COMING FULL CIRCLE: HOW MEDICAL STUDENTS CRAFT THEIR PREFERENCES IN SEARCH OF AN AUTHENTIC DOCTOR ROLE.

by

NJOKE THOMAS

Submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Organizational Behavior

CASE WESTERN RESERVE UNIVERSITY

January, 2018
CASE WESTERN RESERVE UNIVERSITY

SCHOOL OF GRADUATE STUDIES

We hereby approve the dissertation of

Njoke Thomas

candidate for the degree of Doctor of Philosophy

Committee Chair

John Paul Stephens, Ph.D.

Committee Member

Ron Fry, Ph.D.

Committee Member

Emily Heaphy, Ph.D.

Committee Member

Ellen Luebbers, M.D.

Committee Member

Melvin Smith, Ph.D.

Defense date

July 31st, 2017

*We also certify that written approval has been obtained for any proprietary material contained therein.
TABLE OF CONTENTS

CHAPTER 1. PROBLEM STATEMENT
Socialization effects in the medical context
Overview of the dissertation

CHAPTER 2. THEORETICAL REVIEW
Organizational perspective
Sociological perspective
Psychological perspective
Anthropological perspective
Applying an integrative perspective to the medical context

CHAPTER 3. METHODS
Research context
Location and participants
Data collection
Data analysis

CHAPTER 4. TYPOLOGY OF PREFERRED ROLE ENACTMENTS
Caregiver role enactment
Diagnostician role enactment
Balanced role enactment
Ambivalence towards role enactment
Theoretical implications

CHAPTER 5. PREFERENCE CRAFTING
Overview of clerkship experience .......................................................... 71
Emergent model of Preference Crafting .................................................. 73
Summation of findings ....................................................................... 104
Theoretical implications ..................................................................... 107
Implications for medical socialization .................................................... 116

CHAPTER 6. CONCLUDING THOUGHTS .................................................. 119
Limitations ......................................................................................... 121
Future research directions ................................................................. 123

Appendix A. Observation protocol ....................................................... 125
Appendix B. Entry interview script ....................................................... 128
Appendix C. Reflection group facilitator interview script ...................... 130
Appendix D. Personal statement interview script .................................. 132
Appendix E. Midpoint reflection prompt ................................................ 133
Appendix F. Table 3. Summary of data sources ..................................... 135
Appendix G. Figure 4. Induction of Preference Crafting elements ......... 136
Appendix H. Data Table 1. Phases of role learning ............................... 137
Appendix I. Data Table 2. Sensemaking mechanisms ............................. 142
Appendix J. Data Table 3. Contextual features ..................................... 146
Appendix K. Data Table 4. Evidence for Coming Full Circle ............... 148
Appendix L. Data Table 5. Differentiating preferred role enactments .... 152

REFERENCES .................................................................................... 160
LIST OF TABLES

Table 1. Central aspects of liminal rites ................................................................. 333
Table 2. Stages of data analysis .............................................................................. 52
LIST OF FIGURES

Figure 1 Conceptualizing clerkship as a rite of passage .............................................344
Figure 2. Typology of preferred role enactments ............................................................67
Figure 3. Iterative process of Preference Crafting .......................................................107
Coming Full Circle: How Medical Students Craft Their Preferences
in Search of an Authentic Doctor Role

Abstract

by

NJOKE THOMAS

This dissertation introduces the phenomenon of preference-crafting among professionals in training. Current theories of professional socialization assume that individuals have little discretion over how to enact their roles, and thus fail to account for the influence of the initial orientations that newcomers and learners may bring to the role. To develop new theory, I conducted a longitudinal study of nine clinical stage medical students as they navigated the transition from classroom to clinical training. Utilizing ethnographic methods, I captured student sensemaking around critical events in the course of their clinical training and the preferences for practice that emerged over time. Using grounded theory, I induced a typology of preferred role enactments and the process that allowed students to clarify their preferences for role (whether humanistic, technical or both).

Drawing on socialization and identity theories, preference-crafting refers to identity work that allows individuals to define themselves during the liminal experience of professional socialization. Through preference-crafting, students transcended expectation-shattering experiences and established a values-affirming orientation toward the prospective doctor role. Orientations informed students' values-congruent choices of medical specialization. These findings suggest that discretion over professional roles can be exercised well before they are officially assumed, potentially offering insight into the orientations professionals adopt in enacting their role.
CHAPTER 1.

PROBLEM STATEMENT

Nick proceeded to explain passionately that throughout his entire medical school experience he had noticed how little physicians spend time with patients versus on the computer. He seemed extremely displeased and frustrated. The other students listened intently, some nodded their heads. He explained that in the HEALTHWORKS Emergency Department the ratio is about one to ten (physicians’ time spent with patients versus on computer). He shared that this is affecting his specialty decision. He noted that on this rotations a physician spent half the time showing him shortcuts in the computer versus actually teaching him medicine. By contrast in surgery "you are actually doing something". Fieldnote: SOM429A-011515

Medical students frequently identify the desire to help others as a primary motive in their career choice (Ratanawongsa, Howell & Wright, 2006). But as they progress in their training, they discover that the practice of medicine addresses the inherent humanity of health care provision far less than they had expected. In the spaces that might accommodate human value and dignity, they may encounter instead a preoccupation with the scientific aspects of the practice or, as was the case for Nick, an inordinate focus on administrative tasks. Nick's frustration and his colleagues' nods of agreement suggest a certain ubiquity of events like these in the medical student experience. As they did for Nick, these revelations may raise important questions about what constitutes legitimate doctor work and how the doctor role should be enacted. How they go about resolving these discrepancies between the idealized medical practice and the sobering reality is a process we have yet to fully understand.

Dating as far back as Hippocrates, scholars and practitioners have championed the humanistic practice of medicine, i.e. recognizing the personhood of the patient (Merton,

---

1 Student and organizational names have been altered to maintain the privacy of study participants.
and the importance of individual values, goals and preferences for clinical
decisions (Hartzband & Groopman, 2009). In the past two decades, efforts to infuse
humanistic values in medical practice have been linked to health care reform (Hartzban &
Groopman, 2009) and patient-centered care (Laine & Davidoff, 1996). Though espoused
in the mission of the medical profession, and the motives of aspiring doctors, humanism
as manifested in empathy, compassion and rapport with patients is often lacking in the
practice of medicine (Goldberg, 2008; Martiminiakis et al., 2015). This deficiency can
severely undermine the quality of the interaction between doctors and their patients.
Across a variety of clinical settings and medical specialties, doctors have been shown to
disregard or downplay patient emotional cues. In a meta-analysis of 21 studies of
surgeon-patient interaction, surgeons failed to respond to 70 - 90 % of patients’
verbalized emotional or personal cues and as a result only 53% of patients were found to
have fully disclosed their surgical concerns (Levinson, Hudak & Tricco, 2013). In a
multi-city study of 45 providers and 418 HIV positive patients, empathic responses
occurred in only 45% of assessed interactions as doctors tended to disregard the
emotional aspects of patients' disclosures in favor of informational or problem-solving
responses (Hsu et al., 2012). Among a sample of lung cancer patients and their thoracic
surgeons and oncologists, empathic responses were in even shorter supply. Only 10% of
the emotional cues from patients warranted an empathic response from doctors, and these
were often withheld until the end of the interaction (Morse, Edwardsen & Gordon, 2008).
Taken together, these studies make a compelling case for an epidemic of missed
opportunities.
These oversights in doctor-patient communication have significant implications for patient perceptions of quality of care. A balance of technical expertise and humanism seems to be essential for patients to experience their care as effective and complete. The earliest studies of patient perspectives on quality health care, identified good doctors as "technically capable" (Coser, 1956) at a minimum, and also demonstrating an interest in patient welfare, as opposed to discharging their function in an impersonal, routinized and mechanical fashion (Sussman, 1967). An overemphasis of one at the expense of the other, particularly in interfacing with patients can lead to sub-optimal patient outcomes (Angus, Watson, Smith, Gallois & Wiles, 2012; Cegala, McGee & McNeilis, 1996). When a balance is achieved, positive outcomes include patient satisfaction, treatment adherence, improvements in physiological markers (e.g. reduction in blood pressure and blood glucose levels) and overall health status (e.g. reduction in depressive symptoms) (see King and Hoppe [2013] for a review). Mounting concern for an overly technical orientation in medical practice, and employing goal-oriented rationality and instrumentality in the provision of care (Hoogland & Jochemsen, 2000) has prompted interventions throughout the medical training pipeline with the aim of promoting humanism in medical practice (Branch et al., 2001).

The humanistic-technical imbalance in the enactment of the medical role highlights an inherent duality in the practice of all professions. Professional workers are afforded an exalted position among other occupations by virtue of their proprietary technical expertise. They are also entrusted by society to responsibly steward and apply this expertise towards the amelioration of social ills (Abbott, 1988; Gorman & Sandefur, 2011). While expectations of technical mastery and humanitarian objectives need not be
in conflict, they do set the stage for competing priorities in role enactment. Too singular a focus on humanistic concerns may prove detrimental to the individual's standing within the professional community should they fail to meet established standards of technical expertise. Too singular a focus on technical mastery, while signaling professional allegiance, may place the worker (and ultimately the profession) at odds with social expectations. Thus, it behooves both the individual actor and the profession as a whole to achieve a balance of humanistic and technical orientations. How do these social, occupational pressures and individual motives align to inform and shape the enactment of the professional role? For better or worse, how is it that aspiring professionals end up enacting their role in the ways that they do?

Newcomers to a designated role learn acceptable ways of being and doing through socialization, “the process by which individuals become part of an organizations pattern of activities” (Ashforth, Sluss & Harrison, 2007:1). Socialization practices transmit the knowledge and skills necessary for appropriate and effective role enactment within a new work context (Van Maanen & Schein, 1979). For newcomers to a professional role, work is performed within the context of an occupational community circumscribed and defined by shared enterprise, identification and culture (Van Maanen & Barley, 1984). Owing to this primary identification with an occupational community, professional workers are far less likely to define themselves in terms of where they work as opposed to what they do (Pratt, Rockmann & Kauffmann, 2006). And yet, much of the socialization research has focused on organizational entry of first-time workers (Ashforth et al, 2007). Recent research on the experience of newcomers to professional communities has focused on role transition at intermediate stages of the professional socialization process (Ibarra,
Thus, we know very little about the experiences of aspiring professionals on the cusp of professional entry. Organization and professional socialization are often conflated in attempts to interpret the experiences and actions of aspiring professionals. A central premise of this dissertation is that attention to the unique features of professional socialization can offer insight on subsequent role enactment.

The conditions of professional socialization thrust newcomers into a space of in-between-ness, having left one role behind (lay person) but not yet assumed a new role (professional). This inherently liminal state of “being betwixt and between social roles and/or identities” (Ibarra & Obodaru, 2016:47), is typically associated with cultural rites of passage (Turner, 1967). In cultural rites of passage, neophytes are subjected to any number of ritualized ordeals intended as a means of reifying communal values and instilling necessary virtues associated with the destination role. In a similar vein, novices entering the field of professional practice are divested of status, individuality and autonomy, creating a sense of dependency that Shuval (1975) likened to childhood socialization. Their ritualized experiences (Haas & Shaffir, 1982) are intended to symbolically render the aspirant as a blank slate upon which the values and norms of the professional community can be inscribed. As a general rule, organizational socialization does not invoke this state of liminality. This key differential between the two process can be attributed to duration, which can be quite lengthy for aspiring professional and surface issues of role ambiguity, role discretion and role identity. Each of these issues can be consequential for learning and enacting the professional role.

*Duration*
While organizational socialization is typically anchored to organizational entry, professional socialization spans a significantly longer time period. For most professions, socialization commences well before the target role is assumed and may continue long after practitioner status has been attained. This extended socialization time frame is essential for the transmission of a substantial knowledge base and the development of a mature professional identity (Hilton & Slotnick, 2005). As a result, the target role remains aspirational for a long time even as trainees progress through any number of intermediary preparatory roles. In the medical context for example, before achieving the status of doctor, aspirants must complete stints as medical student, medical clerk, intern and resident. We have very little insight into the choices that are made while a professional role is still aspirational and the impact this might have on role enactment.

The professional socialization that occurs before membership status is granted should not be confused with the stage of organizational socialization that occurs in advance of organizational entry. The latter, anticipatory socialization encompasses actions that organizations may take to shape newcomer impressions in advance of entry, as well as newcomer efforts to educate themselves about a future organization (Ashforth et al., 2007). While aspiring professionals most certainly undergo anticipatory socialization before they enter training, the early phases of training and entry are not simultaneous as they are for organizational entry.

**Ambiguity**

In most, if not all professions, the trajectory of professional socialization is clearly delineated. Very little research is required to determine the general steps required to become a doctor or lawyer. And yet aspiring professionals are often beset with
ambiguity. Some degree of uncertainty is to be expected with any new role but for aspiring professionals this is compounded by their state of suspension between layperson (a position which they may never again inhabit) and independent practitioner (a position they will not inhabit for some time). Whereas the target role is both apparent and assumed at the point of organizational entry, the final role is known only in the most general sense when professional socialization begins. Whatever clarity medical or law students may have regarding specialization at the start of their training is usually subject to change as they progress. The destination role is obscured by the distance of time and by students' own ignorance about the role. As discussed above, anticipatory socialization does provide some insight. However, as Becker and colleagues observed in the medical context, most students derived their knowledge of the profession from personal experience as patients and popular culture (Becker, Geer, Hughes & Strauss, 1961). Inexperienced novices progress from limited and peripheral participation in the shared enterprise of the community of practice (Lave & Wenger, 1991), towards unrestricted participation. Intermediary roles facilitate this incremental development of the tacit knowledge (Polanyi, 1962). Aspiring professionals are obliged to focus on these intermediary roles, striving for mastery in the immediate enactment as they look towards the future. This distinction between proximal (mastering intermediary roles) and distal goals (achieving doctor status) is captured in the following student's description of medical school.

"Medical school is like a stairway and I am standing on a stair and it is about three feet high and I am normal size, but I just look at this one stair. I can see the ones above but the thing I have to do is get up this step right now - this one step, and I can't really do anything about the ones above me" (Becker et al, 1961)
Discretion

Socialization scholars have long acknowledged that newcomers are by no means passive recipients of socialization practices. They may demonstrate significant agency in seeking out prototypes of the target role (Ibarra, 1999) and proactiveness in role assumption. At the extreme, this proactiveness may manifest in intentional efforts to adjust the role to suit their own needs as is evident in role innovation (Nicholson, 1984), role crafting (Sluss, van Dick & Thomspoon, 2011) or job crafting (Wrzesniewski & Dutton, 2001). However, role occupancy is a prerequisite for such purposeful adjustment. Those engaged in early stages of professional socialization would appear to have neither discretion nor opportunity to engage in role/job crafting. And yet, the depth of the exposure whilst occupying intermediary roles may provide ample fodder to inform future enactment. It is not clear what kinds of choices and discretion aspirants may have as they work towards the desired professional role.

Identity work

Ibarra & Obodaru (2016) observe that liminal spaces are fertile grounds for identity work, the process of "forming, repairing, maintaining, strengthening or revising the constructions that are productive of a sense of coherence or distinctiveness" (Sveningsson & Alvesson, 2003: 1165). This causal inference holds true for professional socialization which gives rise to two important identity outcomes, professional identity – "the constellation of attributes, beliefs, values, motives and experiences that people use to define themselves in their professional capacity" (Caza & Creary, 2016: 263), and professional identification - the extent to which the professional identity is seen as self-
defining (ibid). More so than any other occupational group, professionals are defined by what they do (Pratt, et al., 2006). Thus, learning what must be done and how to perform the professional role effectively is critical for formulating and internalizing a professional identity.

The significance of professional identity for role enactment is illustrated in the differential orientation of general practitioners (GP) and nurse practitioners (NP). NPs perform many of the same functions as GPs, and are subject to the same constraints to service delivery in terms of time and cost, and yet they outperform their medical counterparts on a number of satisfaction metrics such as empathy and respectful communication (Creech, Filter & Bowman, 2011). Unlike GPs, NPs are first trained as nurses and, as such, identify with a core value of caring (Pearcey & Draper, 2008). By contrast, the core values emphasized in the medical community are professional competence, scientific knowledge, and upholding patient autonomy and welfare (ABIM, 2002). This differential in both value orientations and role enactments suggests that professional identities play a key role in cementing a humanistic orientation in NP practice while minimizing it in GP practice. Within the medical context, professional identity formation is defined as, "an adaptive developmental process that happens simultaneously at two levels…at the level of the individual, which involves the psychological development of the person and…at the collective level which involves the socialization of the person into the appropriate roles and forms of participation in the community's work" (Jarvis-Selinger et al., 2012:1). This definition suggests that socialization and identity formation are viewed as inseparable and mutually constitutive.
It stands to reason that both must be taken into consideration in interpreting resultant role enactments.

**Socialization effects in the medical context**

To restate my central argument, the very nature of professional work can elicit tensions in role enactment, favoring either a technical or humanistic orientation. Extant professional socialization research offers some insights into the process of becoming a professional, which encompasses learning and enacting a distinct role and linking critical aspects of identity to role performance. Thus far, I have explored the implications of professional socialization for role enactment in the abstract. It is critical to understand how these abstractions manifest in real world contexts. Scholars have typically looked to medicine as the prototypical profession for deeper insight on the micro-level dynamics within professional communities (Merton, 1975). In this study, I seek to do the same by focusing on the latter years of medical school in which medical students transition into clinical practice. This study departs from the existing research in that it looks not to the organizational constraints that shape professionals' work attitudes and behaviors, though they are significant. These have been addressed elsewhere and continue to be important considerations. Instead, I will focus on the role learning that occurs long before the role is assumed. In so doing I hope to understand how experiences and personal insights that emerge during the liminal period, when a trainee is neither layperson nor recognized professional, profoundly shapes future role enactment.

The clerkship role, which commences in the third year of medical school, is an important threshold in professional socialization. Students move back and forth between academic and clinical environments. These moves herald their initial transition into the
clinical setting and will ultimately culminate in their entry into a full time residency training program. As Figure 1 illustrates, each of these institutional environments exerts distinct socialization pressures that privilege specific identities. It is during the clerkship year that students first encounter the 'hidden curriculum' of medical practice, in which valued and endorsed behaviors frequently contradict the humanistic values that are professed in the first two years of training (Michalec & Hafferty, 2013). It falls to the medical student to resolve this discrepancy in the construction of their identity. Trainees seem to resolve the cognitive dissonance arising from these discrepancies in one of three ways; by conflating observed and enacted values; by devaluing espoused values or by ascribing to a superordinate set of values to guide their behaviors (Coulehan & Williams, 2001). In the absence of explicit guidance, these choices may not be conscious but they may have a significant impact on professional identity and role enactment. Coulehan and William’s (2001) theoretical propositions are based largely on anecdotal evidence. To assess the impact of the hidden curriculum, O'Brien and colleagues (2016) solicited students’ characterizations of the ideal enactment of the clerkship role. Their findings of four ideal types of role enactment; learners, performers, caregiver and team players, lend some credence to Coulehan & William's (2001) claim that the hidden curriculum in medical socialization influences learner impressions of ideal behavior. However, student characterizations may not translate directly to student actions; thus, it is important to understand the extent to which students seek to emulate the ideal and how this influences role enactment over time. To date, no empirical work in either organizational studies or medical education has established a link between professional socialization and aspiring
professionals’ orientation towards future role enactment. Medical clerkship is thus a compelling period in medical training to investigate this phenomenon.

In this study, I conducted a longitudinal qualitative case study (Eisenhardt, 1989) of a cohort of medical students during the clinical years of their training (3rd and 4th). I explored students’ experiences of professional socialization, identified the events that shape students’ perceptions of how to ‘do doctoring’, and traced their evolving orientation towards future role enactment. To achieve the overarching goals of my research, I chose an inductive approach for this study, which allowed for drawing on the interpretations of individuals living the experience under investigation (Corley & Gioia, 2004). Inductive approaches are also recommended for the development of nascent theory (Edmondson & McManus, 2007). While there is a rich tradition of research in occupational socialization with a specific emphasis on the medical context (Ashforth et al., 2017), no studies to date have investigated the emergence of orientations towards role enactment during socialization. In addition, prior studies have not implicated the liminal qualities of professional socialization as specific fodder for identity construction and role mastery. The novelty of this perspective in an otherwise mature area of inquiry justifies my choice of inductive methods.

**Overview of the dissertation**

In this chapter I have articulated the "problem in the world" that motivates this inquiry. In Chapter 2, I explore dominant theoretical perspectives on the occupational socialization literature and suggest a new theoretical perspective. I revisit these theoretical perspectives in subsequent chapters to situate my findings in the context of existing scholarship. In Chapter 3, I provide a detailed description of my choice of data.
collection and analysis methods. In Chapters 4 & 5, I present the key finding of my research. In Chapter 4, I present a typology of student’s preferred role enactments and discuss the theoretical implication of characterizing role orientation in terms of a typology. In Chapter 5, I present a model of Preference crafting - the reciprocal process of role learning and identity work that surfaces an individual's preconceptions of, affinity for and intended enactment of a prospective role. In Chapter 6, I offer my concluding thought, identifying inevitable limitations of my work and suggesting future research avenues.
CHAPTER 2.
THEORETICAL REVIEW

But the question is, by the time I finish, will I still remember any of what I originally wanted to be? When I'm through with my training, will I have any way of knowing what kind of doctor I have actually become? (Klass, 1987: 41)

A review of organizational scholarship vis a vis socialization, reveals three salient perspectives, organizational, sociological and psychological. In the review that follows, I discuss the key insights and contribution of each perspective. I also acknowledge the blind spots of these perspectives as it pertains to occupational socialization. My overarching aim is to introduce an anthropological lens as a third and lesser-explored perspective. By conceptualizing socialization as a rite of passage (Turner, 1967), I focus attention on the inherent liminality of occupational socialization. I suggest that this experience of liminality has a significant influence on the outcomes of socialization as such merits purposeful investigation and may provide further insight as to the link between socialization and orientations towards role enactment.

