifestyles (Beagan, 2000; Boulis & Jacobs, 2008; Conrad, 1988; Kaiser, 2002).

The seemingly genderless concept of a professional physician identity hides gender within it. The study participants reported experiences that ranged from disappointing gender bias and gender stereotypes from hospital staff and patients to inappropriate sexual conduct from faculty physicians and weighed their selections of specialties for residency training and future practice in large part with how their chosen specialties would mesh with their gendered personal identities as women and their future plans for childbirth and family responsibilities. The guise of a genderless or gender neutral professional identity assumes that the public sphere of work or career is separate from the personal sphere that involves family responsibilities (Acker, 1992). The reality for these women medical students was that their personal and professional identities were very much intertwined.

Gendered Professional Identities

"But science and skill do not make a physician; one must also be initiated into the status of physician; to be accepted, one must have learned to play the part of a physician in the drama of medicine" (Becker et al., 1961, p. 4).

Students begin to sort out the faculty who they identify as exemplars of the medical profession and who they want to be like. Accordingly, they also identify professionals who they do not want to be like (Cohen et al., 2009). In so doing, student doctors shape their professional identities from their perceptions of their social relationships with physicians, faculty, staff, patients, and other students. According to Niemi (1997), "(physician) identity

formation consists of exploring the available alternatives and committing to some choices and goals" (p. 408). Student doctors begin to shape their professional identities as physicians from the personal meanings they construct from their experiences of medical education and the medical profession.

The construction of a professional identity as a physician has been studied from various perspectives that include competency development (Jarvis-Selinger et al, 2012; Pratt et al, 2006); internalization of a physician identity from various master narratives that include the "healing doctor" (cure the sick) narrative, the "detached doctor" (objective, uninvolved demeanor) narrative, or the "privileged doctor" (status) (Monrouxe, 2010); and adoption of an aloof, objective physician persona that characterizes the biomedical model of mainstream allopathic medicine (Apker & Eggly, 2004). Harter and Krone (2001) reported differences in the emerging professional identities of pre-clinical osteopathic medical students that stemmed from the ideological uniqueness of osteopathic medicine. In contrast to the remote unemotional personas reported for allopathic physicians, Harter and Krone's (2001) study of first and second year osteopathic medical students described developing professional identities that were more focused on interaction and dialogue with patients.

However, there were no studies found of the formation of a professional physician identity from a gendered perspective. Study participants' written expression of their determination and will to shape professional identities that fit with their gendered personal identities as women was not what I initially anticipated. I initially assumed their narratives would address styles of physician practice in the vein of Monrouxe's (2010) master narratives of the "healing doctor," the "detached doctor," or the "privileged doctor." Instead,

all but one participant wrote that a major issue was selecting a specialty that accommodated their gendered identities as women who would become physicians and also wives and mothers. Accordingly, this study's exploration of the gender dynamics that influence one's choice of residency training and future career specialty were particularly important to comprehend, since choice of specialty is an essential aspect of a physician's professional identity (Beagan, 2000; Conrad, 1988; Haas & Shaffir, 1991; Harrison, 1982; Harter & Krone, 2001).

The narratives written by the eleven third and fourth year women medical students who participated in my study revealed that when these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students. They anticipated that medical school would teach them the knowledge and skills to become an osteopathic physician and attain the ability to practice medicine as their chosen profession. However, for these young women, becoming osteopathic physicians involved more than successfully completing the medical school curriculum and graduation requirements of the University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM). Study participant Chloe summed up this realization the best.

> The decision to become a doctor initially was easy and . . . something I have wanted to do most of my life---although the real life decisions that come along with this career are not ones I anticipated. *(Chloe)*

Overall, the study's participants acknowledged this realization. These women negotiated their personal identities as women as they shaped their professional identities as future osteopathic physicians. All wanted to have families one day and worried whether and

when they would be able to do this given the lengthy training requirements of their chosen careers as physicians. Accordingly, gender, knowingly and unknowingly, exerted a very strong influence on their emerging professional identities. Study participants were not merely medical students enrolled in a medical school to become osteopathic physicians. Rather, they were women becoming osteopathic physicians.

Student Doctor Marielle described her approach to constructing her emerging professional identity as a future physician in this manner.

> I think the question we should all be asking is who (rather than what) we want to be when we grow up. Who do I want to be when I grow up? I want to be like the doctors I have worked with. . .

Marielle believed that becoming a physician was an ongoing lifetime process. She acknowledged that

> No matter what age I am I will have growing to do, I hope by the end of my growing journey that I have achieved all of the aspects that will make me who I want to be rather than what I want to be.

Importantly, these medical students did not learn about the impact of their gendered personal identities on their developing professional identities from the formal medical school curriculum, but rather from the informal and hidden curriculum they experienced during their third and fourth year clinical education, particularly from their interactions with their clinical physician mentors (Inui, 2003). The influential role of physician role models in shaping the professional identity and demeanor of medical trainees is strongly supported by the relevant medical education literature (Cohen et al, 2009; Suchman et al, 2004). The medical

socialization of students is strongly influenced by the profession's insiders from whom they learn the norms and culture of the profession. All of these experiences guided how these future physicians constructed their emerging professional identities.

Student Doctor Michelle wrote that it was during her third and fourth year clinical rotations that she began forming her future identity as an osteopathic physician.

> This time of clinical training is when I learned what it means to be a female osteopathic physician. I learned from talking with women in medicine and how they balance their own lives. . . I started to form my own identity from what I saw in other doctors and from what I liked and did not like from their practice and patient care. The advice I have gotten from other women has helped me a great deal.

Role of gendered identities. At this point in their nascent preparation as future osteopathic physicians, the third and fourth year women medical students of this study were focused on choosing a specialty for residency training and their future careers as physicians that accommodated their gendered personal identities as women with family roles and identities as wives and mothers. Accordingly, gender was acknowledged by the participants as a powerful influence on their developing professional identities as future physicians given that the specialty a physician chooses for their area of practice is an important aspect of a physician's professional identity (Beagan, 2000; Cohen et al, 2009; Conrad, 1988; Haas & Shaffir, 1991; Harrison, 1982; Harter & Krone, 2001).

From a social constructionist's perspective, we are doing gender constantly in our everyday lives (West & Zimmerman, 1991; Lorber, 1994). Our socially constructed gender

schemas create an expectation of behaviors and roles for women and for men (Lorber, 1994; Valian, 1998). Women and men lead gendered lives. It follows that development of a professional identity as a physician would be influenced by the physician's gender.

> I started thinking about priorities in my life other than medicine. I am not only a future physician but also wife, daughter, sister, and hopefully future mother. . . Deciding what field of medicine to pursue is not as simple as going into what you love, at least for me. I wanted to find something that would allow me to have a family and be good at both being a physician as well as a wife and mother. *(Michelle)*

> Going to medical school for a female is a much more intense decision than for a male. I am a little bit older than some of my other peers. My biological clock has been ticking, my family has been sick, my husband needs me to be a good wife. . . If I were male, my spouse would carry the baby and I would never deal with morning sickness, my house might be cleaner, and I might not feel obligated to be the caretaker of my family. *(Lynn)*

The personal narratives written by the women medical students participating in this study contradicted the commonly-held professional discourses that becoming a physician and developing a physician's professional identity are genderless. Their stories were not just about young women medical students becoming osteopathic physicians, but portrayed how these young women were striving to realize their gendered personal identities as maturing young women while also constructing their emerging professional identities as future female osteopathic physicians.

Women and men are commonly subjected to gendered assumptions and interactions with others. For example, a common gendered assumption in medicine is the belief that women are better caregivers and accustomed to caring for children, so they should become pediatricians. Another common assumption is that men are better with tools, are more adept at repairs, and are better with technical procedures, so they should become surgeons. Conventional wisdom would indicate that these gendered assumptions may apply to some men and women, but arguably not all. Several participants wrote of their experiences with gendered assumptions.

> I have chosen to pursue psychiatry. Over and over again I have been asked by my family and friends if I really think that psychiatry is a good fit for me, simply because I am a woman. They feel that if a patient becomes unruly, that only a big, burly man would be able to control the situation. I've also had a male psychiatry attending assume that I would want to go into child psychiatry because, in his words, "so many women enjoy working with kids." *(Adele)*
>
> During a plastic surgery rotation, I remember being the only female on the service. While working alongside two other male students doing clinical rotations, I felt I was in constant competition with them. The male residents were seemingly more interested in the male students, usually offering them more time in the OR, while I got office duty. I also noticed that the residents and attendings (physicians) alike were more personable with the male

students. They never really engaged in conversation with me or got to know me as a future fellow physician. *(Vicki)*

Balance of career and family. Much has been written concerning women physicians' struggles to attain a balance of career and domestic responsibilities (Bickel, 2000; Boulis & Jacobs, 2008; Mobilos et al, 2008; Reed, & Buddeberg-Fischer, 2001) and the effect of gender on specialty choice (Drinkwater et al, 2008; Lambert & Holmboe, 2005). Seeking a work-life balance is not unique to women physicians and is a common experience of women in other professions (Bracken et al, 2006; Kanter, 1977/1993; Sandler, 1992). However, it is acknowledged that physicians, particularly women physicians, face exceptionally difficult challenges to successfully balance their professional and personal lives given medicine's traditional work ethic and hours (Bickel, 2000; Boulis & Jacobs, 2008).

