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# Identity Theory and Women's Choice of Medical Specialty

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IDENTITY THEORY AND WOMEN'S CHOICE OF MEDICAL SPECIALTY

BY

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IDENTITY THEORY AND WOMEN'S CHOICE OF MEDICAL SPECIALTY

This dissertation is approved as a credible and independent investigation by a candidate for the Doctor of Philosophy degree and is acceptable for meeting the dissertation requirements for this degree. Acceptance of this dissertation does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

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In memory of my father, Dr. Leon Engelbart, Ed.D, who paved the wave for lifelong learning. Not only did he instill in me the value of education, but also the appreciation for the little things in life that make a difference.

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To begin, I would like to thank the amazing physicians who participated in this study. These twenty women dedicated part of their day to meet with me and share the story of their journey in becoming the specialist they are today. I hope their voices may be beneficial to other women interested in medicine and choosing a specialty. I would also like to thank other important people that have encouraged me and helped me in my dissertation and in my path as a lifelong learner.

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ABSTRACT

IDENTIY THEORY AND WOMEN'S CHOICE OF MEDICAL SPECIALTY

KELLI A. ROLFSMEYER

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The purpose of this study was to answer the research question: Does a self

theory of social action account for female physicians' perceptions of past choice of

specialty? Perceptions of self changed as she prepared herself to become a physician.

During her medical training, a medical student gains a better sense of who she is as a

person who will become a doctor. The ability to act back on one's self, called self-

reflexivity, is the mechanism involved in the transitions of a physician's biographical self.

The data for this study was collected through interviews centered on questions

chosen from the literature review on specialty choice. Twenty female physicians were

interviewed from ten different specialties over a five-month period. All twenty

physicians were residents, practicing physicians, or retired physicians.

A social action theory, influenced by structural symbolic interactionism, was

developed to explain the physician's perceived influence on specialty choice. The choice

of specialty is a role performance which relies on the female medical student's desire for

confirmation of her self-related motives. These self-related motives were formed during

her relations with others, which were then played out within certain societal and

structural conditions.

Based on the findings, the theory of social action was able to account for female

physicians' perceived influences of self on role performances as the verification of role,

social and personal identities were legitimized by three types of motives: self-worth;

self-efficacy, and self-authenticity. Although the theory did not predict more than one

identity would occur at a time, this study contributed to the findings that all three types

of identities can operate in one time frame and be confirmed by one or more motives.

This study was not able to account for aligning actions as found in the theory of

social action and only one account of reflected appraisal was observed. In addition to

the theory of social action, new codes described identities with no motives and

described "cooling out the mark" from the theory of dramaturgy.

**Chapter One**

**Introduction**

Being married to a physician and raising daughters interested in medicine

sparked my enthusiasm for this dissertation. The experiences of waiting for my spouse

to arrive home because one more patient needed to be seen or the emotions he 'wore

upon his sleeves' when the day did not go as expected, left me questioning why

physicians choose what they do. I supported my husband through medical school,

residency, fellowship, and over 30 years of practice. It appears the caring and

commitment he has, his love of medicine, and, most importantly, his patients, still keeps

me wondering what drew him to the surgical field of medicine in the first place.

This love for medicine, no doubt, influenced my three daughters as they have all

pursued a career in the health/medical field. I have watched all three of them struggle

when applying for graduate school and eventually choosing their specialty area. My

physician daughter said she would never choose her father's specialty, but after going

through rotations, she chose a very similar one. I wonder if their sense of self influenced

their choices. This could be what Sheldon Stryker was thinking when he built his identity

theory on George Herbert Mead's claim that society shapes self and self shapes role

choices. Did the relationships my daughters had with their father shape their self-

concept? And did this self shape their choices?

**Research Question**

The research question asks: Does a self theory of social action account for female

physicians' perceptions of past choice of specialty? Inspired by my daughters, I

questioned the perceptions female physicians have about their choice of specialty.

What do women physicians say influenced their choice of specialty? Do they believe

their families influenced their choice? If so, what are these perceived influences? What

other influences do they perceive? And, what sociological theory can account for these

perceptions?

### Discussion of the Research Question

The choice of specialty occurs during medical school, usually at the end. The first

two years of medical school consists of preclinical years of taking didactic courses in

basic sciences and learning to interview and examine patients. The last two are clinical

years where the medical student rotates through clerkships in a teaching hospital.

During the fourth year of training each student selects a specialty she would like to

pursue; she then trains in it for at least three years.

These first four years of her medical training may very well be a liminal journey

that ends with a transformation of her self-concept; this journey certainly occurs within

the context of social relations.

In the study, *Boys in White*, Becker et al. ([1961] 2007) tracked the social

relations of medical students throughout their training. The researchers were

particularly interested in the medical school an organization and the processes that each

medical student employed when adapting behavior and self-images to the expectations

of others (Becker et al. [1961] 2007: 18-19).

Symbolic interactionists point to self-reflexivity as one such process. Self-

reflexivity is the process of treating the self as a social object and, then, acting back on

this self by altering one's self-images or behavior (Hewitt 2007). Self-reflexivity allows a

person to gain a better sense of who she will be as a future doctor. This is expected to

be the case when a medical student gains an understanding of her medical interests,

abilities, and contributions she can make to her profession and patients.

These transitions of medical students are critical stages in the development of

their biographical self (Hewitt 2007). Self-reflexivity allows each medical student to treat

herself as an object with a past, a present, and a future. In a sense, the choice of

specialty for each physician and the perceived influences on her choice result from

treating the self as an object in the present and self as an object that existed in the past

(a person in the present talking about the past).

Self-reflexivity and the biographical self relate to the self-concept. One's self-

concept is the meaning one has about herself as a social object. Manfred Kuhn

identified several of its dimensions (Schwirian 1964: 51).

- Pertinent group assignment in terms of status and roles (role-identities)
- Stated preferences (self-related motives)
- Beliefs (value identities)
- Aspirations (self-related motives)
- Self-attributes (self-images)
- Things that are mine
- Moral, ethical, and other self-evaluations (value identities)
- Self-feelings

Understanding how these aspects of self are related to social relations and role

choices are the main goals of self theories (Stryker and Burke 2000). This concern is

similar to Roscoe Hinkle's study of the main features of social action; the main features

of social action are (Hinkle 1963:706-705):

- "Men's social activities arise from their consciousnesses of themselves (as subjects) and of others and the external situations (as objects)."
- "As subjects, men act to achieve their (subjective) intentions, purposes, aims, ends, objectives, or goals."
- "They use appropriate means, techniques, procedures, methods, and instruments.'
- "Their courses of action are limited by unmodifiable conditions or circumstances."
- "Exercising will or judgment, they choose, assess, and evaluate what they will do, are doing, and have done."
- "Standards, rules, or moral principles are invoked in arriving at decisions."
- "Any study of social relationships requires the researcher to use subjective investigative techniques such as "verstehen," imaginative or sympathetic reconstruction, or vicarious experience."

Given the centrality of self-reflexivity, aspects of self, and the contexts of social action in understanding role choices, developing and testing a self theory will contribute to sociological understanding of female medical student's choice of specialty.

**Significance of Research**

This research makes a theoretical contribution to the field of sociology through an understanding of the self's role in social action as a physician navigates her choices of specialties. Further clarification of self may help in understanding this expected contribution.

Self-identities, images, and feeling are major components of one's self-concept. Indeed, Stryker (1968) describes the self as a collection of identities; each which can be invoked and experienced during interaction with others. These identities are the meanings one attributes to oneself as a social object and are associated with a particular social relation (Burke and Tully 1977). The physician's identity has three dimensions – person identity, role identity, and social identity – that can be confirmed when the

physician feels authentic, competent and worthy as a physician (Burke 2004). The person identity consists of self-meaning which is confirmed when the physician feels authentic. The role identity is self as a set of behavioral expectations; it is confirmed when the physician feels competent as a physician. The social identity is self as a social category (or member of a group), it is confirmed when the physician feels that she is a worthy member of her profession or some other social relation she has. This is particularly the case when she perceives she is making significant contributions to her profession and her patients.

Personal identities are constructed and presented through narratives of self and a person may choose what information about herself she wishes to include in her personal narratives (Vryan et al. 2003). Persons may selectively draw upon their personal history or biography and reconstruct their past to maintain their present identity. Through the personal narratives of the physicians in this study a theoretical contribution to a self theory of social action may be possible.

It is hoped that physicians' narratives also help to better understand practical matters. These are:

- Shortages of women physicians in certain specialties.
- Information medical educators can use to better assist future physicians' specialty decisions.

A review of the literature shows there are doctor shortages in pediatrics, general practice, and surgery (Creed et al. 2010). The number of medical students going into primary care residencies and the number of physicians going into family practice continues to decrease; their declining numbers reflect health staffing shortage and

unequal distribution of health personnel geographically (Puertas et al. 2013). In order to aid in the recruitment of doctors to the areas of shortages, it is vital to study the rationale for why doctors are entering certain specialties and not others. It is also important to understand why women are underrepresented in some fields of medicine. The significance of this research will help develop a greater understanding of what attracts female medical students to specific specialties experiencing shortages.

The second area of practical significance relates to the medical students' last two years of medical school when they rotate through clerkships and are collecting information about a future specialty. During this time they are "trying on possible selves" (Burack et al. 1997:540). The possible self is an aspect of the biographical self; as such, and medical students reflect on themselves as an object with a past, present, and the future. With these things in mind, they are searching for a 'personal fit'; self-authenticity, self-efficacy, and self-worth. Occupational counseling may help students identify their own values, interests, and priorities in these terms (Burack et al. 1997).

## Terms and Definitions

The terms and definitions relevant to this study are now defined.

*Controllable/Noncontrollable lifestyle* – Controllable lifestyle is used to define specialties that include the following characteristics: "personal time free of practice requirements for leisure, family, and avocational pursuits; and control of total weekly hours spent on professional responsibilities." (Dorsey et al. 2003: 1173). Noncontrollable lifestyle would be the opposite of these characteristics.

*Medical Resident* - a medical graduate engaged in specialized practice under supervision in a hospital (Stevenson and Lindberg 2010).

*Medical Fellow* - a physician who enters a training program in a medical specialty after completing residency, usually in a hospital or academic setting (Anon. 2015).

*Medical Attending*- a physician who, as a member of a hospital staff, admits and treats patients and may supervise or teach house staff, fellows, and students (Anon. 2015).

*Match Day* – Match Day is a day when medical students learn at which United States residency program they will train for the next three to seven years (National Resident Matching Program 2014).

*National Resident Matching Program (NRMP)* – "National Resident Matching Program is a private, not-for-profit corporation established in 1952 to optimize the rank-ordered choices of applicants and program directors. The NRMP is not an application processing service; rather, it provides an impartial venue for matching applicants' and programs' preferences for each other consistently" (National Resident Matching Program 2014:V).

*Possible Selves* - "Possible selves represent individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming" (Markus and Nurius 1986:954).

*Primary/Non-primary Care Specialties* – Primary care (PC) specialties are family medicine, pediatrics and internal medicine and all other specialties are considered non-primary care (NPC) (Burack et al. 1997).

**Organization of Dissertation**

One intention for this research is to identify the relevant literature pertaining to physician's choice of specialty. Another is to develop a self-theory of choice of specialty. Another is to develop a methodology that will be used to answer my research question and to report my findings. My last intentions for this research are to discuss the significance of my findings, the research shortcomings, and the direction for future research. The remaining chapters of this study are organized as follows:

*Chapter Two: Literature Review* includes an overview of the existing literature that helps identify factors associated with choice of specialty.

*Chapter Three: Theoretical Orientations* discusses the overarching perspective of social action and biographical self and how it is related to choice of specialty. This theoretical orientation will be used in the next chapter to develop a coding scheme.

*Chapter Four: Methodology* provides an overview of the qualitative methods used for the semi-structured interviews, sampling procedures, data collection, and coding scheme.

*Chapter Five: Findings* include presentation of demographic characteristics and the results of the coding scheme. New codes may be added that do not conform to the original coding scheme.

*Chapter Six: Discussion* summarizes the findings presented in chapter five, the findings in response to the research question, and also the limitations and suggestions for future research.

**Chapter Two**

**Literature Review**

**Introduction**

The research question introduced in the previous chapter asks: Does a self theory of social action account for female physician's perceptions of past choice of specialty? The reasons for studying this question are to make a theoretical contribution to the field of sociology by understanding the self's role in social action as it relates to a physician's perceptions of influences on her choice of specialty. The goals of this chapter are to review the literature on the factors associated with choice of specialization and to summarize it into a set of empirical generalizations.

**Integrative Review**

This integrative review is organized according to seven factors found in earlier research on the choice of specialization: family background; structural barriers; socialization; social resources; aspirations; ability; and occupational values. These seven factors will provide a foundation for the interview guide discussed in chapter four.

**Family Background**

Family background is associated with choice of specialization in a few ways. First, female doctors have reported that their parents did not influence their choice to go to medical school but provided social support and direction in selecting a specialization once they were in a medical program. Second, research has revealed that women in medical school come from high socioeconomic background. These findings are described in this section.

Family members provide support by helping their children gain confidence in coping with the challenges of academia and applying for medical school (Klink et al. 2008). Although parents are supportive, Drinkwater et al. (2008) found that parents did not place direct pressure on their children to study medicine but female doctors did credit their parents for their success (Drinkwater et al. 2008).

Although female doctors reported that their parents did not pressure them to attend medical school, they did report that they took their parents' advice when selecting a particular specialty (Ephgrave 2011; Erzurum et al. 2000); mothers were especially supportive (Klink et al. 2008). Ephgrave (2011) discovered medical students had been advised by parents to be aware of burn-out fields of medicine that are high-tech, low-touch fields where one does the same procedures over and over without learning patients' stories. Erzurum et al. (2000) learned that a fifth of students said family members discouraged them from pursuing a career in surgery; this discouragement coincides with the stereotype of surgeons having little time for family and outside activities.

Medical students' socioeconomic background is associated with the composition and attrition rates of students in medical schools. In 2008, less than ten percent of accepted medical students came from the two lowest quintiles of family income compared to more than 75 percent accepted from the upper two quintiles (Association of American Medical Colleges 2014). Along with the socioeconomic composition of medical school students, socioeconomic status also has shown to be associated with

attrition rates in medical school; students from lower socioeconomic backgrounds are more likely to withdraw (Association of American Medical Colleges 2010).

In addition to the composition of medical school and attrition rates, the socioeconomic background of medical students towards their choice of specialty is also associated. Gough and Ducker (1977) explained, although socioeconomic background does not affect clinical performance in medical school, students from working class families more often choose careers in general practice or family medicine. Later research of Cooker et al. (2004) also found medical students choosing family practice were more likely to come from lower income families; they found medical students choosing surgery and surgical subspecialties were more likely from upper income families (Cooker et al. 2004). Furthermore, the top fourth of medical students in terms of family income scored higher than those from the bottom-fourth on objective examinations in medical school and on Steps 1 and Steps 2 of United States Medical Licensing Examination (USMLE) (Cooker et al. 2004).

Parents were found to be role models (Martini et al. 1994). Having a physician parent is an indicator of high income expectations and the status of specialty choice, as there was a negative relationship between having a physician parent and choosing primary care (Henderson et al. 1996). Pinchot et al. (2008) described having an exposure to a surgeon in the family created an interest in pursuing a surgical career, but this interest was not maintained as both surgical progeny and non-surgical progeny matched in the surgical residencies at the same rate.

In summary, family background as indicated by social support, advice, socioeconomic status, and role modeling is associated with choice of specialty.

**Socialization**

Lepiece et al. (2015) describes "medical socialization as involving the internalization of implicit and explicit norms, particularly in a hospital setting" (p.1). When medical students are socialized, they are learning concepts and knowledge which intentionally or inadvertently may affect their attitudes and values towards their medical training.

Aspects of the socialization process which are identified as important include the effect of the faculty on students' attitudes and behavior, the identification of role models and how role-model learning may take place, and the effect of the school's learning climate on specialty choice (Levine et al. 1974). According to Korte et al. (2014), medical students begin to be socialized in their clerkship year of medical school beginning in their third year. It is in this clerkship year medical students learn to navigate their environment, learn to manage aspects of the practice, and manage the performance expectations of members (Korte et al. 2014).

To begin to understand how medical students are affected by school climate and learn new roles, Becker et al. ([1961] 2007) studied the student culture of medical school and considered the criteria by which medical students accessed the specialties they were considering. According to this study, Becker et al. "believe that students' choices of specialties are at this time for the most part make-believe, an experimental trying-on of roles about which they know very little" ([1961] 2007:402). They do not

have to commit to these choices and do not have to lose face when they change their

mind (Becker et al. [1961] 2007). Similar to "trying-on-roles," other research on

socialization described the pathway of medical students in choosing their specialty as a

process of "trying on possible selves" (Burack et al. 1997:540). In this process the social

meaning medical students give to priorities, options, and possible selves becomes

important.