Organizational perspectives

Socialization is most simply defined as a process of selective acquisition of values, attitudes, interests, skills and knowledge of the group for which membership is sought (Merton, 1957). While definitions of socialization abound, scholars agree that socialization is a learning process in which the content of the learning is the culture of the entity for which entry is sought. Organizational scholars have paid the most attention to socialization as it occurs within two distinct contexts, organizations and occupational communities. In the organizational context, socialization is an important instrument of
continuity and stability (Ashforth et al., 2007). As such organizational scholars have tended to focus on the processes by which new workers are ‘broken in’, attending to indicators of person-organization fit and appropriate role mastery. Maintaining the integrity of the knowledge base and practices that delineate an occupational community are also important for continuity and, in the case of professions, sustained social stature. Thus, occupational communities must inspire new members to accept and uphold existing norms and values. This is achieved through professional socialization, defined as "the moral and symbolic transformation of any lay person into an individual who can take on the special role and status claimed by the professional" (Haas & Shaffir, 1982:135).

Beyond sustaining the unique properties of the occupational community, professional socialization affords the aspirant the opportunity to develop role specific knowledge, attitudes and behaviors that solidify their membership.

Organizational scholars have identified four distinct domains of informational content that must be transmitted to fully orient newcomers: task duties, work role, work groups, and organizational climate/ culture (Ostroff & Kozlowski, 1993). All four are essential for optimal functioning and full integration into the work context. However, newcomers initially gravitate towards task domains (including technical and procedural knowledge) and role domains (including expectations, norms and authority boundaries) (Morrison, 1995; Ostroff & Kozlowski, 1993). Socializing agents, including mentors, supervisors, near peers, clients and fellow trainees can all play an important role in transmitting key pieces of information in any one of these domains. Not all information made available through socializing events and agents translate into actionable knowledge. Scholars distinguish between socialization content and newcomer learning and seek to
better understand the preferences newcomers exert in assessing and assimilating information into knowledge and practice.

Sociological perspectives

Sociologists have employed two important analytical frameworks in their exploration of professional socialization. The early work of University of Chicago scholars recognized the rich interpersonal networks within which professionals learn and practice their craft. Adherents of this sociological tradition eschewed formal theorizing in favor of rich descriptions of workers' construction of their social situations (Barley, 1989). While illuminative of the lived experience of professional life and the unique challenges of becoming a professional, these early works provided little by way of generalizable conceptual frameworks that might be used to predict socialization outcomes.

A second stream has explored institutionalized processes of socialization, as manifest in professional schools. The sole mandate of professional schools is to provide this socializing function. In executing this function, they approximate total institutions, places of work and residence wherein,

"all activities are conducted in the same place and under the same single authority; each activity is carried on in the company of other people all of whom are treated alike and are required to do the same thing together; all activities are scheduled tightly around a system of explicit formal rulings and are a part of a single, overall rational plan purportedly designed to fulfill the official aims of the institution" (Goffman, 1961:203)

Professional schools and graduate programs are known to exert inordinate levels of control over trainees, subjecting them to intense physical, emotional and mental demands. Scholars in this tradition have recognized the ubiquity of these practices across professional communities, though acknowledging variance in the severity of socialization
practices. Practices in the service of rebuilding newcomers into prototypes of the profession include to some degree tactics of student isolation, performance pressures, and a curtailment of student of independence and autonomy (Becker et al, 1961; Egan, 1989; Van Maanen, 1983). As with occupational socialization, the body of research on institutional socialization has been primarily comprised of ethnographic accounts, though contemporary researchers have attended to socialization processes and outcomes (see for example Pratt, Rockman and Kaufmann’s [2006] study of medical residents).

Regardless of the context in which they are applied, socialization practices can become institutionalized, taking on important meaning for the occupational community. Through these socialization tactics, and events designed to elicit certain behavioral and attitudinal outcomes (Van Maanen, 1978), newcomers are able to find their place within community structures. Van Maanen and Schein (1979) identified six bi-polar tactics; collective (vs. individual) exposure to learning experiences, formal (vs informal) designation of newcomer status, sequential (vs. random) organization and delivery of socializing content, fixed (vs. variable) duration of probationary period, serial (vs. disjunctive) designation of primary socializing agents, divestiture (vs. investiture) in response to newcomer’s native identity and values. These tactics represent top-down approaches for directing worker adjustment and are often reflective of specific ideologies of worker control (Barley & Kunda, 2001). As a result, certain predictable clusters of tactics emerge upon analysis of socialization practices. Jones (1986) argued that specific clusters of tactics promoted institutionalized socialization - faithful replication of organizationally sanctioned attitudes and behaviors while others promoted individualized socialization, in which newcomers were left to their own devices to adjust to the new
role. Understandably, improvisation in role enactment is more likely to occur under the latter circumstances. Professional socialization, particularly within the context of socializing institutions, has tended to employ institutionalized socialization, incorporating collective, formal, sequential, fixed and serial tactics. Contrary to Jones' prescription, divestiture tactics, or the systematic erasure of newcomer's native values and identity, seem to be more commonly employed in professional socialization than investiture (Egan, 1989; Van Maanen.1983; Van Maanen, 1984).

Occupational socialization is an emergent outcome of interactions between newcomers and the communities in which they seek membership. While acknowledging the idiosyncrasy of individual responses to socialization, scholars have attempted to identify a generalizable pathway of progression through socialization, whether organizational or occupational. These efforts have resulted in numerous stage models that for the most part characterize socialization as a three-fold sequence of significant events. There is some disagreement around the timing of these sequences with some models placing more emphasis on phases leading up to organizational/ occupational entry and others giving more credence to the socialization throughout organizational tenure and the career trajectory. Taken together, these account for four stages that can be generally defined as anticipation (preparation for entry), encounter (commencement of formal training), adjustment (coming to terms with the reality of the role) and stabilization (internalizing associated norms and values). Though initial stage models assumed a more or less linear progression towards insider status, later thinking acknowledged the blurriness of the boundaries between stages and the propensity for repetition of earlier stages as events dictate. Scholars have also belatedly recognized that individuals may
undergo socialization into multiple roles simultaneously (Ashforth et al., 2007). In light of these insights, socialization is better understood as a punctuated equilibrium (Gersick, 1989) in which periods of relative inertia are interrupted by episodes of meaningful growth precipitated by critical events or turning points (Gundry & Rousseau, 1994).

The sociological perspective provides important insight into the process of socialization and the means organizations employ to achieve desired outcomes. However, socialization is often cast as rote indoctrination in the service of instrumental organizational goals. Such a perspective affords little consideration of newcomers’ agentic capabilities. Furthermore, this perspective offers very little insight into intra-individual processes invoked by the external events to which newcomers are subjected.

**Psychological perspectives**

A psychological perspective emphasizes the psychological motives activated by transitions or changes in roles (Ashforth et al., 2007; Ashforth & Schinoff, 2016), the actions taken by organizations to manipulate these motives, and by individuals to resolve them. The process of acquiring a new role within a new community of likeminded practitioners activates psychological motives for meaning, control, identity and belonging (Ashforth, 2001). The socialization tactics referenced earlier may also be conceived as a systemic approach to manipulating these psychological motives.

Role theory provides another important perspective on occupational socialization. Occupational socialization often coincides with meaningful career transitions, “the period during which an individual is either changing roles (taking on a different objective role) or changing orientation to a role already held (altering a subjective state)” (Louis, 1980:
Successful role transitions are predicated upon the acquisition of new skills, behaviors, attitudes and patterns of interrelating. For the role participant, the sum total of these changes can amount to a significant shift in self-definition. Thus career transitions precipitate various forms of identity work (Ibarra & Barbulescu, 2010; Sveningsson & Alvesson, 2003). Identity work related to career transitions may take a number of forms such as enacting comforting rituals (Silver, 1996) experimenting with possible selves (Ibarra, 1999) and engaging in self-affirming narrative construction (Ibarra & Barbulescu, 2010). Utilizing different approaches, all three processes reconcile individual psychological needs and preferences with role demands. These various forms of identity work may be contingent upon role learning, or a clear understanding of role specific tasks and the social context in which they are embedded (Ashforth, 2001:186). Role learning informs broader processes of identity enactment, defined as "engaging in behaviors that conform to role expectations and allow the identity to become manifest" (Obodaru, 2017: 525). Newcomers to a role stake an identity claim by asserting role membership (declaring), shaping insider impressions of their legitimacy through engaged inquiry (questioning), accumulation of material and symbolic resources (equipping) and demonstrating role-specific expertise (Bartel & Dutton, 2001). When these identity claims are granted, the meaning attached to these behaviors constitute a role identity, or "socially constructed definition of self-in-role" (Ashforth, Kreiner & Fugate, 2000: 475). Negative responses to identity claims may prompt newcomers to emphasize additional or different domains of role learning.

Role theory clarifies how newcomers demonstrate agency in their attempts to satisfy central identity and belonging motives activated by the disruptive forces of
socialization. Resolution manifests in two emergent identity outcomes, professional identity and professional identification. A professional identity is defined as the "the constellation of attributes, beliefs, values, motives and experiences that people use to define themselves in their professional capacity (Caza & Creary, 2016: 263). Professional identification reflects the extent of perceived unity between the self and the occupational group, that is, how much one self-defines in terms of one's profession and its exemplary characteristics (Mael & Ashforth, 1992). Satisfaction of identity motives through professional identity and identification is critical for affording professional workers with a source of meaning (Collin & Young, 1992), a sense of well-being (Dutton, Roberts & Bednar, 2010) and shaping workplace attitudes and behaviors (Bunderson, 2001).

Additional psychological motives such as meaning may be achieved through newcomer proactivity, the actions that individuals take to educate themselves about and facilitate adjustment to their new work context (Ashford & Black, 1996; Crant, 2000). Whereas early socialization theories envisioned newcomers as passive objects of socialization forces accommodating the demands of their new role or organization, latter theories acknowledge proactive newcomers are capable of shaping their role(s) even as they are being shaped by socialization forces. This bi-directionality is captured in Nicholson's (1984) typology of socialization outcomes which include changes to the individual (absorption), changes to the role (determination), simultaneous individual and role change (exploration) and preservation both individual and role (replication). Notions of bottom-up adjustments to roles build on the concept of role innovation, defined as "a complete rejection of most of the norms governing the conduct and performance of a particular role" (Van Maanen & Schein, 1979: 229). A desire for authentic role enactment
may be an important antecedent of role innovation. Recent socialization scholarship has demonstrated the importance of authenticity for positive socialization outcomes (Gino, Cable & Staats, 2013). The exact mechanisms by which authenticity is achieved during socialization remains unexplored, though Ibarra (1999) has pointed to newcomers’ reliance on their personal preferences, inclinations and values in identifying role enactments they might realistically emulate. While these "true-to-self" experimentation strategies preserved coherence, at least for recently promoted professionals it limited the development of a professionally appropriate behavioral repertoire. Thus it would seem that an overemphasis on authenticity can prove antithetical to professional development.

The psychological perspective shifts the frame from a structure-based to agency-based understanding of socialization processes and outcomes. It affords greater insight on the intra-individual processes involved in the assumption of a desired professional role. However, so much emphasis is placed on the newcomer's development of a contextually appropriate self-concept, this perspective fails to account for the back and forth interaction between inner and outer worlds. It also provides no exploration of the impact of identity work under these circumstances on subsequent role enactment. One is left to surmise that the identity constructed is more or less consistent with predefined parameters and expectations of the professional identity.

**Anthropological perspectives**

A fourth, but less explored perspective adopts an anthropological lens, taking into consideration the cultural dimension of organizational and occupational life. All occupational communities are defined and circumscribed by culture - the system of collectively accepted meaning that informs expectations, perceptions and behavior
(Schien, 1990, Van Maanen & Barley, 1984). This meaning is imbued in ideologies, reified in practices and transmitted to new members. Seen through an anthropological lens, socialization is a process for initiating and ushering new organizational members into the fold, in other words, a rite of passage. Rites are coordinated, purposeful activities, making use of customary language, ritualized behavior, artifacts and symbols to achieve socially meaningful performances (Trice & Beyer, 1984). Rites are endemic to organizational life, and fulfill important functions linked to the critical task of internal integration faced by all groups, establishing boundaries and criteria for inclusion, allocation of status, intimacy and rewards (Schein, 1990). Specific organizational rites include facilitating transition into organization and between recognizable roles (*rites of passage*), facilitating transition out of organizational life (*rites of degradation*), enhancing social identities (*rites of enhancement*), improving the functioning of social roles (*rites of renewal*), reducing conflict and aggression (*rites of conflict resolution*) and building solidarity among members (*rites of integration*) (Trice & Beyer, 1984).

Socialization practices can be recast as *rites of passage* - structured activities intended to delineate and facilitate transition from one socially recognized position to another (Turner 1967; Van Gennep, 1908). These rites offer a socially-meaningful structure to the transition and value to the intended destination role and internal transformations implied by role assumption. Rites of passage consist of a three-fold sequence of processes of separation, liminality and aggregation. During separation processes, the individual disengages from the current role in preparation for taking on the new. In aggregation, the individual is officially incorporated (or re-incorporated as the case may be), assuming the status and responsibilities of the destination role. Liminality
is both the state of being "betwixt and between" (Turner, 1967:6) these two socially recognized positions and the process of becoming a transformed individual who can take on a new social role. The concept of liminality underscores the formative qualities of transitional experiences (Szakolczai, 2009).

Liminality is an inevitable and paradoxical aspect of role transition. In order to take on an advanced social role or status, the individual must take leave of their current social position. This demands a symbolic death to the old, and infantilization within the community as the individual is taught anew how to see in the world in a manner appropriate to the new station. In indigenous cultures, this manifested as a structural invisibility, individuals undergoing rites of passage were sequestered, accessed only by masters of rites who served as guides. During this liminal period, individuals are perceived as being broken down in order to be built back up again. Initiates experience a loss of social identity and status, they are treated as undifferentiated unit and expected to submit to the masters of the rites unequivocally and surrender to the ordeals to which they may be subjected. Despite the apparent austerity of these procedures, they are ultimately intended to empower the initiate. The losses and ordeals of the liminal state are designed to induce reflection, questioning of prior assumption and renewed consideration of central cultural themes including the group's relationship to society, the nature of reality, truth, time, human nature, human activity and human relationships (Schein, 1990). Liminal experiences also foster communitas, a deep solidarity among those who share in the transitional experience (Turner, 1969:97). See Table 1 for a description of the central elements of liminal rites.
To make it successfully through this middle passage is to achieve maturity, setting aside the imitative practices of children and taking informed, independent action (Szakolczai, 2009). It is also useful to view professional socialization as eliciting a mature professional identity which, according to Aristotle, required a blend of knowledge (episteme), craftsmanship (techne) and practical wisdom in the particular application of general rules (phronesis). Phronesis has been likened to tacit knowledge (Polanyi, 1962) and is thought to emerge from reflective practice and thus achieved only through a prolonged period of instruction (Hilton & Slotnick, 2005). Arguably, it is not so much the duration of socialization but the unique conditions of liminality that invoke the reflexivity required for maturation.

An anthropological perspective on socialization allows us to move beyond role-based and identity-based distinctions and advocate for greater attention to the whole person in the process. Rites of passage are firmly rooted in the human experience, though these manifest in structural and agentic outcomes. These activities call forth and guide an internal and profoundly personal transformation that, when completed, will be externally recognized through the conferral of a new more fitting role. Ndembu tribe members describe the outcome of passage rites as the "growing" of the girl into woman (Turner, 1976) and in much the same light, we may conceptualize occupational socialization as growing of novices into occupational experts. This inner transformation is comparable, though perhaps not limited to identity construction (as addressed under the psychological perspective). Thus, the anthropological perspective does not so much supplant either sociological or psychological perspectives as it affords a deeper insight into individual and collective motives for engaging in the dance of socialization. Applying an
anthropological lens to professional socialization invites us to pay more attention to defining characteristics of the individuals who enter the middle passage in the first place to gain an understanding of who and what emerges on the other side.

Table 1. Central aspects of liminal rites.

<table>
<thead>
<tr>
<th>Symbolic representation within the community</th>
<th>Death - loss of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural assignment</td>
<td>Invisibility - hidden from public view, sequestered</td>
</tr>
<tr>
<td>Homogeneity</td>
<td>Undifferentiated - loss or removal or social status, gender markers, name</td>
</tr>
<tr>
<td>Power relations</td>
<td>Complete submission to superiors Complete equality with cohort (communitas)</td>
</tr>
<tr>
<td>Meaning making</td>
<td>Guided reflection, up-ending activities to prompt reflection, renewed consideration of the taken for granted (sensebreaking/sensegiving)</td>
</tr>
</tbody>
</table>

Applying an integrative perspective to the medical context

As Figure 1 illustrates, medical clerkships represents a middle passage between distinct environments, roles and identities. As accounted for in prior sociological perspectives, medical students move back and forth between these two poles as they progress towards bona fide doctor status. As accounted for in the psychological perspective, students negotiate a consequential shift in identity. In this study, I sought to understand how the liminal properties of clerkship orchestrate a convergence of these changes. I also ascertained the extent to which liminality contributed to behavioral outcomes as manifest in a humanistic or technical orientation towards role enactment.
Figure 1 Conceptualizing clerkship as a rite of passage.

Focusing on the socialization experiences of medical residents, Pratt and colleagues (2006) discovered systematic changes in professional identity in response to changes in the work over time. This co-evolution of identity and work over a six year span is consistent with increasing levels of mastery as residents attain greater centrality in the community of practice. In the early years of residency, identity changes also occurred in response to work-identity integrity assessment, i.e. when the work demanded of residents was inconsistent with their own self-concept of who they were as professionals (Pratt et al, 2006: 241). They surmised that residents were compelled to engage in identity work because their lack of job discretion rendered them powerless to engage in role innovation as an alternative means of resolving these discrepancies. These discretionary limitations, even for professional trainees as advanced as medical residents is a consequence of the complexity of the social problems that fall within the purview of professional practice. During their clinical socialization, medical students experience these restrictions to their autonomy in role enactment even more so than residents.
However, unlike medical residency, medical student training culminates in their acceptance into a residency program to continue training in their choice of medical specialty. Thus, students appear to have some degree of discretion in their future role enactments even if their present repertoire is quite circumscribed.

Arguably, this kind of discretion might allow for some anticipatory form of role crafting, the portfolio of behaviors in service of role learning, definition and innovation (Sluss, van Dick & Thompson, 2011). In crafting a role, individuals mobilize their discretionary power to align their experience of the work with their own expectations and need for meaningful work (Rosso, Dekas & Wrzesniewski, 2010). Ultimately, proactive behaviors of this nature are thought to satisfy individual needs for control, positive self-image and connection to others (Wrzesniewski & Dutton, 2001:180). These changes are achieved by altering task, relational and cognitive boundaries of jobs. There are appreciable limits to the applicability of role/job crafting within this context. The role/job crafting literature highlights the experiences, motivations and actions of role incumbents, offering no consideration that anticipatory crafting may occur during liminality. Medical students do not yet occupy the role of doctor, leading foundational scholars of medical socialization to question whether medical students do in fact take on a professional role in the course of their training (Becker et al., 1961:420). It is clear that they do take on a number of proto-professional roles including that of the medical clerk and acting intern in the third and fourth years of medical school (see Teunissen & Westerman [2011] for a review of literature on the full trajectory of roles in medical training). The structuring of initial clinical socialization as a series of short-term assignments, has been shown to impair the development of a coherent identity in other
contexts (Mansfield, 1972 as cited in Ashforth et. Al., 2007). This calls into question the nature of the identity under construction during the clerkship year of socialization. How do students characterize themselves and their work during this period? If, as Ibarra (1999) found in her examination of financial service professionals, enactments are informed by preferences, how do medical students' clerkship experiences inform and shape their preferences for enacting their future doctor role?

**RQ: How do clerkship experiences inform and shape medical students' preferences for enacting their future doctor role?**
CHAPTER 3.

METHODS

“I’ve become numb. So much of what I do as a student is stuff that I don’t fully believe it [sic]. And rather than try to change everything that I consider wrong in the hospital or the community at large, I just try to get through school in the hope that I will move on to bigger and better things when I have more control over my circumstances. On the other hand, I do believe that habit formed now will rarely be overcome in the future. So I regret not having spoken up on more issues. But I was often too tired.”(Andrea, 4th year reflection, Coulehan & Williams, 2001:599)

Research Context

Medical students embark upon an eight year journey (at a minimum). For many, the preparation for this journey may have started as early as high school, with individuals striving to establish a vitae of academic and personal excellence to earn a coveted medical school admission. This hard work prepares them for some aspects of the challenge that awaits them in their medical training. The first two years of medical school are fairly consistent with a medical student’s undergraduate experiences. Typically students engage in 24 credits of science and lab coursework per semester. Topics such as Anatomy, Physiology and Pharmacology are offered in a progressive sequence. As all students are required to pass the United States Medical Licensing Examination (USMLE), there are standard requirements regarding the fundamental knowledge students must acquire during this time. However, there is variation in the format of content delivery. One example of this variation is the use of an Integrated/Problem Based Learning curriculum. In this approach, content areas are integrated around themes of physiological systems. As an example, students learn the Anatomy, Physiology and Pharmacology of the heart. This modified approach to teaching the fundamentals also utilizes principles of self-directed and collaborative learning. Rather than glean medical knowledge
from didactic sessions, students work in small groups to solve clinical problems by applying knowledge they glean through independent study and research. This approach to preclinical work in some ways mirrors the coordination required to achieve patient outcomes in the clinical setting. At this point, students have no real involvement in clinical practice, but they may participate in any number of programs that allow for shadowing of practicing physicians or to perform basic procedures in outpatient setting. These opportunities are minimal and so circumscribed that in many ways they fail to give students a realistic picture of their formal clinical training.

In the third year, students transition from the academic setting to a period of intensive clinical training. As in the first two years, there are standard requirements regarding the clinical experiences students must have during this time. Students rotate through a number of core medical areas such as General Medicine, Psychiatry, Surgery and Obstetrics/ Gynecology. Rotation duration can vary by specialty lasting anywhere between 8 and 12 weeks. During this time students officially work under the supervision of an attending physician, though in reality much of their day-to-day guidance is provided by residents, who are trainees themselves, albeit more advanced than clerks. At the end of each rotation students must complete National Board of Medical Examiner Shelf Examinations which assesses the extent of student’s knowledge of core medical practice. The results of these exams determine students’ class standing, a key factor in medical residency selection. Thus students are required to straddle both academic and clinical worlds as they engage in practice while preparing for exams.
The fourth year offers a continuation of clinical exposure but under less intense circumstances than the third year. It is also the year in which students declare their intention to pursue a specific medical specialization and go about securing a match with a site of residency training. Activities related to matching, including submitting applications and going on interviews consume about a third of students’ time and energies during the fourth year.