The traditional 24/7 work ethic in medicine holds that the patient comes first and family is sacrificed in order for physicians to do their jobs and care for their patients (Bickel, 2000; Plante, 2004). Attempting to incorporate personal goals and responsibilities into this type of demanding professional culture is extremely challenging and fraught with a high risk of damage to physicians' personal lives. Further, statistics reveal that women physicians experience a higher risk for divorce than their male colleagues (Bickel, 2000).

I went into third year wanting to be an OB/GYN specializing in fertility, and by the end of my second day on my women's health rotation, I tossed that idea. I watched for an entire month as my preceptor struggled to juggle her life with her job. I learned about the depressing truth of how her partner chose his job over his wife and son, and how they had never forgiven him for it.

> And as another family practice doctor with a fellowship in OB/GYN was about to lose her husband for spending too much time at the hospital. . . Being a woman in medicine is not easy. I felt being a woman in OB/GYN was worse and I'm willing to give it up so that my life doesn't become a mom neglecting time with her kids, or a wife neglecting her husband. *(Marielle)*

Drinkwater, Tully, and Dornan's (2008) study of third and fourth year medical students in the United Kingdom (UK) also found that medical students aspired to attain a balance of work and family life. In addition, UK women medical student participants were more willing than their male classmates to compromise their professional attainment to attain a balance of work and family. Increasingly, medical education studies report that both male and female medical students seek specialties with controllable lifestyles to accommodate their desired lifestyles that include a more enjoyable blend of career and family life(Dorsey, Jarjoura, & Rutecki, 2005; Lambert & Holmboe, 2005). Similarly, this study's participants ranked family first. Becoming a physician was also of key importance. Otherwise, why would they devote a minimum of seven years to attain this goal and go into significant debt to pay for their medical education? These women students wrote that they knew most of their male classmates were less hampered by family considerations in their selection of a residency specialty. While male medical students also seek a balance of career and family lifestyles, relevant studies state their reasons include more time with family and avoidance of evening and weekend hours (Kilminster, Downes, Gough, Murdoch-Eaton, & Roberts, 2007; Sanfey et al, 2006). Similarly to findings from women students at other medical schools, my

study's participants were willing to make a compromise if it promoted the likelihood that their specialty choice accommodated their desire for a family.

> I found out we were expecting. It was thrilling and overwhelming. How would we manage my school and a baby? We changed our plans, made a new budget, and began planning for one of the most amazing things in life. But in late February . . . we miscarried. . . . I felt like I had been robbed, like God thought I might not be able to be a good mother. Thinking about my school, I wondered if that was true. But if the miscarriage had taught me anything it was that I wanted to be a mother more than anything. I wanted my own family more than I wanted to be a doctor. *(Lynn)*

As long as they could work as a physician and be a wife and mother, participants were satisfied.

Given their desire for a family in the future, postponing childbirth during their peak fertility years weighed heavily on these women students, especially given their awareness of the increased risk for birth anomalies in older mothers. This significant concern was corroborated by other researchers who studied medical students.

> Men showed little awareness of the conflict between career aspirations and parental responsibilities and had thought little about how they would achieve balance. Women's awareness of the tensions between work and family led them to think about the best time to have children, the consequences of taking time out, and balancing child care with career. They considered sacrificing

ambition for child-friendly working hours and avoiding responsibility and leadership. (Drinkwater et al, 2008, p. 423)

Medical student Tori wrote about the "Fertility Factor," which she described as the concern shared by many women medical students, especially those who were not yet married, that they would miss out on being married and having children. She was from a large family and very much wanted her own family one day.

> During my OB/GYN rotation I could hear the annoying ticks from my biological clock. I even helped deliver multiple babies from girls I graduated with from high school. It made me question if I was even supposed to go into medicine. Should I already be married, own a home, and have several kids? *(Tori)*

Tori concluded that becoming an osteopathic obstetrician and gynecologist was the right choice for her.

Clinical faculty served as important models of career and family balance and provided examples of healthy and unhealthy career and family dynamics. One of the study participants termed finding the right blend of career and family responsibilities was her definition of success and that she realized this definition varied from person to person.

> Now, during my 3rd year rotations I have gotten to see a different aspect of how women are able to balance all their responsibilities and be successful. Part of being successful however is different for any person you may talk to because everyone has a different idea of success. It has really become apparent to me how to pick my priorities and work toward achieving the kind

> of lifestyle I would like. Being able to have a well-balanced life between work and play, along with a job that I enjoy and time to spend with my family to really create and foster good relationships is my own personal opinion of success. *(Carly)*

In contrast to the prevalent finding that women physicians tend to compromise their choice of specialty to accommodate their family responsibilities, Carly wrote that she was fortunate to work with strong female physicians who each modeled a different approach to achieving a balance or blend of their personal and professional lives. Carly was shown that women physicians with families could also have successful careers in the most demanding of specialties. One female physician had a room set aside in her office as a nursery where her nanny cared for her two young children. This arrangement allowed her to have her children near her during work hours and provided her the ability to see her children during the day and vice versa. Another female physician was in a group practice with other female physicians who were committed to allowing time for family duties by scheduling their patients around family duties that included taking children to school and picking them up in the afternoon. Other female physicians worked 3 to 4 days per week. She observed women physicians of various specialties who successfully managed their careers with their family roles, which she found encouraging. These physicians included an internist, family physician, obstetrician, and general surgeon. The last two specialties are widely regarded as the least family friendly and the most difficult with regard to time demands that include being scheduled on call during evenings and weekends (Lambert & Holmboe, 2005; Mobilos et al, 2008).

Residency program specialty selection. Residency selection is determined by a competitive match process that is administered by the National Matching Service (2012) for osteopathic residencies and the National Resident Matching Program (2012) for allopathic programs. Residency programs consider various factors in their selection of candidates that include applicant academic records, clinical rotation experiences and evaluations, medical school performance evaluations, and personal interviews. Obtaining placement in a desired residency program is highly competitive and challenging for all medical students. Specialty and residency selection were particularly stressful for women students who were concerned with when to have children and whether they would have time to attend to family responsibilities.

As found in this study, participants wanted to fulfill their gendered personal identities as women by marrying and becoming mothers. In turn, they wanted to select a practice specialty that suited them and their personal desires. Making a decision concerning their choices of specialty for residency training and future practice proved to be very challenging. Some participants opted to compromise their choice of specialty, but not all did.

> Deciding what field of medicine to pursue is not as simple as going into what you love, at least for me. . . . I wanted to find something that would allow me to have a family and be good at both being a physician as well as wife and mother. . . I just loved my general surgery rotation . . . and the rush of excitement that I felt when I was in the operating room. But the catch is the time commitment. Some days my surgeon would be up all night or never

know when he was going to be done for the day. I was not sure how I felt about this. . . . *(Michelle)*

Staring my fourth year in the face is stressful. Anyone who says committing to do something for the rest of your life is most definitely crazy. I'm looking back on this past year's rotations, trying to picture myself in the lives of my preceptors. I went into third year wanting to be an OB/GYN specializing in fertility, and by the end of my second day on my women's health rotation I tossed that idea. I watched for an entire month as my preceptor struggled to juggle her life with her job. I learned about the depressing truth of how her partner chose his job over his wife and son, and how they had never forgiven him for it. And (that) another family practice doctor with a fellowship in OB/GYN was about to lose her husband for spending too much time at the hospital. *(Marielle)*

A difficult decision for me was deciding my specialty. Obviously this is a big decision regardless of gender but more so for a female student who is anticipating having children and a family. We are all young so it seems until the issue of having children is brought up. Many of us fear reaching the age in which birth defects and genetic abnormalities become more prevalent. If I had no desire to have children or a family I would have been a general pediatric surgeon or plastic surgeon. I absolutely loved the time spent in the OR and felt like I had really good surgical technique. *(Chloe)*

Two participants, Chloe and Marielle, compromised their choices of career specialty to accommodate the family lifestyle they desired. Chloe decided not to select surgery and Marielle abandoned obstetrics and gynecology, which originally were their top interests and chose Pediatrics and Family Medicine, respectively, instead. Medical student Michelle indicated her love for surgery in her personal narrative and that she likely would choose Family Practice instead for family reasons. At no time, did Michelle indicate that her classmate husband was rethinking his choice of a surgical specialty for residency training. In their relationship, it was apparent that she, as wife, future mother, and physician, would shift her choice of specialty, if this were required. Accordingly, I was quite astounded by Michelle's news during our follow-up conversation when she told me that after much pondering and going back and forth and with the support of her classmate husband, she decided to pursue surgery for residency training for which she received a residency placement.