In summary, socialization for medical students begins their third year of school

which is a time of "trying-on-roles" (Becker et al. [1961] 2007) or "trying on possible

selves" (Burack et al. 1997:540). Medical students are socialized from being novices into

future physicians and this training affects their choice of specialties (Long and Hadden

1985).

**Structural Barriers**

"The choices that agents make are always within the realm of structurally

provided possibilities and are, therefore, patterned and comprehensible" (Hays 1994:

64). Indeed, choices are "influenced by the depth and durability of the structural form in

question, by the level of power held by those making the choices, and the cultural milieu

in which the choices are made" (Hays 1994:64). In other words, social structures often

serve as social boundaries with consequences for life chances which allow some

individuals to enter networks of social relationships while keeping others out (Blau

1977). The areas of structural barriers are gender, debt, and future earnings.

*Gender*

Choice of specialty and gender are associated.

Most of the literature on gender has been focused on three concerns: women entering less prestigious specialties at higher rates than do men; gender bias and stereotypes in recruitment of women; and the disparity of pay between women and men. Women are less likely to enter the prestigious fields of surgery and anesthesiology, radiology, and pathology (Davis and Allison 2013), and disproportionately found in the less prestigious fields such as pediatrics, psychiatry, and obstetrics and gynecology (Hinze 1999, 2004).

In addition to women being underrepresented in prestigious fields, there is some evidence that gender stereotypes may have prevented them from entering some specialties. Hinze (1999) reported that male gatekeepers do not see restrictions preventing women from entering some specialties, such as surgery, but "having to be tough or macho" in order to compete in such fields of medicine may be a barrier. (p.233). Indeed, Gargiulo et al. (2006) found that women were more likely than men to be discouraged by images of surgery as 'macho' and an 'old boys club' (p.407). This may be a structural barrier.

Another concern found in the literature is the disproportionate number of women leaving certain specialties that they had originally chosen. For example, Gjerberg's (2002) research suggests, even though men and women aspire to surgery and internal medicine at the same rate, many women surgeons eventually changed to other specialties. One might argue this difference is due to women having stronger desires to

balance their profession as a surgeon with their family life. If this were true, they would not be choosing OBGYN, which has similar workloads and family obligations (Gjerberg 2002).

Lastly, there is a gender gap in earnings. In 2008, male physicians leaving residency in New York State made on average $16,819 more than women physicians working similar hours and in similar fields. Other research by Weeks et al. (2009) discovered after adjusting for work effort, physician characteristics, and practice characteristics, white female physicians' adjusted income is nine percent lower than males in family practice, 18 percent lower among pediatricians, and 19 percent lower among internists. The pay gap between male and female physicians in the United States has not changed in the last two decades (Seabury et al. 2013).

### *Future Earnings and Debt*

Although gender may account for the disparity in future earnings, the relationship between future earnings and specialty choice is unclear. Becker et al. ([1961] 2007) in the study on *Boys in White*, expected to find a relationship between expected future earnings and type of residency; however, this research discovered no such association. In contrast, Grayson et al. (2012) discovered medical students who first choose a primary care specialty and later switch to non-primary care specialties have a greater concern for future earnings.

The relationship between debt and specialty choice is also unclear. On the one hand, Phillips et al. (2014) found medical students who attended public medical school were more concerned with debt and their choice than those who attended private

schools. On the other, Rogers et al. (1990) found no relationship between medical school debt and career choice, but he did find one between future earnings and whether medical students chose primary or non-primary care.

In summary, as indicated by gender stereotypes, structural barriers may affect the physicians' choice of medical specialty. Women are confronted with barriers such as traditional gender roles (Drinkwater et al. 2008; Gjerberg 2002) and gender stereotypes (Hinze 1999; Gargiulo et al. 2006) may prevent them from pursuing or completing specialties, such as surgery. Women physicians, compared to men physicians, continue to have a gap in pay (Seabury et al. 2013). The influence of debt on specialty choice varies (Phillips et al. 2014; Rogers et al. 1990), but future earnings may be more influential (Grayson et al. 2012; Rogers et al. 1990; Dorsey et al. 2003).

**Social Resources**

In addition to family background and structural barriers, social resources are associated with specialty choice in a few ways. The literature describes the number of women faculty, the number of women residents, positive role models, and peer pressure as being associated with specialty choice.

Medical students' social resources are relationships they have with faculty, attendings, and residents; this social capital, when employed, can provide an advantage when choosing a specific medical specialty. Neumayer et al. (2002) determined women's choice of surgery as a career is strongly associated with a higher proportion of women on the surgical faculty. In addition it showed the proportion of female residents who are already in a residency program is important for female medical students when

selecting their specialty (Jagsi et al. 2014). Erzurum et al. (2000) reported that positive

role models are associated with both male and female medical students pursuing

surgical careers. Attendings and residents have been found to be associated with

medical students' career decisions by observing how these physicians handle the

demands of a clinical practice (Clinite et al. 2014). Attendings have also been beneficial

in encouraging pediatric residents to pursue a pediatric fellowship (Umoren and Frintner

2014). In addition to role models, attendings, and residents, associated with medical

students' choice of specialty, peer pressure may influence other medical students to

enter non-primary care specialties (Fincher et al. 1992).

In summary, social resources are associated with physicians' specialty choices.

The number of women on a surgical staff (Neumayer 2002),  the number of female

residents in a program (Jagsi et al. 2014), positive role models (Erzurum et al. 2000),

peers (Fincher et al. 1992), supervisors (Clinite et al. 2014), and mentors (Umoren and

Frintner 2014) have all been associated with the choice medical students make in

specialty decisions.

**Aspirations**

Aspirations are associated with specialty choice. The medical profession offers

many types of opportunities: to save lives; to take care of people; to achieve; to be

challenged in critical situations; and to participate in medical research (Vaglum et al.

1999).

Women's aspirations for choosing medicine may, in part, be related to a drive for

achievement, the desire to work with people, status, or trying to make a difference in

the lives of their patients. Kutner and Brogan (1990) observed women medical students have chosen medicine not only for a more satisfying experience, but also to obtain a higher sense of achievement than that associated with traditional female activities.

Altruistic/people-oriented motives for attending medical school are greater for women than men, but both men and women are equal as to status/oriented and natural science oriented reasons (Vaglum et al. 1999).

Drinkwater et al. discovered although most medical students' career aspirations are "to make a difference in people's lives" (2008:422) this is in conflict with a woman's role as a physician and as a parent and, as a result she is willing to sacrifice her professional aspirations to balance these roles.

According to Williams et al. (1997), medical students' interests in the types of problems in each specialty are the strongest motivator for career choice.

Fincher et al. (1992) observed when medical students considered their choice of specialty, meaningful physician-patient contact was cited as important. For example, Fielding et al. (2007) looked for factors which might dissuade female medical students from entering the field of radiology and found patient contact remained an important factor for both male and female medical students choosing a career.

In addition to the types of problems, longitudinal patient care, and patient contact, medical students may choose primary care if they have been exposed to a rural location as one of their clerkships and have been exposed to rotations with flexible working conditions (Puertas et al. 2013).

In summary, women's aspirations for studying medicine are to attain a higher

sense of achievement (Kutner and Brogan 1990) but professional aspirations may

change in order to balance physician and parent roles (Drinkwater et al. 2008). People-

oriented motives for attending medical school are greater for women than men (Vaglum

et al. 1999). In addition to their aspirations for medical school, medical students'

aspirations in choosing their specialty are based on the types of problems found in each

specialty (Williams et al. 1997) and physician contact (Fielding et al. 2007; Fincher et al.

1992).

**Ability**

Physicians' choice of specialty is associated with their ability. The ability tests

used today in the selection of medical students for residency programs are the United

States Medical Licensing Examination (USMLE) Step 1 and Step 2 tests. Even though

these tests are designed for licensure purposes with the intention of pass/fail, these

scores are often used to evaluate applicants' academic achievements and for selection

into residency programs. The following information was compiled from the US

Residency Match Program (National Resident Matching Program 2011).

The highest mean score for the USMLE Step 1 score, located in Table 2.1, is 244

in Dermatology and the lowest mean Step 1 score is 214 located in Psychiatry (National

Resident Matching Program 2011). Therefore, according to ability, the most difficult

specialty to obtain a residency position is Dermatology, and the least difficult in terms of

ability is Psychiatry.

**Table 2.1. National Resident Matching Program 2011**

| Specialty | Mean USMLE Step 1 | AOA Member | Positions Offered |
|---|---|---|---|
| Anesthesiology | 226 | 8.9% | 1,404 |
| Dermatology | 244 | 50.8% | 372 |
| Radiology | 240 | 26.4% | 1,124 |
| Family Medicine | 213 | 6.5% | 2,708 |
| General Surgery | 227 | 13.1% | 1,108 |
| Internal Medicine | 226 | 15.5% | 5,407 |
| OBGYN | 220 | 10.8% | 1,205 |
| Pediatrics | 227 | 11.6% | 2,601 |
| Psychiatry | 214 | 4.6% | 1,097 |

*Ophthalmology does not appear in this table as they have an earlier match than the other specialties.

Although many factors play a role in residency selection, USMLR Step 1 scores appear to have the most influence in residency selection. The USMLE Step 1 score is ranked number one as the most important for resident selection across all medical specialty program directors (McGaghie et al. 2011). Although there is a correlation between USMLE Step scores and match success, the way the scores are distributed indicates that program directors also use other criteria in finding the right fit for their medical residencies (Anon. 2014).

USMLE Step 1 scores may be associated with the type of specialty a physician chooses along with where the physician practices. Medical students who fail the USMLE Step 1 test on the first try are more likely to become primary care physicians than those who pass, are also more likely to report intent to practice in underserved areas, and are more likely to take five or more years to graduate (McDougle et al. 2013). Comparisons between surgery residents and their USMLE scores find students who had recently

become general surgery residents are not the strongest medical students (Callcut et al. 2003). However, students interested in surgical subspecialties are stronger than those interested in general surgery on three criteria: individual student performance on national standardized exams in surgery, graduating class rank and AOA status (Callcut et al. 2003).

In summary, ability is associated with the physicians' choices of specialty as measured by the USMLE step 1 scores. The USMLE step 1 scores found in the residency match from 2011 found dermatology had the highest mean scores and psychiatry the lowest mean score (National Resident Matching Program 2011). Medical students who fail this exam on the first try are more likely to become family practice physicians (McDougle et al. 2013) and medical students with higher USMLE step 1 scores are more interested in surgical subspecialties over general surgery (Callcut et al. 2003).

**Occupational Values**

The final topic is values. These are associated with occupational attainment as they play a role in the type of occupation one pursues (Kohn 1969) and the way one balances work and family demands (Perrewé and Hocharter 2001). Medical students are faced with the same challenges when selecting their choice of specialty as they are concerned with both the needs of society and their own legitimate needs and interest (Ephgrave 2011). Two common themes related to occupational values in choosing medical specialties are lifestyle and prestige.

*Lifestyle*

Recent specialty choices of graduating U.S. medical students indicate lifestyle is increasingly important in career decisions (Dorsey et al. 2003). The term controllable lifestyle (CL) is used to characterize students who tend to choose specialties which have fewer number of practice work hours per week, allow adequate time to pursue avocational activities, and require fewer nights on call (Schwartz et al. 1990). These are in contrast to traditional reasons for specialty choice such as compensation, prestige, and length of training (Dorsey et al. 2003). The specialties with CL are anesthesiology, dermatology, emergency medicine, neurology, ophthalmology, otolaryngology, pathology, psychiatry, and radiology (Schwartz et al. 1989). Non-controllable lifestyle (NCL) specialties are surgery, medicine, family practice, pediatrics, and obstetrics-gynecology.

Other research shows the importance of lifestyle in choosing or changing to other medical specialties (Clinite et al. 2014; Dodson 2005; Kutner and Brogran 1990). Medical students' rated job satisfaction and work-life balance as the most important specialty characteristics with money and prestige being less important (Clinite et al. 2014). Medical students leave surgical programs due to lifestyle issues (Dodson 2005), and students interested in OBGYN decided to pursue other specialties due to a concern for a "manageable life" (Kutner and Brogan 1990:113).

*Prestige*

In addition to lifestyle, prestige is associated with specialty choice. Davis and Moore (1945) report most members of society feel certain occupations deserve higher

status and payment because they contribute value to society, have longer periods of

education or training, and require performing more difficult skills. Medical specialties

appearing more prestigious emulate some of the same characteristics of high status as

found by Davis and Moore (1945). Medical specialties that are considered to be more

prestigious are intellectually more challenging and have higher training compared to less

prestigious specialties that are considered to have greater service value and lifestyle

characteristics (Rogers et al. 2012).

The prestige hierarchy of medical specialties has been described by Hinze (1999)

as a ladder between four and ten levels. Most residents in her study ranked surgeons as

the most prestigious (level 6), followed by internal medicine (level 5), lumping together

anesthesiologist, radiologists, pathologists, and others (level 4), followed by OBGYN

(level 3), pediatricians (level 2) with psychiatrists at the last rung (level 1) (Hinze 1999).

Ephgrave (2011) described how the ranking of prestigious specialties has

changed.

> The prestigious fields when I was a medical student in the '70s were internal
> medicine, general surgery, and orthopedics. Although orthopedics residency
> programs continue to be highly selective, internal medicine now ranks near the
> bottom in North America (p. 310).

In addition to the ranking of prestige, prestige may be more important to

students choosing non-primary care over primary care specialties as these students are

also more influenced by lifestyle, monetary rewards, and the opinions of other students

(Rogers et al. 1990). "Students' perceptions of the prestige of a specialty may in part be

a reflection of the competitiveness of the specialty" (Fincher et al. 1992:324).

In summary, the topic of values includes both lifestyle and prestige values. Recent specialty choice of graduating United States medical students indicates lifestyle is become increasingly important in their career decisions (Dorsey et al. 2003). CL is gaining popularity among medical students as the percentage of students entering CL specialties is increasing compared to those entering non-controllable lifestyle (NCL) specialties (Schwartz et al. 1989). Prestige is also added as a component of values as the prestige of medical specialties is changing (Ephgrave 2011), and medical students' perceptions of a prestigious specialty may in part be the result of the competitiveness of that specialty (Fincher et al. 1992).

## Empirical Generalizations

A summarization of the literature review is described below in a set of empirical generalizations.

### Family Background

1. Medical students do not believe that their parents influenced their decision to attend medical school (Drinkwater et al. 2008), but may have influenced their choice of specialty (Ephrave 2011; Erzurum et al. 2000).

2. The socioeconomic background of physicians' parents is associated with attending medical school, as 75% of physicians come from the upper two quintiles of family income (Association of American Medical Colleges 2014).

3. Physicians coming from working class families are more likely to choose careers in family medicine or primary care (Gough and Ducker 1977; Cooker et al. 2004).

4. A physician having a physician parent is more likely to choose a specialty in non-primary care (Henderson et al. 1996) and that parent is likely to be a role model (Martini et al. 1994).

**Socialization**

5. Medical students begin to be socialized in medicine their third year of medical school when they begin clerkships (Korte et al. 2014).

6. The third year of medical school is when students begin to try on roles (Becker et al. [1961] 2007) or a process of trying on possible selves (Burack et al 1997).

**Structural Barriers**

7. Women are less likely to be in prestigious specialties such as surgery, anesthesiology, radiology, and pathology (Davis and Allison 2013) and more likely to be in the less prestigious fields of pediatrics, psychiatry, and obstetrics and gynecology (Hinze 1999, 2004).

8. Gender stereotypes may prevent women from entering some specialties (Hinze 1999; Gargiulo et al. 2006).

9. Women enter surgery and internal medicine at the same rate as men but change to other specialties at a high rate (Gjerberg 2002).

10. Women physicians' income in pediatrics, family practice, and internal medicine is less than the incomes of their male counterparts (Seabury et al. 2013).

11. The future earnings of physicians are more important for medical students who choose primary care and later switch to non-primary care specialties (Grayson et al. 2012).

 **Social Resources**

12. A surgery specialty was more likely to be chosen by a woman if there were a higher proportion of women surgical attendings (Neumayer et al. 2002) and if there were positive role models (Erzurum et al. 2000).

13. The number of female residents in a specialty program is important for female medical students choosing that specialty (Jagsi et al. 2014).

**Aspirations**

14. Female medical students choose medicine for satisfying experiences and obtaining a higher sense of achievement (Kutner and Brogan 1990).

15. Women are willing to sacrifice their professional aspirations to meet their roles as physicians and parents (Vaglum et al. 1999).

16. Specialty choice is associated with the types of problems found in each area of medicine (Williams et al. 1997).

17. Patient contact is important for medical students who choose primary care specialties (Fincher et al. 1992) and the lack of females in radiology (Fielding et al. 2007).

**Ability**

18. The USMLE Step 1 score is ranked number one as the most important factor for residency selection (McGaghie et al. 2011).

19. In the 2011 National Residency Match Program, the highest mean Step 1 score was in Dermatology and the lowest mean Step 1 score was in Psychiatry (National Residency Matching Program 2011).