**Location and Participants**

This study spanned two academic years (over a period of 12 months) at School of Medicine (SOM), which is situated within a small, private mid-Western university. The current enrollment at SOM is 815, which is roughly 46% more than the average for all medical schools. The average number of students matriculating per year is 197. SOM is also consistently ranked among the top 25 medical schools by the U.S. News and World Report. Admittedly, these statistics place SOM well above the average medical school. However, the medical curriculum at this institution complies with all national medical education standards. As such, it is safe to say that student experiences in this population are typical of undergraduate medical education. The study population, the class of 2017, consisted of 208 students.

**Data Collection**

The motivating research question concerned the mechanisms of professional identity enactment during the medical clerkship. The study of identity work among professionals is a relatively nascent field and as such consistent with prescriptions of methodological fit (Edmondson & McManus, 2007) has been
investigated using qualitative research methods. Seminal work on medical socialization have employed ethnographic research methods (eg. Becker et al., 1961, Merton, 1957). Over the years, ethnographic work in clinical training contexts has focused on more narrowly defined facets of medical practice including the medical clerkship (Han, Roberts & Korte, 2015, Seabrook, 2004). Ethnographic methods emphasize intimate involvement in the community of study in a learning role (Agar,1996: 119; Emerson, Fretz & Shaw, 1995:2) Consistent with contemporary ethnographic approaches to triangulating data collection methods (see Pratt, 2000) I utilized a combination of overt observation, semi-structured interviews and collection of student-generated artefacts. In addition to these traditional ethnographic methods, I collected student reflections on study generated prompts. These combined approaches were intended to provide multiple sources of insight into the experiences of identity work at the earliest stages of professional training.

**Overt field observations**

While the clinical setting is an important venue for learning through doing, other non-clinical aspects of the third year provide an opportunity for reflection and sense-making. Student Reflection Groups are formed at the start of the clerkship, and represent the only formal educational grouping that is sustained throughout this academic year. For thirty minutes every week, the 12 – 15 participants in reflection groups had the opportunity to discuss and reflect upon themes emerging from their role in care provision. In this space, students expressed doubts and concerns that might not have seemed appropriate to surface in the clinical setting (Konner, 1987:
Reflections groups were created by combining two problem-based learning (IQ) groups. Students had spent their first and second years engaged in collaborative learning within these groups and as such they viewed that as spaces and sources of both social relief and professional support.

I attended the same reflection group meeting for the last 7 months of the clerkship year. Maintaining a visual presence with one group was important for establishing rapport and noting changes in students’ disclosures over time. As reflection group sessions ran concurrently, I trained two undergraduate research assistants in observation methods for the purposes of documenting interactions in two additional groups. Research assistant training included reading and discussion of excerpts from Writing Ethnographic Fieldnotes (Emerson, Fretz & Shaw, 2011), weekly feedback on fieldnotes and monthly team meeting to discuss researchers’ insights. I accompanied each research assistant for the first introduction to their assigned group. During that initial episode, I consented all members of the group and fielded questions about the study. At that time, I introduced the research assistant as the main point of contact for the study. In total, three reflection groups were observed for a total of 23 in-depth fieldnotes, which varied in length from 3 to 6 singled spaced pages. Participants were not identified by name but rather by nicknames that research assistants developed and used consistently throughout the observation period.

A semi-structured observation protocol (see Appendix A) guided initial observation and generation of fieldnotes. The protocol served to focus the observer’s attention on two specific student behaviors that have been linked to
professional identity construction in the literature, sensemaking (Pratt, 2000) and storytelling (Ibarra & Barbulescu, 2010). Pratt’s research also demonstrates the importance of sensegiving in the socialization process. As such, observers attended to the ways in which the facilitator engaged in sensegiving during discussion. We also noted displays of relational competencies, for example, empathic responses to a participant’s apparent distress, within these sessions. We documented the nature of these displays and whether they were made among students, from facilitator to student or student to facilitator. During our monthly meetings we reviewed and discussed excerpts of each other’s fieldnotes. Our discussions of the different insights emerging from our independent observations served as a means of calibration future observations and note-taking.

**Semi-structured Interviews**

I started conducting entry interviews in December 2015. I had originally intended to conduct as many as 30 interviews over a two month time frame. However, students proved very difficult to recruit for an hour long interview. I ultimately conducted entry interviews with 12 third-year students. With the exception of two interviews which were conducted over the telephone, entry interviews were conducted in person on SOM campus. Interviews lasted anywhere from 45 - 60 minutes.

I developed the interview scripts with the intent of capturing two specific phenomena that have been shown to influence professional identity work namely the resolution of discrepancies (Pratt et al., 2006), and the influence of role models (Ibarra, 1999). Given my interest in humanistic role enactments, I also investigates
student beliefs about the relevance of relational competencies in the enactment of the doctor role (see Appendices B).

During the course of observing weekly reflection group sessions, I recognized the impact of reflection group facilitators, many of them fourth year students who received curriculum credits for serving in this role. Additionally, a handful of facilitators are retired physicians wanting to maintain some engagement with academic medicine. Whether veteran or novice, facilitators seemed capable of influencing the tone of any given session. A facilitator’s opinion on the validity of a reflection prompt could promote or inhibit student engagement. As this became clear, I obtained permission to conduct semi-structured interviews with a handful of facilitators. I wanted to understand their motivations for facilitating these sessions as well as their perspective on the purpose of the clerkship year in the broader arc of medical training. I initially recruited facilitators through reflection group sessions I observed. From initial contacts with three reflection group facilitators, I used a snowball sample to recruit and conduct semi-structured interviews (see Appendix C) with a total of 7 reflection group facilitators. Interviews were conducted in person and lasted anywhere from 45 - 60 minutes.

As I conducted interviews with reflection group facilitators, one interviewee - a retired physician with several decades of practice and teaching experience – shared his perspective that the purpose of the third year was to help students find their place in the medical community. He further noted that specialty selection in the fourth year was a tangible outcome of this process of meaning making. This suggestion was further underscored as a key informant shared her preparations for
the residency application process. She mentioned plans to meet with academic advisors to discuss the content and framing of her Personal Statement. Further probing of this disclosure suggested that students’ personal statements and the process through which they were crafted could provide important insights into students’ construction/enactment of the doctor role. October 2016, I invited 11 of the 12 students for whom I had conducted entry interviews (one student had decided to take a year off) to participate in interviews regarding their Personal Statement. I collected two drafts of the Personal Statement (initial and final) from eight of these informant (one student only shared his final draft). These artifacts served as the centerpiece for semi-structured interviews. (See Appendix D).

Interviews were conducted in person and lasted anywhere from 45 - 60 minutes.

Student Reflections

Students’ verbatim description are the most powerful source of insight into their experience of clerkships. Several studies have utilized written reflections or critical incident reports as a means of eliciting students’ perspectives (Karnieli-Miller, Vu, Holtman & Inui, 2010). During the early years of their training, written reflections are often embedded in the curriculum as a means of prompting critical self-reflection. These exercises typically invite students to provide first person perspectives on emotional responses and/or insights as to the nature of their current work/intended profession. To incorporate these powerful insights, I invited all members of the 3rd year cohort to submit an online reflection at the midpoint of their clerkship year. The reflection prompt directed students to recall one critical incident in the clerkship and share any personal or professional meaning that was
attached to the event (See Appendix E). In addition to the substantive prompts, I asked respondents to provide demographic data.

**Data corpus**

Data collection commenced in October 2015 and concluded in October 2016. This time span incorporated the last seven months of the clerkship year and the first four months of the fourth year. The complete corpus of data collected consisted of interviews, observational fieldnotes and student generated artifacts. During this twelve month period I conducted 33 interviews with students and reflection group facilitators, many of whom were fourth year students. I conducted a total of 26 interviews with 12 key informants. These included entry interviews, interviews about the Personal Statement and check in interviews.

Observational fieldnotes were generated from a total of 23 sessions across 3 reflection groups. The observation period spanned from October 2015 to April 2016. A total of 41 students were observed. Fieldnotes were produced within 24 hours of observation. The first and final draft of the Personal Statement submitted for residency application were collected from 9 key informants for a total of 17 artifacts. Midpoint reflections were collected from an additional 17 students (these reflections have not been used in data analysis reported here). All data, field notes, artifacts and transcribed interviews were uploaded into Atlas ti. for analysis (see Appendix F for a full listing of each data type and source).

**Data Analysis**

Professions are typically defined by their technical orientation including an expert knowledge base and technical autonomy (Gorman & Sandefur, 2011). Also
defining of profession though less emphasized is the normative orientation towards the service of others, which I have interpreted as a humanistic orientation. Sensitized by the literature and my preliminary observations of high humanistic orientation for some of my informants, I conceptualized humanistic and technical as binary orientations. I approached my analysis of each informant with the intent of situating them along a continuum between these two poles and noting how their position changed over time.

The first round of data collection yielded an abundance of data and ideas to be pursued. As one of my informants noted, no two students’ descriptions of their clerkship experience are alike. This made it difficult to determine where to begin to make a useful comparison in the midst of this sea of seemingly idiosyncratic data. In reflecting on my informants, I found one to be particularly salient in exemplifying a technical orientation towards the doctor role. Following Maitlis (2005), I constructed a profile of my informant which I used to clarify for myself what explicitly articulated motivations, personal values and attitudes towards the clerkship experience contributed to my impression of his high technical orientation. Profile construction proved to be a useful tool for immersing myself in a manageable subsample of the data and developing a more holistic image of this informant than any one data source by itself could afford. Upon completing the first, I developed a similar narrative for another narrative who represented the humanistic extreme within my sample. Taken by themselves, these two informant profiles corroborated my earlier bias of thinking of technical and humanistic as poles of a continuum of doctor role enactments. The third informant I attempted to
profile proved far less amenable to this dichotomous characterization. She displayed high levels of both orientations. This finding upended my original thinking.

This initial evidence that humanistic and technical orientations may not be mutually exclusive led me to entertain the idea that the orientations may be orthogonally related continua. One implication of this was the possibility of four, not two enactments of the doctor role. My profile construction up to this point had identified 3 of the four possible. I made a preliminary designation of each of these three enactments as diagnostician, caregiver and balanced. I returned to the data for a more focused analysis to clarify specific domains of differentiation among these three types and seek out evidence of the fourth.

During initial profile development, when the differentiation between my three informants was largely intuitive, four domains had emerged: career motivation, sources of gratification, attitudes towards patient and recognition of one's own humanity. Using these domains as a rudimentary coding schema, I coded additional members of my sample. I was able to designate additional informants into the humanistic and balanced categories based on data collected at that point in time. None of my informants demonstrated low orientation to both technical and humanistic enactment of the doctor role.

Around the time of this first phase of data analysis, a check-in conversation with one of my key informants pointed to another data source for additional insights on the emerging typology. She mentioned that the Personal Statement component of the residency application was an artefact all medical students created, and tended to
view as one means of communicating their interpretation of the doctor role to their intended specialty community. I reasoned that these Personal Statements could be used to corroborate and further refine these types. This prompted a narrower focus for the final round of data collection which included both the artefacts and interviews surrounding their development and intended representation of the student. Three additional domains, which I had by then labeled domains of difference, emerged from analysis of this data; doctor ideal and identified priorities and identified strengths. Figure 1 illustrates the overarching typology of role enactments. The lack of evidence for a fourth type, was a source of concern that I will address in later detail in the Discussion.

**Surfacing a common experience**

Consolidating a typology of doctor role enactments initiated a second phase of analysis. As I explored students’ writing and thinking, it became clear that, contrary to common beliefs about identity construction in the medical profession, students’ preferred doctor role enactments remained relatively stable over time. There was no evidence that students had altered their personally meaningful construction of the doctor role over the course of the study. Thus emerged a second empirical insight that more of a student’s initial construction of the doctor role is preserved rather than lost. Regardless of their starting construction/enactment of the doctor, at the midpoint of 4th year and heading into residency interviews, students had not only preserved these initial constructions but had made tangible steps to build a medical career around their personal constructions. To understand these findings I sought to identify a common process, a series of actions or steps
taken by students that would explain this phenomenon. Thus began the second stage of my analytical approach in which I surfaced commonalities in student experiences and identified patterned connections among these common experiences.

In pursuit of this emergent goal of surfacing commonalities, I analyzed key informant data in the chronological order in which they were collected. I also incorporated excerpts from interviews with fourth year reflection group facilitators in which they recounted their clerkship experiences. I initially approached the data with my rudimentary coding schema. These were words and phrases that I had encountered frequently while developing the typology (e.g. ambiguity, hierarchy, usefulness). I started with a total of 20 of these rudimentary codes, expanding some to provide further specificity while collapsing others as I recognized duplication in their meaning. While sorting through the data and clarifying the first order codes, I made initial attempts to cluster the codes and sequence the clusters. During this process of concurrent specifying, clustering and ordering, a sequence of phases emerged. These phases offered the most parsimonious clustering of codes and relationships between clusters. Taken as a whole, they offered an explanation for the unexpected findings of preservation rather than change. The four main stages emerging from this process included Immersion, Confrontation, Growth-in-Role and Rediscovery.

As I continued on with my analysis, I realized that in identifying these phases I had made an analytical leap from the first order codes to aggregate dimensions. To make more explicit the intuition underlying this cognitive leap, I attempted to further clarify each of the dimension and ensure the validity of the
perceived link between aggregate dimensions and first other codes. Second-order
codes emerged during this iterative process which included sorting within each
cluster to identify relationships between the codes within any one aggregate
dimension. I also conducted focused coding to further articulate each aggregate
dimension. At this point I was looking for codes that clarified the boundaries of the
dimensions. I was also trying to determine whether any additional phases became
apparent. The four phases initially identified proved stable, although additional
analysis allowed for more clarity on the first phase and a more meaningful label of
Inundation replaces the initial designation (Immersion). The second-order themes
that emerged during this process articulated both contextual and experiential facets
of each dimension. I concluded the coding process when my analysis provided no
further insights about the identified aggregate dimensions. At that point I had
identified 27 first order codes and 9 second order themes in addition to the 4
aggregate dimensions.

The third and final insight emerged from my attempts to validate my
findings. Assuming I had reached theoretical saturation (Strauss & Corbin, 1998:
136), I engaged in member check discussions around the two initial insights and
findings discussed above. Sharing study products with participants in this manner is
an important means of gauging the accuracy of descriptions and interpretations
(Miles, Huberman & Saldana, 2014: 58). Member check can be applied, at the
discretion of the researcher, at any point during data collection and analysis. It is
also within the researcher’s purview to determine how much weight to give to
participant feedback and how to incorporate insights gleaned through member
checking in framing their findings (Lincoln & Guba, 1985:315). Key informants which whom I shared my preliminary findings corroborated the typology and the proposed phases of role learning, they suggested that the model was missing two interdependent mechanisms of student sensemaking: questioning and clarifying. They suggested that these mechanisms could be the impetus for movement among the latter phases. With this insight in mind, I returned to the data to determine whether these mechanisms had in fact been captured in my data collection. I initially found both sets of interviews. The observational data from student reflection groups were the richest sources of first order codes related to these mechanisms were. In my initial analysis of fieldnotes, I had focused only on coding references to my key informants. Expanding my analysis to the full corpus of fieldnotes uncovered additional instances of questioning and clarifying. I was able to distinguish two temporally distinct types of questioning. I also discovered two additional mechanisms related to the direction of movement, absorption and disruption. I concluded this final coding process at the point when no new mechanism emerged. At that point I had identified 10 confirmatory codes corresponding with 6 mechanisms. Table 2 summarizes the stages and outputs of my data analysis.
Table 2. Stages of data analysis

<table>
<thead>
<tr>
<th>Data Analysis Stage</th>
<th>Tasks</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Surfacing meaningful differences among key informants.</td>
<td>1. Constructing narratives on key informants based on interviews and a focused subset of observation data. 2. Identifying key issue domains that differentiate</td>
<td>1. Seven (7) key issue domains 2. Three (3) types of preferred role enactments</td>
</tr>
<tr>
<td>Phase 2: Surfacing commonality of experiences among key informants.</td>
<td>1. Listing words and phrases commonly used by medical students to describe clerkship experiences in interviews and artifacts. 2. Specifying first order codes, aggregating and ordering in temporal sequence.</td>
<td>1. Four (4) phases of preference crafting</td>
</tr>
<tr>
<td>Phase 3: Surfacing sensemaking mechanisms that facilitate progression through phases of preference crafting.</td>
<td>1. Building on key informant feedback to develop a list of sensemaking activities. 2. Identifying instances of sensemaking in interviews and expanded subset of observational data.</td>
<td>1. Three (3) categories of sensemaking mechanisms</td>
</tr>
</tbody>
</table>

Figure 4 (Appendix G) offers an empirically grounded integration of the phases and mechanism induced through analysis. Any linearity suggested by this representation is inadvertent. In fact students experience multiple revolutions among the first three phases before arriving at the final stage of Rediscovery. The specifics of these relationships are addressed in greater detail in Chapter 5.
. . . basically what you’re supposed to do is take a walking, talking, confusing, disorganized (as we all are) human being, with an array of symptoms that are experienced, not diagnosed, and take it all in, put it in the Cuisinart and puree it into this sort of form that everyone can quickly extrapolate from. They don’t want to hear the story of the person. They want to hear the edited version. . . You’re not there to just talk with people and learn about their lives and nurture them. You’re not there for that. You’re a professional and you’re trained in interpreting phenomenological descriptions of behavior into physiologic and pathophysiologic processes. So there’s the sense of if you try to tell people really the story of someone, they’d be angry; they’d be annoyed at you because you’re missing the point. (Harvard University medical student - Good, 1994:166)

Most students when asked about their motivation to become a doctor invoked dual desire to help others and to indulge their scientific interest. Medicine seemed to present the ideal integration of these humanistic and technical motives. However, as students recounted the significant experiences leading up to and during clerkship, it became apparent that they routinely privileged one of these two motives. In the early phases of my analysis I identified 7 unique domains that allowed me to differentiate students in terms of humanistic and technical orientation. These domains emerged as I queried the data to fully understand the differences among my informants at our first point of contact. At this point there were still acclimating to clinical training and I hoped to compare these baseline characterizations to the proto-professional who would emerge at the end of the year. The domains that surfaced in students’ discussion of their initial clinical exposure include career motivation, sources of gratification, attitudes towards patient and acknowledging humanity (self). At the start of their fourth year, as students turn their attention towards crafting an optimally distinct narrative for residency applications,
additional domains emerged: doctor ideal, identified strengths and identified priorities. As noted in my prior discussion of analytical methods, I discovered that enactment orientations that emerged during our first contact had not changed by the time of our second contact. If anything, these seem to have been solidified in students’ choice of specialty. In this chapter, I draw on each of these 7 dimensions to construct descriptive narratives of the three distinct role enactment preferences found in my sample. I conclude with a brief discussion of preliminary implications of these findings.

**Caregiver role enactment**

All three students who fell into the Caregiver category disclosed deeply personal reasons for pursuing a medical career. Jill previously worked in hospice care and valued the trusting relationships she had established with patients. She had pursued a medical career expecting to make similarly fulfilling connections with patients. Both Nina and Mitch had supported family members through health crises. For Nina, these early and impressionable experiences with the vulnerability of chronic illness ignited her passion to "help people to… become better versions of themselves" (entry interview). For Mitch, medical school was the realization of a childhood dream. Daunted by social and economic disadvantages, he had relinquished this aspiration in favor of the pragmatic choice of a career in business. An acute family health crisis prompted him to reassess his priorities. His pursuit of medicine was as much a journey of self-empowerment, as a means of helping others.

...the number one thing that really changed it for me was that feeling of just being helpless if it is your wife, your parents, or whoever it is who need help and you can't do anything about it. You can’t even answer a question. It's a horrible feeling to me. In contrast to my business career, people had all of these motivations and priorities and most of it was driven by greed. I also realized that as soon as something changes with your family – someone gets sick or hurt or
whatever – none of that matters anymore. None of it does. You could be the most powerful person in business and then you need to seek help from trained professionals; it's really humbling. I just really felt like I needed that for myself to be able to offer some level of comfort. (Mitch, Personal Statement Interview)

Of the three, only Nina started the clerkship year with a clearly articulated doctor ideal. For her, a doctor was an advocate, both in the local sense of advocating on behalf of individual patients, and in the global sense of advocating around important health issues. Throughout the clerkship year, this ideal remained steadfast, bolstered by her need to advocate on her own behalf at several points throughout the year. One important issue for Nina during this time was the physician well-being. She believed the medical community should be doing a better job of addressing the psychological and physical toll of medical school and residency training. Both Nina and Jill expressed frustration that SOM administration espoused a value for student well-being and yet continued to structure clerkships in a manner that made it very difficult for students to engage in self-care. This recognition of their own humanity recurred in conversations with all three informants.

The choice to continue embracing their humanity in the midst of being taught to maintain objectivity frequently placed them at odds with supervisors, making their journey through the clerkship passage particularly challenging. Of all the students in my sample, these three struggled the most to find their place in the medical community, the central socialization project according to both practitioners and theorists. This disconnect was most salient on their surgical rotations, a specialty that proved challenging for all three. As Jill noted, connecting with patients did not seem to be a priority for this group of doctors. For Mitch, who had originally considered a surgical specialty, these surgical experiences were an important source of clarification. He ultimately determined that the
positive regard of patients and colleagues was an important source of gratification for him and thus a deciding factor in his preferred enactment.

*I guess it really didn't change; it just came full circle. When I came to school I really wanted to do orthopedic surgery. I felt like I wanted to work with my hands. I wanted to be able to look at something and say it was broken and then fix it with a really simple approach. Also, there is a certain prestige component to that, and the earning potential – and everything else. But then when it comes right down to it and you have to do a lot of soul searching about what your career is going to be like and how you are going to happiest and you realized what motivates you the most, it is seeing people out in the community who you have been able to help.*

(Mitch, Personal Statement Interview)

At one point, Jill's experiences caused her to question whether medicine was right for her. Her confidence in her suitability for the role was restored through a developmental relationship with a mentor psychiatrist. In psychiatry, the same personal qualities and attitudes towards patient care that were labeled liabilities in other rotations were commended as assets. Jill's time in psychiatry both during her clerkship and later in an acting internship allowed her to don a "cloak of competence" (Haas & Shaffir, 1982: x). Nina had entered the clerkship year with an acute awareness of her otherness in terms of race, gender and economic background. She repeatedly voiced her concern for finding her community and establishing a professional identity. At times, she identified more with her patients than with the physicians, and often found herself in the position of advocating on patients' behalf as best as her marginal status would allow.