Choice of a specialty for residency training and for future practice is a key decision for both men and women medical students. Increasingly, it has been observed that both men and women are seeking specialty choices that allow time for family responsibilities and activities and personal lifestyles (Dorsey et al, 2005; Lambert & Holmboe, 2005). Yet, for women who are seeking to accommodate future plans for childbirth and family responsibilities, specialty choice is more complicated and more challenging (Sanfey et al, 2006). The choice of a career specialty that study participants were determining was a very real concern described in nearly every participant's narrative.

Yet, study participants were not angry or resentful. Rather, these women medical students were seeking acceptance within the male-dominated medical profession. They were willing to play by the medical profession's rules. In so doing, they were pragmatically making their career choices, which sometimes involved compromises to accommodate their personal gender identities and desire for a family-friendly career specialty. Some speculate that this pragmatic attitude reflects a generational shift in which a more youthful generation of physicians, especially female physicians, believe that balance between work and family is allowed and that self-sacrifice may be needed on occasion, but is not the automatic professional default (Bickel, 2000; Boulis & Jacobs, 2008; Sanfey et al, 2006). These women medical students were not striving to become superwomen physicians reminiscent of 1970-era feminist pioneers. Bickel observed that "superwoman died of exhaustion at some point in the 1970s" (2000, p. 16). Instead, a generational shift is evident among today's young physicians in which there are expectations of balance and self-sacrifice is not a given.

It was clear from their personal narratives that participants were aware that gender exerted a significant impact on their choices and their career path, which is similar to findings reported by other researchers (Bickel, 2000; Drinkwater et al, 2008; Lambert & Holmboe, 2005). One of this study's conclusions is similar to that found in another study of women medical students' specialty choices, which was that "gender interacted powerfully with all the factors affecting students' career decisions" (Drinkwater et al, 2008, p. 423). KYCOM participants acknowledged that if they were male, they would not be faced with the same type of concerns or decisions. Yet, they accepted these gendered obstacles and

persisted in their efforts to attain a residency program in a specialty choice that accommodated their desired career and family goals.

As the study findings evidenced, these women students relied heavily on their clinical faculty as role models, mentors, and guides; they negotiated the intersection of their personal and professional identities; they selected residency specialties that they felt they were qualified for and would accommodate a blend of their personal and professional identities; they fretted about the Fertility Factor; and they were most annoyed about experiences of gender dynamics that included gender bias, sexual harassment, and being subjected to gender stereotypes by others.

Gender dynamics. The medical education literature contains many accounts of women medical students and physicians experiencing forms of gender bias and gender stereotypes from within the medical profession, health care staff, and from the public that confirm the prevailing sociocultural characterization of a physician identity as male (Beagan, 2000; Bickel, 2000; Boulis & Jacobs, 2008; Risberg, 2004; Riska, 2000, 2008). The narratives authored by study participants revealed that they believed that women and men experienced medical school differently. In their narratives, study participants revealed their gendered experiences of being treated differently than their male classmates, of discrimination, of sexual harassment, and of unwelcome stereotypes that arose from their gender. Noticeably, participant experiences of medicine and their influence on participant construction of professional identities were not genderless.

> When starting my clinical rotations I found a slight gender barrier---even with my female preceptors. For the most part both male and female preceptors felt

> more comfortable joking and telling jokes with male students. Obviously, once I established a working relationship with these physicians we were able to have a similar relationship with professional lines drawn. It was fascinating to see that I had to work harder to have a more casual relationship with my preceptor. *(Chloe)*

Women students also reported instances of gender stereotyping in which patients, members of their community, and the general public had difficulty recognizing them as medical students and as future physicians. One student who married a classmate reported that residents in her small rural community were more likely to recognize her husband as a doctor in training than herself. Further, women students observed male physicians who demeaned women physicians for the time they spent attending to their families in place of their practices and other physicians who assumed female medical students would enter more female-friendly specialties.

> While in the lounge, one of my (preceptor's) old medical school classmates, who had went into orthopedic surgery, came up to us and started talking about how much medicine had changed in the last 20 years. At that point, both gentlemen began speaking about the number of women who were being accepted into medical school. That's when the orthopedic physician voiced his rather uncouth opinion. He thought that only a few number of women should be selected for medical training because "women only want to work part time." At that moment, I felt the hairs on the back of my neck stand on

end. He had negatively stereotyped females working in medicine directly in front of me. *(Adele)*

My husband and I are both going to be doctors. When we moved to a new location to start our 3rd and 4th year rotations, we met many new people at church and in our neighborhood. When meeting these new people, if they knew that we had moved into town to complete medical school, they automatically assumed that my husband was going to be a doctor and not me. In fact, my neighbors still call my husband "doc" and they call me by my first name. *(Adele)*

I AM NOT A NURSE!!! If I had a dollar for every time someone called me a nurse or asked if I was in nursing school after telling them I was in medical school, I would not be worried about how I am going to pay next month's bills. For some reason, patients, nurses, and other staff think that medical school is the equivalent of nursing school or radiology technician school. That drove me crazy!! I can say I have even seen it happen to my female preceptor after she had introduced herself as a doctor. She turned beet red and tried to politely correct her patient. So I foresee that as a problem that will not go away with a long white coat. *(Lynn)*

Power of professional assimilation. It is extremely difficult for students to report experiences of inappropriate gender dynamics and injustices, especially if the alleged perpetrators are medical school or hospital faculty and staff (Kilminster et al, 2007). It has been widely reported that women medical students and physicians are more likely than their

male colleagues to experience instances of inappropriate gender dynamics (Bickel, 2000; Riska, 2008).

Instances of inappropriate gender dynamics and the daunting effect of asymmetric power relations were evident in participant narratives. Participants often described their efforts to please their clinical physician faculty since these individuals were evaluating them and also might be influential sources of letters of recommendation in the future for their residency applications. A decision to challenge the medical establishment carried high risks. Student Doctor Chloe mentioned that a physician exhibited inappropriate behavior toward her and other female students. She chose not to make a formal complaint. Chloe made a tactical decision to fit in rather than resist. Instead, she warned other female classmates who also were assigned to this physician. She employed informal peer communications to warn other women students of this physicians' inappropriate behavior rather than openly challenge this physician or the hospital and risk negative consequences for herself and her future career.

As the participants indicated, the circumstances had to be egregious for them to assert themselves. Yet, two participants did finally speak up and challenged unacceptable gender dynamics that each had tolerated. Student Doctor Renee lodged a complaint of sexual harassment concerning a male physician preceptor that the institution subsequently investigated and upheld.

> Because I really didn't want other students to feel as uncomfortable as I felt while on rotation with this preceptor, I ended up turning him in. This preceptor added worries to my plate that no student should have to deal with.

> He was inappropriate and unprofessional. Although it was very scary for me to turn him in and get involved with that process, I felt like it was my responsibility to speak up so that at least female students aren't placed with this preceptor anymore. Now that the situation has been dealt with and it is over, I can look back and say I did the right thing. *(Renee)*

Also, another participant, Lynn, protested to her hospital operating room supervisor regarding the hostile and rude behaviors repeatedly directed at her by operating room nurses and technicians. Lynn received a prompt personal apology from the hospital chief executive.

> She (surgical technician) told me I needed to learn to do it myself. However, I have never to this day seen a male surgeon in the OR gown and glove himself. I have been cursed at and told I had no business being in the OR without a nametag. I was constantly monitored and watched under close supervision with the expectation that I would mess up or break sterile field. After discussion with male peers, it is evident this only happens to the female students. And the most unusual thing is…female nurses and techs were the ones being so hateful every time. They would rarely do it in front of my preceptor, but seemed to be only happy when they felt they had disturbed me enough to make me upset. I finally had enough and went directly to the OR supervisor and let her know what was going on. I demanded to be treated with respect and nothing less. If I messed up, I wanted to know and I wanted to follow protocol but I didn't deserve to be treated like that. She told me "maybe they thought you were a scrub tech student or sales representative, but

soon enough you will be able to put them in their place." This infuriated me. I did not want to "put them in their place." I responded, "Does it matter what they thought I was? Doesn't anyone, no matter who they are, deserve to be treated with respect? This behavior shouldn't be tolerated, especially when there are so many people who need and want jobs right now." Within an hour, the CEO had come to apologize to me.

Influence of Gender

In summary, the personal narratives of the study participants amply documented their gendered experiences, pleasant and unpleasant, as they worked with their clinical physician faculty to learn what was required of them to complete their clinical rotations so that they could graduate and realize their dreams of becoming osteopathic physicians. The five findings identified in this study all related to the myriad ways that gender influenced the personal and professional lives of these eleven women medical students. In many ways, it was also apparent that the study findings were not independent of each other. On the contrary, I believe the findings significantly intersected, influenced, and interacted with each other. Clearly, participants evidenced gendered identities and experiences that shaped their emerging professional identities as future physicians.