20.  Medical students interested in surgical fields subspecialties score higher in national standardized surgery exams, graduating class rank, and AOA status than students interested in general surgery (Callcut et al. 2003).

**Occupational Values**

21. Lifestyle is important in the selection of specialties (Dorsey et al. 2003; Schwartz et al. 1989; Clinite et al. 2014; Dodson 2005).

22. More prestigious medical specialties are intellectually more challenging, have more years of training compared to less prestigious specialties, and have greater service value and lifestyle characteristics (Rogers et al. 2012).

23. In North America, the ranking of prestigious specialties has changed since 1970 with specialties such as internal medicine now ranking near the bottom (Ephgrave 2011).

24. Medical Students may see more competitive specialties as prestigious (Fincher et al. 1992).

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**Summary**

</div>

Family background is associated with choice of specialization. Female doctors have reported that their parents did not influence their choice to go to medical school but provided social support and direction in selecting a specialization once they were in a medical program. Research has also revealed women in medical school come from

higher socioeconomic background, but this is not associated with academic performance.

In addition to family background, structural barriers may affect the physicians' choice of medical specialty. Women are confronted with barriers such as traditional gender roles, gender stereotypes, and a known gap in pay. Physicians may also receive feedback that contributes to their choice of specialty.

Socialization is the second factor described in the review of the literature as being associated with specialty choice. Aspects of the socialization process which are identified as important include the effect of the faculty on students' attitudes and behavior, the identification of role models and how role-model learning may take place, and the effect of the school's learning climate on specialty choice.

Social resources in the form of social capital and on-going social relations, the third factor, are also associated with specialty choice. The literature describes the number of women faculty, the number of women residents, positive role models, and peer pressure as being associated with choices. The literature also describes aspirations as being associated with specialty choice. The medical profession offers many types of opportunities: to save lives; to take care of people; to be challenged in critical situations; to work for public health; and to perform research. Because of numerous opportunities, medical students' aspirations vary as to the reasons they choose medicine and their choice of specialty.

Physicians' choices of specialties are associated with their abilities. The ability tests used today in the selection of medical students for residency programs are the

United States Medical Licensing Examination (USMLE) Step 1 and Step 2 tests. Even though these tests are designed for licensure purposes with the intention of pass/fail, these scores are often used to evaluate applicants' academic achievements and for selection into residency programs.

Lastly, the topic of values includes both lifestyle and prestige values, which are associated with specialty choice. Recent specialty choice of graduating United States medical students indicates lifestyle is become increasingly important in their career decisions (Dorsey et al. 2003). Prestige is also added as a component of values as the prestige of medical specialties is changing, and medical students' perceptions of a prestigious specialty may, in part, be the result of the competitiveness of that specialty.

**Chapter Three**

**Theoretical Orientation**

**Introduction**

The purpose of this study is to answer this research question: Does a self theory of social action account for female physicians' perceptions of past choices of specialty? Before an answer to this question could be developed, it was first necessary to discover what factors are associated with female physicians' choice of specialty. These factors were summarized in Chapter Two. The literature review discovered various family background and structural factors, gender stereotypes, doing something interesting, having a certain lifestyle once on the job, and the ability to balance work and family issues to be important factors associated with the choice of specialty.

In the introductory chapter, it was argued a self theory of social action may account for these empirical generalizations.

In this chapter a self theory of physicians' choice of specialty is developed. It is an integration of propositions drawn from structural symbolic interactionism and social action theory.

A modified version of Roscoe Hinkle's (1963:706-707) description of the main features of social action will be used as the overarching propositions. These seven main features are:

- "Men's social activities arise from their consciousnesses of themselves (as subjects) and of other others and the external situation (as objects)."
- "As subjects, men act to achieve their (subjective) intentions, purposes, aims, ends, objectives, or goals."

- "They use appropriate means, techniques, procedures, methods, and instruments."
- "Their courses of action are limited by unmodifiable conditions or circumstances."
- "Exercising will or judgment, they choose, assess, and evaluate what they will do, are doing, and have done."
- "Standards, rules, or moral principles are invoked in arriving at decisions."
- "Any study of social relationships requires the researcher to use subjective investigative techniques such as "verstehen," imaginative or sympathetic reconstruction, or vicarious experience."

Structural symbolic interactionist ideas are used to make these propositions even more interactionist than Hinkle described them to be. Hinkle (1963) argued that these features of social action already existed in sociology and can hardly be considered new as they existed in the earlier works of Thomas, Mead, Park, Faris, Ward, Ross, Giddings, Small and Cooley.

This self theory of physicians' choice of specialty will be presented in three sections. The first section will present the main propositions of structural symbolic interactionism. The second part will be a revision of Hinkle's description of social action. It will include revised propositions as they relate to choice of specialty. The third part will be a list of the theoretical propositions that make up this self theory of female physician's choice of specialty.

## Structural Symbolic Interactionism

**Introduction**

Structural symbolic interactionism deals with the connections among these relationships: (1) social structure with self-identities, images, feelings, and motives; (2) self identities, images, feelings, and motives with role choices; (3) role choice connections to the kinds and quality of relations with others; and (4) their aligning

actions and reflected appraisals as these behaviors relate to social structure and aspects

of their self-concept. This basic contention is depicted in a structural symbolic

interactionist way in Figure 3.1.

Figure 3.1.     A Structural Symbolic Interactionist Perspective on the Relationships
among Society, Self, and Role Choices
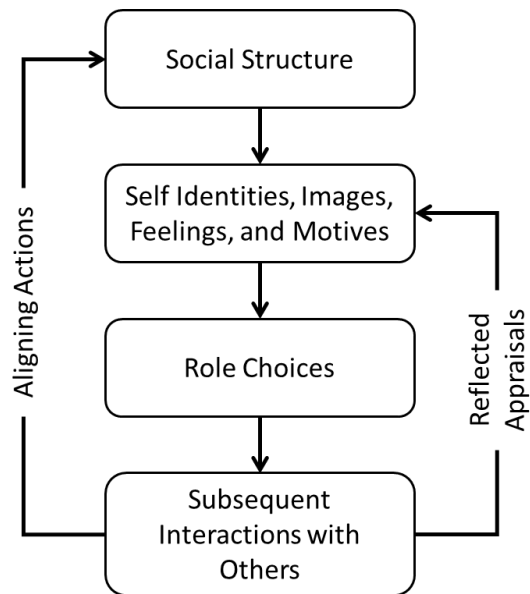


The interpretation of these four parts of symbolic interactionism theory will now be

described.

**Social Structure with Self-identities, Images, Feelings, and Motives**

Social structure is the complex ties among people occupying different social

positions in society (Stryker 2008). It is with people in her social network that the

medical student develops a self-concept and its component parts: self-identities; self-

images tied to these identities; self-feelings tied to these images; and self-related

motives tied to these identities, images, and motives (Stryker, 2008). The culture shared

by people in the social network plays an important role in determining the kinds and

characteristics members' interactions. As Burke (2004: 6) noted …

> identities are tied to positions in the social structure; these positions, in turn, are defined by our culture. Culture makes available the categories that name the various roles and groups which, from one point of view, make up the social structure.

In addition to identities being linked to social structures, they consist of three types -

role, social and personal.

> McCall and Simmons (1978) define role identities in terms of plans of action.

> [Role identity is] the character and the role that an individual devises for himself as an occupant of a particular social position. More intuitively, such a role-identity is his imaginative view of himself as he likes to think of himself being and acting as an occupant of that position (McCall and Simmons 1978:65). Role identities and the images and feelings tied to them tend to be idealized and idiosyncratic.

> This is also true for social and personal identities. According to Stets and Burke

(2000), a social identity is formed as a member of a group or identification with a social

category; the social identity is shared with others in that group or social category. A

person identity "consists of the meanings and expectations that constitute not only a

person's essence or core, but also all meanings that define who the person is as a

person (Burke 2004: 9). This person identity—expressed in unique self-narratives—is

given meaning during interactions with others within given cultural and historical

contexts (Vryan et al. 2003:367).

**Self- Identities, Images, Feelings and Motives with Role Choices**

As described above, identities are important components of the self. The physician's identities, images of self, and self-related feelings are sources of self-motives. And self-related motives are crucial to understanding the self as a social force. These self-related motives are related to what Hinkle (1963) describes as the mechanism by which men and women act to achieve their goals.

Seeking out situations within which self will be legitimized relates to three motives: self-esteem motive (verifies social identity); self-efficacy motive (verifies role identity); and authenticity motive (legitimizes person identity). The self-esteem motive has two stages: desire to view oneself as "good;" and attempts to maintain a positive self-image (Gecas 2000: 101). The self-efficacy motive is one's desire to be perceived by others as a competent manipulator of one's immediate environment (Gecas 2000: 101). The authenticity motive relates to one's desire to have experiences that are proper and genuine, so that there is a congruency between value-related identities and role performances (Gecas 2000: 101).

**Role Choices Shape the Kinds and Quality of Relations with Others**

As previously described, society shapes self, self shapes role choices, and role choices now can be used to shape the relations actors have with others. For symbolic interactionists, a person's conduct emerges when she interacts with others in specific situations. Rather than seeing one's action as acting out role expectations, structural symbolic interactionists view social action as making a role consistent with one's

identities and motives, and within the cultural context of his or her social network

(Stryker 2008).

**Their Relations with Others Are Evaluated by the Person in Terms of Aligning Actions and Reflected Appraisals**

When interacting with others, actors use aligning actions and reflected

appraisals to insure that his or her role performance appear to be reasonable to others

(Hewitt 2007). Both concepts are modifications of Cooley's 1902 discussion of the

looking glass self (Gecas and Schwalbe 1983; Rosenberg 1990).

Because each person seeks positive evaluations of her identities, her self-

concepts can come to correspond at least partially to other people's views of her. The

actor has three choices when her actions do not align with the other's expectations. The

actor can either align her actions to fit the other's expectations or alter her behavior so

as to get a different appraisal. When these two options repeatedly fail, they alter a

person's self-concept.

For example, a physician on an OBGYN rotation in medical school believes the

attending physician thinks she is doing a great job. Her appraisal of herself is coming

from how she believes the attending sees her. This reflected appraisal affects her self-

concept with a positive image she has of herself as a future OBGYN physician. This

reflected appraisal also affects her future interactions with others. With this goal in

mind as an OBGYN physician, she tends to interact with other women interested in

OBGYN and continues to take courses related to OBGYN. Therefore, reflected appraisal

has influenced both self-concept and social relations within her social network. It would

also work in the reverse; if she perceived the attending physician thought she was doing a bad job, she would either try to improve her standing with the attending physician or focus on some other specialty. If she chooses to focus on a different specialty, future interaction will also be different. When she is trying to improve her status with physicians she may employ aligning actions to create consistency among social acts.

## Revised Approach to Social Action

Roscoe Hinkle's (1963) dimensions can be given a more symbolic interactionist character by incorporating some of these ideas. These revisions are discussed in respect to physicians' choice of specialty in this part of the chapter.

### Treating Herself as a Subject/Treating Self, Others, and Things in the Situation as Objects

The physician treats herself as an object when she talks about her biographical self, particularly in terms of her identities, images of herself as a person whom has these identities, and the feelings she has about her self and actions with regard to these images. She is also an object to herself when talks about her self-related motives and choice of specialty.

### Acting to Accomplish a Goal or Objective

Wanting to be a physician with an identifiable specialty is a goal. The self is the source of this goal. According to the literature previously described, the medical profession offers many types of opportunities which a medical student can tie to one or more of her identities and self-related motives: a drive for achievement, the desire to

work with people, gain status, and the effort to make a difference in the lives of her

patients (Vaglun et al 1999; Kutner and Brogan 1990).

In the review of the literature it was also discovered many women medical

students have chosen medicine for a more satisfying experience and to obtain a higher

sense of achievement than has been associated with traditional female activities.

Drinkwater et al. (2008:422) discovered although most medical students' career

aspirations are "to make a difference in people's lives" this is in conflict with women's

roles as a physician and as a parent. In keeping with this finding, it can be expected that

many female medical students will sacrifice their professional aspirations to balance

these roles.

**Identifying and Employing Resources to Achieve Her Intentions**

Knowledge of stratification systems implies that people who have different

access to resources fall into different levels in the social structure. The same holds true

for physicians making choices about specialties; their access to resources will vary and

will be used in different ways. Burke (2004) identifies resources as anything that

functions to sustain a person, group, or interaction, whether or not these resources are

socially valued, scarce, or even an entity. These resources can be what they had, have,

or want to acquire. For instance, social ties with parents, faculty, attendings, and

residents can be leveraged when choosing a medical specialty.

A medical student's ability is also a resource in specialty choice. The ability tests

used today in selection of medical students for residency programs can also be

leveraged to obtain a specialty of her choice.

**Invoking "Standards, Rules, and Moral Principles ... In arriving at Decisions"**

People identify themselves in terms of values, beliefs, morals, and ethics

(Schwirian 1964:51). In terms of self-images these identifications relate to values, moral

fiber, and ideologies (Gecas 2000; Gecas and Mortimer 1987). In terms of role choices,

female medical students' choices will be based, in part, on what they believe exists,

what they believe is proper and improper, and deciding the extent to which their

decisions match up with social standards.

**Monitoring, Choosing, Assessing, and Evaluating What She Had Done, Is Doing, or Will Do**
Physicians have the ability to monitor, choose, assess and evaluate situations

and their future goals (Mead 1934; Hewitt 2007; Blumer [1969] 1986).

The review of the literature reveals that, as female medical students "try on"

different specialties, they tend to focus on what they find interesting (Williams et al.

1997) and situations that have greater physician-patient contact (Fincher et al 1992).

Indeed, Fielding et al. (2007) discovered that female medical students found the field of

radiology unattractive because of the low physician-patient contact.

Medical students are also able to reflect on experiences in medical school.

According to Becker et al. ([1961] 2007), they "believe that students' choices of

specialties are at this time for the most part make-believe, an experimental trying-on

roles about which they know very little" (1961:42). They do not have to commit to these

choices and do not have to lose face when they change their mind (Becker et al. [1961]

2007). Similar to "trying-on-roles," other research describes the pathway of medical

students in choosing their specialty as a process of "trying on possible selves" (Burack et

al. 1997:540). In this process the social meaning that medical students give to priorities, options, and biographical selves becomes important.

**Being Constrained and Enabled by Social Structures**

Hays (1994:64) wrote, "The choices that agents make are always within the realm of structurally provided possibilities (Hays 1994:64). Indeed, choices are "influenced by the depth and durability of the structural form in question, by the level of power held by those making the choices, and by the cultural milieu in which the choices are made. Three areas of structure most relevant for physician's choices are socioeconomic background, gender, and debt.

## Theoretical Propositions

The following theoretical propositions are organized from the components found in the symbolic interactionist theory and attempt to explain their association with female physicians' choice of specialty.

1.  Occupational aspirations and expectations, of which choice of specialty is an example, are found within the context of social structure. Social structure includes relations with parents, professors, others, gender stereotypes, and social class standing.

2.  Their occupational aspirations and expectations are aspects of the medical students' self-concept, which includes self-identities, images of self in terms of these identities, and feelings about these images.

3. Actors want their identities, images and feelings verified by others, and, as such, act as motives for behavior. The most important motives are those role choices and interactions that will confirm their notions of who they think they really are (authenticity motive), their control of their choices and actions (self-efficacy motive) and their worth to others (self-worth motive).

4. Female medical students are more likely than their male counterparts to value people-oriented motives for attending medical school and are willing to balance their professional aspirations with their role as a parent.

5. These choices will shape with whom female medical students/physicians interact and the quality of these interactions.

6. The processes identified above are constantly occurring, but there are times when they are particularly important: during the preclinical two years of medical school; the last two years of medical school as they rotate through their clerkships; the day medical students declare their specialty and wait for decisions on Match Day; and lastly during residencies as they consider a sub-specialty.

**Summary**

In this chapter, a self theory of physicians' choice of specialty was developed from an integration of propositions drawn from structural symbolic interactionism and social action theory. It was proposed the choice of specialty is a kind of role performance which relies on the female medical student's desire for confirmation of her self-related motives. These self-related motives were formed during her relations with

others, which were themselves played out within certain societal and structural

conditions.

The following chapter will explain the research design for this study which

includes the population and sampling procedures, the interview guide, and codes and

coding procedures.

**Chapter Four**

**Methods**

This chapter describes how the social action theory of choice of medical specialty, which was developed in the previous chapter, will be examined. Before describing these procedures, a summary of the key steps made thus far will be helpful.

First, it was noted the choice of specialty occurs during medical school. The first two years of medical school consists of preclinical years of taking didactic courses in basic sciences and learning to interview and examine patients. The last two are clinical years where the medical student rotates through clerkships in a teaching hospital. During the fourth year of training medical students selects a specialty they would like to pursue and then trains in for at least three years.