*Surgery has shown me so much about how unsafe patients can be in the hands of some providers. I had a patient tell me directly “I need you to advocate for me” (we were discussing where she would be discharged to, and the team was dragging their feet about sending her to her preferred SNF2). It was such a bittersweet moment to hear a patient tell me they trusted me with their care to act in their best interest. But also disheartening because I have the least influence in the team. These kinds of experiences just bolster my reserve [sic] to be different and better.*

(Nina, reflection at 3rd month of clerkship)

---

2 Skilled nursing facility
As the ultimate goal of clerkship was to develop both the know-how and the values system of a doctor, in short to identify as a doctor, her resistance might be viewed as dangerous and potentially undermining her career aspirations. However, she was able to establish alliances with doctors who shared her deep respect and caring for patient well-being. As her competence became increasingly apparent to herself and others, she embraced the strength she had gained from her otherness. Her thoughtful insight in 'reading' patient situations earned her praise in her psychiatry rotation. Though recognition from a highly respected pediatric preceptor prompted her to consider the pediatric specialty, much like Jill, she ultimately recognized that her identified strengths and identified priority for patient centered care provision were most compatible with the psychiatry specialty.

So I think there is a sense of compassion for patients with psychiatric issues that I have. Having grown up in a family with people with mental illness and having experienced that early on and my own difficulties also have helped me to just be more clear about that. Be more purposeful in that way. Be more patient with these patients. So a lot of people say, especially going into psychiatry, "Oh, my gosh. Psych is so hard. I liked it more than I thought I would, but I can't imagine doing that forever." And it's like I can't imagine doing anything else forever. (Nina, Personal Statement interview)

**Diagnostician role enactment**

In discussing their motivations for pursuing a medical career, students in the diagnostician/ scientist typology admitted that what truly inspired them was a desire for intellectual stimulation that superseded a mere love of science. They saw in the provision of medical care an opportunity to take on such tasks as investigating mysterious symptoms, plumb the depths of their medical knowledge to propose differential diagnoses and stay abreast of the constant and unpredictable shifts in a patient's status.
These sentiments were exemplified in Avi’s disclosure that he abandoned a successful career in consulting in pursuit of an even greater cognitive challenge. Much like Avi, Rob acknowledged the need for 'more of a challenge' than he was afforded in his prior occupation as a Physics lecturer. He had come to teaching after abandoning a career as a bench scientist, and medicine seemed the ideal occupation to regain his desired level of cognitive stimulation.

A common theme in these informants' interviews was an absence of the patient in their recounting of stories from their clinical experiences. In these students' reconstruction of events, the patient receded into the background, their humanity eclipsed by the novelty or implausibility of their circumstances or simply by the storyteller's preoccupation with the disease. This was exemplified in a quote from Avi as he described his expectations of the doctor role:

> You know so it depends you have to just dynamically think about the patient in front of you, how she is presenting in the context of whatever brought them to the hospital and be prepared to change your point of view on something based on new information as it become available. So that person who came in complaining of a headache, if that's what they started with 6 hours ago but now have a stiff neck and a fever too, if you initially thought it was a migraine, you now have to change your focus and consider that it may be meningitis instead. Two very different conditions with different treatments, one of which is harmless the other is life threatening. And so forcing yourself to remain abreast of things is intellectually enjoying. (Avi, entry interview)

In relating this example, Avi quickly moved away from the human aspects of the case. His choice of words couches the scenario in the jargon of the profession; the patient does not simply come in with an ailment but she is "presenting". The ailing patient is swiftly reduced to a differential diagnosis, a cognitive leap he had become adept at performing in only a short period of time. Furthermore Avi readily admitted to the enjoyment derived
from "remaining abreast" of these changes as they develop and through a rigorous process deducing the true cause of dis-ease. Avi's sentiments were echoed by Katie, a third student in to this category, who observed that the interactions with patients afforded her an opportunity to put the knowledge accumulated during her pre-clinical years into action:

*I think that's getting to talk to the patients and kind of knowing what I could do, and kind of thinking through the process. I think having a concrete thought about it, that's been rewarding. Because before med school, you could hear about somebody coming in with some condition, and you have no idea what to do. But now that you have a foundation of knowledge as well as more experience, you can apply that toward some kind of plan to actually make a difference. I think that's been rewarding.* (Katie, entry interview)

While Katie valued her ability to 'make a difference' for her patients, for her this was achieved through the skillful enactment of medical expertise.

In my encounters with students in this category, I remarked upon the singlemindedness of their devotion to accumulating the knowledge necessary to achieve this level of competence. Avi, for instance, prided himself in the rigorous study schedule he established during his preclinical years, which he faithfully upheld despite the demands of the third year. This deep appreciation for knowledge as essential for role learning occasionally manifested in a reductionist view of patients. In their enthusiasm for exposure to as many medical conditions as possible, students often lost sight of the patients behind the disease. For Avi in particular, this preference for novelty limited the perceived effectiveness of medical rounds, a staple of clinical practice regardless of specialty and primary venue of knowledge transmission. In the quote that follows, he explained the source of his disenchantment with the process with respect to his learning.
The idea is everyone is supposed to be learning from everybody else, but when you recognize that a lot of the patients can be in many ways considered identical – I’m not saying that to reduce a patient’s experience, but rather if you’re on a cardiology service, of those 20 patients, 18 of them are going to be hypertensive, male, obese smokers, who are over age 60 and who have heart failure…. They’re all the same patient. Eventually, once you’ve seen that patient enough times, there’s not much more to learn. Again, not saying that to diminish experience, because there’s always something to learn, but when you’re talking about doing this in the context of rounds, by the time you’re on patient number 20, people are ready to shoot themselves in the head. (Avi personal statement interview)

To be fair, this preoccupation with novelty was typical of many third year students as they represented opportunities for learning. Other students tended to be a bit more discreet in their enthusiasm, often expressing some guilt or embarrassment to show such pointed interest in learning as much as they could at the expense of the patient. However, students in this category placed paramount value on honing and maintaining their knowledge, "you can't ever really allow yourself to feel like you've learned everything there is to learn" (Avi, entry interview).

A pragmatic instrumentalism infused these students' attitudes towards the patient, and was most apparent in their outlook on the doctor-patient relationship. Katie maintained that being there for a patient was first and foremost about applying their expertise towards resolving the problem. Rob acknowledged that not every condition required a doctor-patient rapport,

Sometimes there are medical problems that just need a medical fix. You just need a pill. You just need an ointment. We just need to run a test and make sure it’s not X, Y, Z. That’s not maybe the best in a perfect world, but I think for a lot of times it’s enough. (Rob, entry interview)

Pragmatism could also be observed in their contemplation of the mortality of their patients as well as their own. This was exemplified in Rob's contribution to two separate
reflection group conversation that turned to issues of death and dying. In the first instance he shared that he had been emotionally prepared for the three patients death he had observed due to the severity of their illness and the extremity of the methods that had been used to keep them alive. He admitted to a sense of relief when the patients was released from the 'torture' of medical intervention. He observed soberly, "I wish I could have saved those people but that would have had to be about six weeks before I met them" (Fieldnote SOM-IC012216). In a subsequent conversation he displayed a similar pragmatism when a facilitator inquired whether students had given any thought to their own advanced directives:

After a pause Rob said "hopefully everyone here has an advance directive" which prompted some head shaking from his colleagues. He shared that he had two other medical students witness his AD one night after a study session. It's filled out and on file with his family and decision makers. He was spurred to action by a course at the start of medical school. The hardest part of the process for him was deciding that his parents would not be his decision-makers, instead he chose his brothers. (Fieldnote SOM-IC020516)

As students became more preoccupied with specialty selection, Avi grappled with his own uncertainty. His initial choice of internal medicine proved unsatisfying particularly because it did not provide the level of intellectual stimulation he desired, involving far more patient management than he’d anticipated. In the quote that follows, he explains his ultimate choice of Emergency Medicine; in the process, he emphasizes the diagnostic aspects of his preferred role.

At the end of the day I wanted to be a generalist, not a specialist. I'm comfortable knowing things that are broad level as opposed to a deep level. I can live with the fact that it’s okay for someone else to know the heart as best as they possibly can, and it’s okay for me to know 40 percent of that material, but enough to be a functioning doctor in my particular setting. You don’t need to be a tertiary care level cardiologist to work in an emergency room, nor should you be. That’s someone else’s job. My job is to figure out if there’s a problem; if I can diagnose something, diagnose it; if there’s something very
rare or bizarre going on, keep the patient alive and get that patient to the level of diagnostics. And that's okay by me. (Avi, PS Interview)

**Balanced role enactment**

Sam & Wayne both decided on a medical career at an early age. Sam, who had family ties to medicine, had fond memories of his own pediatrician. A medical career satisfied his desire for direct contact with the beneficiaries of his work. Wayne's medical career was inspired by the untimely death of a relative and his childhood chronic health problems. His commitment to this goal prompted his emigration from his native Cameroon to the United States. At the time of the study he had been living in the U.S for seven years. Like Sam, Rachel had many family ties to medicine. By her own admission, this 'insider knowledge' of sorts had initially made her very wary of pursuing a medical career. Unlike the others, she had conducted an extensive exploration of career options including international public health work. A positive experience coordinating clinical research trials affirmed her competency in working with very sick children and the gratification to be derived from offering hope to their families. These insights more than anything else prompted her towards specializing in pediatrics.

As noted earlier, students high on the humanistic orientation routinely demonstrated an appreciation for humanity of their patients, their colleagues and a recognition of their own humanity. Cognizance of their own humanity emerged in their attention to self-care during the clerkship period, Rachel found renewal in her artistic work, Sam in time spent with family and Wayne in his spiritual practice. In their evolving practice, they demonstrated recognition of the personhood of the patient and the importance of engaging patients in clinical decisions. In the quote that follows, Sam
described how these insights contributed to his preference for continuity of care, an opportunity to get to know individual patient's values, goals and desired health outcomes.

“In certain contexts, it's hard to practice medicine in the way that physical medicine is able to...just because you have continuity of care...but I saw when I was in internal medicine in surgery ... that what the patient was caring about and what the doctor or surgeon was caring about were two different things. The doctor or surgeon might tell the patient to do something, but you could see in the patient's eyes that they weren't going to do it anyways. What was the point of having this whole conversation or what was the point of giving that medication? I think that I wanted a kind of medical field where you had more continuity. You got to know the person.” (Sam, Personal Statement interview)

Sam’s confrontation of this apparent disconnect ultimately contributed to important specialty choice, as he steered away from Pediatrics and towards Physical Medicine & Rehabilitation (PMR). Rachel experienced a similar conversion as she became disenchanted with the emphasis on care management she encountered in Pediatrics. Her pediatrics experience was a striking departure from her previous work in clinical research trials where she felt her work offered participants hope for a solution. Her technical orientation emerged in her preference for the procedural exactness of surgery. She likened her work to artistic expression: holding a scalpel effected the same purposeful calm for her as flourishing a paintbrush. The decisiveness of the work was a great source of pleasure to her. Rachel's ability to move seamlessly between humanistic and technical orientations epitomizes the balanced category, and emerged in this excerpt from her Personal Statement:

Sarah's body had the contour of a woman well into her second trimester, but she was not pregnant. A CT scan revealed a massive tumor arising from her ovary. My satisfaction at finally making sense of her puzzling symptoms gave way to heavy-heartedness when I realized that she would require major surgery for a probable malignancy. Though I had diligently studied reproductive biology in medical school, nothing in a book or a lecture could have prepared me for what I saw when we opened her abdomen a few weeks later. An enormous mass emerged
from the incision, glistening with tortuous blood vessels. **Wide-eyed, I set to work with my team, tying them off one by one until the tumor was completely removed.** (Rachel, Personal Statement)

Rachel’s artistic inclinations emerge in this vivid recount of a clinical event, in which she mirrored the enthusiasm for novelty expressed by students in the Scientist/ Diagnostician category. However, her fervor was tempered with her awareness that this condition, a boon for student learning, would require invasive medical intervention, constituting perhaps both physical and emotional anguish for her patient. She dove into the task of an enormous surgical procedure, while maintaining compassion for the person under her knife.

Rachel's delight in the intellectually stimulating aspects of the role was echoed in a quote from Wayne in which he connects his medical interest to a lifelong fascination with solving puzzles.

I always enjoyed playing games about “the odd one out”, where one is presented with words of an unidentified category or images that look related, and then asked to identity the most unrelated object. Medicine of complex patients in a manner of speaking, is an extrapolation of this game. For instance when a patient with several co-morbidities is admitted from the ED, it is up to internist to figure out what went wrong. For these subset of patients, **it is often quite intellectually stimulating to hone in on the acute insult within the context of several co-morbidities.** Just like “the odd one out”, there may be one aggravation that throws the whole system off-balance. The process of thinking through the intricate interactions of these suboptimal systems to restore the patient back to his/her baseline is very fulfilling. It would be dishonest of me to deny the frustration of not being able to identify the culprit, but such are the moments when I am pushed to think “outside the box”. The satisfaction derived from solving such cases affords medicine its allure. (Wayne, Personal Statement)

There is no question that Wayne, much like Avi, derived considerable pleasure from the dogged pursuit of the answer to the riddle presented by his patient's ailments. At the same
time, Wayne demonstrated great degree of thoughtfulness in attending to the humanity of his patients. He took great pride in taking ownership for the delivery of care to his patients, which for him meant knowing every detail possible, from the medical history to the social background. He found great personal reward in the relationships that emerged in the course of this level of care provision.

This brings into limelight the importance that patient-physician relationships have on patient care. I had the privilege of taking care of a patient with a new diagnosis of multiple myeloma. I checked on this patient and his family twice a day, updating the family about any decisions or treatment plans as well as addressing their concerns both physical and emotional. On the day of discharge, the patient’s wife remarked with profound gratitude that among the several elements that contributed to his discharge, she was convinced that my conscientious involvement in her husband’s care was significant. **I carried away several lessons from this encounter, but one that remains indelible in my mind is building a relationship with patients can have a positive outcome on patient care.** (Wayne, Personal Statement)

Like Sam and Rachel, Wayne ultimately changed his specialty choice in response to his evolving understanding of his preference for role enactments as well as the implicit demands of certain specialties. At the start of the year, he had wanted to pursue a cardiology specialty. Cardiology was not included among the standard rotations, but he was able to gain exposure through mentorship and shadowing opportunities. He soon became disenchanted by what he describes as a propensity to "overly intellectualized (such that) the patient becomes a case rather than a person" (Wayne, entry interview). Repelled by such attitudes and the intense demands of cardiology, he gravitated towards Internal Medicine. This specialty afforded him the most authentic enactment of both technical and humanistic inclinations.
Ambivalence towards role enactment

This typology of preferred doctor role enactment builds on prior conceptualizations of humanistic orientation in medical practice (Martimianakis et al., 2015). As noted earlier, professional roles, by definition, encompass technical and humanistic dimensions. It follows that role enactment might privilege one or the other of these orientations. At the outset of this study, I conceptualized humanistic and technical orientation as two poles of the same continuum. To be highly oriented towards one, necessitated a low orientation towards the other. However my analysis demonstrated that informants could be high on both orientations (Balanced) suggesting that humanistic and technical might represent two independent dimensions. If my informants could exhibit high levels of both orientations, it stood to reason that other informants could be low on both. I labelled this theoretical fourth type Ambivalent, but was unable to identify any ambivalent types in my sample.

From a methodological perspective, this absence might be attributed to my modest sample size and sampling methods. Participation in my study was elective and the core of my analysis rested on the participation of students during an extraordinarily period of their lives. Students were willing enough to participate in observation activities but many declined to participate in the more intensive interviews. Arguably, students low on both orientations may have been disinclined to participate in the more invasive aspects of my study. It is also possible that ambivalent students might find themselves questioning their compatibility with the profession and as a result take steps to exit training. This voluntary culling would diminish the stock of ambivalent students in a cohort.
A third explanation invokes the human need for a sense of competence (Deci & Ryan, 2000) and meaningful work (Rosso et al., 2010). In the course of my analysis, I noted the importance of deriving gratification from the daily activities of clinical work. For caregivers, gratification may be derived from time spent bonding with patients. For diagnosticians, gratification might be derived from the resolving a particularly difficult case. Regardless of the source, gratification seemed essential for sustaining students through the ordeals of clerkship. The pursuit of this gratification might compel ambivalent students to reorient themselves towards greater expression of one or both dimensions of role enactment (i.e. humanistic or technical). Figure 2 illustrates the proposed relationship between preferred role enactments.

![Diagram of preferred role enactments]

*Figure 2. Typology of preferred role enactments*
My findings bear some similarity to prior findings of four ideal enactments of the clerkship role, performer, learner, caregiver and team player (O'Brien et al., 2015. In brief performers prioritize promoting an image of knowledgeability, learners focused on advancing their own learning, caregivers focused on relationships with patients and team players focused on relationships with other professionals. These profiles were generated from medical students' response to the question, "what makes an ideal student in your clerkship program?" Though endorsed by 3rd and 4th year students as clinical preceptors, they perceived to be contextual ideals and not universally valued. Instead, profiles were more favorably viewed under certain clinical and team conditions and by certain attending physicians. Nonetheless, performer and learner profiles do seem to exhibit high technical orientations while caregiver and team player orientation seem more humanistic in their orientation.

The situated nature of these ideals required students to engage in situation monitoring to fully grasp where and when ideals were best applied. In short, these ideals seemed to promote impression management (Goffman, 1959) more so than authentic enactment of the clerkship role. By design, students' responses reflected what was deemed valued in the community rather than identifying the enactments that were personally meaningful to them. By contrast, the domains that informed my typology of preferred role enactment were induced from students’ descriptions of their own interests, motives and insights. Thus these preferred role enactments may be viewed as students' authentic expression of the professional role. This finding is consistent with Reid's (2015)
distinction between idealized or expected professional identities (as promoted by organizations) and experienced professional identity (as preferred or desired by the worker). Furthermore my typology shifts the frame of reference beyond the clerkship role to provide insight on future role enactment intentions. Students focused less on what they deemed as a successful clerkship enactment, though their ideas regarding success in this role did factor in our conversations, and more on what for them would constitute a gratifying enactment of the doctor role.

Much of the professional socialization literature has fixated on apparent changes in student attitudes as a consequence of socialization practices. Yet my findings indicated that students do not change their orientation as anticipated, but gravitate towards communities that endorse their values and capabilities. This is consistent with Ibarra's finding that newcomers engage in identity matching, that is, integrating observations of role exemplar and knowledge of their own abilities and preferences to create a projected image of themselves in the role (Ibarra, 1999). Because the target role is either unclear or uncertain for medical students, a wider array of possible selves must be considered. Ibarra alludes to the importance of both values and preferences in assessing the feasibility of observed enactments for inclusion in the role entrants’ behavioral repertoire. The same is true for medical students. As with the residents studied by Pratt, the role entrants in Ibarra's study were locked into a role and thus in search of the most authentic enactment that could be achieved under those constraints. Conceivably, entrants could resort to role crafting if necessary, and if the context allows. When a role is aspirational, the future role occupant is not in a position to make modifications. Specialization imparts variability in the target role such that aspirants are able to map their preferences for enactment onto a
specialized version of the role. I have labeled this kind of activity preference crating - the reciprocal process of role learning and identity work that surfaces an individual's preconceptions of, affinity for and intended enactment of a prospective role. In the chapter that follows, I move beyond this initial discovery of preferred role enactments to describe the process of preference crafting as it emerged from my analysis of students’ description from and response to their experiences.
CHAPTER 5.
PREFERENCE CRAFTING

*I don’t see how you can become a doctor without the third year. It’s logical. It makes sense, but I think it really reorientates [sic] you on what you think you want to become or what you think your choice or decision... at least it gets you thinking in that direction... because a lot of people change their minds about what they want to do based on their third year experience. It gives you a better perspective where you want to go. And it helps you see what your strengths and weaknesses are what you like most and what you don’t like and what you will be able to deal with. I think it’s like a turning point right because you come in one way you reach the bottom and you can only go up. So third year is like that bottom where things will get better.*

(Wayne, entry interview)

**Overview of clerkship experience**

Nothing can truly prepare students for the jolt of entering the clinical environment in the clerkship role, though it is a role they have been anticipated for years. “Drinking from a firehose”, “thrown to the dogs”, “thrown in the deep end”, all of these metaphors were used to convey the overwhelming nature of the experience. As previously discussed, entering the third year thrust students into an intensely liminal state. Neither conventional student nor legitimate doctor, they straddled two worlds chronically uncertain of their place. In as much as they aspired to be doctors, they were first obliged to excel in this transitional role.

Students quickly found themselves in over their heads, immersed in practical realities that up-ended much of the knowledge they had mastered in preclinical training. They suffered from the limitations of a novice perspective and thus much like children had to be taught to sense, cognize and behave appropriately. This advanced learning emerged in the process of enacting increasingly complex tasks under the supervision of senior doctors. This is how the tacit knowledge of professional practice has been
transmitted for centuries. They are often reminded that in time they too will progress from the margins to impart hard-won knowledge for junior medical students.

The initial shock of being thrown into the deep, was quickly tempered by students' will to swim. They steadily assimilated new ways of knowing and doing. Beyond merely staying afloat, students navigated the ambiguity of their role by employing dual strategies of managing expectations and managing interactions. Expectations of their supervisors as well as their own incoming expectations became salient, particularly when these expectations were breached. Students also discovered that medical training is a social enterprise, requiring them to successfully manage interactions with any number of patients, doctors and other medical personnel.

Time and again, students came face to face with expectation-shattering situations, or experienced dissonance as a result of observed interactions, or any of the numerous occasions when medical reality upended their prior clinical training. Encounters with death, forced students to contend with the unpredictability of the human body and the limits of medical expertise. These dissonant events prompted them to question the meaning of the medical enterprise in order to clarify what it truly meant to them to ‘do doctoring’.

Over time students accumulated recognizable levels of expertise. Demonstrations of competence earned them greater responsibility. Students also matured in their understanding of the doctor role, which allowed them discern preferred aspects of the work and sources of personal gratification in the role. The structure of medical training incorporates numerous disruptions that repeatedly jolted students out of any semblance of comfort or equilibrium. Student changed core rotations every 8 -12 weeks. Within core
specialties they moved within a number of different services and reported to several different attending physicians.