These women were intelligent and hard-working medical students, many from small communities, who emphatically voiced their commitment to family values. Further, their gendered experiences were not unlike the gendered experiences of other women medical students and physicians (Beagan, 2000; Bickel, 2000; Boulis & Jacobs, 2008; Risberg, 2004; Riska, 2000, 2008). As recounted in their personal narratives, these experiences, many of

them gendered, influenced how they were constructing their professional identity as future physicians. At this nascent time in their budding medical careers, they were focusing on selection of a residency program specialty for their future practice; an essential element of a physician's professional identity (Beagan, 2000; Conrad, 1988; Haas & Shaffir, 1991; Harrison, 1982; Harter & Krone, 2001). In so doing, they were seeking also to safeguard and promote realization of their personal gendered identities as women, which entailed being wives, mothers, and physicians.

Similarly to the women in medicine who had preceded them, these women medical students and residents chose to successfully fit in with the existing medical education program structure (Beagan, 2000; Harrison, 1982). From their personal narratives and from my conversations with participants, I am of the opinion that they did not feel disadvantaged by their medical education experiences. Even though the work was hard and required these women to put their lives on hold for several years for their medical education, they all were appreciative of their opportunity to become osteopathic physicians. At this point in time these women actively were forming their professional identities as future osteopathic physicians in their own unique ways. Carly summed up this experience as follows.

> Part of being successful however is different for any person you may talk to because everyone has a different idea of success. It has really become apparent to me how to pick my priorities and work toward achieving the kind of lifestyle I would like. Being able to have a well-balanced life between work and play, along with a job that I enjoy and time to spend with my family

to really create and foster good relationships is my own personal opinion of success. *(Carly)*

During my follow-up conversations with seven of the study participants, I asked them if there was anything about their medical education program or their future residency training that they would like to see changed. To my surprise, no suggestions were offered. Instead, these women felt they could handle the requirements of their medical education. Becoming a member of this prestigious profession and gaining acceptance from its members was a defining goal for participants. Clearly, these women were willing to play by the rules of the profession to attain this goal.

Pondering their silence at this point in time to my question regarding any need for change, I wonder how each would respond if I could ask these women this same question in ten or twenty years. The growing participation of women in medicine has many wondering whether a significant presence of women physicians will bring change to the profession of medicine, which to this date has remained remarkably resistant, unchanged, and dominated by masculine values and norms (Bickel, 2000; Bluestone, 1978; Boulis & Jacobs, 2008, Kilminster et al, 2006; Riska, 2008).

From a poststructuralist feminist stance, these women medical students were developing their professional identities as future physicians and, in so doing, were also constructing identities as gendered organizational performers (Acker, 2006). The eleven women medical students who participated in this study shared the common goal of becoming osteopathic physicians. They sought to learn how to become physicians and be accepted by the medical profession. They did what was asked of them by their medical school, clinical

facilities, residency programs, and other professional organizations that have roles in medical education. They followed the curriculum requirements of their medical school, the rules of the profession for applying to residency programs, and so forth in order to become osteopathic physicians and practice medicine. They were on track to realize their common goal of becoming physicians.

The concept of a gendered organizational performer posits that the individual seeks to either fit in or resist (Acker, 1990, 1993). It is not surprising that the experiences described by this study's women students in their personal narratives indicated that they were seeking to learn how to practice medicine and to develop professional identities so they could fit in and gain professional acceptance as future osteopathic physicians. Further, participant narratives did not reveal a compelling awareness that change was needed to improve their situations. These women were not focused on change to improve their circumstances. At this point in their nascent medical careers, participants were consumed with completing their educational requirements to graduate and earn their degrees, obtaining a residency program placement for postgraduate training, and becoming physicians.

Further, these women were knowingly and unknowingly benefitting from significant social changes that were brought about by the protests of feminist activists of the Women's Liberation Movement (Bickel, 2000; Bluestone, 1978; Boulis & Jacobs, 2008). While participants fretted about their fertility and ability to have healthy babies as they postponed childbirth during their medical education, they were benefitting from the achievement of early feminists who fought to make affordable and effective birth control methods, particularly the birth control pill, readily available to the general public. Generational

differences have been reported that suggest that younger physicians and medical students, both male and female, are seeking more balanced and enjoyable lives (Bickel, 2000; Boulis & Jacobs, 2008; Sanfey et al, 2006). Student Doctor Chloe offered the following observation concerning her generation's desire to attain a workable balance or blend of their medical career and family lives.

> (We must) prove we are just as hardworking and competent as our male counterparts---especially to the baby-boomer generation that believes women that take off time to have children aren't dedicated to our patients. I read several articles discussing the generational gaps among men and women. It's interesting to see that we are viewed as less devoted and lazy in the fact that we value our family and desire to want to spend time at home. *(Chloe)*

I would argue that the generational differences identified reflect comparative differences between an earlier generation that actively protested and fought for meaningful social change and a later generation that benefits from this change and now takes it for granted. The fact that women are now enrolled in medical school in comparable numbers to their male colleagues is an outcome of the Women's Liberation Movement that fought for women's ability to participate in roles outside of women's traditional domestic identities as wife, daughter, mother and to access higher education and professional careers that previously were not generally available to women (Boulis & Jacobs, 2008).

Viewed from a poststructuralist feminist stance, changes, such as higher education and career opportunities as well as commonly available contraception, that have become part of everyday life are now taken for granted and assumed to be normal rather than viewed as

creations attributed to the social activism of an earlier generation and era. Feminist protests of the Women's Liberation Movement disrupted the traditional structures of our society that encompassed family, education, health care, and career opportunities. These feminists challenged our society's traditional understandings of women's identities and roles. What was new and controversial then is now assumed to be normal and natural, particularly by those who are now benefitting from the outcomes of social change tenaciously wrought by the protests of "women libbers" (Weedon, 1987/1997).

With regard to this study's participants, this observed generational shift facilitates speculation that these women medical students chose to become future osteopathic physicians and were prepared to accommodate their professional career aspirations to their desired gendered personal identities and roles. In this study, the accommodation most commonly mentioned involved selection of a future career specialty as indicated by their pursuit of postgraduate residency program placement.

In contrast, poststructuralist feminists would conclude that these women engaged in their own repression. Even though these women medical students were aware that they were basing their residency choices on childbearing and family lifestyle considerations more so than their male classmates; participants, who did compromise their specialty choices to accommodate their gendered personal identities, did not protest their circumstances. Rather, these participants accepted this situation in order to move on and move forward. They did not resist.

In this regard, participants' lack of resistance is not surprising given their nascent roles as trainees within the medical profession. A key consideration is that gender relations

are always power relations (Harding, 1996). Strategies for addressing the improvement of women's situations must always deal with issues of power and power imbalances. Given their lack of power currency or capital, it was not surprising that third and fourth year medical students would be unlikely to adopt an organizational persona of resistance. The stakes for them were simply too high. Instead, given that the participation of women in medicine is steadily increasing, the profession of medicine and its leaders, educators, practitioners, policymakers, and researchers would be better positioned to address the circumstances of its medical students, residents, and physicians and initiate needed change to enable its physicians to more freely select choice of career specialty.

Conclusions and Implications for the Future

In conclusion, gender, knowingly and unknowingly, exerted a very strong influence on participants' emerging professional identities. Study participants were not merely medical students enrolled in a medical school to become osteopathic physicians. Rather, they were women becoming osteopathic physicians. Viewed from the critical perspective of poststructuralist feminism, study findings revealed that participants' gendered identities strongly influenced what they felt they could or could not do with regard to their future medical careers and developing professional identities. The personal narratives written by these women evidenced common themes concerning their efforts to blend their personal identities as women with their emerging professional identities as osteopathic physicians. The intersection of personal and professional identities was most evident in the participants' narrative accounts of their choice of specialty to pursue for postgraduate residency training, since residency training typically indicates physicians' future practice specialty (Boulis &

Jacobs, 2008; Drinkwater, Tully, & Dornan, 2008; and Serrano, 2007). With regard to this study, the dynamics influencing one's choice of residency training and future career specialty were particularly important to comprehend, since choice of specialty is an essential aspect of a physician's professional identity (Beagan, 2000; Conrad, 1988; Haas & Shaffir, 1991; Harrison, 1982; Harter & Krone, 2001).

The purpose of this study was to gain a better understanding of how the experiences and perceptions of third and fourth year women osteopathic medical students influenced their constructions of their emerging professional identities as physicians from the perspective of gender. This study revealed that participants wanted to have families one day and worried whether and when they would be able to do this given the lengthy training requirements of their chosen careers as physicians. Student Doctor Lana candidly concluded, "I wanted to have it all, a successful career, four children and an adoring husband who was also successful." These women medical students were willing to do whatever it took to attain their goals including compromise their selection of a practice specialty, postpone having children, delay forming romantic relationships, and tolerate unpleasant instances of gendered interactions.

Participants agreed that their male counterparts generally experienced medical school and development of their professional identities differently. These women believed that male medical students were freer to choose a specialty that they loved rather than one that would enable a balance of career and family.