Second, a review of the literature discovered that female medical students are less likely to choose prestigious specialties such as surgery, anesthesiology, radiology, and pathology (Davis & Allison 2013) and more likely to choose the less prestigious fields of pediatrics, psychiatry, and gynecology (Hinze 1999, 2004).

Third, this research focused on the factors associated with these choices. A literature review discovered various family background and structural factors, gender stereotypes, doing something interesting, having a certain lifestyle once on the job, and the ability to balance work and family issues to be important factors associated with their choices.

Fourth, a social action theory, heavily influenced by structural symbolic interactionism, was developed to explain these relationships. It was proposed the

choice of specialty is a kind of role performance which relies on the female medical

student's desire for confirmation of her self-related motives. These self-related motives

were formed during her relations with others, which were themselves played out within

certain societal and structural conditions.

As noted above, this chapter describes how this theory will be tested. It begins

with a description of the population and the procedures used in selecting a sample from

it. It then focuses on the instrument and how it was constructed. The third part details

the codes, how they were constructed, and how the data was actually coded.

## Population and Sampling Procedures

Purposeful sampling was used to identify participants in this study based on ten

different medical specialties chosen from the literature on prestige and lifestyle (Fincher

et al. 1992; Rogers et al. 2012). Two physicians from each specialty were originally

chosen to be interviewed for a total of 20 interviews. These specialties included three

primary care specialties: Family practice, Pediatrics, and Internal Medicine and seven

non-primary specialties: Anesthesiology, Dermatology, Obstetrics and Gynecology

(OBGYN), Ophthalmology, Psychiatry, Radiology, and Surgery.

The physicians were contacted and asked to participate in this study by email,

phone, or United States Postal Service. The Institutional Review Board (IRB) approved

human subjects form. During the interviews, a description/purpose of the research was

provided to each of them. The response rate was 87 percent, as a total of 23 physicians

were contacted with 20 responding and agreeing to be interviewed. One physician was

willing to be interviewed but conflicting schedules prevented the interview from taking

place. Another physician responded by email initially, but did not respond to future

emails. The third physician's time commitment prevented her from participating.

Although the initial design of the study included two different physicians from

ten different specialties, only one ophthalmologist was available to be interviewed and

another surgeon was added to maintain a total of 20 physicians. Two of the 20

physicians were in surgical residencies and not yet practicing. One physician was

completing her second residency in radiology after practicing as an emergency room

physician. Another physician was completing a fellowship in gastroenterology after she

had finished her internal medicine residency. Four women were retired and also had

spouses who were physicians. Ten women were practicing medicine in the specialty

they chose and the last physician was a pediatrician working in a physician's office in a

capacity other than a physician.

The 20 physicians graduated from high school between 1971 and 2005 with an

age span difference of 36 years. The sample included one Chinese physician, one Indian

physician, along with 18 white physicians. Three physicians' parents were first

generation immigrants to the United States. These three physicians' parents were from

China, India, and Ireland. The 20 physicians resided in six different states which included

Nebraska, Minnesota, South Dakota, California, Oregon, and Washington.

Recommendations of physicians to be recruited came from family, friends and from the

referral of interviewed physicians where there was no discrimination of race/ethnicity in

the sample.

**Interview Guide**

For this study, in-depth semi-structured interviewing was the method utilized. The interviews were conducted in my home, a local coffee establishment, or their office, depending on the preference of the physician. The interviews began with an introduction of the study and the permission to audio-record our conversations. The physician and researcher were able to engage in a dialogue that first began with a guided question protocol with probes to clarify concepts, elicit detail, and extend the conversation.

Questions for the semi-structured interviews were designed around the seven factors discussed earlier to encourage the interviewees to describe their awareness of opportunities and barriers, personal experiences, and their considerations in choosing a medical specialty. The interview guide appears in Appendix A.

After the completion of the first four interviews, adjustments were made to the interview guide and two questions were added to the practicing or retired physicians' interviews. To identify and redefine concepts is an important part of the iterative process of qualitative research (Chambliss and Schutt 2006). The "change in medicine" was a frequent concept identified in the first four interviews. By adjusting the interview guide, I was able to ask for more clarification of these changes which have occurred in medicine throughout the physicians' careers. This adjustment appears in Appendix B.

Qualitative data collection and analysis occurred in two phases over the course of five months. The first phase involved the collection of the data in the form of face-to-

face interviews. Twenty in-depth, semi-structured participant interviews, approximately

one hour in length, were conducted from June to October, 2014.

For reliability, the interviews were all conducted in the same manner; the same

questions from the interview guide were asked until the two additional questions were

added after the fourth interview, and as much time was given as needed for each

interview. The interviews were audio recorded and were only identified by a number for

confidentially purposes. The respondents' names were not used while being addressed

during the interviews. The recordings were transcribed by a master of sociology

graduate. Only changes were made to the transcripts where clarification was needed to

words that appeared inaudible to the transcriber but were recalled by the researcher.

**Codes and Coding Procedures**

The second phase involved interpretation and analysis of the qualitative data. In

order to decipher the qualitative data, codes were assigned to the categories found in

the symbolic interaction model and the connection between the categories. These

categories and connections are outlined below:

- social structure to self
- self to role choice
- social structure to self to role choice
- self to role choice to interactions with others
- self to role choice to interactions with others to reflected appraisal
- self to role choice to interactions with others to aligning actions

The concepts found within the symbolic interaction framework as indicated above

were operationalized to identify these concepts within the physicians' narratives. The

operationalization of these concepts is described in the next section. After these first

codes were found, a second process took place in order to describe the type of self that

was employed by the physicians as they described their perception of influences on

their specialty. Two main categories of self either describe their three identities or three

types of motives to legitimize their self. These are described within the operationalizing

section.

After these two phases of coding were completed, new coding was added or data

that did not fit the categories and connections described above.

**Operationalizing the Categories**

In order to code the outlined categories, it is important to operationalize the

categories. These descriptions appear in the charts below.

**Table 4.1 Social Structure to Self-identities to Self-motives**

| Social Structure | | Self (Personal, Role, Social) | | Self-motives |
|---|---|---|---|---|
| <ul><li>Parents: socio-economic background and support</li><li>Gender</li><li>Characteristics of specialty</li><li>Culture</li></ul> | → | <ul><li>Personal: person's essence or core</li><li>Role: occupant of a particular role</li><li>Social: membership of a group</li></ul> | → | <ul><li>Self-worth: desire to be seen as good</li><li>Self-efficacy: desire to be competent</li><li>Authenticity: experiences that are genuine and congruent</li></ul> |

**\***Example: Doctor refers to her parents' encouragement as it relates to her personal, role, or social identity which is verified by her self-worth, self-efficacy, or authenticity.

*Example: Doctor refers to her culture of straddling two worlds as it relates to her personal, role, or social identity which is verified by her self-worth, self-efficacy, or authenticity.

**Table 4.2 Self-identities to Self-motives to Role Choice**

| Self (Personal, Role, Social) | | Self-motives | | Role Choice |
|---|---|---|---|---|
| • Personal: person's essence or core<br>• Role: occupant of a particular role<br>• Social: membership of a group | → | • Self-worth: desire to be seen as good<br>• Self-efficacy: desire to be competent<br>• Authenticity: experiences that are genuine and congruent | → | • Attending medical school<br>• Specialty choice<br>• Medical school choice<br>• Medical school and residency location |

*Example: Doctor refers to her personal, role or social self which is legitimized by her self-worth, self-efficacy, or authenticity when choosing the specialty she did.

*Example: Doctor refers to her personal, role, or social self which is legitimized by her self-worth, self-efficacy, or authenticity when choosing where she will eventually practice.

**Table 4.3 Social Structure to Self-identities to Self-motives to Role Choice**

| Social Structure | | Self (Personal, Role, Social) | | Self-motives | | Role Choice |
|---|---|---|---|---|---|---|
| • Parents (socioeconomic background and support)<br>• Gender<br>• Characteristics of specialty<br>• Culture | → | • Personal- person's essence or core<br>• Role- occupant of a particular role<br>• Social- membership of a group | → | • Self-worth- Desire to be seen as good<br>• Self-efficacy- desire to be competent<br>• Authenticity- experiences that are genuine and congruent | → | • Attending medical school<br>• Specialty choice<br>• Medical school choice<br>• Medical school and residency location |

*Example: Doctor refers to her encouragement from parents as it relates to her personal, role, or social identity which is verified by self-worth, self-efficacy, or authenticity in the choice where to attend medical school.

*Example: Doctor refers to the characteristics of the specialty as it relates to her personal, role, or social identity which is verified by self-worth, self-efficacy, or authenticity in her decision on the type of specialty she will choose.

**Table 4.4 Self-identities to Self-motives to Role Choice to Interactions**

| Self (Personal, Role, Social) | | Self-motives | | Role Choice | | Interactions |
|---|---|---|---|---|---|---|
| • Personal: person's essence or core<br>• Role: Occupant of a particular role<br>• Social: Membership of a group | → | • Self-worth:<br>• desire to be seen as good<br>• Self-efficacy: desire to be competent<br>• Authenticity: experiences that are genuine and congruent | → | • Attending medical school<br>• Medical School Choice<br>• Residency choice<br>• Residency and practice location | → | • Patient contact<br>• Physician contact<br>• Professor contact<br>• Time spent with family |

*Example: Doctor refers to her personal, role, or social identity which is verified by her self-worth, self-efficacy, or authenticity when choosing her specialty after interacting with attendings on a rotation.

*Example: Doctor refers to her personal, role, or social identity which is verified by her self-worth, self-efficacy or authenticity when deciding to attend medical considering the influence of college professors.

**Table 4.5 Self-identities to Self-motives to Role Choice to Interactions to Reflected Appraisal**

| Self (Personal, Role, Social) | | Self-motives | | Role Choice | | Interactions | | Reflected Appraisal |
|---|---|---|---|---|---|---|---|---|
| • Personal: Person's essence or core<br>• Role: Occupant of a particular role<br>• Social: Member-ship of a group | → | • Self-worth: Desire to be seen as good<br>• Self-efficacy: desire to be competent<br>• Authenticity: experiences that are genuine and congruent | → | • Attending medical school<br>• Medical school choice<br>• Specialty choice<br>• Residency and practice location | → | • Patient contact<br>• Physician contact<br>• Professor contact<br>• Time spent with family | → | • How do I see myself and how do others see me |

*Example: Doctor refers to personal, role, or social identity which is verified by self-worth, self-efficacy, and authenticity as she decides a specialty choice when interacting with patients on a medicine rotation that praised her for her bedside manner.

*Example: Doctor refers to personal, role, or social identity which is verified by self-worth, self-efficacy, and authenticity as she decides a career in medicine when interacting with other students who have complemented her on her ability and desire for achievement.

**Table 4.6 Self-identities to Self-motives to Role Choice to Interactions to Aligning Actions**

| Self (Personal, Role, Social) | | Self-motives | | Role Decision | | Interactions | | Aligning Actions |
|---|---|---|---|---|---|---|---|---|
| • Personal: Person's essence or core <br> • Role: <br> • Occupant of a particular role <br> • Social: Member-ship of a group | → | • Self-worth: Desire to be seen as good <br> • Self-efficacy: desire to be competent <br> • Authenticity :experiences that are genuine and congruent | → | • Attending medical school <br> • Medical school choice <br> • Specialty choice <br> • Residency and practice location | → | • Patient contact <br> • Physician contact <br> • Professor contact <br> • Time spent with family | → | • Normalization <br> • Neutralization <br> • Embracement <br> • Passing |

*Example: Doctor refers to personal, role, or social identity which is verified by self-worth, self-efficacy, or authenticity when making a decision about specialty choice due to too much patient contact and the need to neutralize the jarring comments she has received from patients.

*Example: Doctor refers to personal, role, or social identity which is verified by self-worth, self-efficacy, or authenticity when spending time studying with other medical students that have a far easier time at taking tests.

It is important for the research to ensure reliability and validity. To use multiple methods, for example, observation, interviews, and recordings, will lead to a more valid and reliable construction of realities (Golafshani 2003). The researcher participated in

the observation, interviews, recordings, and coding process described in this study.

Triangulation also improved validity and reliability through sharing ideas, explanations,

codes, and categories with my major advisor. It is important to eliminate bias and

increase the truthfulness found in the text through the triangulation process.

**Summary**

This chapter described the methods used to test the theory of social action on

the choice of medical specialties. The population consisted of 20 female physicians

either in a residency, medical practice, or retired. The qualitative approach used face-to-

face, semi-structured interviews over the course of five months. The interviews were

transcribed and coded according to the three types of identities (role, social, personal)

and three types of self-motives (efficacy, authenticity, worth) found in the theory of

social action.

The findings for this study will be presented in the next chapter, first describing the

research population.

**Chapter Five**

**Findings**

The research question asks: Does a self-theory of social action account for

female physicians' perceptions of past choices of specialty? This chapter begins by

describing the demographic characteristics of the 20 physicians. The data is then

analyzed in terms of the codes developed in the previous chapter. This data analysis is

followed by the construction of new codes for data not fitting into existing codes.

**Demographic Characteristics**

Demographic data was collected from 20 physicians. The demographic

characteristics appear in Table 5.1. In examining the age of the physicians in this sample,

the average age was 43.8 years with age ranging from 27-61 years. Although 15 of the

physicians were married, the three residents were single and two physicians were

divorced. The number of children per physician averaged 1.4 children ranging from zero

to four.

The college major of 11 of the physicians was a science major, with only four

having a major other than science. Five physicians reported having a double major

which usually consisted of a science and a non-science emphasis. Seventy-five percent

of the physicians attended private colleges and 25 percent attended public schools. The

reverse holds true for the type of medical school they attended, as 40 percent attended

private medical schools and 60 percent attended public medical schools. The average

year of graduation from medical school was 1998, ranging from 1979-2014. Finally, 25

percent of the physicians had another career before deciding to go to medical school

while 75 percent entered medical school directly out of college.

**Table 5.1: Characteristics of Subjects Interviewed (N = 20)**

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Average age = 43.8 years
Range of ages = 27-61 years
Marital Status
       Married = 15 (75%)
       Single = 3 (15%)
Divorced = 2 (10%)
Number of Children
       Average = 1.4
       Range = 0-4
Education
       College major
              Science = 11 (55%)
              Non-Science = 4 (20%)
              Double Major = 5 (25%)
       Types of colleges attended
              Private = 15 (75%)
              Public = 5 (25%)
       Types of Medical Schools attended
              Private = 8 (40%)
              Public = 12 (60%)
              Year of graduation
                     Average = 1998
                     Range = 1979-2014
Career before Medical School
       Yes = 5 (25%)
       No = 15 (75%)
Current Career Characteristics
       Practicing Physician = 11 (55%)
       Working in another capacity besides physician = 1 (5%)
       Retired = 4 (20%)
       Resident = 3 (15%)
       Fellowship = 1 (5%)

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**DESCRIPTION OF THE DATA USING EXISTING CODES**

Previously, it was stated the structural symbolic interactionist model was built around Mead's contention that society shapes self, self shapes role choices, and role choices shape society (Stryker 2008). The physicians' selves are shaped by their earlier family experiences, cultural experiences, location in the social structure, and the social context of medical school where they received their training. Role-, social-, and personal-identities are important components of the self. Seeking out situations where the self will be legitimized relates to the three self-related motives: self esteem motive (verifies social identity); self efficacy motive (verifies role identities); and authenticity motive (verifies person identity). The findings will be organized according to the components found in the symbolic interactionist model, the type of identities, and the type of motives.

The narratives in the first section will describe the connection among social structures, self-identities, and self-motives.

**Social Structure – Self**

The twenty physicians in this study have described situations whereby society or the social structure has provided meaning to their "selves." The formation of self-concept has been described by Rosenberg (1990) as being influenced by social factors. In this sense, self is a social product. It is a social product because it arises out of social experiences and interaction, is influenced by an individual's location in the social structure, is formed within institutional systems such as the family, is constructed from the materials of the culture, and is affected by immediate and social contexts

(Rosenberg 1990). These identities become the source of self-motives: the self-esteem motive verifies social identity, self-efficacy motive verifies role identity, and authenticity verifies personal identity.

The narratives in this section describe the connections among social structure, self-identities, and self-motives. Table 5.2 is a visual representation of this coding scheme. Seventeen examples were found amongst the 20 interviews describing the connections of social structure to self.

**Table 5.2 Social Structure to Self-identities to Self-motives**

| Social Structure | | Self (Personal, Role, Social) | | Self-motives |
|---|---|---|---|---|
| • Parents (socioeconomic background and support)<br>• Gender<br>• Characteristics of specialty<br>• Culture | → | • Personal: person's essence or core<br>• Role: occupant of a particular role<br>• Social: membership of a group | → | • Self-worth: desire to be seen as good<br>• Self-efficacy: desire to be competent<br>• Authenticity: experiences that are genuine and congruent |

### *Connections of Structure to Role Identity to Self-efficacy*

The first example describes the relationship between physicians' role identities and the self-efficacy motive; this coincides with the theoretical proposition that the verification of role identities leads to increased feelings of self-efficacy.