Selecting an area of medical specialization was a critical outcome of the clerkship experience. By the midpoint, these considerations became more urgent. Many fourth year activities depended upon this choice. This forced differentiation prompted another round of questioning of themselves and others, in order to clarify their intent. Students’ personal values were particularly salient during these deliberations. They emerged from this process having identified their priorities and affirmed the core values that initially propelled them into a medical career. Taken in its totally, the arc of each student's narrative comes full circle in these fourth year decisions and the preparation for residency applications. This trajectory was apparent in some form for everyone one of the core informants for this study.

**Emergent process of Preference Crafting**

In the following sections, I explore in greater detail each of the individual phases of role learning and mechanisms of preference crafting that have emerged in my analysis of the data. I provide empirical evidence to justify claims of patterned interaction.

**Inundation**

*Experiencing ambiguity*

For most, if not all students, the first day of their clerkship experience was not their first time in the clinical setting. All students mentioned that they had spent some time shadowing practicing physicians or volunteering in a hospital before applying to medical school. During their pre-clinical years students also participated in programs that allowed for more in-depth shadowing and/or performing basic clinical procedures (e.g.
blood pressure screenings in community outreach programs). In addition, all preclinical students participated in simulated activities with a standardized patient. These activities were intended to gently introduce students to the complexities of the clinical setting and dynamics of patient interactions. However nothing could fully prepare them for the sense of inundation that accompanied the start of their first rotation. It was a feeling that resurfaced each time they started afresh, though perhaps a bit attenuated for each consecutive beginning. For the first time students had a formal, if peripheral, role in the provision of patient care. Now they have the capacity, as one student noted, to leave a mark on the care of patients. It is also the first time that their performance in the clinical setting will have a direct bearing on their academic standing. This is a transition that they, understandably, have been looking forward to from the moment they decided on a medical career. Yet, their grasp of the clerkship as a role was quite abstract at the start of their first rotation.

Many informants spoke of piecing together the stories of friends in their third year when they surfaced on Fridays (the one day students are released from clinical duty). These stories ran the gamut from the awe-inspiring to the anxiety provoking. As one student noted,

*I heard the term clerkship before going to medical school but the first time I really understood what it meant was really my first year of medical school seeing to third and fourth years coming into school on Fridays when they have some classes and talking about what they were up to. That was probably when I first really understood what they were doing. I mean it was like you know an interesting patient that they had seen. Awkward or unusual situations that they had gotten themselves into that they felt like they were struggling to handle like kinda feeling their way out. There were also some complaints, about feeling difficulty with attending, feeling bored, feeling unneeded kind of like the good and the bad basically. There was some stuff about feeling good about being part of the process and stuff where they felt like they were struggling. A little bit of both.* (Sam, entry interview)
This quote captured the mixed emotions evoked as student struggle to maintain equilibrium amidst the highs and lows of a given clerkship. Clinical encounters pique students' interest, arouse feelings of discomfort and remind them of their limited capacity to contribute in this setting. Sam's choice of the words "feeling their way out" illustrates the ubiquitous experience of ambiguity. Students often had no idea what they should be doing at any given time, or how exactly to execute certain tasks the first time they are assigned. The lack of clear guidelines could range from the mundane, such as knowing what to carry around with them during rounds to more significant insights such as knowing how to suture. Many informants spoke of needing to figure things out on their own and the seeming obscurity of pertinent information as if critical details were intentionally kept just beyond their grasp. The feelings of frustration and anxiety attendant up this apparent opacity is captured in Jill’s complaint about her surgical rotation,

*I feel like they don’t tell you until you’re doing something wrong, they won’t tell you ahead of time what they expect. So sometimes they’ll say something if I’m not doing I’m supposed to be. It’s like you should have told me that before, then I would have known. So yeah. Usually you have to ask and beg to be told information that should just be like obvious to you but of course they don’t tell you.* (Jill, entry interview)

**Peripheral participation**

From the perspective of the student inundation was overwhelming but in the grand scheme of medical socialization, the clerkship year is designed as a measured immersion in medical practice. Students operated with somewhat of a safety net. Their initial task delegations allowed them to practice procedures introduced in preclinical training while minimizing the possibility of harming patients. The repercussions for
making mistakes in these early tasks were relatively low, and, as the following informant noted there is seemed to be a general expectation that medical students would make mistakes.

The other day, accidentally, I was trying to cut a tie, and I cut the resident’s glove by accident. That bothered me because at that point I had a lot of OR experience, but I was still making rudimentary mistakes like that. So that really annoyed me….I don’t get in trouble at all. People are really nice about it. I beat myself up about it. No one ever makes me feel bad about it. Everyone understands, oh, it’s like the med student. Actually, it’s pretty nice being a med student because you have a safety net underneath you. You can make as many mistakes as you want, and no one actually cares. [laughter] They’re like okay, we expect that. (Michelle, entry interview)

Two main staples of clerkship activity include conducting patient interviews and pre-rounding on patients to review charts in preparation for morning rounds. Student often described these tasks as being on the front line of information gathering. As they executed this fundamental task students learned to sort and sift through the patients' stories and explanations along with the result of their own physical examination to discern the medically relevant facts. They learned how to identify possible causes of dysfunction and propose a course of medically appropriate care. They mastered the appropriate medical jargon and learned how to ‘code switch’ succinctly communicating findings to supervising doctors using jargon then translating back to laymen's terms for the benefit of the patient. These informational exchanges and processes of decision-making brought the hierarchy of the medical training model into sharp relief.

Recognition of their lowly status within a rigidly hierarchical system presented another striking contrast to the pre-clinical curriculum which employed a problem based learning (PBL) format and eschewed didactic course. Knowledge transfer occurred primarily in egalitarian teams characterized by mutual sharing and collective learning. All of this changed in the clinical environment. During their clerkships, informants were
acutely aware and constantly reminded that they were the least knowledgeable member of a highly stratified team. When they referenced this differential, students invoked imagery of "the low man on the totem pole" (Rachel, entry interview) or "bottom of the food chain" (Wayne, entry interview). Student also came to terms with the fact that their education was no longer the central enterprise of their milieu. The training of medical students took a back seat to priorities of patient care and resident training. This proved a sobering realization for the following informant:

*I don’t know that that’s the same everywhere, but I kind of get the impression that medical education is different. It’s about so much that’s not us. That’s why in the third year it really hits you upside the head. You know, this is a hospital. It’s about treating patients. And then it’s also about education, but it’s about educating fellows and residents. Med students are in there somewhere...* (Rob, entry interview)

This radical shift from the center to the periphery contributed to students’ overarching sense of uselessness, chaos and lack of direction at the start of the clerkship year.

**Absorption & Navigation**

At first glance, students’ accretion of knowledge through absorption appears to be a relatively passive mechanism. Student were very much like sponges, soaking up any insights that could restore their efficacy and imitating the actions of senior doctors. Absorption was facilitated by a hypervigilance and hunger for novel experiences. So much so that some attest to feelings of exasperation by overrepresentation of certain conditions in their patient population (for example respiratory infections in the pediatric clinic), others guilily confess to hoping for a code so they can learn from the experience. Despite their longing for novelty, students found great value in the mundane. The boundedness of student participation coupled with the complete immersion in the clinical
environment afforded multiple opportunities for the enactment of routinized tasks. The more time they spent in the setting, the more they were able to pick up.

Absorption, though essential for student learning, was not by itself sufficient for appreciable student growth in the clerkship role. Active engagement with the experiential aspects of the Inundation Phase proved critical for growth to occur. They did so by employing two significant coping strategies, managing expectations and managing interactions.

*Managing expectations*

The experience of inundation made salient for many medical students the implausibility of their initial expectations. Student recognized how little they actually understood about the logistics of medical care. In their interviews as well as in reflection groups, students discussed the extent to which they had previously idealized the doctor role without fully understanding all that it entailed. For example, while they had all expected to interact with patients, most had no inkling of the amount of administrative work. Others noted that their proximity to practicing doctors had alerted them to the fallibility of clinicians. In one reflection group, as students discussed their strategies for incorporating attending feedback, one student disclosed that he was "starting to disagree with his attending" and recognized that sometimes his attending "could have handled situations better or explained things better to patients" (Fieldnote: SOM-429A-101615).

In the following quote, an informant discussed how the much anticipated commencement of clerkship had revealed his own idealism and the need to align his expectations with reality.

*When you think of clerkship you think this is the time when you are becoming a doctor. It's not the basic sciences that you learn you can learn anywhere this is a
unique experience and you know you're gonna be given the privilege of taking care of patients and just caring for them. I mean that's a side of medicine that almost every student looks forward to...the point where you actually are doing...making a difference in patient care... but when you get into it you see that there is...it's really unrealistic at least my perspective was a little unrealistic. I tend to fantasize a lot about what I think it's going to be like and um sometimes my fantasies are just utopia. Too good to be true and when I get into the environment I get the harsh reality of the difference of what I thought it was gonna be and what it actually is. So um maybe I need to tone down my expectations as opposed to always thinking about it's gonna be this way or this way or this way. (Wayne, entry interview)

On the flip side of student expectations of the experience were other clinical personnel’s expectation of student performance. It was certainly understood that as novices students would not immediately master procedures. However, they would be expected to perform to best of their ability and learn from their mistakes. What constituted the best of their ability was open to interpretation and left to the subjective assessment of their preceptors.

One strategy that allowed students to manage their own and others' expectations was exchanging stories with third year medical students. Through storytelling, students attempted to extract some meaning from the daily drama of the clinical environment. Stories were a form of currency among medical students. Like Pokémon or baseball cards, they were compared and contrasted, traded and ranked. There could be a bit of one-upsmanship in this pastime as students jockeyed to relate the worst story about neglectful attending physicians or egregious medical errors. Storytelling was a form of communal learning, and allowed for exchanges of information about what could be expected in future rotations or certain teaching hospitals. Above all, sharing stories normalized students’ experiences. The reflection group sessions during which student reconvened was a repository of stories. Informants spoke fondly of this opportunity to reconnect with their classmates, but above all to have their experiences, good and bad, validated by others uniquely positioned to understand.
I think just from a purely social perspective, it was nice that we all kind of came back 'cause we're all in different areas so I don't get to see my classmates a lot. Also, it was the same group of people that we had those "touchy-feely" sessions with the first two years, so it's nice that we've all been through really the whole path together. I liked that those groups were consistent throughout. In terms of my particular group, I felt like most of the time, it ended up being just kind of a therapeutic venting session. We would talk about funny things or stressful things or how we were liking what was going on. I think that was the most helpful, that you realize that other people are going through things and other people are struggling.

(Kim, entry interview)

Kim, like many others, also valued the social aspect of the Friday sessions. While the transmission of procedural medical knowledge is a social enterprise, many students admitted to feelings of isolation at one point or another of the clerkship year. Whereas the demands of pre-clinical training had cut them off from outside interests and ties, clinical training sequestered them from their medical student friendships as well. Isolation also stemmed from the transient nature of their role. These students were embedded in a given clinical setting for a relatively short period of time. During this time they were expected to contribute to care delivery, though they were not yet doctors and as a result lacked a clearly defined role. To overcome these feelings of isolation and get the most out of their clinical environments, students learned to manage a multiplicity of interactions.

Managing interactions

In navigating the open waters of the medical clerkships students were obliged to manage interactions on two important fronts, with patients and with medical staff. Both of these interactions had important implications for student learning and satisfaction with the clerkship experience. When asked, many students shared an initial expectation that much of the doctor's role involved interaction with patients, an aspect that many of them relished. If nothing else the parameters of their role allowed for the depth of connection.
that they imagined. These interactions with patients often provide a balm to offset the hardships in other aspects of the role.

*I really like being with patients so that would be my relax time you know at different times they'd be like go and see this new patient and I'd be like "yes!" I get to like go and actually talk to somebody and use the information that I've gained in the first two years of medical school and everything that I've learned in this clerkship to try to figure out what's going on with them.* (Rachel, entry interview)

Though most patients also welcomed the opportunity to interact with anyone who demonstrated an interest in their care and well-being there were also tales of contentious interactions with patients. Students had to learn how to put patients at ease and accept the relatively infrequent moments when patients declined to have a medical student contribute to their care. As students navigated patient relationships their conversations became more focused and purpose-driven. Consider one informant's awareness of how the quality of her interactions with patient diverged from her initial expectations.

*I do talk with patients a lot, but I think it's a lot less talking with patients, and more just figuring out what kind of information you need to assess them and figure out a treatment plan.* (Katie, entry interview)

Students gained tremendous insight from their interactions with patients, as one student noted concepts such as social determinants of health were more accessible viewed through the lens of a real patient situation. However, interactions with residents and attending physician were the primary instrument for structuring their practically derived knowledge onto their preclinical foundation. This integration of knowledge occurred within the context of rigid stratification among house staff. Students were repeatedly advised to look first to the medical intern, the most junior resident, for direction. They were often assigned to an intern, who was formally responsible for the medical student’s assigned patients. In the first months of their clerkship, when interns were themselves just learning the ropes of residency, this partnership could and did exacerbate some student’s
sense of ambiguity. Interns were often themselves overwhelmed and lost in those initial months. One informant employed great care in approaching his intern for help in recognition of these limitations. More advanced residents were also available to student as sources of teaching and in the moment insight. Many informants shared the importance of being proactive in seeking out their guidance rather than waiting for teaching. As noted earlier, teaching medical student is not the central enterprise of the clinical environment and not all residents and attending physicians are of a mind to do so. Thus students needed to be strategic in balancing the demands they placed on their senior doctors to avoid becoming a nuisance or being neglected in the process. Being strategic might involve thoughtfulness about the kinds of questions directed to different types of residents as the following informant observed.

So it depends on what you want. So ... for like questions that you feel like you would be embarrassed to ask other people you ask the intern because like they’re the lowest on the totem pole. Versus you might want to talk to the senior resident about bigger issues, like what goals you have for the rotation, you know of want to show them that you are anticipating and trying to improve. (Rachel, entry interview)

The saving grace for many students was the opportunity to cultivate supportive relationships whether with mentors back at their academic home base, with preceptors who took an interest in their performance or with other students on the same service who became a provisional but significant source of support and information sharing. In the following quote, a participant in a pilot of a longitudinal clerkship model (LIC) contrasts his experience working in an outpatient setting with a preceptor over the course of several months to the brief interactions with inpatient attending physicians.

And then in the LIC part, because like I said it’s kind of two things, it was rewarding like establishing the relationships with these attendings, you know, your one-on-ones, and then getting better and better and better slowly with them in a
more kind of organic way, rather than just like go home and study real quick and tell me everything you know about COPD tomorrow. It was like they watched you just get better with your relationship with the patients. That’s how my LIC has been. It hasn’t necessarily been like watching me gain tons of knowledge, which has also happened, but it’s been more centered on like watching my process of like interviewing a patient methodically and establishing a relationship and all that kind of stuff. (Art, entry interview)

Art highlighted the organic learning that emerges within the context of a developmental relationship. The ongoing nature of the connection allowed him to develop understanding naturally over time rather than forcing to cram knowledge simply for the purpose of making an impressive display. While all informants did not have the benefit of these longitudinal relationships it was clear that developmental relationships of any kind aided students in their progression to other phases of preference crafting.

Pathways from Inundation to Growth in Role

I was paired with a preceptor who had been practicing medicine for over 50 years…I specifically asked to be placed in a private clinic as opposed to being placed in another hospital for that rotation just because I wanted to see what it was like to see outpatient medicine done one a day to day basis. I had prepared for this for a couple days prior. I refreshed myself on the common conditions and drugs that you use in the family medicine outpatient practice…I put together a sheet of goals for myself for the rotation. I was hoping to go over all of this stuff with the doctor who I was gonna be working with. That never happened. What happened instead was the first day that we worked there, I walked into the place and introduced myself and he was a very cordial guy. He goes “Happy to have you here, go see this guy and come back and tell me what we’re gonna do for him” And you know I almost felt blindsided because I was on the first day of my clinical rotations altogether.

So him handing me that file and saying “Go figure out what’s wrong” forced me in the first three weeks of med school to really get good at thinking through what the differential diagnosis would be of this patient’s condition. And…him forcing me into that position, into that mindset was probably the most significant things that happened to me that whole year…when I went on to my next rotation which was inpatient internal medicine…I was miles ahead of other people who were around me just for having been with him for those three weeks. I knew exactly what to ask about particular patients. Not because I had done it before but because I had learned a system. I had developed a new mindset for how to approach things like
this. I got comments from people on the teams that I was working with that I was already operating at an intern level, a first year resident level. (Avi, entry interview)

Avi’s recounting of the events of his first clerkship rotation perfectly epitomized a direct trajectory from inundation to growth-in-role, mediated by mechanisms of absorption and navigation. The preparations described suggested an attempt to impose structure on the ambiguity of the first experience fueled by initial expectations. The immediate dose of reality tempered these expectations allowing for absorption of new ways of thinking and acting in the role. In a matter of three weeks, Avi demonstrated an accumulation of procedural expertise that earned him recognition from subsequent preceptors. An important contextual feature of this first placement, a flatter hierarchy than Avi would later encounter in inpatient settings, allowed for direct engagement with a seasoned physician. It also afforded more opportunities to partake in practice and increase his competence in key tasks of the role.

In comparison, other informants' progress to growth were much less dramatic and far harder won. The first domain in which student's recognize and report improvement pertains to their interaction with patients. After the first three months of clerkship, student report greater confidence in initiating conversations with patients, taking patient history and conducting examinations. Mastering the medical jargon and effectively presenting to attending physicians remained a source of anxiety in these early months. By the midpoint of the clerkship year students reported greater confidence in managing their interactions with house staff. The following quote demonstrates how Sam leveraged communication with residents to improve his interactions with patients and ultimately make himself more useful.
You get to know what questions you should ask the resident before you go and see the patient. Especially when I’m getting on a new service, I ask, “what do you want me to… what are the important things that you want to hear from me about when I go see the patient?” You get to get a better idea of what to ask during an orientation because when you’re on your first rotation they might ask, “what else do you need to me to do to help you?” and I have no idea what I need to know because I don’t know what I don’t know…that’s the best way of saying it. So it does get easier as it goes along and you’re also picking up clinical skills so things that you needed to be taught before to remember what to ask during a conversation, you don’t have to remember again ’cause you already know, it’s already in the back of your head. (Sam, entry interview)

As Sam recognized, intern know-how that he made explicit for the benefit of his own learning soon became tacit and taken for granted. Students also established embodied knowledge over time. In one reflection group, student discussed their growing familiarity with the sights, sounds and smells of disease and disrepair. They had also learned to manage their own visceral responses to observing dysfunctional or damaged human bodies (Fieldnote: SOM-IC010816).

By the time informants completed the clerkship year and transitioned into their final year of medical school, they had pieced together disjointed domains of competence into a coherent practice. The clinical activities in the fourth year offered a concrete example of this integrated expertise. All fourth year students are required to complete an acting internship (AI) in their intended specialty. This activity provided students an opportunity to audition the intern role. Even students who had eagerly anticipate the ‘ownership’ of patient care that this up-step in responsibility afforded acknowledge the magnitude of the task. The safety net had gotten just a bit smaller. Yet students persevered and grew in their confidence in their ability to assume and master the role.

Confrontation

Tensions & Contradictions
Upon entering the clinical arena, students are initially preoccupied with finding their own place. However, as noted earlier it does not take long for them to take note of discrepancies between their expectations and reality. Some discrepancies are relatively benign and attributed to their own ignorance of medical practice. A pervasive observation was that the preclinical instructions for conducting examinations and patient interviews promoted an ideal that had no place in the time pressured clinical reality. As Sam explained, students learned how to revise their practice, aligning their actions with clinical expectations.

So you're doing what's called a focused physical exam where you are only doing parts of it. And there's some questions that we are told to ask that in practical situations don't really matter... and a lot of the stuff that we would ask has already been put in the chart so you are adapting what you read in the chart and what you want to ask. What we learn to do is the ideal, an ideal world if you had an hour to talk with the patient but that doesn't happen so you don't do that. (Sam, entry interview)

Students also bore witness to residents and attending actions that contradicted their expectations about caring for patients. Discrepancies of this nature proved more jarring. Students shared stories in which the humanity of patients were routinely ignored or trivialized. In the following quote, Mitch described a situation that ran counter to his self-imposed standards of care provision.

If you mention anything that's not like immediately, you know, of concern, they will sort of poo-poo it and move on. Well, that's not true, so I did go – this was also in surgery, it was like my second day there, I went in to visit a patient in the morning, so I'm pre-rounding on her, I want to make sure that, you know, she didn't have problems overnight, she had a mastectomy the day before for breast cancer, and I go in to check on her, and part of what you do is check the wound; right? Her bandages were soaked through with blood and, you know, that's something that the attendings want to know, is there blood, is there fluid, all this kind of stuff. So I changed the dressing and I gave her a clean gown and clean sheets, too, because I mean she was just sitting in her own blood, which you think anybody would do; right? So when I'm reporting to my chief, this was before the attending even, I just
said like, you know, when I checked on her, she had a lot of blood, so you know, thinking that I don’t want to mislead him when he goes in there to see that everything is clean, I said I gave her a clean gown, clean sheets and everything else, and he’s like wow, you’re really going for the patient advocate of the year award or something, as cynical as he could be, and I’m like are you kidding me? You would have just left her like that? And I could tell that he would have because it’s like not my job, he just would have waited for somebody else to clean it up. (Mitch, entry interview)

This quote highlights a mentality that several other informants encountered and disclosed during our interviews. Some doctors tended to restrict their attention within narrow parameters and routinely ignored any indication of need that did not fall within those boundaries. While some informants labeled these dismissals of patients' perceived neediness as thoughtlessness, "not even thinking that this person has something going on" (Art, entry interview), others ascribed stronger language such as "patient hate" (Rachel, entry interview) reflecting a certain amount of frustration on the part of doctors. These manifestations of diminished regard for humanity were not restricted to patient interactions. Informants shared stories in which the humanity of other doctors, other students and their own humanity were routinely minimized.

Like once a week they would do attending rounds where we would round with attendings and it was like intense, I will say that, because they would just like grill the intern with questions. Luckily they didn’t really ask me anything. Yeah, and they were really mean to him. I felt bad for him. And that’s what I hate. I felt like they were deliberately trying to humiliate him. Not to teach, not to do anything but embarrass him and make him feel bad. You know? It’s just like I don’t get that; but that’s how it is. That’s the culture, especially on surgery. (Jill, entry interview)

In both of these disclosures, informants shared a common sentiment of being made to feel complicit in the dehumanizing of others and their own feelings of incredulity, resentment and empathy for patient or colleague. Informants could recognize how time constraints, high patient loads and the competing commitments embedded in
resident and attending roles might leave little room for acknowledging patient humanity. As the following informant recognized, attending physicians may wear many different hats in the course of their clinical interactions which inevitably impacts the quality of patient interaction.