Importantly, study findings support the stance that rather than being gender blind, the profession of medicine is blind to gender and how it affects its medical students and

physicians. We are so accustomed to gender's permeation of our lives and routine behaviors, that often we are oblivious to it. Importantly, these medical students did not learn about the impact of their gendered personal identities on their developing professional identities from the formal medical school curriculum, but rather from the informal and hidden curriculum they experienced during their third and fourth year clinical education, particularly from their interactions with their clinical physician mentors (Inui, 2003). The influential role of physician role models in shaping the professional identity and demeanor of medical trainees is well documented within medical education literature (Cohen et al, 2009; Suchman et al, 2004).

Furthermore, the findings from this study revealed that medical education is not genderless as we are led to believe (Risberg, 2004). On the contrary, our prevailing paradigm of medical education, which initially was created to teach unmarried, middle class, white male students, is blind to gender. The guise of a genderless physician also assumes homogeneity. It was initially hoped that the entrance of women in significant numbers into the allopathic and osteopathic medical professions would modify this viewpoint, but the longstanding medical education paradigm has been resilient to significant change (Bickel, 2000; Bluestone, 1978; Boulis & Jacobs, 2008).

The medical education establishment holds that its purpose is to train future physicians, which accounts in large part for the guise of a genderless medical curriculum (Risberg, 2004). The medical profession, osteopathic or allopathic, does not directly address or accommodate the gendered personal identities of its medical students and physicians (Bickel, 2000; Boulis & Jacobs, 2008), even though the steady rise of women entering

medicine is expected to continue (AAMC, 2012; AACOM, 2012). As a result, career-family balance issues, which are a more significant influence for women than for their male colleagues, are viewed by the medical profession as individual matters, since it is a matter of personal choice for women to become physicians and to have children and care for them (Bickel, 2000; Boulis & Jacobs, 2008). Accordingly, women in medicine are disadvantaged by this stance and particularly by the existing graduate medical education paradigm, which remains largely unchanged from when medical students and medical residents were primarily unmarried men (Becker et al, 1961).

In addition, this study's findings are consistent with current research and reports on medical education and women in medicine. The gendered choices faced by women medical students regarding selection of their specialty and the medical practice experiences of women physicians are widely discussed in medical education literature (Bickel, 2000; Boulis & Jacobs, 2008, Kilminster et al, 2006; Riska, 2008). Given the balancing act that women in the medical profession with families seek, there is a reported tendency within the profession to attribute their situations to their individual personal choices (Bickel, 2000; Boulis & Jacobs, 2008, Kilminster et al, 2006; Riska, 2008). In so doing, responsibility for the balancing act that faces medical professionals on a day-to-day basis rests with the individual and arises from her personal choices. The professional stance remains that the identity of a physician is genderless and anyone can become a physician (Risberg, 2004; Riska, 2008). However, statistics clearly show that the prevailing professional norms and culture hinder women physicians given that their distribution within the profession is not homogenous and in alignment with their numbers. Consequently, the medical profession continues to

evidence gender segregation that is both vertical and horizontal (Bickel, 2000; Boulis & Jacobs, 2008, Kilminster et al, 2006; Riska, 2008).

This study's findings corroborate those from a Swedish study of third term male and female medical students who were asked to write a short paper about their perspectives on the importance of gender in the role and career of physicians (Hamberg & Johansson, 2006). The authors reported that 62 percent of women participants and 22 percent of male participants held the belief that it was important and necessary to consider gender in the working life of physicians. Women medical students fretted about how being a woman in a male-dominated profession would affect them personally. Similarly to the women medical students in this study, Swedish women students wrote that their most common worry concerned their opportunities for having a family. Moreover, many of the Swedish male medical students were of the opinion that gender was a women's issue.

Importantly, we learned from this study that the professional physician identities that were being constructed by the study participants, who at the time were third and fourth year women students at the University of Pikeville - Kentucky College of Osteopathic Medicine (KYCOM), were undeniably influenced by their gendered personal identities and by social and educational gender dynamics. Participants' narratives revealed that when these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students. Study participants reported gender inequities that centered on blending the intersection of their personal and professional identities and from their experiences of gender dynamics from their medical education and social experiences that were consistent with findings described in the relevant literature on women

in medicine (Bickel, 2000; Boulis & Jacobs, 2008; Risberg, 2004; Riska, 2000, 2008). A summary of principal points learned follows.

- Participants revealed the issues and concerns that were important influences in their constructions of their emerging professional physician identities. Their narratives reported that their gendered personal identities and their perceptions of and reactions to various experiences of gender dynamics in their medical education were key influences.
- Participants' gendered personal identities and various forms of gender dynamics influenced the development of their professional identities as future physicians. This finding was most evident in participants' selection of a career specialty, which in some instances involved a compromise in their specialty choice, which is an essential component of a physician's professional identity.
- Participants relied on clinical physicians, particularly women physicians, as role models, mentors, and resources for how to become women physicians faced with blending their gendered personal identities with their evolving professional identities as future physicians. This finding confirmed the importance of having an adequate presence of women physicians on faculty within medical schools and at clinical education venues.
- Study findings confirmed reports in the relevant literature that women medical students were more likely than male students to compromise their choice of a specialty to attain a desired balance of career and family life.

- Further, study findings confirmed reports in the relevant literature that women medical students and physicians were more likely than their male counterparts to be subjected to negative experiences of various forms of gender dynamics that include gender discrimination, gender stereotypes, and sexual harassment.
- As found in the medical education literature, this study found that the prevailing training models and duty assignments and schedules for certain residency specialties are not as welcoming to women or as family friendly as other specialties.
- This study and related studies in medical education evidence that the paradigm of graduate medical education that predominantly offers hospital-based training, for which the original trainees were unmarried men, does not reflect the lifestyles of current residents; many of whom are married and many of whom are women having and caring for children.

To further elaborate, this study found that the influence of gender was most evident in the study's participants' selection of future residency options given that residency choice generally identifies a physician's future career and practice specialty and significantly shapes their emerging professional identity (Cohen et al, 2009; Drinkwater et al, 2008; Haas & Shaffir, 1991; Pratt et al, 2006; Riska, 2008; and Serrano, 2007). Accordingly, while women now have more opportunity to access and pursue medicine as a career, they can be constrained in their choices of a practice specialty and formation of professional identities by their gendered personal identities and by the more male-oriented educational program structures and rules of participation that all medical students and residents must

accommodate. Several women admitted that they would have selected a different specialty if they had been male. Specifically, specialties with residency programs that required long hours and frequent call assignments, such as surgery and obstetrics and gynecology, were fields that participants Chloe and Marielle did not choose because of family lifestyle concerns, even though these fields initially were their respective first choices.

Moreover, it was clear from participant narratives that these eleven medical students were not merely medical students becoming osteopathic physicians. Importantly, they were women shaping their professional identities as future physicians. This study sought to address the gap in the relevant literature regarding the influence of gender on the development of medical students' professional identities as physicians and to offer a medical student perspective on how they constructed their developing professional identities as future physicians (Boulis et al., 2001; Harter & Krone, 2001). This study found that gender, particularly gendered personal identities and gender dynamics, significantly influenced the construction of participant professional identities as future physicians. Moreover, this study offered a glimpse into how study participants formed their emerging professional physician identities. It is hoped that this study contributed to the growing body of knowledge that concerns the increasing presence of women in medicine and the future impact of women physicians on the gendered profession of medicine. Since this was a limited study, its findings may not be generalizable to all medical students and medical settings. Yet, the findings gain credibility from their corroboration from the extant literature.

The relevance of this study's findings is that the guise of a genderless medical education program is unmasked to reveal that the professional identity of physicians is not

genderless. The medical profession knowingly and unknowingly embodies a gender regime (Acker, 1990) that does not readily accommodate women physicians' family lifestyles and responsibilities within its existing educational program structure, which historically was oriented to the lives and availability of unmarried middle class, white men. Importantly, the longstanding paradigm of undergraduate and graduate medical education does not offer women medical students and women physicians the same educational and career opportunities as those experienced by their male counterparts (Bickel, 2000; Boulis & Jacobs, 2008; Risberg, 2004; Riska, 2000, 2008).

Further, Riska (2008) argues that the steadily increasing numbers of women becoming physicians is a workforce planning issue. She maintains that the profession of medicine has not yet benefitted from the full potential of its women physicians, simply because women are limited in what they can do within the male-oriented medical profession as evidenced by the persistent patterns of vertical and horizontal career segregation experienced by women physicians (Bickel, 2000; Boulis & Jacobs, 2008). The prevailing educational models of undergraduate and graduate medical education programs (Hahn, 2009) have resisted change and are generally the same as when the medical profession educated students who were overwhelmingly unmarried middle class, white males (Becker et al, 1961). Residency programs are traditionally hospital-based educational programs that are full-time with long work hours that include shift schedules for 24/7 patient care with weekend and night call schedules (Serrano, 2007). These schedules do not readily accommodate physicians who are married and those with children.