> [Referring to a medical school experience] In one of them I did a medicine rotation. I knew I was going to get enough OB, I wanted other learning. Dr. OBGYN 1

While in medical school, this future obstetrician gynecologist wanted to learn other areas of medicine to be more competent as a future OBGYN physician.

A surgeon talked about her father's involvement in terms of the connection between her future role identity, whatever she chose as an occupation, and the importance of effort and control over her actions:

> I also remember [my dad] being very involved in my education from an early age, telling me to work hard and be persistent. Don't give up easily. Dr. Surgical Resident 3

### *Connections of Structure to Role and Social identity to Authenticity*

The theory also proposes that authenticity motive is linked back to social structure through one's social identity. This relationship was found in physician's discussion of her life growing up with parents of first generation immigrants and her need to fit in and be authentic.

> [Referring to her ethnicity] I have always felt that I straddled two worlds. Neither fit. I didn't really fit in either one completely. Dr. Internal Medicine 2

Another physician, struggling with her need to feel authentic as a future parent, expressed her authenticity motive in terms of her adult child and parent identities in relation to her parents:

> For me, my parents never were pressuring me to be married, or being actively exploring my family life, which is probably too far on the other extreme. Dr. Surgical Resident 3

An anesthesiologist and a surgeon referred to their parents' encouragement in terms of doing whatever would make her happy (an authenticity motive).

> [My parents] encouraged me to do whatever would make me the happiest. Dr. Anesthesiologist 2

> They [parents] were always supportive [about going into surgery]. This is your career. You have to pick what makes you happy. Dr. Surgical Resident 2

*Connections of Structure to Role, Social and Personal Identities to Self-worth*

Identity theorists assert identities within the self-concept are organized in a salience hierarchy (Stryker and Burke 2000). Identity salience is defined as "the probability that an identity will be invoked across a variety of situations, or alternately across persons in a given situation" (Stryker and Burke 2000:286). When this happens identity standards may shift so that two or three identities can be verified at the same time (Burke 2004:10).

This was found to be the case when one family practice physician invoked all three identities in reference to her sense of self-worth.

> [Referring to wanting to be a doctor] I thought I could never do it because nobody in my family ever went to college and I didn't think I was smart enough and I had no one to bounce this off of. So I stuck to the sciences and I was going to be a med-tech and that's what I entered in college as a med tech. Dr. Family Practice 2

Her social identity is related to her family. Her role identity is related to her choice to become a med tech. And her person identity is related to her belief that she wasn't smart enough to be a doctor.

To sum up, the narratives in this section depict the connections among social structure, self-identities, and self-motives. The narratives in the next section describe the connections among self-identities, self-motives and role choices.

**Self-identities, Self-motives and Role Choices**

A characteristic of symbolic interactionist theory is, "human beings are active in shaping their own behavior" (Manis and Meltzer 1978: 6-8). Identities are important components of the self-concept. The physician's identities, images of self, and self-

related feelings are sources of self-motives. Their actual role choices stem from these motives.

Table 5.3 is a visual representation of this coding scheme. Within the 20 interviews, 141 examples were found describing the path of self to role choice.

**Table 5.3 Self-identities to Self-motives to Role Choice**

| Self (Personal, Role, Social) | | Self-motives | | Role Choice |
|---|---|---|---|---|
| • Personal: person's essence or core<br>• Role: occupant of a particular role<br>• Social: membership of a group | → | • Self-worth: desire to be seen as good<br>• Self-efficacy: desire to be competent<br>• Authenticity: experiences that are genuine and congruent | → | • Attending medical school<br>• Specialty choice<br>• Medical school choice<br>• Medical school and residency location |

### *Connections of Role Identity to* Self-efficacy *to Role Choice*

The following narratives corroborate with the theory and describe the self-efficacy motive being used to verify role identity. The narratives describe what gives them confidence as a physician.

> I felt personally I'm not a very patient person. So I had to really try to take a step back and sit down and be really good at having family meetings, explaining medications, explaining diagnoses, like being more patient. Dr. Internal Medicine/Gastroenterology Fellow 1

> I don't think that, I want to be a doctor, has really hit until just more recently when I've actually valued it more. Dr. OBGYN 1

> Even when you don't want to pay attention to that detail, you pay attention to that detail because the point isn't to just win. I think it's different from athletics because it's not just about does your team win or lose, it's about getting the most out of yourself. Dr. Surgical Resident 3

[Referring to having prestige as important in a specialty] It was really more about what I wanted; I never cared about what other people thought about me. It was really what I wanted. Dr. Pediatrician 2

I can't say that [interest, personal talent] influenced that I went into it, but once I got into it I was like 'thank God I took piano lessons all those years because there's a lot of dexterity.' Dr. Ophthalmologist 1

[Preparing for residency during medical school] that was preparing me by upping my surgical skills, seeing traumas, putting central lines in. I just, I felt that was the best way to prepare… the more exposure I got before I left for surgical residency I felt like, that would, that was the key. Dr. Surgeon 1

### Connections of Role and Personal Identities to Self-efficacy to Role Choice

Three narratives describe both role and personal identities and a motive of self-efficacy with role decisions.

I would have considered dermatology, but quite frankly, you have to be at the top of your class to get into some those and I didn't feel like I was going to get in. Dr. Pediatrician 1

[What interested her into going into family practice] I wanted to do it all. To me that was the challenge. Dr. Family Practice 2

The goal of the pediatrician was to enter a specialty she knew she would be able to attain. The family practice physician's incentive was to be competent in all areas of medicine.

### Connections of Role and Personal Identities to Authenticity to Role Choice

The narratives in this sub-section depict the relationship between two identities—role identity and personal identity—and the authenticity motive.

I like to split up my day with procedures and then I see a consult and then I see a patient that I chronically follow. It tends to be more interesting, too, if you're following a patient chronically for something you're really interested in. Dr. Internal medicine/ Gastroenterology fellow 1

I don't know if there is a specific skill, just that I liked I just think there was a lot of things that complimented what my interests, and so no I'm not like incredible with my hands. Dr. Dermatologist 1

[Referring to a personal talent] You are physically doing something. It's not just thinking through something. I liked the hands on skills and I think I've always been kind of an artsy crafty hand person. Dr. Surgical Resident 2

Then as I went through medical school, honestly, I had a very open mind, I'm like a sponge. I love to learn. Dr. Ophthalmologist 1

The four different physicians in these narratives described their personal identity which is what makes them unique. To Burke (2004: 10), "person identity figure into all of our interactions and social behaviors because they are always on display and always under perceptual control" and, therefore, coincide with strong commitment. These four physicians were committed to these identities and seeking authenticity helps to legitimize them.

### *Connections of Role and Personal Identities to Authenticity and Self-efficacy to Role Choice*

The following narratives describe the connection between two identities (role and personal) with two motives (authenticity and self-efficacy).

[Parental influence on specialty] Not especially. I think when I got to medical school, I actually didn't love it. And psychiatry seemed the most different. Dr. Psychiatrist 1

[As a physician coming from a family that did not have a college education, what motivated you to become a physician?] I didn't want to be stuck on the farm. Dr. Radiologist 1

[Referring to the reason she chose the specialty she did] I still think it's because you know you had office time, you had surgery time, you had continuity time, and you had a wide age group. I mean you got to do the…I don't want to call interesting, but such a blessing, you know childbirth and all that kind of things to be able to do more medicine. Dr. OBGYN 1

[Describing her position as an attending] Just being, I guess, mentoring and teaching. It's a really privileged role, and I didn't realize how much I would enjoy that. Dr. Internal medicine 2

[Referring to the amount of contact you wanted to have with patients] I like the balance of surgery. I'll agree I'm not a super chatty Kathy. I don't look forward to just talking to patients one-on-one all day long and I think that's part of why I was turned off, to some of the other primary care specialties. Dr. Surgical Resident 2

That was I think the biggest thing because when I was thinking about what I wanted to do after school I knew that that had to be a big part of what I knew I was going to enjoy do something I was good at. Dr. Surgical Resident 3

You still had to be kind of at the top of your game to get in to those sub specialties. That like, oh, that's my, that's my goal. I'm going to try. I'm like, well, if I have to be at the top of my game to get into those, if I choose not to get into them, I can probably get into whatever I want. Dr. Ophthalmologist 1

The physicians in these narratives are describing what is important for them in medicine. Verification of role and personal identities leads to increased feelings of self-competence and to increase feelings of authenticity—being who they really are. They chose their specialties recognizing the images they had of their personal identities.

### *Connections of Role Identity to Authenticity and Self-efficacy to Role Choice*

The narratives described below include two motives (authenticity and self-efficacy) to verify role identity.

And patients didn't want to hear about a conceptually high blood pressure they wanted to know what was wrong with something they could see and that was very attractive to me. I like things that people already care about. The diversity in skin is so huge and at the same time, so, so interesting to me. Dr. Dermatology Resident 2

(Describing what she will do after residency) I want to find whatever kind of fellowship, whether it's like trauma or colorectal like whatever vascular, whatever fellowship people have a lot of I want to do that but then, still practice in an environment where I would be a general surgeon. I just want to have that extra training because from what I've heard, you operate more in your fellowship than most programs do their whole five years and so it just seems like to be able to go someplace where you learn from great surgeons and you learn how to operate well. Dr. Surgical Resident 3

Both of these examples are from residents whose authenticity motive and self-efficacy

motive worked coincided in their choice of specialty.

### Connections of Role and Social Identities to Authenticity to Role Choice

Two identities; role and social are described below with only one type of motive;

authenticity.

> I'm a relationship person. At the end of the day, I'd love to have a smile or a hug … My year of fellowship; you developed one or two [relationships] that stuck. Dr. Ophthalmologist 1

> [Describing when she knew she wanted to go to medical school] That was my decision. I decided I think it was in second grade. They said 'where do you want to be in twenty years?' I said I wanted to be a doctor and I stuck with it. And, here I am. Dr. Surgical Resident 2

### Connections of Role and Social Identities to Self-efficacy to Role Choice

These two narratives describe self-efficacy motive legitimizing role and social

identities.

> So when we found we both were going to go to Mayo, then we decided we'd get married. It was like okay, career first I guess. Dr. OBGYN 2

> Well I really remember thinking it would be so cool to follow a pregnancy, deliver the baby, and continue to follow those kids and see them grow and change and have that relationship with them and their parents, so if that's what you're asking. That had value for me. Dr. Family Practice 2

### Connections of Role and Social Identities to Self-worth and Self-efficacy to Role Choice

The narratives described below contain two identities (role and social), and two

motives (self-worth and self-efficacy).

> I think I had to recognize from early time that I wasn't necessarily going to click with everyone in my profession. So I had to find alternative communities so that I could kind of put on my cooperative face when I come to work, and then kind of be who I really am with people. Dr. Surgical Resident 3

I thought that it was one specialty where you really got to know people on a little broader basis not just for one little thing. Just to make that sort of connection with people and have that kind of trust, kind of relationship, where you could kind of help them sort of navigate through things or point them to if they needed specialty care. Dr. Family Practice 1

I think that's kind of why I want to stay more general surgery based. Just because you may take out the appendix and if you do a great job and they enjoyed you as your surgeon, then they'll come back to you for their colonoscopy or their breast cancer or whatever. Dr. Surgical Resident 2

I just love doing it because I love being a mom [referring to her help as lactation specialist] But I will have to say too, that growing up, I didn't really intend on getting married at any particular time, I didn't really intend, you know, I was like whatever happened, happened. Dr. Pediatrician 1

### Connections of Role and Social Identities to Authenticity and Self-efficacy to Role Choice

These two narratives describe all three identities with two motives (authenticity

and self-efficacy).

I was kind of a school nerd, so more school was better. Dr. OBGYN 1

I guess I enjoy doing things with my hands or doing procedures and anesthesia has quite a few procedures. I like to get up in the morning. I like taking care of a patient but not going into all aspects of care. You just take care of what's going on right now… I just like to go to work and take care of the patients and then leave my work at work. Dr. Anesthesiologist 2

### Connections of Role, Social, and Personal Identities to Authenticity, Self-worth and Self-efficacy to Role Choice

Three identities and three motives are all operating in these narratives. The

theory states that self-worth motive verifies social identity, self-efficacy motive verifies

role identity, and authenticity motive legitimizes person identity. The theory does not

state that all three of these operate at one time; but they did in these cases.

I think my only talent was a good listener. As I was growing up I was super, super shy, so I didn't say a lot but I did listen pretty well. So and who wants a listener more than women?  Dr. OBGYN 1

I did really well, and a lot of it you know, evaluation wise, my evaluations were always really high because I'm a hard worker. It's sort of a good thing but a fault is I say 'yes' a lot. You just show up with a positive, you know, you're glad to be there, and I was, I was glad to be there. Dr. Anesthesiologist 1

I think it's probably three components for me. One it's just the privilege of caring for people, I mean, there is really no other job in the world. I just find it a very privileged place to be. I like human connection, emotional connection with people. I like quite frankly the thrill of making a diagnosis. It's both exciting but it's very rewarding. Dr. Internal Medicine 2

According to Burke (2004), the verification of the social identity sustains a group, verification of the role identity sustains the role, and verification of the person identity leads to increased authenticity and figures into all of our interactions. The OBGYN physician enjoys working with women and is a great listener. The anesthesiologist did well in medical school and residency and her positive attitude and working hard makes her authentic. Lastly, the internal medicine attending feels privileged to be in the role she has in taking care of people.

The narratives in this section described the connections among self-identities, self-motives and role choices. The narratives in the next section describe the connections among social structures, self-identities, self-motives, and role choice.

**Social Structure – Self – Role Choice**

It was previously described that the self is a social product is formed within social relations. It was also described above identities and self-related motives are the source for actual role choices. Roles can be thought of as a resource a medical student uses to create a vision of what the future will be like.

The narratives in this section describe the connections among social structures, self-identities, self-motives, and role choice. Table 5.4 is a visual representation of this coding scheme. This research found 161 examples describing the path of social structure to self-identities to self-motives to role choices.

**Table 5.4 Social Structure to Self-identities to Self-motives to Role Choice**

| Social Structure | | Self (Personal, Role, Social) | | Self-motives | | Role Choice |
|---|---|---|---|---|---|---|
| • Parents (socioeconomic background and support)<br>• Gender<br>• Characteristics of specialty<br>• Culture | → | • Personal: person's essence or core<br>• Role: occupant of a particular role<br>• Social: membership of a group | → | • Self-worth- desire to be seen as good<br>• Self-efficacy- desire to be competent<br>• Authenticity- experiences that are genuine and congruent | → | • Attending medical school<br>• Specialty choice<br>• Medical school choice<br>• Medical school and residency location |

***Connections of Structure to Role and Personal Identities to Authenticity to Role Choice***

Three examples describe both role and personal identity with authenticity as the motive. The narratives in this section describe how social structure enters into their decision. As Stryker and Burke (2000) argue; "the probability of entering into concrete (and discrete) social networks in which persons live their lives is influenced by larger social structures in which those networks are embedded" (p 285).

> I had a very awful, malignant job and during that year, I kind of started thinking, is this really what I want to do the rest of my life and it wasn't. So I decided to apply to radiology. Dr. Radiologist Resident 2

I mean, probably. I knew I wanted to have children and that seemed, probably down the road it would give me greater flexibility with hours. Dr. Psychiatrist 1

I had an externship… in orthopedics and I did that in September and then I realized that I just didn't know if this was a good fit for me [as a mother] and then I started changing things. Dr. Anesthesiologist 2

These three narratives describe their personal identity and what needed to be changed or done in their lives to be authentic. The social structures in each example are a malignant job, future children, and a child the anesthesiologist already had.

### *Connections of Structure to Role and Personal Identities to Authenticity and Self-efficacy to Role Choice*

The next narratives describe both role and personal identity and authenticity and self-efficacy as the motives.

I was always interested in science. I loved science and was a biology major. Loved physiology as I took it in college and then I went to visit the program for medical illustration at a college and thought wow, 'I can get in here probably.' But I looked at what they were doing and I thought this is like boring. I'm not going to sit here at a drafting table for the rest of my life while the doctor's out there doing the research. Dr. Pediatrician 2

The same pediatrician describes her experience with sub-specializing and what she thinks about going into orthopedic surgery.

I mean I loved surgery. I loved doing intricate things with my hands and I loved to sew. I just didn't feel like I could commit that many more years to doing, of my life to doing that, to sub-specializing, so I didn't consider fellowship. I think for that reason pediatric fellowship or even going into something like surgery. I loved orthopedics, oh my gosh, but it was such a man's world!  Dr. Pediatrician 2

The social structure of a boring medical illustration class and the number of years it would take to do a sub-specialty prevented her from pursing different degrees or subspecialties. But her love of science and intricate things describe her personal identity which is tied to self-efficacy and being authentic.

***Connections of Structure to Role and Personal Identities to Self-efficacy to Role
Choice***

The following narrative describes both role and personal identity with self-

efficacy as the motive.