_With the attending physician, it's also – we're coming in as a group of how ever many we are, like six or something, and so often it's kind of a teaching session, too, which I think patients understand that they're at a teaching hospital. But not only is the physician spending such a short period of time with you, but they're also explaining what that sign means or – so it's not even completely all directed toward the patient. It's kind of directed back at the rest of the group._ (Kim, entry interview)

As training progressed, students found that despite their best intentions they too had to juggle their commitment to learning, their commitment to caring for patients and their need to take care of themselves. This confrontation underscored an inherent paradox that most students negotiated at some point in the year, particularly those inclined towards a humanistic orientation. They may have chosen to enter the profession with the intention of helping others, but in order to earn the status of doctor they must meet rigorous performance standards. Good performance might rely more on tenacious pursuit of learning opportunities, and impression management than on reflective engagement and caring for patient.

**Performance pressures**

Students negotiated the tensions and contradictions of medical practice within the contextual parameters of high performance orientation. Pressures to perform manifested in three significant ways; constant preceptor scrutiny and evaluation, constant assessment and students' internally driven compulsion to keep up with the rest of the medical team. Ostensibly, the purpose of the clerkship year is to provide a space for practical application of the concepts learned in pre-clinical training. However, students were

88
keenly aware that everything they do was under is scrutiny because the attending physicians who serve as their preceptors must grade their performance. In contrast to AS description of the organic learning that occurred in the context of developmental relationships, the following informant explained how the pressure to perform tipped her toward impression management behavior.

And after 3 months in, I'm comfortable in that space, and I think – then the whole perfectionism part comes in too, because it's like I'm being graded. I'm being evaluated. These people aren't just here to kind of like me. They've gotta find good and bad things about what I'm doing, ways that I can improve, or else it's not structured. Right?...So – but in my mind I just think that I'm very much aware of this pressure to perform, that it – I think for a lot of people – a lot of students – academic – that's typical and that's something that we all – most people I know kind of have that trait, but I think I feel it more – it's more evident now as a third-year, because I'm interacting with so many different people and I am really just trying to make an impression. (Nina, check-in interview)

Ironically, while attending physicians shoulder the responsibility for students' summative grades, they often have the least exposure to students. Typically morning rounds are the one consistent opportunity for attending-student interactions. Thus the window for student impression management and attending impression formation is small and bombarded with numerous intrusions. During rounds, students were required to present on their patients, an inherently cognitively demanding activity as described below, made all the more daunting by the specter of constant scrutiny.

So you are taking what you learn from the patient and kind translating it from what they told you to jargon so that it can be more succinct. So you are not telling them that the patient has a temperature of over 100 you're saying that they're febrile. So you're always trying to take a longer term and make it very succinct so you have to do all that kind of translating in your head. You have to tell the person listening the shortest, concise but accurate and complete picture of the patient because it doesn't take very long for them to lose their attention span when you are telling them about the patient. So that was definitely pretty stressful because you want to look you know what you're talking doing and you have to come up with what you think the diagnosis is and what you would do for the patient. When I didn't have much experience that was very stressful for me. (Sam, entry interview)
Time emerged as the most precious resource in the clinical setting. There was never enough of it and students were mindful of how much of it they consumed in the execution of their tasks. Like Sam, students were often cognizant that attending physician's attention spans during their morning rounds were short and fleeting. Informants also reported anxiety about their ability to keep up with the rest of the medical team which could have implications for how they were evaluated. In the quote that follows, Jill, shared her sense of her superior’s disappointment in her inability to keep pace with her team. A challenge that stemmed from her preference for making some connection, however small, with her patients.

*Yeah, I feel like we were rounding, for example, and they would always be like really rushed and I would usually be like behind, like running behind them because I was trying to like listen to their heart and lungs, I think. I need to with every patient, but I usually had to wait until they were all done examining the patient. So I would usually try to at least say something like good morning and how are you and stuff, not just to come in and interrupt them and not even tell them like who I am. But no one said anything to me; I just feel like, I don’t know, I just got that impression like they thought I was too slow and that I was like taking too long. I don’t know. If I didn’t talk to them I would have gone faster. No one said anything, but I feel like it was just different than how they acted because they were always like rushed so they didn’t really care to develop any sort of relationships too much.*

(Mitch, entry interview)

In contrast to the preclinical years when medical students only completed exams at the end of each year, each rotation culminates in a SHELF examination. These comprehensive assessments were a part of their board certification and had to be passed if student wished to advance to residency. Furthermore, achieving honors in these examinations could enhance students’ residency applications. At the same time, SHELF exams tended to require knowledge of obscure conditions that students rarely encountered in the clinic, thus "learning for the shelf exam is not necessarily what is
useful in everyday life” (Kim, entry interview). As a result, a dilemma of time and energy management emerged for student as they attempted to optimize value.

**Pathways from Confrontation to Growth in Role**

When student first begin their clerkship rotations, the cognitive, emotional and physical demands of absorption and navigation leave little room for role related introspection. Informants convey a sense that the first few weeks of a rotation are really about staying afloat and getting one's bearings. However, as students spend more time in a clinical setting, repeat occurrences and shared stories confirm that jarring events are not anomalous. These confrontations make students more aware of the values that they drive their career choices and expectations. They trigger student questioning of the meaning of these events. Questioning was usually restricted to safe spaces. None of the informants discussed questioning one of their supervising doctors about jarring events or challenging the perpetrators directly. For the most part, questioning seemed to be restricted to student's social interactions with other third year students. It was routinely observed in the weekly reflection groups. During interviews students often questioned rhetorically, or described instances of their own questioning. In most of the events reported and observed, questioning triggered an outpouring of advice and similar stories that the inquirer could then use to piece together their own resolution.

**Growth related questioning and clarifying**

The trajectory from confrontation to growth was progressive, an iterative process of increased understanding of the context of work and of the self over time that ultimately resulted in actionable preferences. To illustrate this movement, I present a series of related quotes from Mitch. The confrontation event in this case was a critical comment
from a chief surgical resident (referenced in Confrontation). The comment communicated the resident's disregard for the patient's humanity and Mitch’s humanistic orientation. In the first quote, Mitch reflected on the trigger event, ending the thought with his own questioning.

*I think there’s a lot of that, like whose job is it to do this or that in the hospital, and you know, I look at it from a very different point of view, because you know, I ran a company that was in the hospitality industry before this, you know, and you teach everybody who walks through a restaurant or walks through a hotel, if there’s something on the floor, you pick it up; you know? I would expect the most experienced surgeon or an orderly to offer somebody a clean sheet, it doesn’t matter, you know, if you walked out of there without doing it, then you would hear about it from me if I were in charge. It’s common courtesy for one, but it’s also like what kind of tone and attitude are we going to set around here, what are the expectations of how people perceive patients? (Mitch, entry interview)*

Mitch’s question on the mission or purpose of the health care organization was clearly rhetorical, underscoring the personal values that inform his professional practice. These values had fueled his expectation about doctor behavior and attitudes towards patient. His experience of the breach of these expectations, rather than leading to expectation management led him to further scrutinize the enactment of the doctor role for this specialty. In the following quote, he contrasted his overall experience of the rotation in which the trigger event occurred (surgery) to another rotation (internal medicine).

*So for one, it’s a stark contrast between my specific surgery experience versus my medicine experience, both in the same hospital. So medicine, they make a big deal of saying like we have – we put a lot of effort into creating this like really supportive culture... and that’s in combination with all of your interns and residents and attendings also being good at their jobs, liking their jobs, happy with the choice that they made in their career and all these sorts of things. And so it’s like the structure is set up for success, the team is happy, the team you work around with are nice to you, everything, versus my surgery experience, like on day one, you walk into a room of interns working, you even ask, “am I in the right place?” , and nobody will even look at you! It’s like the people who are newest on the job who were in my shoes just a year ago... how can you be so, you know, sort of miserable already? They don’t even remember what it was like for a student and just turn*
around and say like "yeah, let me help you out", never happened. (Mitch, entry interview)

The surgical rotation was Mitch’s first inundation in clerkship and as a result made a significant impression on him. However, in contrasting his experience of this specialty with another specialty, he was able to come to terms with the extremity of the behavior he observed. He was also assessing these diverse role enactments through the lens of his value for collaborative and supportive workplace environments. This reflection also ended with questioning, this time related to his assessment of the lack of job satisfaction on this service. Each one of his questions surfaced a value. In the final quote in this series, Mitch shared his decision not to pursue a surgical specialty, a path he had entertained during preclinical training.

No, that’s 100% off the table….I do not want to risk turning out like any of those people. There’s not a single person really that I worked with that I would want to be like in my career, a couple that I encountered maybe, but throughout the day on any given day, the vast majority of people I just wouldn’t even want to work along-side, work with, collaborate with, anything. (Mitch, entry interview)

In this quote, Mitch rejected what he perceived to be a poor model of the doctor role enactment. In doing so, he articulated his distinct value for collegiality. Unlike other informants whose value for intellectual stimulation had swayed them to pursue this specialty, he was unable to envision his preferred enactment of the doctor role within this context. While this example focused on an intense contradiction related to dismissing humanity contradictions could be quite subtle. Other student reported contradictions were triggered by recognition that an idealized role enactment failed to provide the anticipated gratification. As was the case for Rachel whose initial interest in pediatrics was thwarted by her experience of the workflow, in particular the amount of time spent on medical rounds and writing notes.
On medicine I once rounded for six hours. It was the most horrible day of my life...this is a huge reason I want to do OB/ GYN and not pediatrics. Pediatrics in the same way in terms of the workflow. You learn the workflow of different specialties and the more medicine heavy ones definitely rounding is a huge part of the day. Not so on surgery, you've got to get to the OR...much more efficient (laughs). (Rachel, entry interview)

Growth-in-role: identifying preferences

In contrast to the pathway from inundation to expertise related growth, the pathway from confrontation focused primarily on questions of identity and purpose. Thus growth resulting from this trajectory was related to preferences for role enactment. These preferences stemmed from a deeper understanding of the doctor role and a deeper understanding of the self. Informants were able to identify their unique strengths as resources, and a preference for role enactments that leveraged those strengths. Informants also demonstrated greater insights about which tasks and environments offered them the most gratification.

Contextual constraints

Disruption

So that's the disorienting part is that every couple weeks you are starting with a new team or new people and with new expectations and with patients with different problems and different services care about different problems. Like if I'm on the L&D, Labor and Delivery, they want to know is the patient...has the patient had any surgeries has the patient had babies before but if I'm on surgery they don't really want to know that stuff. So that's the disorienting part that I'm constant changing environment, changing the people I'm working with. (Sam entry interview)

Traditional clerkship rotations afforded medical students a limited period of exposure to the inner workings of the ten foundational specialties. These were broken up into four core clinical rotations that may contain two to three specialties and range from 8 to 12 weeks in duration. Over the course of any one core specialty, students worked on different services and, as a result, participated in a number of different medical teams. As
Sam noted, each new service introduced a unique set of medical problems requiring them to tap into different areas of medical knowledge established during preclinical training while developing the know-how for applying that understanding in real time.

Furthermore, each new team presented a new set of expectations of how things should be done. Informants described the jarring experience of being taken back to square one just as they had established their footing in the previous specialty. As noted in the quote above, these disruptions contributed to the general feeling of disorientation that was commonplace in the inundation phase. For students with a stronger technical orientation, the constant assimilation and jettisoning of specialty specific expertise was an additional source of discomfort. As he described his experience of these frequent disruptions, the following informant raised his own questions of how he should best manage all this knowledge that could not feasibly be applied to his own medical practice.

*My medical knowledge has grown, although it always feels inadequate, partly because it just is inadequate and partly because we’re always moving to something new. So right when you start to kind of figure out medicine, the things you’re seeing every day for six weeks, you start to figure them out. Then you’re doing surgery. Then you’re doing Peds. …It’s frustrating and I think you just learn to shift gears and then hope that – I don’t know. If at the end of med school I become a psychiatrist, do I just – everything learned in OB, do I just forget about that and not worry about ever knowing it again? Maybe because maybe everybody is a specialist and it doesn’t matter. For now, you just kind of keep starting over. Every time you start over, you’re a little ahead of where you were before.* (Rob, entry interview)

For Rob the constant shifting of gears was more than disorienting, it curtailed his accumulation of a depth of expertise in any one area. However, he noted that he learned to cope with these changes. Despite the disruption, students could discern an accumulation of expertise over time and each round of starting over was an improvement on the time before.
Forced differentiation

At the exact midpoint of the clerkship year (mid-January), the society deans convened an all-class meeting to discuss the logistics of fourth year. This would include selecting Acting Internships (AI's) and applying to residency programs. The society deans and invited directors of local residency programs emphasized the importance of leveraging AIs and electives to their best advantage in the residency application process. There was no explicit discussion of how students should identify the residency they wanted to enter, and by extension the AI they should pursue. The prevailing attitude seemed to be that students already had some idea of their desired specialty. This particular informational meeting appeared to downplay the enormity of the decisions students faced in the following year.

Had observations been limited to this formal event, the discrepancy between society deans’ attitude and students’ sentiments would not have been obscured. Student discussion in the reflection group meeting earlier that day offered a glimpse into the tumult emotions surrounding the fateful choice that lay ahead of them. The period of immersion and exploration of various specialties would soon come to an end. This forced differentiation, did not sit well with many students. A comparison of fieldnotes collected on this day revealed a universal preoccupation with the class meeting. Students expressed their uncertainty about what to expect in this informational session, concerns that they would be told that their choices should already be apparent and some resistance to thinking about making this choice already. Collective anxiety was further fueled by the reflection prompt for the day: "Now that you’re halfway through your third year of
When students started medical school they had enough knowledge of the trajectory of medical training to understand that specialty selected would be required. In practice, formal commencement of this process of selection was met with resistance. In many ways specialty selection marked the beginning of the end of the liminal experience of the third and fourth years. Each successive rotation afforded students the opportunity to try on new aspects of the doctor role. As long as they did not choose, students remained 'undifferentiated'. Some students and medical education scholars argue that
students are not afforded sufficient time in this state of exploration before they are required to choose, perhaps resulting in identity foreclosure (Marcia, 1966). In this sample, there seemed to be a high degree of variability in terms of the amount of time students desired to make a selection. Some students were clear on their choice at the start of medical school and when the time came recommitted to that choice without hesitation. These students often tapped into external sources of insight to aid them in their decision process as reflected in one student's disclosure during the angst of the mid-January reflection group.

Blonde-girl states that she has always wanted to do urology and still wants to do urology. Her dad is an urologist at HEALTHWORKS and that is how she became interested in the field. She also explains that she has a brother in medical school and another in college that also want to become urologists. She states that she became interested in urology at first because, “It is easier to become interested in a field you already know about.” (SOM-429A-011516)

As demonstrated in Blonde Girl's quote, familial ties to the medical profession afforded a certain amount of foreknowledge of medical specialties. This is not to say that these students did not consider other specialties, only that they were ready to choose and clear on their decision when the time came. This was true of Art, whose father practiced Internal Medicine. While he briefly considered a surgical specialty, once he had taken all the factors into consideration including his preference for patient engagement and his board scores, he settled on Internal Medicine with very little apprehension.

Other students were indecisive when forced differentiation became more urgent due to impending activities that depended on their choice. Within my sample there were students who were surprised to discover that they were no longer inclined towards initial specialty interests. As an example, Avi, one of the key informants, revealed both in interviews and his reflection group that he had entered medical school feeling very
certain of his interest in Internal Medicine. When his experience of the IM rotation proved unsatisfying he had to contend with the drawbacks of his preferred specialty, Emergency Medicine. The same was true for Rachel, who intended to be a pediatrician when she applied to medical school but soon became disenchanted with the practice of medicine-focused specialties. As she contemplated a surgical specialty she compared and contrasted medical and surgical specialties.

"It's definitely uh a dichotomy that gets brought up a lot of the time. And on medicine you use your deductive reasoning to figure out what's going on. In surgery you look and see what the problem is. Not all of them, this is like very reductionist. So on medicine you come up with these really broad differentials and on rounds there is a lot of teaching that's going on and you might spend ten minutes examining the patient with the attending and everyone can see the findings and then you talk about the patient with the patient and you talk about what's on the differential and what tests you might want to order and the tests three days to come back and the patient is there for a long time and it just drags on and I am a very immediate gratification person and I was just like I cannot, like I just can't. I think like in the first and second years I was like wow this is really conceptually interesting but in practice I was like I don't have the patience. I just don't have the patience and half the time...this is the most frustrating part...half the time you never find out what was wrong and you just sent them on their way. I was like this doesn't feel like medicine, this doesn't feel like doctoring to me." (Rachel, entry interview)

In both cases, these students ultimately moved forward with the process of selecting AIs and followed up with residency applications consistent with their AI choice. In spite of any trepidation they might have felt about making a choice at this point, most students pressed forward. The structure of the process did not allow for students to progress into the fourth year without committing to a specialty. It was possible to switch specialty choice later in the process. This was the case for Mitch who was prompted to apply to both Internal Medicine and Radiology opportunities after a chance exposure to Radiology changed his perspective of the specialty.
Towards the end of my data collection I was steered towards one student who had gained notoriety within the cohort for his refusal to go along with the customary timing of specialty choice. In an interview, Tom disclosed that rather than choose prematurely, he had elected to take a year off and engage in a deeper exploration of his choices. The emergent product of his investigation is a podcast, with the stated mission, "interviews with one physician from each of the 120+ specialties and subspecialties listed on the AAMC’s Careers in Medicine website to enable med students to start the thought process in the privacy of their own ear buds" In this way, the podcast was both a vehicle for Tom's personal learning about specialties not included in the clerkship experience and for educating a broader community of medical students. Tom's resistance was notable because of its rarity. However, two students in my sample did elect to take time off in the fourth year. Both had ostensibly committed to a specialty choice and one had even gone so far as begin the residency application interview process before deciding to wait. However, their postponement of residency matching left open the possibility that change might occur. At the very least, these decisions delayed these students’ progress toward enactment of their chosen medical specialty.

**Pathways from Growth in Role to Rediscovery**

*I don't see how you can become a doctor without the third year. It's logical. It makes sense, but I think it really reorientates [sic] you on what you think you want to become or what you think your choice or decision...at least it gets you thinking in that direction...because a lot of people change their minds about what they want to do based on their third year experience. It gives you a better perspective where you want to go. And it helps you see what your strengths and weaknesses are what you like most and what you don't like and what you will be able to deal with. I think it’s like a turning point right because you come in one way you reach the bottom and you can only go up. So third year is like that bottom where things will get better.*

(Wayne, entry interview)
In the preceding quote, Wayne captures the clarifying effect of the clerkship experience. For him and many others in my sample, a sense of clarity emerged out of the difficulty and ambiguity of the clerkship experience. The reorientation referenced here stems from a deeper understanding of oneself which he summarized in this statement, "it helps you see what your strengths and weaknesses are, what you like most, and what you don't like, and what you will be able to deal with". Implicit in this self-realization is the greater understanding of the medical role that allows students to identify how they can feasibly enact this role. This dual insight is critical for the process of role construction.

As noted before, the process of preference crafting occurring during this period was iterative. With each new rotation, students had the opportunity to accumulate new expertise and identify new preferences. The necessity of differentiation was ever present, even in earlier rotations, and as such each episode of growth prompted choice related questioning and clarifying. The insight gained through these cycles of growth, questioning and clarifying seemed to nudge students closer to a choice. The numerous insights and experiences students wove together in arriving at a selection are captured in Avi's reflection on his own process of choosing Emergency Medicine.

By the time third year started, I was pretty sure I was dyed-in-the-wool internal med, all the way. I was planning on subspecialty cardiology or pulmonology or something like that after a basic internal medicine residency. And I have no doubt that I would have been very good at that, but then I actually went and did my rotation in internal medicine and I liked it well enough, but I realized that a lot of the things that I really enjoyed about it were actually quite mundane, even after just six weeks of doing it...the idea of just having a patient on my service for a week straight in the hospital while I grind through a process of correcting someone’s sodium levels or normalizing their blood sugar was just not all that appealing. The investigation into what was going on with them, which was what really interested me in the first place, and the deductive reasoning that goes along with the diagnosis was largely absent with the exception of the couple of cases that someone either in a primary care clinic or in an emergency department had not previously figured out. When I started breaking it down, hospital medicine was 70 percent patient
management, given known diagnoses, and 30 percent figuring out the really difficult diagnoses. By contrast, emergency medicine was 70 percent diagnosis... and about 30 percent management. And I realized I was never gonna find a perfect fit in one or the other. It was always gonna be something that I enjoyed or something that I didn’t enjoy by each one. The question was just: where should that balance fall for me? Ultimately, the 70/30 that emergency medicine has I found more favorable. (Avi, PS interview).

Note Avi’s acknowledgement of the analytic bent in his preferred doctor role based on his deriving gratification from his "investigation of what was going on" with his patients and the "deductive reasoning that goes into diagnosis". In addition, his assessment of the different specialties led to questioning of the optimal balance for him.

Elsewhere, he grappled with the breadth of knowledge required in an EM specialty which would preclude a depth of medical knowledge. His intellectual motivations made this compromise a bit of a challenge. Yet, by the time of the interview, he had made his peace with this conflict. In this quote, he allowed that he was "never gonna find a perfect fit" and instead chose to focus on the specialty with a task composition that he found favorable. It was also apparent to me how much AB’s reflections mirrored RP’s reasoning at the end of her clerkship year when she disclosed her switch from Pediatrics to Obstetrics/ Gynecology, a specialty that encompassed both surgical activities and the patient interaction she desired.

Beyond their clarification of their desired work content, students also became quite cognizant of their preferences for work-life balance. In the following quote, the informant disclosed his reasons for not laying claim to his choice of Physical Medicine & Rehabilitation earlier in his medical training despite early and influential exposure to practitioners.

Part of it was I didn't have enough exposure to the field of PMR, and also it's been evolving, balancing my personal interests in the particular field with also lifestyle considerations....I think as I've gone along in my medical education ...
First and second year, I was pretty gung-ho about I didn't really care what the lifestyle was. I just wanted to get into a field that I like. I'm starting to realize that, for me, there needs to be a little bit more balance ... Between those two considerations. (Sam, PS interview)

This disclosure mirrors others in the latter part of the clerkship year in demonstrating the informant's refined understanding of the desired role coupled with an affirmation of the self-in-role. With the use of the word “evolving” the informant also underscored the iterative nature of his journey to this discovery. This same informant later noted the centrality of family in his life which he described as crucial to his construction of his unique doctor role. He shared that it was "important to tell them (residency programs) that it's a big part of who I am...that's a thing that I value" (Sam, PS interview). Across the board, selecting a specialty and accounting for that choice in the broader medical community prompted student to articulate their values both professional and personal.