It follows that research is needed to explore alternative educational arrangements that can more fully accommodate the personal lives of all of the medical profession's physicians, male and female. Further, improvements are recommended for medical education to assist its students, especially women, understand the impact of gender on their medical education, on their future career options, and on their lives as women physicians.

Recommendations for Future Research

Research recommendation 1. The influence of gender on the development of physicians' professional identities by medical students and by physicians is understudied. Additional research is needed.

This study explored whether gender influences how eleven women osteopathic medical students at one osteopathic medical school were constructing their emerging professional identities as future physicians. If feasible, I believe it would be useful to study these participants again in five or ten years to ascertain if their perceptions have been confirmed or modified by their personal and professional experiences and whether their experiences have engendered new insights about the medical education continuum and the profession of medicine and whether structural change concerning how medicine is taught and practiced is indicated.

Also, more studies concerning the influence of gender on the construction of medical students' professional identities are needed. It would be useful to broaden the scope of this research to encompass male medical students and students at other osteopathic and allopathic medical schools and conduct comparative studies.

Research recommendation 2. Research studies are needed that explore alternative educational structures and policies that allow more flexibility in residency programs to accommodate women medical trainees' personal gendered identities as wives and mothers.

The entrance of women into the professions of osteopathic medicine and allopathic medicine is continuing at a sustained pace (AACOM, 2012; AAMC, 2012). Given that women in medicine generally are required to modify their personal life choices to accommodate the fairly rigid structure of medical school and postgraduate residency training, improved policies and structuring of residency educational programs to accommodate work-life balance issues should enhance women medical trainees' ability to select the specialties they love rather than compromise their choices to accommodate their domestic responsibilities.

Further, it is evident that the traditional structure of residency programs, which historically was hospital-based and principally served residents who were unmarried male physicians, has resisted significant change (Boulis & Jacobs, 2008; Serrano, 2007).

> The inflexible nature of residency training is not essential to the education of graduate-level student physicians. It is merely a byproduct of a system that evolved without significant planning efforts and without attention to the personal needs of student physicians. In fact, residents are often referred to as "house officers" because historically, they were expected to live in the hospital. Under such conditions, marriage was actively discouraged for the predominantly male population. In short, family concerns were not prioritized for either male or female residents. (Boulis & Jacobs, 2008, pp. 101-102)

The failure of medicine to restructure its medical education programs into more flexible educational models that are more conducive to life responsibilities of women and men limits the career potentials of its physicians, men and women, and potential benefits to the society it serves. Increasingly, studies find that both male and female physicians desire medical postgraduate training and career choices that facilitate more satisfying blends of their career and family life (Dorsey et al, 2005; Sanfey et al, 2006). Importantly, given the context of this study and its findings, limited career opportunities act to restrict the specialty choices made by medical students, particularly women, which shapes their professional identities as physicians.

Recommendations for Medical Education

Study participants found the choice of specialty for residency training or graduate medical education that follows graduation from medical school to be a stressful experience. When these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students. Their personal narratives compellingly revealed their desire to attain a specialty that would enable them the flexibility to achieve a work-life balance. The long hours and call schedules required by the residency programs of certain specialties as well as their gendered cultures discouraged many of these women students. Several participants admitted that they compromised their choices of specialty given considerations of the specialty's work demand on family life. Moreover, the medical literature confirms that the women medical students in this study were analogous to other women medical students who made similar choices concerning their residency program

placements (Boulis & Jacobs, 2008; Drinkwater et al, 2008; Hamberg & Johansson, 2006; Serrano, 2007).

In addition, participants acknowledged the significant role played by their clinical physician faculty or preceptors who served as important role models and mentors, which is confirmed by other researchers (Cohen et al, 2009; Inui, 2003). Mentors, particularly women physicians, served as significant resources to participants concerning how to balance career and professional responsibilities and how to be women physicians in the male-oriented profession of medicine.

> Medicine, both osteopathic and allopathic, is becoming more feminized as the number of women entering these fields continues to rise (AACOM, 2012; AAMC, 2012). It is common knowledge that women physicians more than their male colleagues will plan their careers with consideration of family responsibilities and lifestyle. (Boulis & Jacobs, 2008; Drinkwater et al, 2008; Serrano, 2007)

With women now constituting nearly half of the students admitted to medical school each year (AACOM, 2012; AAMC, 2012), several improvements would better serve women medical students and women physicians.

Education recommendation 1. Incorporate gender issues into the medical curriculum to better prepare male and female medical students to become physicians and to live their lives productively as physicians. In conjunction, medical schools also need to ensure that their administrators, faculty, and staff are not gender challenged.

Hamberg and Johansson (2006) describe the inclusion of a gender perspective as part of the mainstream medical school curriculum at Umeå University, where women students dominate medical school enrollments and women physicians nearly constitute the majority of Sweden's physicians. The reasons for inclusion of a gender perspective as part of its students' learning was done for many of the same reasons cited in this study's findings and throughout the medical literature. These reasons include gender differences in the educational experiences of women students that served to disadvantage them, specialty choices driven by gendered personal choices, gender stereotyping, and more. Inclusion of a gendered perspective in the Umeå University formal medical school curriculum has encountered resistance and criticism. Some men feel it is irrelevant to their circumstances and that instruction regarding gender issues benefits women more than men. Some male medical students concluded that gender was a women's issue.

> Most men (medical students) believed that nowadays gender questions are of no importance since equal opportunities for men and women have already been achieved. Thus it is up to the individual to take responsibility for the situation (Hamberg & Johansson, 2006, p. 638).

I expect the response within the U.S. would be similar. Despite this assumption, I believe medical schools can do a better job of preparing their students to become physicians with lives as spouses and parents. Presently, the focus is on imparting the skills and knowledge needed to practice medicine as a physician with little or no instruction on how to live as a physician.

Education recommendation 2. Hire an adequate number of women physician faculty to participate in the medical school curriculum to ensure availability as student mentors, instructors, and advisors.

Participants recognized and appreciated that physician mentors who they experienced during their third and fourth year clinical education assignments were potent and influential sources of learning, particularly women physicians. These physicians influenced their specialty career choices, taught them how to become physicians, and modeled different ways to attain a balance or blend of professional work responsibilities with domestic duties.

KYCOM is a medical school that is dominated by male faculty and administrators. During this study's data collection in 2011, KYCOM employed 17 full-time faculty who taught courses in years one and two of the medical curriculum (University of Pikeville, 2013). There were six senior medical schools administrators that included five men and one woman. Only four full-time faculty members were women. Additionally, only one full-time female physician taught clinical courses. Participants reported that they encountered more female physician faculty during years three and four at the hospitals and clinics they were assigned to for their clinical rotations, but the majority of their clinical physician faculty were males. In 2011, KYCOM's clinical rotations involved the participation of 922 clinical physicians as faculty preceptors, of whom 20 percent were female (University of Pikeville, 2013).

Education recommendation 3. In addition to having knowledgeable clinical mentors, medical students at KYCOM and at other medical schools, osteopathic and allopathic, should have well developed career advising programs that assist students, both

men and women, to select a specialty choice that is right for them. Faculty and staff who participate in career advising should also be trained in the relevant issues so they may serve as effective career resources to students.

Effective career advising programs must help students to understand the nature of the various specialties and to manage the impact of gendered issues that include career and family balance, gendered workforce climate issues, and professional burnout.

Summary

This study sought to address the gap in the relevant literature regarding the influence of gender on the development of medical students' professional identities as physicians and to offer a medical student perspective on how they constructed their developing professional identities as future physicians (Boulis et al., 2001; Harter & Krone, 2001). This study found that gender, particularly gendered personal identities and gender dynamics, significantly influenced the construction of participant professional identities as future physicians. Moreover, this study offered a glimpse into how study participants formed their emerging professional physician identities.

The women medical students who participated in this study linked their gendered identities as women with the professional identities they were actively shaping as future osteopathic physicians. Participants' narratives revealed that when these young women entered medical school, they did not anticipate the difficult real life decisions that they would face as women medical students. The influence of gender was most evident in the study participants' selection of future residency options as residency choice generally identifies a physician's future career and practice specialty (Drinkwater et al, 2008; Riska, 2008; and

Serrano, 2007). These women students sought residency programs in career specialties that fit their desired personal identities as wives and mothers. Several of the study participants admitted that they did not choose the specialties they loved for their residency programs due to significant concerns that the specialty's professional demands would not promote the family-friendly life style that they desired. These women acknowledged that their choices were less about their own professional interests and more about their current or future roles as wives and mothers. These young women factored in their desires for a family with their perceptions of the time demands, scheduling flexibility, and receptivity of different specialties. Further, these medical students revealed that their selections of career specialties were most influenced by the physician faculty, particularly women physicians, they worked with and observed during their third and fourth year clinical rotations.