> Age kept me from doing a fellowship. I would have considered surgical oncology. I love
> my cancer patients that would have been one. I would have considered endocrine
> surgery, also another love of mine. But age was really a major factor. It's like, it's time to
> probably get a house, pay off some loans, and get a car that's not fourteen years old. Dr.
> Surgeon 1

The narrative describes her age as being a factor in not continuing to pursue a

fellowship. She perceived the time-span of a medical education, buying a house, debt,

and the update of her car as barriers.

***Connections of Structure to Role Identity to Authenticity to Role Choice***

The following narrative reveals a relationship between role identity and

authenticity.

> [Referring to what interested her in becoming a physician] Yeah I, I have like an anatomy
> book from when I was, seven or something like that my parents gave me. Dr.
> Psychiatrist 1

The social structure in this narrative describes her parents giving her an anatomy book.

Bourdieu (1986) would describe this as a form of cultural capital that is not available to

everyone. So at a very young age she had a role identity of becoming a physician and

being authentic.

***Connections of Structure to Social Identity to Self-worth to Role Choice***

The following narrative reveals a connection between role identity and the self-

efficacy motive.

> I had a rough patch. My parents got divorced when I was high school. I think I was homesick. I went to the University and it was just too far away. I didn't have any really close friends there. I didn't know anybody really. It was a huge school and I just felt lost. I felt like your teacher didn't know who you were. Dr. Anesthesiologist 1

Divorced parents, a university too big and too far away were the social structures within which her social identity and her low sense of self-worth were connected.

### *Connections of Structure to Role Identity to Self-efficacy to Role Choice*

The narratives below reveal the connection between role identity and the self-efficacy motive. The first three examples describe the social structure as family members.

> And so and then my dad, I think, indirectly influenced me to do medicine just because I wanted not necessarily medicine, but a job that was very stable because I felt like when we were younger growing up, he was like intermittently working so sometimes he would work for a company sometimes he would try to work on his own go back to working for a company, sometimes he'd go a year without working… so I wanted job security. Dr. Internal Medicine/Gastroenterology Fellow 1

> My sister chose medicine and she was older than me and, I guess we did everything the same. I mean honestly, one day in church I just thought oh, probably as a junior and I go, hmm, I'm going to go into medicine. I thought I be a general practitioner. Dr. OBGYN 2

> [Referring to her parents that had not been to college] Yeah and my parents always talked about, even though they're farmers and they both worked hard and raised five children, they always valued education and always felt kind of even though back then eighth grade, when they grew up eighth grade for a lot of people was the end of it. Not necessarily that I had to go to medical school or anything, but they just wanted their children to finish high school and if they could get to college. Dr. Radiologist 1

The next two examples describe the social structure in relationship to money – having debt and saving money.

> I just need to get on and start making more money and get my loans paid back. Because I did it, all medical school with [grants and] loans. Dr. Pediatrician 1

> I know certainly probably one of the most active things that people think about now. .. For medical school I had gotten into more than one place and I ended up choosing New Mexico because I knew I could afford it and so I left with very little debt… I didn't have

scholarships, but I worked. I started working when I was fifteen and I saved money, for undergraduate, I got scholarships which helped a lot. I continued to save money and I worked all the way through college. Dr. Internal Medicine 2

The last example describes the social structure as the size of the community and how

this affected her need to be competent in child care.

Just because of the community we lived in, we didn't have actual pediatricians right in our town so we usually referred them for their delivery and then they came back with their babies, so we did the well-child care for a long time. Dr. Family Practice 1

Although the social structures are all different, their role identities are verified by

striving for self-efficacy. This corroborates with the theory.

### *Connections of Structure to Role and Social Identities to Authenticity to Role Choice*

The following four narratives are example of the connections among two

identities (role and social), authenticity motive, and role choice.

[Referring to opportunities in medical school] I really attribute it to I went to Jesuit medical school. They're really into service. I got to go on three different international um medical mission trips while I was there. Dr. Dermatology Resident 2

[Referring to her sister's influence in becoming a doctor] Initially I was in high school when she was in medical school and at that time I saw her studying for her boards and I swore up and down I would never, ever, ever do what she is doing. And then I went to college and was in the honors program there and got exposed to not just a core curriculum but they gave us a global perspective of things that was their vision. Dr. Pediatrician 2

My first year of medical school I was like, 'I think I want to go into ophthalmology.' Now I did meet with someone who is several years ahead of me and she was going into derm and she was talking a little bit about lifestyle. Dr. Ophthalmologist 1

I think someone who played a large influence for me was an internal medicine physician who was in charge of hospital safety and the humility that he exercised when he lectured us about how easy it is for us to do harm, how we're not God's gift to our patients, our patients are gifts to us. Dr. Surgical Resident 3

Previously, it was stated the authenticity motive related to one's desire to have

experiences that are proper and genuine, and as result it would be expected that the

physicians would talk about the connection between value-related identities and role

performances (Gecas 2000). Burke (2004) argues that verifying the self as a group

member involves being like the others and receiving recognition, approval, and

acceptance of other. The physicians described above had a social identity based on

meanings they shared with others. The dermatology resident found that her motive to

be authentic was from experiences she had on medical missions. Although the

pediatrician did not want to be like a physician sister, in order to be authentic came

from her college experiences. The ophthalmologist experiences needed to include

lifestyle to be authentic. Lastly, the surgical resident knew she wanted to be like the

physician in charge of hospital safety but her social identity and role identity were tied

to her authenticity motive, that, is by being "God's gifts to our patients."

### *Connections of Structure to Role and Social Identities to Authenticity and Self-worth to Role Choice*

The following two narratives are examples of the connection of both role and

social identities with the authenticity motive, but these two examples also include the

motive of self-worth.

> [Referring to her decision to apply for medical school] My sophomore year in Biology, we had an awesome biology teacher and a really tough unit on human anatomy or something. He said, 'Any one of you who scored over 95 percent on this test should strongly think about some premed courses.' It was kind of been in the back of my mind before it would be fun to be a doctor, but my family had never gone to college, let alone graduate high school so it was can you do that? That kind of cemented it for me. Hey, if he thinks I can, and I had a lot of respect for him, maybe I should try this.
> Dr. Radiologist 1

> In my third year, in organic chemistry and biochemistry a professor came up to me and he said, 'Have you ever thought about applying to medical school?' I had just finished his biochemistry course and I said no, 'I can't. I'm not pre-med quality.' He goes 'Yes you are.' And I said, 'no, I'm really not.' And he went away and a month later he came back

to my lab again, and he said, 'I see you didn't apply.' And I said, 'no, I didn't.' He says, 'will you apply for me?' And I said, 'alright.' I really respected him. Dr. Family Practice 2

They did not originally think they were capable of becoming physicians because they grew up in homes where their parents did not attend college. Gecas (2000) describes the self-esteem motive as having two stages: the desire to view oneself as good, and the attempt to maintain a positive self-image. They both had the desire to maintain a positive image and to be seen by their professors as making the right choice.

### *Connections of Structure to Role and Social Identities to Self-worth to Role Choice*

An OBGYN physician described a situation very similar to the two previous examples, but this time role and social identity are only talked about in terms of the motive of self-worth. She wanted to do the right thing and take her MCAT's (Medical School Aptitude Test) as advised by her physician, but she did not make a connection to feeling authentic because she had no idea what she was doing.

> One of the chemistry professors I had was still encouraging me to take more chemistry and be more like a head of the lab kind of thing. Then a biology professor who himself wanted to go to medical school but he had defer when he was in the war, and then he came back and taught instead of went to medical school, he was pushing me to go to medical school. So I just said okay, I'll take the MCATs. I had no idea what I was doing. Dr. OBGYN 1

Again, the following two examples both role and social identity are talked about in terms of self-worth. The physicians' self was shaped by the social relations they had with family members. Their need to experience self-worth was cited as a reason to achieve their goal. The Internal Medicine physician acted and went to college and became successful in her own specialty. The second physician acted to practice in a location close to her grandmother and family roots.

[Parental influence to attend medical school] I don't recall that ever being an influence. I think what I remember is my parents saying, 'Whatever it is you do, you have to go to college and you need to be successful whatever you do.' Dr. Internal medicine 2

[Location of specialty] It didn't really influence what I went in to, but where because my roots had started growing. I was close to my grandmother. She was getting older. I just didn't want to be so far away that I never got to see her again. Dr. OBGYN 1

### Connections of Structure to Role and Social Identities to Authenticity to Self-efficacy to Role Choice

The doctors in the following narratives talked about the connections among two

identities (role and social) and two motives (authenticity and self-efficacy).

I came back because my family was from here and because it was community- based family medicine program. I did not want to go to other locations where they fought for procedures and admissions because there are so many subspecialists. The number thing for me, more important than family, actually was a community -based family medicine because we were first up for pediatrics admissions. I got in to see so much surgery. I got to see everything. Dr. Family Practice 2

I wanted to come to a program where I knew I could learn the most and become the best that I could be and I think for me, that was going happen in a place where I could get a lot of hands on experience, but also be in an environment where I didn't feel threatened all the time. Dr. Surgical Resident 3

For me, going into medicine - and this is just the honest truth for whatever it means - you know I saw my parents divorced when I was young. I saw my mom struggle. I want to do something where I know that I'm going to have a good income that if I'm ever in that same situation, I can support myself, my kids. Dr. Ophthalmologist 1

These three physicians have sought out situations where the self can be

legitimized. The family practice physician talked about the need to practice in a

community-based family medicine practice near where her family lived. The surgical

resident chose a practice where she would not be threatened by others and would get

lots of hands-on experiences. And the ophthalmologist wanted to go into medicine to be

able to support herself as she didn't want to struggle as her mom did. By choosing either

medicine or the specialty they chose, their motives were authenticity and self-efficacy.

*Connections of Structure to Role and Social Identities to Self-worth to Self-efficacy to Role Choice*

The following Internal Medicine physician talked about her role and social

identities in terms of the self-worth and self-efficacy motives.

> [Referring to a family friend who influence in becoming a physician] …because they were the only other Indian family. But he was this, probably one of the most sensitive, most compassionate people I think I had ever met. I think that's what struck me about him. I thought that is amazing. You can be a physician and be that kind, and that compassionate. And interestingly, I had the chance to see him this last summer sort of almost on accident and he is exactly the same. Dr. Internal Medicine 2

The physician shared the same ethnicity as a family friend with whom she could

identify. The internal medicine physician had a desire to be seen as good and competent

as both a person and a physician.

*Connections of Structure to Role and Social Identities to Self-efficacy to Role Choice*

A family practice physician, who once specialized in both obstetrics and

gynecology, dropped obstetrics because she thought that malpractice insurance rates

were too high.

> But interestingly after we started, there was a sort of a malpractice kind of crisis for OBGYN where they were hiking up the [malpractice insurance] rates so much in family medicine for family docs that were doing OB that huge majority of family doctors just got out of doing OB. So we stopped that after about five years I would say. Dr. Family Practice 1

*Connections of Structure to Role, Social, and Personal Identities to Self-worth to Self-efficacy to Role Choice*

The motive of self-worth is also important to the radiologist in the previous

narrative**.** Her father's influence was a big part of her identities as she had spent time with him

at his practice.

Going into emergency medicine, there was probably some influence I spent some shifts with my dad working and there were a few other decisions. I didn't want a practice, I didn't want my own practice, I didn't want to take call. I think there was probably some influence there. Going into radiology was all me. Dr. Radiology Resident 2

***Connections of Structure to Role, Social, and Personal Identities to Authenticity to Role Choice***

The narratives in the following two examples describe their selves being shaped

by family members. But to be authentic, the physicians chose their own path to medical

school and specialty.

> Then I thought I had enjoyed OBGYN and so I think at some point I decided this is what I want to do. My mother was appalled. She was very sad. Because she goes, 'You need your sleep.' I always wanted all this sleep. She goes, 'This is not a good field for you. You need your sleep.' Also she was thinking more in terms of your lifestyle. 'I know we'll probably get to this at some point, but you know, your lifestyle will be a little more difficult. Why not take something that's a little more regulated.' I said,' because this is where my heart is now' and so I decided my passion was in OBGYN and I didn't care what the hours were and so, that was the next step. And then it became an easy decision after that and I never looked back. Dr. OBGYN 2

> I wanted job security. [My grandma] was always pushing me to be a doctor, because she thought I was intelligent and she thought I liked it. And she was pushing me to do something that in society that is highly regarded. Dr. Internal Medicine/Gastroenterology Fellow 1

***Connections of Structure to Role, Social, and Personal Identities to Authenticity to Self-efficacy to Role Choice***

This example includes self-efficacy as a motive in addition to authenticity just

described. Instead of family members affecting the "self", this pediatrician identified her

medical school advisor's advice as influential.

> I was torn between either geriatrics or pediatrics. My advisor at the time I just kept going back and forth,'ah man I love this, but man this looks really good too!' I did my internal medicine rotation, I did peds rotation and I loved them both. And I was like what do I do? And he gave this great advice, he said 'If you come to a fork in the road and you see that each way is equal you just can't make that decision, then it doesn't matter because you'll be happy in either just make the move.' Dr. Pediatrician 2

The narratives in this sub-section described the connections among social structures, self-identities, self-motives, and role choices. The following section describes the connections between self-identities, self-motives, role choices, and interactions.

**Self – Role Choice – Interactions**

Symbolic Interactionists stress the importance of role-making. A persons' conduct emerges when they interact with others in specific situations. Rather than role expectations, actors make roles consistent with her identities (Stryker 2008). These identities become the source of self-motives: typically, actions tied to the self-esteem motive are meant to verify social identity, those actions tied to the self-efficacy motive are meant to verify role identity, and actions tied to the authenticity motive is meant to verify personal identity.

**Table 5.5 Self-identities to Self-motives to Role Choice to Interactions**

| Self (Personal, Role, Social) | | Self-motives | | Role Choice | | Interactions |
|---|---|---|---|---|---|---|
| • Personal: person's essence or core<br>• Role: Occupant of a particular role<br>• Social: Membership of a group | → | • Self-worth-desire to be seen as good<br>• Self-efficacy-desire to be competent<br>• Authenticity-experiences that are genuine and congruent | → | • Attending medical school<br>• Medical School Choice<br>• Residency choice<br>• Residency and practice location | → | • Patient contact<br>• Physician contact<br>• Professor contact<br>• Time spent with family |

The narratives in this section describe the connections among self-identities, self-motives, role choice, and interactions. Table 5.5 is a visual representation of this

coding scheme. This research found 73 examples describing the path of self to role

decisions and interactions.

### Connections of Role and Personal Identities to Authenticity to Role Choice to Interactions

> I hit my first day in nursing school and they made me make the bed or something. I was like, 'are you kidding me?' … They were teaching me nurse maid, or nursing corners or something like that. 'I was like, no way; I'm going to be a doctor.'
>  Dr. Radiology Resident 2

In this case, the actions and interactions while attending nursing school did not

coincide with her sense of authenticity, so she decided to become a physician instead.

### Connections of Role and Social Identities to Authenticity to Role Choice to Interactions

In the following narratives, a dermatologist and an anesthesiologist conveyed

the importance of doing something they loved or found fascinating and interacting with

interesting people.

> My mentor at the end of my second year of medical school … Skin system was just one week. But it was great, I loved it. And my mentor was kind of the head of it…The people I matched with seemed really smart, really nice; they talked about things that I loved. I like histology a lot. And there was a clinical pathologic correlation and they were really enthusiastic about their work. They seemed like really happy people so, and then I realized that things I really liked about ophthalmology were present in dermatology. Dr. Dermatologist 1

> I think my influence of going into medical school; I was a little kid, I just had some minor health problems. Like some ENT things, some nose problems, some tonsil problems things like that. And I was always just fascinated by medicine stuff. You know, my favorite toy was my little Fischer Price stethoscope stuff and, and I think  I was supposed to be an anesthesiologist probably because  I just remember what it's like to be a little kid and be afraid and really feel like I didn't get a lot of, I don't know, empathy or whatever. I was treated a little roughly sometimes. Dr. Anesthesiologist 1

Indeed, the dermatologist interacted with others who seemed smart and enjoyed what

she did. The anesthesiologist found her interactions with others as a child influenced her

becoming a physician and an anesthesiologist.

### Connections of Role and Social Identities to Self-worth to Role Choice to Interactions

In the following narratives, we see the doctors making connections among their

motive of self-worth and their role and social identities. The first three examples

describe their interactions with attendings.

> You know I think it may have been more the attendings that I worked with, in that particular field that just took a little more time to tell me what it was all about. They took me aside and said, 'This is how we do it. This is why we do it.' Dr. OBGYN 1

> [Describing a personal talent she has for her specialty] People will see everybody and they'll watch and they're like, 'Oh, you've got really good hands.' But I've been told that many times. Dr. Ophthalmologist 1

> I managed to luck out and get a rotation with those two [physicians] and they made it so fun and it is like, 'You know, you should really think about this.' They said, 'You don't want to be getting telephone calls at 2 am for snotty noses in kids. You know that's truly what it's like. Yeah, you know, this is kind of interesting. The lifestyle might be a little better.' Dr. Radiologist 1

The following example describes interactions with professors in medical school.