Clarifying preference through narrative

On the heels of finalizing their specialty choice, students completed their residency applications which included, among other things, a personal statement. The personal statement does not spur specialty choice so much as it ratifies it. In many ways it is a vehicle for signaling meaningful preferences to the broader medical community. It is in this document that students were able to set themselves apart from other applicants. As one student noted, there is very little in the objective scores submitted that can differentiate one applicant from another. Thus, it is in the personal statement that students were able to craft an optimally distinct narrative. It is also in this narrative that students signaled to residency directors their preferred enactment of the doctor role in the belief that is consistent with the ethos of the specialty.
In the quote that follows, Nina spoke with pride of the authenticity of her statement and her ability to "be true to who I am" both in her choice of specialty and in the way that she had chosen to represent herself. Here, she emphasized that her choices amounted to much more than finding employment within her chosen occupation it is about her own transcendence of the challenges of her training to discover a role that in uniquely hers as well as the capacity within herself to enact that role.

But I think what's so moving and why I think I'm so proud of my personal statement, but I'm also proud of myself. I think that in the ways that we can represent ourselves and kind of like share our stories and share our truth, this document from however many words of the page, really speaks to what's truest about who I am. I'm honored to read through my Dean's letter and my personal statement because these are all things that I think really do speak to who I am. And I think that these aren't – this isn't me showboating. This isn't an impressive document that shiny and fluffy. This is some of the brokenness that I have on this page. So it's really empowered to kind of...being a place where you are now kind of having to shine a light on those things, but also being proud of having overcome some of these difficulties. You know? So yeah, I think it's just like anything else. You want to be matched. You want programs to like you. You want to fit and you want to be employable, but in the same sentence like I want this experience and this moment to be true to who I am. (Nina, PS interview)

Whether resolution of the contextual demands for forced differentiation led students to retain or reject their initial specialty considerations, the choices presented were consistent with students' construction of the doctor role and affirming of their core values. Students came full circle as they reconnected with key values and articulated preferences that steered them towards specific specialty choices. In Data Table 4 (Appendix K), I outline each student's trajectory from early specialty considerations to final choice.

**Summation of findings**

My data points to four phases of role learning: Inundation, Confrontation, Growth In Role, Rediscovery, and two sensemaking mechanisms: Navigation, Questioning and Clarifying. In this section I present an overarching model of the evolving relationship
between role learning and sensemaking that constitutes preference-crafting over the course of the clerkship experience (see Figure 3 for a visual depiction of the relationship between phases and mechanisms).

Cycles of Growth in role

A basic building block of preference crafting was the cycle of growth that occurred within each clinical rotation. Student activities within each cycle were commensurate with their peripheral position in the medical community but subject to performance pressures. A sense of inundation emerged at the outset of each rotation, as students became immersed in the field of practice. Students accumulated role-relevant knowledge through sponge-like intake of environmental cues (absorption), and manipulation of internal and external cues such as role expectations (navigation). Through these mechanisms of absorption and navigation, students achieved growth in procedural expertise. Absorption and Navigation could also lead to a Confrontation in which role learning was obstructed by a major discrepancy between the espoused or expected doctor role and observed enactments. These incidents triggered the sensemaking mechanisms of questioning and clarifying, which allowed for gauging the extent of discrepancy and determining the implications for personalized enactment of the doctor role. Resolution of Confrontation facilitated students' growth with respect to understanding and prioritizing their preferences. Growth in role is best understood as an intermediate phase of preference crafting that facilitated a greater understanding of both role demands and aspirant preferences. In spite of the short time frame afforded in any given cycle of growth, the intensity of Inundation afforded multiple opportunities for Growth in role.
Iterative process of preference crafting

As noted previously, Growth in role emerged within the bounds of a given rotation. However, additional contextual constraints influenced the relationship between cycles of role learning. First, cycles were repeatedly disrupted to accommodate student exposure to multiple medical specialties. As students transitioned from one clinical context to the next, they extrapolated insights, refining both learning and enactment along the way. Second, the clerkship experience culminated in the selection of a medical specialty which moved students out of their undifferentiated state. Forced differentiation imposed another contextual constraint that spanned cycles of growth in role. As with disruption, forced differentiation imposed a temporal limit on the open-endedness of the clerkship experience. Using mechanisms of questioning and clarifying, students discerned whether the role enactments encountered and afforded within each specialty constituted a good fit with their own preferences for role enactment. When students were drawn to multiple specialties or failed to find satisfaction in their initial specialty choice they could direct inquiry internally to gain a deeper understanding of their preferences and/or towards more advanced doctors (mentors, role models, facilitators) to understand how others went about crafting their preferences. Through this iterative process of questioning enactments and clarifying preferences students achieved in Rediscovery, a self-defined target role that aligned their understanding of the doctor role with their identified preferences and capabilities.
Theoretical Implications

In this study I applied an anthropological perspective to the process of socialization to discern how the inherent liminality of the experience might influence orientations towards role enactment. Consistent with prior examinations of occupational socialization (Egan, 1989; Simpson, 1967; Van Maanen, 1983), clerkship experiences demonstrated characteristic conditions of liminal rites including isolation, marginality, ambiguity, loss of status and autonomy, near complete submission to authority and emergent solidarity of communitas (Turner, 1969: 97) among liminars. These conditions provide important contextual constraints that facilitate the process of preference crafting, which I have induced from the data and described above. The concept of preference clarifies the mechanisms by which individuals define themselves in liminal spaces in their career trajectory. Foundational professional identity scholarship has maintained that emergent insights regarding preferences, values and abilities contribute over time to the
construction of a professional identity (Schein, 1978). While subsequent empirical findings substantiate this connection, they fail to account for emergence of these insights in the first place. In directly examining the processes by which preference, values and talents become salient during the socialization process, my research sheds light on the underpinnings of professional identity work.

Authenticity

My findings demonstrate that a desire for authenticity, or the degree of congruence between self-assessment and self-presentation (Baumeister, 1998), shaped these emergent preferences for role enactment. Staying true to their core values and evolving life priorities informed students’ selection among the various doctor prototypes. This finding is consistent with Ibarra's empirically grounded model of adaptation among recently-promoted financial services professionals (Ibarra, 1999). Whereas Ibarra identified professionals’ use of true-to-self imitation strategies as a means of authentic in-role experimentation, I observed medical students using true-to-self strategies to select among future enactments of the doctor role. This situated discretion resulted from two important contextual factors: the high degree of specialization in the medical profession and the forced differentiation imposed as a requirement for exiting this liminal stage. In acting upon the preferences refined over the course of their clerkship, students exercised their situated discretion and fulfilled authenticity motives.

Role discretion has already been identified as a significant factor in adjustment to transitions (Nicholson, 1984). However, socialization scholars do not readily acknowledge the discretion afforded to newcomers to highly stratified occupational communities such as medicine. The findings of this study suggest a positive association...
between specialization and discretion that allows early stage medical trainees to exercise preference in their role enactment. From the outset, I have sought to distinguished any perceived discretion medical students may have over the future enactment of the doctor role from job crafting (Wrzesniewski & Dutton, 2001) and role crafting (Sluss et al., 2011). The literature associated with both concepts assume role incumbency. But professional aspirants, particularly in the early stages of training operate from the periphery, and are not in a position to make substantive changes to either the task or relational parameters of the work. Where aspirants do have an advantage over incumbents seems to be with regard to cognitive fluidity. As one gains mastery over an expertise domain, cognitive entrenchment or highly stable cognitive schema may inhibit one's ability to respond to novel situations and generate new ideas (Dane, 2010). This suggests that individuals would be most likely to engage in cognitive reframing of aspects of their job when their cognitive schema are still pliable. That is, when they first assume the role as opposed to later in the career once they have achieved mastery. For aspiring professionals, cognitive reframing may be the only avenue open to them to satisfy psychological motives triggered in the course of training. Though aspirants were not in a position to alter task and relational boundaries, within their liminal space, they were able to map personal preferences that emerged in the course of training onto possible enactments of the role. In doing so, they made informed selections that afforded greater fidelity to their espoused work-related values and attitudes.

Among my informants, a clear pattern of preference crafting emerged as a means of bridging the discrepancy between idealized and observed role enactments. These experiences of confrontation mirrored medical residents’ reported work-identity integrity
violations, defined as perceived discrepancies between professional identity and work content or processes (Pratt et al, 2006). By contrast, direct assessments of work-identity integrity could account for only a portion of medical students' evolving discovery of the role. Given their marginal status in the clinical setting, medical students understood and accepted that their work content was restricted to the most basic aspects of a more comprehensive repertoire. Thus their capacity for making direct assessment of work-identity integrity was limited. They observed the performance of role models enacting the full occupational repertoire as a means of role prototyping - "discerning what constitutes a credible role performance" (Ibarra, 1999: 774). Integrity violations centered on the extent of the departure of student observations from what they expected. Which is not to say that students had no opportunity for direct assessments of work-identity integrity. For students, it was not just that their assigned work deviated from their expectations, but also that the scope of work associated with patient care was far greater than they had originally envisioned. Furthermore, the enactment of certain tasks sometimes failed to provide desired levels of gratification and meaningfulness. These findings suggest that integrity assessments posited by Pratt and colleagues as antecedents of identity work can encompass both direct (enactment) and indirect (observation) sources and focus on both worth content and subjective meaning. In differentiating between direct and indirect assessments of work-identity integrity, my findings refine current understanding of an important antecedent of professional identity construction.

Equally important as the focus of integrity assessments were the responses to perceived violations. For medical residents, perceived integrity violations triggered customization strategies that facilitated adjustment of the still malleable professional
identity to the realities of the work. These identity customization strategies, arguably a means of cognitive reframing, seemed inherently impermanent. Residents deployed them solely as a means of bridging the divide of practical inexperience in the early years of residency. Radiology and surgery interns confronted with integrity violations could gain some reassurance from observations of senior residents that envisioned specialty work would ultimately manifest. On the other hand, the cognitive reframing inherent in medical students' preference crafting appeared to be more profound and with permanent outcomes. Distinct from identity customization, the work of preference crafting encompassed cognitive tasks of role learning (expertise related growth), as students broadened their grasp of what various enactments of the role entailed, and enactment selection (preference related growth), as students identified personally meaningful enactments of the doctor role. Thus medical students actively engaged in anticipatory cognitive reframing, aimed at aligning a future relational and task boundaries with identified values and priorities.

Across the board, students identified personally meaningful enactments of the doctor role by actively questioning discrepancies (in both observed and enacted behaviors) and clarifying their core values and priorities. This kind of reflective action has been identified as an important means of achieving practical wisdom in knowledge application, indicative of a mature professional identity (Hilton & Slotnick, 2005). Professional identity theorists recognize reflexivity in newcomer's assessments of their provisional selves (Ibarra, 1999). Though Ibarra demonstrated the affective consequences of these self-assessments, her theoretical framework offered very little indication of the basis of these comparisons. My findings suggest that comparisons are often based on
newcomers’ determination of the extent to which the meaning derived from experimental enactment reflect their core values.

Values are the enduring beliefs that inform individual preferences for ways of doing and being (Rokeach, 1973: 2). These intrinsic motivators have been shown to influence identity work around career transitions, determining whether foregone identities will be retained or fully relinquished. When core values remain unfulfilled, individuals retain foregone identities by employing imagined or real enactments, such as job crafting (Obodaru, 2017). My findings suggest that only provisional enactments that reflected and reinforced students' core personal values were deemed worthy of retention. In my sample, students' values were invoked and made salient by a number of critical events. Confrontation events and the cognitive dissonance they generated triggered sensemaking in the form of questioning which surfaced student values. Similarly, student constructions of personal statements for their residency application highlighted the values implicit in their anticipated roles. As narratives, Personal Statements often traced students' journey of self-discovery, offering insight on how the evolving understanding of self and role informed their choice of specialty. Through carefully constructed stories of personal motivations, meaningful interactions and clinical insights, student clarified and affirm their core values. Arguably, these actions are also consistent with membership-claiming acts of declaring and revealing (Bartel & Dutton, 2001). Through their statements, students not only staked a claim to membership in a specific specialty, but also signaled the relevant expertise necessary to gain admittance as a novice member. Viewed from this perspective, my findings validate prior theoretical propositions linking narrative identity work to the realization of legitimacy and authenticity outcomes (Ibarra &
Barbulescu, 2010). They also offer a further elaboration of the role of values in identity work. While prior research has established the role of values in managing foregone identities, my findings pinpoints the exact role that values can play in facilitating the transition into desired identities.

**Liminality**

In the course of my analysis, liminality emerged as a salient feature of professional socialization. In this study I have focused on a distinct form of liminality arising from rites of passage associated with occupational entry. However, as Ibarra and Obodaru (2016) have noted, liminality is increasingly prevalent across career trajectories. Novel work arrangements keep some individuals in a perpetual state of between-ness with respect to their organizational membership. Outside of these novel arrangements, individuals may enter and exit the workforce at multiple points throughout their career. Many have approached these self-imposed liminal periods as a means of enhancing future employability through continuing education, skill development and resume building experiences (Sullivan & Baruch, 2009). This type of liminality is far less structured than encountered in the professional socialization described in this study in the sense that they are self-guided and lacking a pre-determined duration or outcome. I would argue that those individuals operating on the sidelines of the workforce may engage in preference crafting to identify the most personally meaningful (and rewarding) point of re-entry. This broader scope of aspiring workers engaged in preference crafting is a compelling impetus for further exploration of the process.

It is also worth considering that even within the classic professions wherein rites of passage abound, liminality may vary significantly with respect to duration, intensity
and certainty of outcomes. Since preference crafting captures the processes by which individuals self-define during liminal experiences, variance in institutionalized liminality will have important consequences for the unfolding of such processes. A comparison of medical and legal socialization processes illustrates the implications of variations in institutionalized liminality. In this study, I have demonstrated how the medical professional strictly manages the socialization process, concentrating clinical exposure in an immersive clerkship experience and requiring a definitive outcome in the form of specialty selection. By contrast, practical exposure in law school is loosely structured. Until recently there was no universal requirement for students to participate in 'live-client clinical courses'. Many, though not all, American law students complete summer internships after their first and second years of instruction, and these immersive experiences can be instrumental for developing both expertise and preferences for future practice. With periods of immersive practice distributed across all three years of training rather than concentrated in the latter years, law students are afforded greater opportunity for reflection between cycles of growth. In addition, law students are afforded greater discretion in choosing the contexts of their clinical training. This can allow for immediate response to emerging preferences. As both socialization processes rely on some degree of liminality to facilitate the emergence of a professional identity, it seems likely that preference crafting will emerge. However, it is not clear how the greater autonomy and discretion afforded law students would ultimately influence preference crafting.

*Socialization models*

---

4 In 2014 the American Bar Association mandated a minimum of six credit hours in a legal clinic or experiential environment.
Preference crafting advances prior work to identify a generalizable sequence of stages in the process of socialization. Classic socialization models have been critiqued for offering little explanation of how advancement between proposed stages occurs (Bauer, Morrison & Callister, 1998). Preference crafting captures critical phases of role learning as well as contextual and behavioral factors that precipitate movement between these stages. Extant models have tended to conceptualize socialization as a linear progress, moving newcomers in lockstep from periphery to full-fledged participants without consideration of repetition of past stages (see Ashforth et al., 2007). Preference crafting provides additional insight regarding the drivers of movement between specific stages and the potential for backward and forward momentum. First, my findings highlight a number of sense-making mechanisms that propel individuals through successive stages. Second, my findings demonstrate that certain contextual factors can cause regression to earlier stages. In this case, the disruption of learning routines (changes in clinical environment, routines and interactions) initiated new cycles of growth that contributed to the end result of rediscovery. While traditional socialization models recognize the importance of conflict, shock and surprise for learning particularly in the Encounter stage (Ashforth et al., 2007), they have not recognized disruptions as an enabler. Disruption as a feature of the socialization process is more typical of professional socialization processes than in organizational socialization. However, dominant stage models have been based on organizational socialization. Given the increasing professionalization of work, and number of occupational communities identified as professionals it is important to understand how the sequence of critical events associated with socialization differ from organizational socialization.
Implications for medical socialization

The concept of preference crafting emerged as I sought to understand what aspects of early medical socialization informed observed enactments of the doctor role. I was not alone in this interest, and extant literature painted a grim picture of empathy decline during medical socialization achieving a low point during the clerkship year (see Konrath, O'Brien & Hsing, 2011; Neumann et al, 2011). I approached my investigation with an expectation that drastic behavior change of some sort might manifest in the course of the year spent shadowing students. I learned that I was not alone in this expectation and in fact some students, confronted with the behaviors of supervising physicians pondered which among their ranks might succumb to a change in attitude. One informant expressed both the bewilderment and fear in his consideration of bad behavior he observed and the potential influence on his own enactments or those of his colleagues.

Interviewer: So how do you resolve this bad behavior, unhappy people, lawlessness (observed in resident and doctor behavior) with...what you imagined being a doctor would be or what you want to be like as a doctor?
Interviewee: It’s very scary. I talk to my classmates all the time about this thing we don’t understand which is just – my classmates, they are all nice, friendly, hardworking. I mean, hardworking...generous people. How is it that half of us are going to turn into that in two or three years? I don’t understand it. (Rob, entry interview)

Despite my expectation that some, though perhaps not all, students would be unfavorably transformed by this overwhelming experience, I was surprised to find just the opposite. Throughout the clinical years of medical school, students became more of who they were when they began. Like Rob, I found medical students for the most part to be friendly, thoughtful, hardworking and generous with their insights. However, as my findings attest, they are not all oriented towards the humanistic. Nor should they be.
Through analysis and findings I have gained a greater appreciation for the reassurance of a veteran doctor during the reflection group session, “There's always a place” (Fieldnote: IC-011516). I was and am struck by his simple wisdom that there are a great many ways to be a doctor. These findings suggests that the medical professions (and other professions as well) would be better served ensuring that aspiring professionals find their right place, rather than trying to reshape all students in the image of one ideal. Recent backlash against the demands for physician empathy as emotional labor and an exploitation of professional bodies (Larson & Yao, 2005) suggest that efforts to approximate the ideal are quickly falling out of favor. Though students in my study seemed quite in tune with their values, I do not imagine that this is the case for all students. In the absence of explicit opportunities for values clarification, students may struggle to identify preferences for future role enactment. Socializing institutions wishing to fully empower their students to embark upon a gratifying career would do well to make values clarification an explicit part of the medical curriculum.

The emergence of disruption as a contextual driver of preference crafting potentially challenges recent innovation in medical education aimed at minimizing disruption. Longitudinal Integrate Clerkships (LICs) address concerns that frequent rotations rob students of the opportunity to observe the progression of disease over time and to establish long-term connections with either patients or senior physicians. Given the importance of relationships for professional growth and advancement (Gersick, Dutton & Bartunek, 2000), this structural barrier to establishing relationships of any kind but especially developmental relationships can be problematic. LIC interventions aim for depth of exposure rather than breadth. For example at Harvard Medical School, LIC
participants were embedded in 5 ambulatory clinics for the duration of their clerkship year, spending anywhere from 5 to 10 hours at each site (Ogur et al., 2007. Initial findings have demonstrated students engaged in LIC interventions matched students in traditional clerkships in terms of their performance on board certification assessments of content knowledge and clinical skills (Ogur, Hirsch, Krupat & Bor, 2007). Beyond standardized competence assessments, LIC participants expressed a deeper connection to patients, confidence in the clerkship role and preparation to contribute to patient care (Ogur & Hirsch, 2009). These findings suggest that students ultimately navigated the daily transition from one clinical context with negligible disruption. However, it is certainly worth exploring the extent to which the LIC intervention effectively limits the kind of disruption that allow for enactment preferences to emerge. The data suggest that the value of disruption lies in the shock and surprise of up-ending experiences. Assuming the ignorant outsider role in a new setting allow students to see aspects of the medical culture that very quickly become taken for granted as they themselves begin to assimilate. Students also actively compare and contrast various experiences as means of surfacing their preferences. Limiting the scope of their exposure may inadvertently stymie mechanisms of preference crafting, leaving students with less clarity about future role enactments. Future research should identify the triggers and enablers of preference crafting under these conditions and the extent to which it may differ from preference crafting in traditional clerkships.
CHAPTER 6.
CONCLUDING THOUGHTS

Yeah, I think that doctors, the white coat, patients have a lot of respect for that. I think sometimes a little too much. More than we can offer them. But it is a responsibility and it is a privilege. I also think that we should not abuse it... cognizant of that privilege I want to – for me it's all about – in spite of the respect and the reverence that they have for doctors, I see it as an opportunity to just serve. One of my core principles is to just trying to stay grounded and humble in the sense that I try to protect myself from letting that get to me and making me think that I more than what I am. (Wayne, PS Interview)

In both inception and design, this study aimed at investigating the increasingly technical orientation of professional practice, at the apparent expense of service to humanity. Bolstered by supporting evidence, I contended that professional socialization might play a central role in this trend by sanctioning certain core values and professional identities more so than others. I chose to address my initial study in the medical context for a number of reasons. First, the apparent dichotomy in role enactment was most salient. Second, medicine exemplifies an extreme case (Eisenhardt, 1989) of the characteristics of professional socialization that interested me. To wit, there is a protracted state of liminality. It can take as many as ten years for doctors in training to be recognized as autonomous practitioners. In practice, medicine is the most highly specialized of the practices. There are over 100 specialties that aspiring practitioners must choose from. In addition, there is a sense of finality in differentiation. Once a student selects a specialty and invests resources in learning the ropes of that specific practice, it can be difficult to change course. While all professional training involves a period of structured, more or less didactic knowledge transfer interspersed with practical
experiences, it is only in medicine that a year of student training is devoted to clinical exposure. Next to law, medicine is also one of the most popularized professions, the subject of numerous books, television series and movies. At the same time it is a highly idealized profession. As a consequence, aspirants to the medical profession are guided by a great many ideals and notions about their future enactment of the role. All of these factors make for a rich research context.