The guise in the medical profession, osteopathic and allopathic, is that becoming a physician is neutral and genderless (Risberg, 2004). The medical profession knowingly and unknowingly embodies a gender regime (Acker, 1990) that does not readily accommodate women physicians' family lifestyles and responsibilities within its existing educational program structure, which historically was oriented to the lives and availability of unmarried middle class, white men. Accordingly, while women now have more opportunity to access and pursue medicine as a career, they are constrained in their choices of a practice specialty and formation of professional identities by the more male-oriented educational program structures and rules of participation that all medical students and residents must accommodate. As a result, it seems many women medical students and physicians

inadvertently engage in and accept organizational and professional norms that inherently disadvantage them in relation to their male colleagues.

My recommendations for additional research build on and hopefully expand and possibly challenge the findings of this study. My recommendations for future improvements in medical education are aimed at the changing demographics and increasing feminization of the medical profession. I believe more attention should be given to ensuring a balance of male and female faculty, especially physicians involved in clinical instruction, to teach and mentor male and female students, to better advise and prepare medical students for medical practice, and to improve student selection of specialties for their career choices. If the educational and practice needs of women physicians and medical trainees are more embraced and supported by the medical profession, women physicians may finally realize their full career potentials as physicians in the specialties that they love. In so doing, the profession of medicine may more fully benefit from the professional contributions of all of its physicians, male and female.

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APPENDICES

Appendix A. NCSU IRB Approval

Campus Box 7514
Raleigh, North Carolina 27695-7514

919.515.2444 (phone)
919.515.7721 (fax)

From: Deb Paxton, IRB Administrator
North Carolina State University
Institutional Review Board

Date: June 19, 2012

Title: An Exploration of Emerging Professional Identity in Women Osteopathic Medical Students

IRB#: 1534

Dear Linda Dunatov

The continuation request for the project listed above has been approved in accordance with policy under 45 CFR 46, and is approved for one year (**through June 19, 2013**). If your study lasts beyond that time, including data analysis, you must apply for continuing approval before the listed expiration date.

NOTE:

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects the Assurance Number is: FWA00003429.

2. Review de novo of this proposal is necessary if any significant alterations/additions are made.

If you have any questions please do not hesitate to contact the IRB office at 919.515.4514. Please provide your faculty sponsor with a copy of this letter, if applicable. Thank you.

Sincerely,

Deb Paxton
NC State IRB

Appendix B. Invitation to Year 4 Women Students to Participate in Research Study

To the Women Student Doctors of KYCOM (PCSOM) Class of 2011,

I believe many of you are aware that I am pursuing doctoral studies toward an Ed.D. degree from North Carolina State University. I am preparing to conduct a research study for my doctoral dissertation. My focus is exploring the medical school experiences of women osteopathic medical students at KYCOM (PCSOM), which to date have not been studied at any osteopathic medical school. Accordingly, I am inviting your participation in my research in your roles as women who are fourth year medical students scheduled to graduate from University of Pikeville – Kentucky College of Osteopathic Medicine (PCSOM) next May as members of the Class of 2011.

I would like to clarify that participation is strictly voluntary. Whether or not you choose to participate in my study has no bearing or impact on your student status at KYCOM (PCSOM). In fact, students who do choose to participate can be assured of several things. First, your identity will only be known to me. Your identity will be protected through the use of pseudonyms that I will create for each of my participants. No one at KYCOM (PCSOM) or anyone who is affiliated with KYCOM (PCSOM) will know of your participation, including other participants. Second, the responses that you would provide me will be kept confidential. My study will report findings based on aggregate responses. Additionally, any excerpts used in my dissertation report from individual responses will be carefully shielded to avoid identifying my participants. Third, participants can remove themselves at any time from this study.

You do not have to be in Pikeville to participate in this study. I will ask participants to write about their medical school experiences at KYCOM (PCSOM). I do not expect formal writing as would be required in an academic paper. Rather, I am looking for a more personal style of writing that would be similar to writing in a journal. I believe this would involve several hours of your time. You will have approximately four weeks to complete and submit your writing to me. There have only been a few studies conducted concerning the medical school experiences of women medical students and none to date concerning women training to be D.O.s. If you are willing, I would very much appreciate your voluntary cooperation.

I have received approval from my doctoral committee and from the Institutional Review Board at North Carolina State University to commence my research. KYCOM (PCSOM) through our dean, Dr. Boyd R. Buser, also has approved this study of its medical students. If you should choose to participate in my doctoral study, please let me know by email as soon as possible. I will provide study participants more information and direction once you contact me. As with any formal study, each participant will be asked to review and complete an informed consent form. I will review this form with each participant individually. Please let me know as soon as possible whether you are interested in becoming one of my study participants. My goal is to collect my study data (your written narratives) as soon as possible.

I look forward to hearing from you. Please contact me if you have any questions by email, ldunatov@pc.edu or dunatovlinda@gmail.com. Thank you very much!

Sincerely,

Linda J. Dunatov
Ed.D. Candidate
North Carolina State University

Appendix C. Invitation to Year 3 Women Students to Participate in Research Study

To the Women Student Doctors of KYCOM (PCSOM) Class of 2012,

How are you? I believe many of you are aware that I am pursuing doctoral studies toward an Ed.D. degree from North Carolina State University. I am conducting a research study for my doctoral dissertation. My focus is exploring the medical school experiences of women osteopathic medical students at KYCOM (PCSOM). To date, there have been only a few similar studies conducted at any osteopathic medical school. More information about the experiences of women medical students is needed to benefit osteopathic medical education and the profession of osteopathic medicine. Accordingly, I am inviting your participation in my research in your roles as women who are nearing completion of your third year as medical students at University of Pikeville – Kentucky College of Osteopathic Medicine (KYCOM/PCSOM).

I would like to clarify that participation is strictly voluntary. Whether or not you choose to participate in my study has no bearing or impact on your student status at KYCOM (PCSOM). In fact, students who do choose to participate can be assured of several things. First, your identity will only be known to me. Your identity will be protected through the use of pseudonyms that I will create for each of my participants. No one at KYCOM (PCSOM) or anyone who is affiliated with PCSOM will know of your participation, including other participants. Second, the responses that you would provide me will be kept confidential. My study will report findings based on aggregate responses. Additionally, any excerpts that I might use in my dissertation report from individual responses will be carefully shielded to avoid identifying my participants. Third, participants can remove themselves at any time from this study.

You do not have to be in Pikeville to participate in this study. I will ask participants to write about their medical school experiences at KYCOM (PCSOM). I do not expect formal writing as would be required in an academic paper. Rather, I am looking for a more personal style of writing that would be similar to writing in a journal. I believe this would involve several hours of your time. You will have approximately four weeks to complete and submit your writing to me. If you are willing, I would very much appreciate your voluntary cooperation.

I have received approval from my doctoral committee and from the Institutional Review Board at North Carolina State University to commence my research. KYCOM (PCSOM) through our dean, Dr. Boyd R. Buser, also has approved this study of its medical students. If you should choose to participate in my doctoral study, please let me know by email or phone as soon as possible. I will provide study participants more information and direction once you contact me. As with any formal study, each participant will be asked to review and complete an informed consent form. I will review this form with each participant individually. Please let me know as soon as possible whether you are interested in becoming one of my study participants. My goal is to collect my study data (your written narratives) as soon as possible.

I look forward to hearing from you. I would be happy to offer you more information about my study. I really need your participation. Please contact me by email, ldunatov@pc.edu or dunatovlinda@gmail.com. **Thank you very much!**

Sincerely,

Linda J. Dunatov
Ed.D. Candidate
North Carolina State University

Appendix D. NCSU INFORMED CONSENT FORM FOR RESEARCH (Yr 4)

This consent form is valid August 23, 2010 through August 23, 2011

Title of Study: An Exploration of Emerging Professional Identity in Women Osteopathic Medical Students

Principal Investigator: Linda J. Dunatov Faculty Sponsor: Dr. Susan J. Bracken

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What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is strictly voluntary. You have the right to be a part of this study, to choose not to participate, or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?

The purpose of my dissertation research is to gain a better understanding of how women osteopathic medical students construct their professional identities as physicians. With respect to osteopathic medical education, there is a paucity of research on medical student socialization and professional identity construction. Not enough is known about how osteopathic medical students, particularly women, go about constructing their professional identities as osteopathic physicians.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to complete a narrative letter about your experiences as a woman osteopathic medical student

Please refer to the attached overview and description of this activity for study participants.

a. You will have four weeks to complete this narrative letter. While you may take a few days to reflect on your educational experiences at KYCOM (PCSOM), I estimate it will take you about 4 – 8 hours to write this letter.
b. You can complete this task at your current location. You do not need to come to Pikeville to participate in this study.
c. As I begin my analysis of participant narratives, it is possible that I may wish to communicate with you to clarify portions of your letter. If this is the case, I will contact you by phone or email.

Risks

This study should not subject its participants to any risks. The guiding questions for your narrative letter ask about difficulties encountered during your schooling. You may be uncomfortable sharing negative experiences. You are free to include only information that you are comfortable disclosing in your letter.