> I mean that was one of the advantages of being in a pretty small program really is that you really knew the professors and if you got good reviews from them, I, I mean, you kind of knew you'd get in (to a residency). Dr. Family Practice 1

In the following narrative a pediatrician describes the interaction she had playing on a

volleyball team with medical students. She decided to start taking pre-med courses.

> After my first year of nursing school in … I played on a, interesting, I played on a co-ed volleyball team with some medical students. And I really got the impression from them that, ' wow, if these guys could make it through medical school, I could make it through medical school.' I'm serious. So what I did was during my first year of nursing school I kind of made the decision I wanted to be a physician. And so instead of taking the nursing school physiology and chemistry, I did the pre-med courses. Dr. Pediatrician 1

This dermatologist also stressed the importance of growing up in a family of physicians.

> My dad, and I had other, like uncles and cousins, people who were doctors I was around, and I think all of them. They all seemed pretty happy and liked their jobs and I think they all influenced me. Dr. Dermatologist 1

***Connections of Role and Social Identities to Self-worth to Self-efficacy to Role Choice to Interactions***

In the following narratives, we see that the doctors made connections between

the self-efficacy motive and role.

> What I did like, they offered me this job. Oh my gosh, it was when they had the resident party, the graduating residents in June. They approached me about coming back since this job had come open and I was really happy to come back. Dr. Psychiatrist 2

> [Referring to whether she was encouraged to enter the specialty she did] Probably every rotation if you did well, your attendings or resident, you know residents encouraged you to pursue that. Dr. Anesthesiologist 2

They identified interactions with and encouragement from attendings as important in

developing a positive image of themselves; they also felt competent in their role as a

physician.

***Connections of Role and Social Identities to Self-efficacy to Role Choice to Interactions***

The physicians' role and social identity are important in the narratives described

below, particularly as they relate to the perceived prestige of specialties.

> One of the things I liked about it [prestige] was that like it didn't hurt it. It was like in our generation of doctors if you did dermatology, people were like, 'Oh, you must' even though it was like counter, it counter acted this thing where people were like, 'You're a pimple popper.' Where it's like, if they knew at least, 'Oh you had to work hard to do that,' like even if you are a pimple popper, it wasn't easy to do it. So I think it helped me … because I know what, I don't think what I do is silly but I'm not immune like anyone is to like other people's impressions. Dr. Dermatologist 1

The dermatologist described her "self" as not being immune to other's

impressions. When asked about whether it was important to be in a prestigious

specialty, she described it as important because others may think of her as just a

"pimple popper," but she knows that what she does has far greater scope than that.

This relates to the self-efficacy motive because others seeing her as competent is

important to her.

The dermatologist described in the next example was not immune to what the

physician assistants told her and their suggestions affected her self-efficacy motive of

wanting more freedom in her practice and being able to make more money working the

same number of hours.

> Then I kind of started working with the physician assistants and they kept telling me,
> three of the four that I had kind of shadowed around were female and they kind of had
> told me, you hit this glass ceiling, where you're working the same hours as a physician
> but you're not making as much and you don't have the freedom to practice on your
> own. Dr. Dermatology Resident 2

The ophthalmologist in the example that follows tries to figure out if medical school is

really what she wants to do and shadows other physicians one summer.

> When I was in between my sophomore and junior year of college, I spent some time out
> in the Midwest and there was a slash semi-retired physician out there who then set me
> up with many other people that he happened to know in different specialties. That's
> what I did, that was my summer job really was to go and travel and spend a week or so
> with these people and try to figure out one, is medical school something I really wanted
> to do. Dr. Ophthalmologist 1

### *Connections of Role, Social, and Personal Identities to Self-worth to Role Choice to Interactions*

In addition to role and social identity, personal identities become important.

Vryan et al. (2003) describes personal identities as incorporating our unique biographies

and aspects of our personality that are associated with cultural and historical contexts.

This surgeon finds people similar to her in personality, and they have families and

children. This motive of self-worth allows her to maintain the image of a "being a nice

person" as these surgeons are also nice people.

> Suddenly I saw that could be me. And those surgeons aren't all- and then I meet Tom
> and all the rest of the group and Mark and I'm like they are all really nice people. And
> they have families and they have children. I started to see that, that, I was like them.
> And that was a huge hurdle for ever even considering it as a career. Because initially I
> thought, there's no way this career would fit my personality. And then I met them. They
> are one hundred percent the reason I'm surgeon today. Without them, it wouldn't have
> happened. Dr. Surgeon 1

### *Connections of Role, Social, and Personal Identities to Authenticity to Role Choice to Interactions*

In the narratives described below, authenticity now becomes the motive to

legitimize their identities. The authenticity motive relates to one's desire to have

experiences that are proper and genuine, so there is a congruency between value-

related identities and role performances (Gecas 2000). The anesthesiologist describes

how well she did on rotations in medical school and attendings and residents wanted

her to consider their specialty. The pediatrician wanted experiences that went along

with her value of working with people.

> No, I had lots of,' I don't like to toot my own horn. I was a really good medical student. I
> did very well. I graduated very high in my class and you do rotations and people wanted
> you to do a residency with them. I had that, they'd ask me, 'Okay, you should do a
> residency and come here.' I got that a lot. Dr. Anesthesiologist 1
>
> I did the radiology and anesthesia rotations, but they were so boring. I just could not
> tolerate dermatology I, I could have handled but again it was almost too specific. You
> know, I mean, I like, so I was a social work major. I mean I like getting into people's
> business. Dr. Pediatrician 1

 The connections of self motives, self-identities, role choice and interactions have

just been described. The following findings describe the connections among self-

motives, self-identities, role choice, interactions and reflected appraisal.

**Self – Role Choice- Interaction – Reflected Appraisal**

The symbolic interaction model also includes reflected appraisals. A reflected

appraisal is the physician's perception of others' judgments of her behavior.

Only one narrative in this section describes the connection among self-identities, self-

motives, role choice, interactions, and reflected appraisal. Table 5.6 is a visual

representation of this coding scheme.

**Table 5.6 Self-identities to Self-motives to Role Choice to Interactions to Reflected Appraisal**

| Self (Personal, Role, Social) | | Self-motives | | Role Choice | | Interactions | | Reflected Appraisal |
|---|---|---|---|---|---|---|---|---|
| • Personal: Person's essence or core<br>• Role: Occupant of a particular role<br>• Social: Member-ship of a group | → | • Self-worth-desire to be seen as good<br>• Self-efficacy-desire to be competent<br>• Authenticity-experiences that are genuine and congruent | → | • Attending medical school<br>• Medical school choice<br>• Specialty choice<br>• Residency and practice location | → | • Patient contact<br>• Physician contact<br>• Professor contact<br>• Time spent with family | → | • How do I see myself and how do others see me |

***Connections of Role, Personal, and Social Identities to Self-worth, Self-efficacy, Authenticity to Role Choice to Reflected Appraisal***

In the following narrative, we see a surgeon is describing the connections among

all of the components of the model, except aligning actions.

Interviewer: "Did an opportunity or situation arise that influenced your choice of medical specialty or the fact that you became a surgeon?"
Surgeon:   "That was determined by rotation at Surgical Institute as a third year medical student. I specifically did not want to go into surgery so I took surgery first to just… get it done with …but I rotated with them, and that was it. I just, I think my first day I did a

procedure with Dr. Ryan … and he let me do a lot of the procedure and I just, he knew, and I knew, I wasn't really, really, willing to admit it yet. And but then I went through the other rotations and there was nothing like that. And then I started going back and taking trauma call and scrubbing cases. And that was just it. It's kind of like knowing like who you're supposed to marry."

This physician went on to a surgical residency and after her training she came back to the Surgical Institute and joined Dr. Ryan's practice. As a medical student, her self-concept came from the response she received from Dr. Ryan as he knew and she knew she had a gift for surgery. This reflected appraisal not only affected her self-concept but the new interactions she would have with others taking trauma call and scrubbing on surgical cases. This reflected appraisal also changed social relations as she later joined Dr. Ryan's surgical practice.

As the physicians spoke about their biographical selves in the past, the act was not able to be observed making it difficult to describe reflected appraisal. The following section describes the connection among self-identities, self-motives, role choice, interactions, and aligning actions.

**Self – Role Choice – Interaction – Aligning Actions**

When people interact they need to coordinate their lines of conduct, but people do not always act the way others expect them to. According to Stokes and Hewitt (1976), verbal efforts may be needed in order to align the social interaction, the selves of those involved, and the culture they share. These identities become the source of self-motives.

The narratives in this section were to describe the connections between self-identities, self-motives, role choice, interactions, and aligning actions. Table 5.7 is a visual representation of this coding scheme.

**Table 5.7 Self-identities to Self-motives to Role Choice to Interactions to Aligning Actions**

| Self (Personal, Role, Social) | | Self-motives | | Role Choice | | Interactions | | Aligning Actions |
|---|---|---|---|---|---|---|---|---|
| • Personal:<br>• Person's essence or core<br>• Role:<br>• Occupant of a particular role<br>• Social: Member-ship of a group | → | • Self-worth-desire to be seen as good<br>• Self-efficacy-desire to be competent<br>• Authenticity-experiences that are genuine and congruent | → | • Attending medical school<br>• Medical school choice<br>• Specialty choice<br>• Residency and practice location | → | • Patient contact<br>• Physician contact<br>• Professor contact<br>• Time spent with family | → | • Normalization<br>• Neutralization<br>• Embracement<br>• Passing |

Although aligning actions was originally coded, it was not able to be observed since the act itself could not be observed. Again, as was found with reflected appraisals, the physicians talking about their biographical selves in the past did not allow aligning actions to be corroborated.

**ADDITIONAL CODES**

The narratives described in this section are additional codes whereby narratives described the identity without self-motives or did not depict one of these components found in the symbolic interactionist model.

**Identities Only, with No Self-motives**

### *Connections of Structure to Role and Social Identities*

Self-motives may be unclear in a way that the physician relates one identity to

another identity rather than to a specific motive. The respondents were asked if their

parents had encouraged them to go to medical school. For example, two doctors linked

the role identity to one of her social identities:

> I will have to say too, that my parents were not encouragers. Dr. Pediatrician 1

> She thought I should take more of a secretarial kind of job and I didn't understand it at
> the time, but when I look back, she was probably afraid. That was probably a scary thing
> to her. Dr. Psychiatrist 2

Despite the fact that the pediatrician was not encouraged by her parents to attend

medical school and the psychiatrist's mother could not understand her intentions, both

of these women became physicians. The narratives in these responses did not explain

their motives.

### *Connections of Identity with Role Choice*

The two narratives described below contain both role and personal identities but

the motive for their identity is also unclear. The first physician describes her lack of

knowledge as it influenced her personal identity.

> [Describing her preparation for medical school] I had no idea what I was getting myself
> into really, no idea. Dr. OBGYN 1

The second physician quickly went through college in three years but reflecting back on

this experience she wondered why she did that.

> I didn't take summer school, I just, I tested out of quite a bit and then I crammed a lot of
> credits in to get done in three years. Not quite sure why I felt like I needed to do that.
> Dr. OBGYN 2

In the following two examples their social identity was important to their "selves", as both doctors wanted to identify as being part of a group of surgeons or a physician in general. There is no known connection to a self-related motive.

> [Referring to her husband being reluctant about her going into general surgery] … and then he was on board. Dr. Ryan actually met with him and sat him down and talked to him about what it would be like. Dr. Surgeon 1

> My parents' family physician, he was their internist, and he strongly encouraged me to go into medicine. Dr. Pediatrician 2

**Cooling the Mark Out**

*Cooling out the mark*, a phrase prominent in the works of Erving Goffman (1952), deals with reflected appraisals, but not in the way structural symbolic interactionists conceive it. He compared the reflected appraisal process to the mark in a con game; the mark is the person who was conned out of large amount of money. The con man cannot have the mark telling the police what had happened, so he "cools out" the mark, so he, the mark, can regain some degree of dignity.

> For the mark, cooling represents a process of adjustment to an impossible situation – a situation arising from having defined himself in a way which the social facts come to contradict. The mark must therefore be supplied with a new set of apologies for himself, a new framework in which to see himself and judge himself. A process of redefining the self along defensible lines must be integrated and carried along; since the mark himself is frequently in too weakened a condition to do this, the cooler must initially do it for him (Goffman 1952: 456).

The following three narratives describe two surgical residents and an emergency medicine physician who were "cooled out" and encouraged to enter another specialty while they were in medical school.

Example 1

I think a couple of them were family physicians that I had worked with and then some of them were various family friends that said, 'Why surgery, you could be just as successful as a family doctor or internal medicine.' I think once I had made that decision in surgery and I rotated with other specialties, you know they kind of, 'Why do you want to do surgery you are female, why don't you think about something that's a little more hourly friendly.' And things like that because I think surgery residency is notorious for being pretty gruesome … and talking with my program director there, she made multiple comments about you know, academically being weak. Dr. Surgical Resident 2

In this narrative the surgical resident recalled an incident where she was told by

a program director that she was academically weak, and friends tried to steer her into

the direction of family practice or internal medicine. She was also discouraged while

rotating in other specialties that surgery was too gruesome for a female. In this

situation, the mark is given a new set of encouragements as to what specialty may be

more fitting for her. Despite others' remarks, she chose surgery as her specialty.

Example 2

I think a lot of people around didn't think I was a good fit for surgery. I wasn't angry enough or aggressive enough or abrasive, thick skinned maybe. I wasn't willing to offend people enough, which I am. I just selectively pick the people, it's usually my colleagues, but, no, but that the typical personality of someone in a more like high powered specialty. I got told a lot of times, 'You're not a surgeon.' You know… I think they just hoped that I would, I think a lot of my peers thought I would end up in primary care and people said things like, 'Don't sellout … don't go into surgery, you don't like.' Sellout, I don't even know what they meant, people have such odd opinions.
Dr. Surgical Resident 3

This female surgery resident was also "cooled out" and encouraged to enter a

primary care specialty. In this situation it wasn't her academic ability that was holding

her back but her personality as it was not what others thought would be tough enough

for surgery. Despite others opinions, she also went into surgery.

The mark in the following narrative, is "cooled out" and told she may not match in emergency medicine and she began the process of applying for OBGYN positions for residency. According to Goffman (1952) the process of redefining the self begins and she felt weakened. This physician wondered if she was good enough to go into her chosen specialty. But after loss of money and time, she came to the realization that OBGYN was not for her and she found a residency in emergency medicine.

Example 3

And I remember [the dean of medical education] saying based on my board scores, not grades because I did really well, but based on my board scores he was questioning whether it was going to be possible for me to find a spot in emergency medicine competitive wise and he said, 'You might want to think about applying for a second career' and I think that really did a disservice to me. I ended up applying to OBGYN which I didn't even care about. I ended flying around the country, spending all this money on OBGYN interviews because they interviewed earlier than emergency medicine and at this time I know that [the dean's] job is to point you in reality, but I'm not the kind that is always reality based. I go for what I want.

[Later in this interview the physician was asked about a roadblock or barrier which may have prevented her from pursuing a specialty of her choice and she felt it was] Well yes and… am I really good enough to it. Dr. Radiology Resident 2

**Summary**

In the theory chapter, a self theory of social action, which is depicted in figure 5-1, was used to account for female physicians' perceptions of past choice of specialties. The model shows that social structure, self-identities, self-related motives, role choices, subsequent interactions with others, aligning actions, and reflected appraisals are interconnected.

Figure 5.1:    A Structural Symbolic Interactionist Perspective on the Relationships among Society, Self, and Role Choices
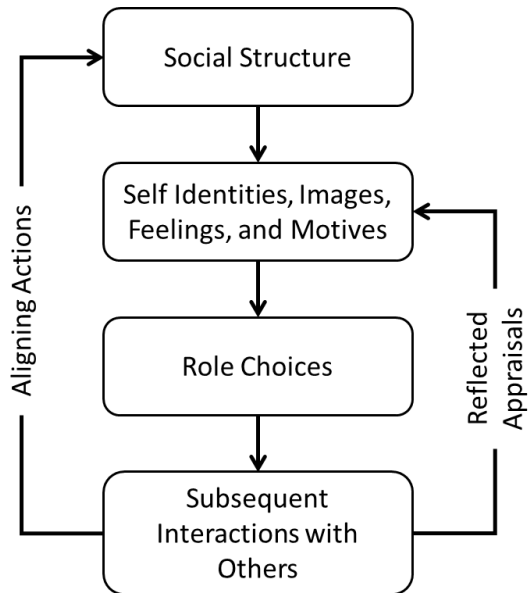


Codes for these relationships were created in the Methods chapter. The codes focused

on the connections among the parts. Much evidence was found to support this general

model. But the findings did not support the connection of aligning actions found in the

model and only one example was able to illustrate the connection of reflected appraisal.