Benefits

The focus of this research is exploring how the experiences of women as osteopathic medical students shape their emerging professional identities as physicians. The professional socialization of women medical students, particularly in osteopathic medical education, is understudied. Further, a summary of my study's aggregated findings will be provided to the Dean to increase the School's understanding of the medical education socialization experiences of its women students. In so doing, it is hoped that the results of this research may benefit the educational program and experiences of all KYCOM (PCSOM) students, and possibly medical students at other osteopathic medical schools, and the profession of osteopathic medicine.

Confidentiality
The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in a private location that is not part of KYCOM (PCSOM). No reference will be made in oral or written reports that could link you or other participants to the study. Respondent identities will be stripped from their documents to protect their privacy and a pseudonym will be assigned for use in this study. However, if this study's data collection should discover experiences that may be criminal acts or that threaten the safety or well-being of any participants, it may be necessary to report this behavior to relevant authorities in a manner that does not expose the study's participant letters.

Compensation
You will not receive any compensation for participating in this study.

Participation
Participation in this study, or lack thereof, will not affect your academic standing, grades, or future letters of recommendation at KYCOM (PCSOM).

Questions
If you have questions at any time about this study or the procedures, please contact Linda Dunatov at dunatovlinda@gmail.com.

What if you have questions about your rights as a research participant?
If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919-515-4514).

Consent To Participate
"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled."

Subject's signature_____ **Date** _____

Investigator's signature_____ **Date** ___1-7-2011_____

Women Medical Students Constructing their Emerging Professional Identities as Future Osteopathic Physicians

Overview. As women osteopathic medical students at KYCOM (PCSOM), you are learning to become doctors of osteopathic medicine (D.O.). You have learned foundational knowledge in the basic and clinical sciences, technical skills that include how to interact with patients, how to use diagnostic instruments and osteopathic medical manipulation protocols, and how to use these in the care of patients. You also have trained in various specialties of osteopathic medicine and with different faculty at KYCOM (PCSOM) and its regional clinical education sites. As women student doctors who are nearing graduation, you will soon become doctors of osteopathic medicine and enter postgraduate training in a specialty that you are in the process of determining.

I would like to learn more about how you as a woman are shaping your emerging professional identity as a future osteopathic physician. The activity that follows is intended to elicit your personal reflections on your experiences of your KYCOM (PCSOM) medical education. While you are encouraged to complete this activity in a manner that is meaningful to you, some questions that can guide your reflective process follow.

- What has it been like for you as a woman to be a medical student learning to become a D.O.?
    - As a woman, have you experienced any advantages or disadvantages in your quest to become a D.O.?
    - What experiences have proved troublesome to you? What experiences have been particularly inspiring?
    - Have you encountered difficulties with faculty, classmates, staff, or patients?
- What are the stated or implicit rules or expectations placed on yourself and other medical students and how do these affect you?
- Do you have an image of an ideal physician that serves as the model for your emerging professional identity as an osteopathic physician? Why is this model of professional identity meaningful to you?

Activity

As you complete the final year of your osteopathic medical education, please reflect on what has been the most meaningful to you and to your developing professional identity as a female osteopathic physician. Please write a letter (at least 5-10 single-spaced pages) to a fictitious incoming woman student in which you share your experiences, stories, and reflections as well as offer suggestions and advice to guide this novice female student on her journey through medical school to become a D.O.

Appendix E. NCSU INFORMED CONSENT FORM FOR RESEARCH (Yr 3)

This consent form is valid August 23, 2010 through August 23, 2011

Title of Study: An Exploration of Emerging Professional Identity in Women Osteopathic Medical Students

Principal Investigator: Linda J. Dunatov Faculty Sponsor (if applicable): Dr. Susan J. Bracken

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What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is strictly voluntary. You have the right to be a part of this study, to choose not to participate, or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?

The purpose of my dissertation research is to gain a better understanding of how women osteopathic medical students construct their professional identities as physicians. With respect to osteopathic medical education, there is a paucity of research on medical student socialization and professional identity construction. Not enough is known about how osteopathic medical students, particularly women, go about constructing their professional identities as osteopathic physicians.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to complete a narrative letter about your experiences as a woman osteopathic medical student

Please refer to the attached overview and description of this activity for study participants.

d. You will have four weeks to complete this narrative letter. While you may take a few days to reflect on your educational experiences at KYCOM (PCSOM), I estimate it will take you about 4 – 8 hours to write this letter.
e. You can complete this task at your current location. You do not need to come to Pikeville to participate in this study.
f. As I begin my analysis of participant narratives, it is possible that I may wish to communicate with you to clarify portions of your letter. If this is the case, I will contact you by phone or email.

Risks

This study should not subject its participants to any risks. The guiding questions for your narrative letter ask about difficulties encountered during your schooling. You may be uncomfortable sharing negative experiences. You are free to include only information that you are comfortable disclosing in your letter.

Benefits

The focus of this research is exploring how the experiences of women as osteopathic medical students shape their emerging professional identities as physicians. The professional socialization of women medical students, particularly in osteopathic medical education, is understudied. Further, a summary of my study's aggregated findings will be provided to the Dean to increase the School's understanding of the medical education socialization experiences of its women students. In so doing, it is hoped that the results of this research may benefit the educational program and experiences of all KYCOM (PCSOM) students, and possibly medical students at other osteopathic medical schools, and the profession of osteopathic medicine.

Confidentiality
The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in a private location that is not part of KYCOM (PCSOM). No reference will be made in oral or written reports that could link you or other participants to the study. Respondent identities will be stripped from their documents to protect their privacy and a pseudonym will be assigned for use in this study. However, if this study's data collection should discover experiences that may be criminal acts or that threaten the safety or well-being of any participants, it may be necessary to report this behavior to relevant authorities in a manner that does not expose the study's participant letters.

Compensation
You will not receive any compensation for participating in this study.

Participation
Participation in this study, or lack thereof, will not affect your academic standing, grades, or future letters of recommendation at KYCOM (PCSOM).

Questions
If you have questions at any time about this study or the procedures, please contact Linda Dunatov at dunatovlinda@gmail.com.

What if you have questions about your rights as a research participant?
If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919-515-4514).

Consent To Participate
"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled."

Subject's signature_____ **Date** _____

Investigator's signature_____ **Date** ___**2-20-2011**_____

Women Medical Students Constructing their Emerging Professional Identities as Future Osteopathic Physicians

Overview. As women osteopathic medical students at KYCOM (PCSOM), you are learning to become doctors of osteopathic medicine (D.O.). You have learned foundational knowledge in the basic and clinical sciences, technical skills that include how to interact with patients, how to use diagnostic instruments and osteopathic medical manipulation protocols, and how to use these in the care of patients. You also have trained in various specialties of osteopathic medicine and with different faculty at KYCOM (PCSOM) and its regional clinical education sites.

I would like to learn more about how you as a woman are shaping your emerging professional identity as a future osteopathic physician. The activity that follows is intended to elicit your personal reflections on your experiences of your KYCOM (PCSOM) medical education. While you are encouraged to complete this activity in a manner that is meaningful to you, some questions that can guide your reflective process follow.

- What has it been like for you as a woman to be a medical student learning to become a D.O.?
    - As a woman, have you experienced any advantages or disadvantages in your quest to become a D.O.?
    - What experiences have proved troublesome to you? What experiences have been particularly inspiring?
    - Have you encountered difficulties with faculty, classmates, staff, or patients?
- What are the stated or implicit rules or expectations placed on yourself and other medical students and how do these affect you?
- Do you have an image of an ideal physician that serves as the model for your emerging professional identity as an osteopathic physician? Why is this model of professional identity meaningful to you?

Activity

As you complete your third year of your osteopathic medical education, please reflect on what has been the most meaningful to you and to your developing professional identity as a female osteopathic physician. Please write a letter (at least 5-10 single-spaced pages) to a fictitious incoming woman student in which you share your experiences, stories, and reflections as well as offer suggestions and advice to guide this novice female student on her journey through medical school to become a D.O.

Appendix F. Participant Demographics

Participant Demographics												
	Year		Age	Hometown				Marital Status		Parent		Residency Specialty
Participant	3	4	24-29	KY	Appalachia	Rural	Med Underserved	Single	Married	Y	N	
Adele		X	X	X		X	X		X		X	Psychiatry
Chloe		X	X	X				X			X	Pediatrics
Lynn		X	X			X	X		X		X	Family Medicine
Vicki		X	X	X	X	X	X	X			X	Family Practice
Carly	X		X					X			X	Pediatrics
Lana	X		X			X	X		X		X	Family Practice
Michelle	X		X						X		X	Surgery
Marielle	X		X	X	X	X	X	X			X	Family Medicine
Renee	X		X	X				X			X	Pediatrics
Tori	X		X	X	X	X	X	X			X	Ob/Gyn
Eva	X		X					X			X	Internal Medicine
TOTALS	7	4	11	6	3	6	6	7	4		11	