Chapter Six will discuss these findings and answer the research question. In

addition, the study's limitations will be addressed along with implications and future

directions.

**Chapter Six**

**Discussion**

**Purpose**

The purpose of this study was to answer the research question: Does a self-theory of social action account for female physicians' perceptions of past choice of specialty? Inspired my daughters, I questioned the perceptions female physicians have about their choice of specialty. What do women physicians say influenced their choice of specialty? And, what sociological theory can account for these perceptions?

The reasons for studying this question are to make a theoretical contribution to the field of sociology by understanding the self's role in social action as it relates to physicians' perceptions of influences on their choice of specialization. It is hoped that physicians' narratives also help to better understand practical matters. These are:

- Shortages of women physicians in certain specialties.
- Information medical educators can use to better assist future physicians' specialty decisions.

An integrative review of the literature was organized according to seven factors: family background; socialization; structural barriers; social resources; aspirations; ability; and occupational values.

Family background is associated with choice of specialization in a few ways. First, female doctors have reported that their parents did not influence their choice to go to medical school but provided social support and direction in selecting a specialization once they were in a medical program. Second, research has revealed that women in

medical school come from high socioeconomic background, but this is not associated with academic performance. In addition to family background, structural barriers may affect physicians' choice of medical specialty. Women are confronted with barriers such as traditional gender roles, gender stereotypes, and a known gap in pay.

Socialization is another factor described in the review of the literature as being associated with specialty choice. Aspects of the socialization process which are identified as important include the effect of the faculty on students' attitudes and behavior, the identification of role models and how role-model learning may take place, and the effect of the school's learning climate on specialty choice.

Social resources in the form of social capital and on-going social relations, the third factor, are also associated with specialty choice. The literature describes the number of women faculty, the number of women residents, positive role models, and peer pressure as being associated with choices. The literature also describes aspirations as being associated with specialty choice. The medical profession offers many types of opportunities: to save lives; to take care of people; to be challenged in critical situations; to work for public health, and to perform research. Because of numerous opportunities medical students' aspirations vary as to the reasons they choose medicine and their choice of specialty.

Physicians' choice of specialty is associated with their ability. The ability tests used today in the selection of medical students for residency programs are the United States Medical Licensing Examination (USMLE) Step 1 and Step 2 tests. Even though these tests are designed for licensure purposes with the intention of pass/fail, these

scores are often used to evaluate applicants' academic achievements and for selection

into residency programs.

Lastly, the topic of values includes both lifestyle and prestige values, which are

associated with specialty choice. Recent specialty choice of graduating United States

medical students indicates lifestyle is become increasingly important in their career

decisions (Dorsey et al. 2003). Prestige is also added as a component of values as the

prestige of medical specialties is changing, and medical students' perceptions of a

prestigious specialty may in part be the result of the competitiveness of that specialty.

Although numerous empirical studies were found related to these seven topics,

the literature did not describe female perceptions of self when choosing their medical

specialty.

The structural symbolic interactionist perspective is used in this study and was

built around Mead's contention that society shapes self, self shapes role choices, and

role choices shape society (Stryker 2008). Rosenberg (1990) says selves are shaped by

social relations and the physicians' selves in this study are shaped by their earlier family

experiences, cultural experiences, location in the social structure, and the social context

of medical school while they received their training.

The physician's identities, images of self, and self-related feelings are important

components of the self and are sources of self-motives.

The theory predicts:

Because role-identities [images and feelings] are idealized and rather
idiosyncratic conceptions of oneself, the realities of life are constantly jarring
them, raising difficulties and embarrassments for them. As a consequence of this

> jarring, we are always having to devise perspectives that allow us to maintain these views of ourselves, at some level, despite contradictory occurrences. As a creature of ideals, man's main concern is to maintain a tentative hold on these idealized conceptions of himself, to legitimate his role-identities. Such legitimation is accomplished principally through role-performances ... (McCall and Simmons 1978:68-69).

This is also true for social and personal identities as described by Burke. According to Stets and Burke (2000:226), "having a particular social identity means being at one with a certain group, being like others in the group, and seeing things from the group's perspective." A person identity "consists of the meanings and expectations that constitute not only a person's essence or core, but also all meanings that define who the person is as a person (Burke 2004: 9). This person identity is controlled by interactions with others. According to Vryan et al. (2003:367) "we construct unique self-narratives, incorporating our particular biographies and aspects of personality associated with us, within given cultural and historical contexts.

Seeking out situations within which self will be legitimized relates to three motives: self-esteem motive (verifies social identity); self-efficacy motive (verifies role identity); and authenticity motive (legitimization of person identity). The self-esteem motive has two stages: (1) desire to view oneself as "good;" and (2) attempts to maintain a positive self-image (Gecas 2000: 101). The self-efficacy motive is one's desire to be perceived by others as a competent manipulator of one's immediate environment (Gecas 2000: 101). The authenticity motive relates to one's desire to have experiences that are proper and genuine, so that there is a congruency between value-related identities and role performances (Gecas 2000: 101).

**Discussion of Findings**

This study focuses on female physicians' perceptions of self when choosing their medical specialty. The findings were organized into six sections according to the components found in the structural symbolic interactionist theory and then classified according to the types of identities and motives. These six sections and the number of narratives found in this study are:

- Social structure/self                                          17 examples

- Self/role choice                                               141 examples

- Social structure/self/role choice                              161 examples

- Self/role choice/interactions                                  73 examples

- Self/role choice/interactions/reflected appraisal             1 example

- Self/role choice/interactions/aligning actions                0 examples

The theory predicted self-efficacy is verified through enactment of role identities, personal identity is verified through authenticity, and social identity is verified by self-worth. However, the theory did not predict more than one identity would occur at a time although it described role identities as confusing and raise difficulties for our role performances. For the most part, examples described more than one identity operating at a time and verification of identities did not always fit this pattern. This study contributes this finding of more than one identity occurring at a time and any motive may legitimize any identity. An example of more than one identity and more than one self-motive appears below.

***Connections of Structure to Role and Personal Identities to Authenticity and Self-efficacy to Role Choice***

> I mean I loved surgery. I loved doing intricate things with my hands and I loved to sew. I just didn't feel like I could commit that many more years to doing, of my life to doing that, to sub-specializing, so I didn't consider fellowship. I think for that reason pediatric fellowship or even going into something like surgery. I loved orthopedics, oh my gosh, but it was such a man's world! Dr. Pediatrician 2

The theory did predict the importance of social structures on the self. The social structures the physicians described as perceived influences on their self include - parents, other family members, children, the job itself, rotations in medical school, requirements of the specialty, other physicians, attendings, teachers, the physician's age, and prestige. Many of these social structures in turn affected their lifestyle decisions. The following example describes the requirements of a specialty as a perceived influence on the choosing a specialty where she wouldn't have to be on call.

***Connections of Structure to Role, Social, Personal Identities to Self-worth to Self-efficacy to Role Choice***

> Going into emergency medicine, there was probably some influence I spent some shifts with my dad working and there were a few other decisions. I didn't want a practice, I didn't want my own practice, I didn't want to take call. I think there was probably some influence there. Going into radiology was all me. Dr. Radiology Resident 2

The theory predicted reflected appraisal and aligning actions were a component of role choice. Because the physicians were talking about their self in the past it was difficult to describe these two perceived influences on the self. Only one example of reflected appraisal was found and no examples of aligning actions were observed. This example appears below.

*Connections of Role, Personal, and Social Identities to Self-worth, Self-efficacy, Authenticity to Role Choice to Reflected Appraisal*

The following narrative describes a surgeon's outcome of reflected appraisal.

Interviewer: "Did an opportunity or situation arise that influenced your choice of medical specialty or the fact that you became a surgeon?"
Surgeon:   "That was determined by a rotation at Surgical Institute as a third year medical student. I specifically did not want to go into surgery so I took surgery first to just… get it done with …but I rotated with them, and that was it. I just, I think my first day I did a procedure with Dr. Ryan…and he let me do a lot of the procedure and I just, he knew, and I knew, I wasn't really, really, willing to admit it yet. And but then I went through the other rotations and there was nothing like that. And then I started going back and taking trauma call and scrubbing cases. And that was just it. It's kind of like knowing like who you're supposed to marry."  Dr. Surgeon 1

The theory did not predict identities whereby the motives were unclear. An

example is described below.

### Connections of Structure to Role and Social Identities

Self-motives may be unclear in a way the physician relates one identity to

another identity rather than to a specific motive

I will have to say too, that my parents were not encouragers.
Dr. Pediatrician 1

The theory did not predict the new code, "cooling out the mark" described in three

different physicians' narratives. An example is described below.

I think a lot of people around didn't think I was a good fit for surgery. I wasn't angry enough or aggressive enough or abrasive, thick skinned maybe. I wasn't willing to offend people enough, which I am. I just selectively pick the people, it's usually my colleagues, but, no, but that the typical personality of someone in a more like high powered specialty. I got told a lot of times, 'You're not a surgeon.' You know… I think they just hoped that I would, I think a lot of my peers thought I would end up in primary care and people said things like, 'Don't sellout … don't go into surgery, you don't like.' Sellout, I don't even know what they meant, people have such odd opinions.
Dr. Surgical Resident 3

Because this term was illustrated by Goffman (1952) under the theory of dramaturgy, concepts from this theory may need to be incorporated into future studies to include interaction order and how we may be misguided in communication with others.

**Study Limitations**

Perceptions of self change with all professional training including medical students' perceptions of self. They gain a better sense of who they are as a person, and who they will be as a doctor. They gain an understanding of their medical interests and abilities. And they consider what contributions they can make to their profession and patients.

Because perceptions of self change, the age of physicians in this study, describing their pasts was a limitation. The oldest women in this group of physicians graduated from medical school in 1979 and reflecting on their past selves and the choices they made was difficult in some instances. Talking about oneself in the past related to their perceptions of self, reflected appraisal and aligning actions were not able to be observed. These two components did not demonstrate their contribution to the theory.

This study contains other limitations. The sample size could have been increased to strengthen the findings. Although ten different specialties were included in this design, additional specialties would have been beneficial to add validity to the research. It would have been beneficial to include an equal sample of primary care and non-

primary care physicians to gain a greater understanding of physician shortages in the primary care fields of medicine. It would also be more beneficial to include other racial/ethnic minorities for greater generalizability of the study. It is also difficult to generalize this study to the population of all female physicians, as the interview sample was not randomly selected and limited to only six different states.

To strengthen the validity of the study it would be beneficial to have the physicians review their transcriptions to confirm their responses as well as the context of the answers according to what was transcribed. However, this would have required more time of the physician, and the time commitment was a barrier I encountered, with some physicians not even being able to meet with me due to their busy schedules. And lastly, the new code of "cooling the mark out" described in this study suggests other factors might be worth further investigation to better understand the perceived influences of selves on the selection of specialties.

**Implications and Future Directions**

A future study of women physicians' perceptions of specialty choice and the theoretical contribution that can be made to a self theory of social action would best be served by interviewing women of similar age right after the completion of medical school. The self-reflectivity on their perception of influences would be easier to recall.

In order to observe the act and to make a contribution of aligning actions and reflected appraisal, a similar study to Becker et al. ([1961] 2007) might better serve observing these two components of the social action theory. Becker et al. ([1961] 2007)

was able to follow male medical students and examine and interview their intentions as they "tried on roles" in becoming a specialist.

Using a qualitative approach, this study gives physicians a voice in offering an explanation as to the perceptions of self in specialty selection. This voice may help assist in reducing the underrepresentation of physicians in some fields of medicine helping to implement medical programs and job opportunities. The physicians in this study also offer future female physicians encouragement in achieving a future in medicine. Along with implications the future direction of this research includes a comparative study of male physicians to determine the similarities and differences of gender in specialty choice. It may be beneficial for other research to include women who never matched in the specialty of their choice to gain a greater understanding of what may have been perceived influences on self. This understanding may advise future physicians how to obtain their choice of specialty.

**Conclusions**

A female physicians' choice of specialty is a role performance which relies on the confirmation of her self-related motives. These self-related motives were formed during her relations with others, which were themselves played out within certain societal and structural conditions. These self-related motives for becoming a physician and choosing the specialty she did occurred at various stages of life, different interactions with others, and diverse family and societal circumstances. An overview of these stages is summarized in the following paragraphs.

Even at a young age, as early as ten years of age, some of the women in this study wanted to become a doctor. Their interactions with their family physician, or growing up in families whose relatives were physicians, greatly influenced their identities. My daughters may have been influenced by their father as described in the following example of a dermatologist whose father is a physician.

> I think just because I worked with my dad and he loved his job so much and is so happy in his career. And he had, I'd say, a pretty good work life balance. I saw the way he practiced and he has this combination of clinic and of surgical like procedural practice.
> Dr. Dermatologist 1

Although some fathers were important to their daughters' selves in becoming physicians, this was not the case for all the physicians in this study. The following example describes a family practice physician's father's reasoning for not wasting her time in going to medical school.

> My mother said, 'You can do anything.' It was open ended. My dad said, 'Why are you going to med school?' When I got in he said, 'You're just going to get married and have kids and waste the degree.' It's a good thing I didn't listen to my dad.
> Dr. Family Practice 2

The motives for wanting to become a physician were developed over time as one legitimized their role, social or personal identity with self-worth, self-efficacy or authenticity. Not all of the physicians decided at such a young age that they wanted a career in medicine, but were later encouraged by college professors or were searching for a greater sense of achievement.

Once the decision was made to apply for medical school, excelling at rigorous courses became a role choice. The college majors of the physicians in this study varied as some chose fields of study outside the requirements of science courses. Before

applying for medical school, they had to take the Medical College Admission Test

(MCAT), fill out a standard application, and decide what medical schools they wished to

apply.

Once in medical school, the first two years consists of coursework and the last

two years the medical students rotate through clerkships in a teaching hospital. By the

fourth year, the medical students have to decide on what specialty they would like to

pursue. Many role decisions play a part in her final choice, as self-motives confirm

identities and a medical student tries to find the right fit as she considers her structural

conditions and personal needs.

The women became physicians upon medical school graduation and later went

to residency training. During residencies other role choices were made as to whether

they would continue to pursue a fellowship and where they would eventually practice. A

self-theory of social action helped to explain these physicians' perceptions in choosing

their specialty.

The women in this study all had different stories as to their desire to pursue

medicine and the road they traveled to accomplishing this goal. For each it was a

journey.

> Then you go out and you start your job and you have to build but you're also building a
> family. You're always fighting against those influences so you don't get to sit down and
> think, I'm doing what I like to do, until you're ready to not do it anymore.
> Dr. OBGYN 1

APPENDIX A

Interviewee _____

College attended/graduated from _____

Year of college graduation _____

Major _____

Other career before medical school _____

Year of medical school graduation _____

Type of Specialty _____

Specialty Location _____

*Family Background:*
- I would like to find out about the profession, career or work of your parents. Let's start with your father. What did he do?  What type of education did he have?
- Mother?
- Did your parent's influence the medical specialty you chose?

*Structural Opportunities/Constraints*
- Did an opportunity or situation arise that influenced your choice of medical specialty?
- Was there a roadblock or barrier that prohibited you from considering a different specialty?
- Did family or personal obligations influence your choice of the medical specialty you chose?
- At any time, did you feel encouraged or tracked to enter a specific specialty?
- In the past do you feel that there were certain specialties that were more female oriented?
    - If so, were you ever encouraged to enter one of those?
- Was a geographical location a consideration in the specialty you chose?

*Network Resources:*
- Was there ever a time in your life when you just knew you wanted to be a doctor? If so, was there an individual you interacted with that influenced your choice?
- What year in medical school did you know that you wanted to be a specialist?
- Did other students influence your specialty choice?
- Did financial obligations ever influence your specialty choice?
- Did someone influence the location of your residency by networking on your behalf?

**Aspirations:**
- Did a specific interest or personal talent influence your specialty choice?
- Did others expect you to follow a certain medical tract?

***Ability:***
- Describe your class rank in medical school:  Upper ¼ Upper ½ Bottom ½
- Describe your Step 1 scores with the same ranking:
- Do you know your medical school class rank?  Are you comfortable sharing that with me?
- Your Step I scores?
  - Did your Step I scores and or medical school ranking influence the medical specialty you chose?

*Socialization*
- As a medical student did you have to prepare yourself any differently for your specialty than other medical students entering other specialties?
- How were you prepared for your role as an internist?
- Do different specialties have to learn different roles?

*Occupational Values*

- Did the amount of contact you had with patients influence your specialty decision?
- Longitudinal patient care opportunities?
  - Here is a list of medical specialties. I would like you to rank them on prestige. Please rank them on how you believe most health personnel would rank them. One being the highest.
  - Now rank them according to lifestyle. A score of one is the the lifestyle that in the most controllable and a score of twelve would be the least controllable.
- Is there anything else you would like to add on what influenced you in becoming _____ (specialty).

APPENDIX B

1. If you had to do it all over again, would you have gone into the same specialty you chose?

2. What advice or recommendations would you make to a woman interested in a career as a physician?

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