The dominant discourse in the socialization literature is one of transformation and change. As a result, I approached the field with a deficiency mindset, equating change with a loss of the self in favor of the collective’s goals and priorities. Faced with blatant disregard for humanity in the clinical settings, students might suppress their own humanistic inclinations. What I observed instead were remarkable levels of resilience. Though all but a couple students could point to confrontations with inhumanity, these events did not come to define students’ future role enactments. At least, not in the way that I expected. For these students, encounters with the unexpected served to make them more aware of their assumptions and expectations about the preferences. If students had merely adjusted their assumptions and expectations to match the reality of those moments, the guiding assumptions of this research would have been confirmed. My story would have been far less interesting or compelling. What they did instead demanded that I negotiate my own confrontation as a researcher and turn an appreciative lens on these findings. This new perspective allowed me to see that students were indeed quite resilient and gained much more than they lost. They were able to achieve this self-preservation by tapping into their core personal values and letting those be the guides of their future role enactments.
Limitations

In this study I conducted an in-depth investigation of the experiences of nine medical students. Medical students are a notoriously difficult population to study due to the constraints on their availability. This proved to be the case with for 3rd year students at SOM. My sample of key informants though diverse represent only a small fraction of the population of medical students at SOM. The potential lack of representativeness of my sample calls into question the transferability of my findings. Admittedly, my findings would have more weight if they had been derived from a larger sample of respondents. At the same time the depth of engagement I was able to establish with informants would not have been likely with a larger group. Thus my sample size reflects the best compromise to achieve competing demands of qualitative rigor. To address the issue medical students' general disinclination to participate in research, future studies might recruit medical students at multiple research sites. In addition to resolving issues of samples size, this approach could also account for school level influences on the medical student population (e.g. SOM's affinity for non-traditional students).

Overall, informants were forthcoming about challenges and personal doubts they faced during their clinical training. With the exception of two, all informants completed the career transition within the allotted time and retained their commitment to a medical career. All informants, including the two who elected to take a year off, implicated deeply personal values in accounting for their career choices. While my sample may not suffer from an elite bias, per se, it is possible that my informants were more self-aware and articulate than the average student. It is not clear how the inclusion of students who had a more marginal experience of clinical training might have influenced my findings.
However, students contemplating exiting their pathway to a desired occupation are unlikely to participate in research of this nature. This presents an important dilemma of research design that deserves further consideration. If research focuses primarily on the students who thrive, then any interventions developed on the strength of our research may fail those student most in need of support. More emphasis should be placed on engaging marginalized medical students in this kind of research to better understand how they navigate the clerkship experience.

Much of the recent ethnographic research in clinical settings have been conducted by medical personnel. It can be difficult for researchers without medical credentials to gain access to clinical spaces. Given my interest in developing a comprehensive picture of students' experience, collecting clinical observation would have enhanced the comprehensiveness of my data. In the absence of clinical observations, I relied upon student reconstructions of memorable events. These retrospective accounts introduced an element of recall bias, and offered only one perspective on multi-faceted interactions. As a result my data were not as comprehensive as they might have been had I been able to observe some of these interaction myself and pose specific question to my informants.

An important limitation of my study is that I closed my investigation before students' career transitions were complete. My initial study design aimed to clarify how student experiences during the clerkship year informed their construction of the doctor role. In the course of data collection, I came to understand the true purpose of the third year as a means of informing student specialty choice and subsequent application to residency training programs. Choice itself was not the original focus of my research, but,
I eventually recognized the implications for entry into the resident role. Therefore my findings straddle extant literature streams of career choice and career transition without fully doing justice to either. To fully understand the medical student career transition, my study would need to span the last two years of medical school as well as the intern year of residency.

**Future research directions**

The contributions and limitations of my research suggests a number of future avenues for exploration. In this segment I explore three of these possibilities in greater detail.

**Exploring linkages between preference crafting and job crafting**

Having established a clear distinction between preference crafting and both job crafting, a question arises as to the relationship between the two concepts. Having engaged in preference crafting during early liminal phases of socialization, are individuals more or less inclined to engage in job crafting as job/role occupants? A defensible argument can be made for both positive and negative associations between the two. When individuals assume an aspirational role equipped with a greater sense of self-awareness, they may be more empowered to adapt task and relational boundaries to their liking. Conversely, job selection based on clearly defined preferences may minimize the need for altering task and relational boundaries.

**Sampling for transition failures**

As discussed earlier, current qualitative design in medical context may unwittingly privilege high performers who may feel more confident about sharing their experiences. To gain greater insight on the experience of low performers, future studies
could specifically sample for students who exited medical school during the third and fourth year. To engage such individuals, recruitment would need to be conducted among alternative study population employed in study, such as participants in online discussion forums for those who are considering leaving or have left medical school. One such site, the Dropout Club (DOC) has been in existence for the past decade and boasts a global membership base. While actual medical school drop-outs is only one segment of the membership base a perusal of their revealed a number of threads specifically related to drop-out intentions. Their stories could provide invaluable insights regarding factors that prevents students from finding their place within the medical community.

Preference crafting across the professions

While my study focused on the experiences of doctors in training, preference crafting may occur in any highly specialized occupation. The extended duration of knowledge accumulation in the medical profession makes it an ideal occupation for surfacing the phenomenon. Future studies should examine how preferences for role enactment emerge in other specialized occupations (e.g. law, engineering). Studies of this nature can clarify how preference emerges when the time horizon for selection is brief and the opportunities for exposure are limited.
## Appendix A. Observation Protocol

### Classroom Setting

**Date** ________________

<table>
<thead>
<tr>
<th>Contextual Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of students present</strong></td>
</tr>
<tr>
<td><strong>Mood</strong> - To what extent is the mood shared among all members of the group?</td>
</tr>
<tr>
<td>Assess starting and ending mood of group</td>
</tr>
<tr>
<td><strong>Engagement</strong> - To what extent do members of the group appear to be distracted or disinterested?</td>
</tr>
<tr>
<td>Assess starting and ending level of engagement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storytelling</strong></td>
</tr>
<tr>
<td>• Do students engage in storytelling?</td>
</tr>
<tr>
<td>• What are the subject matter or topics of stories that are bought into the space?</td>
</tr>
<tr>
<td>o How often do student reference patients / attending physicians/ residents/ other medical students?</td>
</tr>
<tr>
<td>• Do students respond to stories with stories of their own?</td>
</tr>
<tr>
<td>• What stories capture the interest of other students? (asking the storyteller for additional clarification and/ or offering similar experiences)</td>
</tr>
</tbody>
</table>
- Under what circumstances do students not engage in story telling? What substitutes for storytelling during that time?

### Sensemaking

- How often do students request an explanation from their peers after sharing a story?
- How often do students offer assurance or explanation to their peers after they have shared a story?
  - What is the content of these assurances or explanations?
- To what extent do students look to the facilitator to help them make sense of these stories?
- What if any statements are made about the profession as a whole?
- Do students ever make evaluative statements about the profession?

### Emotional expression

- How often if ever do students discuss their own emotional responses to their experiences?
- How often, if ever, do students include description of others emotions in recounting their experiences?
- To what extent do students express empathy towards their peers' experiences?
- What if any emotional express can be observed among the students in the group? (facial expression, body language)
- Are expressions of emotion acknowledged?
- What are the norms around emotional expression in the reflection group?
  - Are students allowed to express their feelings openly?
  - Are any particular emotions discouraged or unsupported?
<table>
<thead>
<tr>
<th>Facilitator Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storytelling</strong></td>
</tr>
<tr>
<td>- Do facilitators share ever share stories from their own clinical experiences?</td>
</tr>
<tr>
<td>- Under what circumstances does this occur?</td>
</tr>
<tr>
<td>- How do student response to facilitator stories?</td>
</tr>
<tr>
<td><strong>Sensegiving</strong></td>
</tr>
<tr>
<td>- What if any response does the facilitator provide when statements are made about the profession?</td>
</tr>
<tr>
<td>- How often does the facilitator offer assurance or explanation after students have shared a story?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Emotional Expression</strong></td>
</tr>
<tr>
<td>- To what extent does the facilitator express empathy towards students' experiences?</td>
</tr>
<tr>
<td>- Does the facilitator acknowledge students expression of emotions?</td>
</tr>
</tbody>
</table>
Appendix B. Entry Interview Script

Q1. Can you tell me little bit about your motivations for becoming a doctor?

Q2. I’d like to ask you to share with me your earliest recollections of learning about the clerkship experience, before you actually started.

   Probe: Can you recall any conversations you might have had with other students or faculty about what the medical clerkship was and what you could expect from that experience?
   Probe: Any orientations?
   Probe: Any other activities come to mind?

Q3. Now thinking specifically about your clerkship experiences so far. Off the top of your head what are some words that come to mind when you think about your current experiences?

   Probe: Can you tell me more about what each of those words mean to you?

Q4. Can you describe for me what a typical day in the clinic setting is like for you?

   Probe: What aspects of your day you find most stressful? What aspects do you find most rewarding?

Q5. At this point in your clerkship do you feel like more of a doctor than when you were in class in your first two years?

   Probe: So what are your thoughts or feelings about your present status as a doctor in training?

Q6. At this point in your clerkship who are the specific people in your clinical setting you rely upon to help you understand how you should behave?

   Probe: Can you tell me more about these individuals and your relationship with them? What is each person’s specific professional role?
Q7. So far have there been specific situations when you were specifically directed to think about interpersonal skills such as how you communicate and build rapport with patients?

Probes:
- **If yes** - Can you tell me more about one of these experiences? Who was involved? (You do not need to provide names only roles) What did they say or do?
- **Probe:** Did this experience have any impact on your thinking about what it means to be a doctor?

Q8. Have there been any situations where you were specifically directed to avoid thinking about the human aspects of your interactions with patients such as how they or you may be feeling about a situation?

Probes:
- **If yes** - Can you tell me more about one of these experiences? Who was involved? (You do not need to provide names only roles) What did they say or do?
- **Probe:** Did this experience have any impact on your thinking about what it means to be a doctor?

Q9. Do you think a physician can be effective in their care of patients without focusing on building relationships with patients?

Probes:
- **Probe:** Please explain your response.
- **Probe:** What about building relationships with other doctors?
- **Probe:** What about building relationships with other health professionals?

Q10. What are you most looking forward to for the remainder of your clerkship experience?

Q11. Is there anything else you would like to add about your experience so far?
Appendix C. Reflection Group Facilitator Interview Script

Thank you for agreeing to participate in my study. As I explained when I reached out to you, this study is intended to understand the ways in which medical students make sense of what it means to be a doctor. The first half of my study has focused on capturing students’ descriptions of their experiences in the clinic, how those experiences compare to their expectations and how they adjust their understanding of the role of the doctor. Many of these observations I have collected during their reflection groups and it has become apparent to me what a critical role facilitators play in the training process. Any perspective you can offer will be valuable to my research.

1. Can you clarify for me your primary role and affiliation with the medical school outside of facilitating the reflection group? Can you briefly describe the duration and nature of your medical practice if you are still practicing?

2. Can you share what prompted you to take on the role of reflection group facilitator?
   a. Probe: How long have you been facilitating groups?
   b. Probe: How often do you lead a group?
   c. Probe: What if any training did you receive to prepare you for this role?

3. Please describe for me in as much detail as possible what is going on for you when you are facilitating a group. By this I mean your initial thoughts on getting the prompts, what kinds of things you are paying attention to as the students are
sharing, what if any notes you make on the sheet you turn in and anything you do immediately after the session.

4. How do you see these reflection group activities fitting into the overall purpose of the medical clerkship?
   a. Would you change anything about these reflection groups?

5. From your perspective what are the most critical things that students need to learn during the clerkship experience?

6. How do you see yourself contributing to their learning as facilitator of this group?
   a. Probe: How do you incorporate your experiences of being a doctor into the discussion?
   b. Probe: What feedback do you provide to the reflection group organizers?

7. From your perspective how has the training of doctors changed since you were a medical student? (will only ask more senior doctors)
   a. Probe: Do you ever share any of these perspectives with the students in the groups you facilitate?

8. Is there anything else you would like to add?
Appendix D. Personal Statement Interview Script

Q1. Can you explain to me your understanding of the significance of the Personal Statement?

Q2. Can you describe your process for crafting your Personal Statement?
   
   Probe: When did you first start working on it?
   
   Probe: How many drafts did you develop before completing your final draft?
   
   Probe: Who helped you develop your statement?

Q3: How did you decide which stories to include and which to omit?
   
   Probe: Can you tell me more about your decision to include this anecdote (refer to statement) in your personal statement?
   
   Probe: I noticed that in your final draft you chose not to include (anecdote) which is included in your first draft. Can you tell me about your decision to remove this story?

Q4. What role did your clerkship experience play in influencing how you chose to present yourself in this statement? Where there any other significant influences?

Q5. What did the clerkship teach you about the doctor’s role in patient care?

Q6. Is there anything else you would like to add about your experience?
Appendix E. Midpoint reflection prompt

*Midpoint Reflection*

Reflecting on the block that you have just recently completed (or are about to complete) Please share a meaningful experience that had a strong effect (either bad or good) on you. You could write about an interaction in which you were directly involved or one that you observed. It might be an interaction with a patient, an attending doctor or another student. In describing your experience explain why it stands out for you, whether the impact on you was positive or negative and share any meaning you may have attached to the sequence of events. You are encouraged to provide as much detail as possible without specifying the names of the individuals involved. Discuss how the situation you described influenced your thinking about your role as a doctor-in-training and your future practice of medicine.

*Demographic Information Request (to be included in every reflection request)*

Please provide us with some additional information about yourself.

*Age:* ______

*Gender:* [ ] M  [ ] F

*Race/ Ethnicity:*

- [ ] Hispanic of any race
  - For non-Hispanic only
  - [ ] American Indian or Alaska Native  [ ] Black, African American, Caribbean
  - [ ] Native Hawaiian or Other Pacific Islander  [ ] Asian  [ ] White
Medical Background: (please check all that apply)

☐ Members of your immediate family are doctors
☐ Members of your extended family are doctors
☐ Members of your immediate family work in other health professions
☐ Members of your extended family work in other health professions
☐ I have previously worked in another health profession
### Appendix F. Table 3. Summary of Data Sources

<table>
<thead>
<tr>
<th>Informant</th>
<th>Name</th>
<th>Status</th>
<th>Interviews</th>
<th>Observations</th>
<th>Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nina</td>
<td>3rd year</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Mitch</td>
<td>3rd year</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Jill</td>
<td>3rd year</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Rob</td>
<td>3rd year</td>
<td>2</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Avi</td>
<td>3rd year</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Art</td>
<td>3rd year</td>
<td>2</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Sam</td>
<td>3rd year</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Katie</td>
<td>3rd year</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Wayne</td>
<td>3rd year</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Rachel</td>
<td>3rd year</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Michelle</td>
<td>3rd year</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Kim</td>
<td>3rd year</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>RGF1</td>
<td>Facilitator (retired MD)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>RGF2</td>
<td>Facilitator (4th year)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>RGF3</td>
<td>Facilitator (4th year)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>RGF4</td>
<td>Facilitator (4th year)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>RGF5</td>
<td>Facilitator (4th year)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>RGF6</td>
<td>Facilitator (4th year)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>RGF7</td>
<td>Facilitator (4th year)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>SR1</td>
<td>4th year - researcher</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>SR2</td>
<td>4th year - researcher</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Indicates data collected but not analyzed.
Appendix G. Figure 2. Induction of Preference Crafting elements
Appendix H. Data Table 1. Phases of role learning

<table>
<thead>
<tr>
<th>Aggregate dimension</th>
<th>Second order theme</th>
<th>Exemplary quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inundation</td>
<td>Encountering ambiguity</td>
<td><em>Case is really cool in the sense that it has like all these different hospitals you go to, but everybody’s experience is absolutely different, depending on how much inpatient, outpatient, what it’s like, so if you know two people’s description of their third year it’s not at all alike; you know? So it was like even by asking four of my friends, I was even more confused. And there was like no written description of like what it should be, at least that I was aware of, maybe on the website somewhere there was, but I didn’t know how to get there.</em> (Art, entry interview)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>It’s going to take me a little be longer to sort of pre-round on my patients than most people, you know, you have to figure out how to navigate the chart, see where information is, know what it means, all this kind of stuff, plus get your systems down on how you’re going to sort of organize yourself, because that’s entirely something you just have to figure out on the fly, you know, what stuff you’re going to write down or carry in your pocket and that kind of stuff.</em> (Mitch, entry interview)</td>
</tr>
<tr>
<td>Peripheral</td>
<td>participation</td>
<td><em>Blue shoes states that she is on Psych and that her attendings and residents teach her. The other medical students grumble and some say, “Lucky!” Blue shoes notes that one of her attendings brought her into an empty patient room and asked Blue shoes to tell the attending about the patient. When Blue shoes told the attending that there was no patient in the room, the attending laughed and said, “Lucky!”</em> (Michelle, entry interview)</td>
</tr>
</tbody>
</table>
the attending explained that he or she wanted Blue-shoes to “play-detective” and learn from the things in the room. (Fieldnote: SOM-429A-111315)

| Confrontation | Tensions and contradictions | Regarding surprising observations of unprofessionalism among medical students: ....for whatever reason, haven’t – it doesn’t click to them that they have to operate on a higher level at this point in terms of their responsibilities and just the professional aspects of it, not necessarily – you know, maybe they’re more committed to the learning side of it. And like for me, I’ll be in the hospital all day working with the team, engaged with patients, all that kind of thing, no time to study, versus other people who will always be unavailable because they’ve found a way to get away and go and read all afternoon or something like that, and those people will do better on tests, you know, so I don’t know, I haven’t figured out the right balance, but it’s kind of surprising. (Mitch, entry interview)

I think, at least, so a lot of it has to do with the context because in certain contexts, it’s hard to practice medicine in the way that physical medicine is able to...just because you have continuity of care. The patient modulation, but I saw when I was in internal medicine in surgery ... that what the patient was caring about and what the doctor or surgeon was caring about were two different things. The doctor or surgeon might tell the patient to do something, but you could see in the patient’s eyes that they weren’t going to do it anyways. What was the point of having this whole conversation or what was the point of giving that medication? I think that I wanted a kind of medical field where you had more continuity. You got to know the person. (Sam, PS interview)

| Pressure to perform | Yeah, I feel like we were rounding, for example, and they would always be like really rushed and I would usually be like behind, like running behind them because I was trying to like listen to their heart and lungs, I think. I need to with every patient, but I usually had to wait until they were all done examining the patient. So I would usually try to at least say something like good morning and how are you and stuff, not just to come in and interrupt them and not even tell them like who I am. But no one said anything to me; I just feel like, I don’t know, I just got that impression like they thought I was too slow and that I was like taking too long. I don’t know. If I didn’t talk to them I would have gone faster. No one said
anything, but I feel like it was just different than how they acted because they were always like rushed so they didn’t really care to develop any sort of relationship too much. (Jill, entry interview)

For what it's worth I never question that I can make a – build rapport in a professional setting. At the bare minimum I can be really professional, I can get what I need to get out of a patient encounter, and then hopefully in can make a connection that's worthwhile. And after 30 months in, I'm comfortable in that space, and I think – then the whole perfectionism part comes in too, because it's like I'm being graded. I'm being evaluated. These people aren't just here to kind of like me. They've gotta find good and bad things about what I'm doing, ways that I can improve, or else it's not structured. Right? (Nina, check in interview)

<table>
<thead>
<tr>
<th>Growth in role</th>
<th>Recognizing progress</th>
</tr>
</thead>
</table>
|                | In the sense of feeling comfortable in a hospital setting, feeling like I've gained a sense of competence in my medical knowledge. It really is humbling to be in this room... I say this all the time... it really is humbling to be in a patient's room and to be in conversations with physicians and families and as a student in awe that I never have before and be talking to patients and their families... so it's been humbling to kind of get a foot in the door in that way. Someone, who know people acknowledging you as part of a medical team. So that I think it's been, it's helped me formed maybe my sense of a professional identity and even more of my own personal identity. (Nina, check in interview)

Probably the most rewarding part was I was in my second to last clerkship and uh I think I had just finished emergency medicine and I was walking down the hall and somebody collapsed right in front of me. And like... she just... she was like an older woman and smashed her head on the wall and like fell to the floor and at HEALTHWORKS we all wear long white coats and I was like oh my gosh and I rushed over and everyone was looking at me and I looked around and nobody else was wearing a white coat. It was me!... and I was like, "okay... I know what to do" Yeah that was like a really cool moment where I was like, "I got this." (Rachel, entry interview)
<table>
<thead>
<tr>
<th>Recognizing preference</th>
<th><em>I thought I might, definitely not general surgery, but you know, I wanted to know whether or not I liked the people I was working around, whether I liked being in the operating room, all that sort of thing...that’s 100% off the table...I just could not subject myself to it, primarily because I do not want to risk turning out like any of those people. There’s not a single person really that I worked with that I would want to be like in my career, a couple that I encountered maybe, but throughout the day on any given day, the vast majority of people I just wouldn’t even want to work along-side, work with, collaborate with, anything.</em> (Mitch, entry interview)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describing rewarding experiences: &quot;....the patients. Uh the fact that had ownership for my patients. Yeah....That means that I am not allowing...I know every detail about my patient at least and uh whatever plans that we have to do for the patient I always try to follow up on it. So although a resident supervises me I try to make is a point of duty to do whatever the attending asks the residents to do cause I want to take care of that patient and um you know any decisions that are gonna be made or any consults that are gonna be made, I make sure I follow up on those I look at the notes that were written by consult services or any procedures that were done so that anytime the physician had a question about the patient I would be ready to provide an answer. I just know my patient, care for them, I mean know every aspect of their care, their medical histories, their medications, their... you know social history stuff like that so was what it meant to me to take ownership.* (Wayne, entry interview)</td>
<td></td>
</tr>
<tr>
<td>Rediscovery</td>
<td>Affirming values</td>
</tr>
</tbody>
</table>
trying to say is like those types of traits are considered more useful I guess. (Jill, PS interview)

Coming to medical school, my image of what a doctor was a pediatrician. That was the doctor that I had the most contact with. Then, I still wanted to be that kind of doctor and that I didn't want to take care of one organ system. Cardiologist, GI doctor. Then I also liked that, especially at Case, a lot of what we learn is more about the emotional side of medicine. What a patient cares about isn't the same as what you care about as a physician. You have to find a common ground there. That was ... When I realized that there was field that valued that, that was my realization moment that I could ...maybe find myself in that field. (Sam, PS interview)
Appendix I. Data Table 2. Sensemaking mechanisms

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Exemplary quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorption</td>
<td><em>If I’m following an intern who has eight or nine patients, the day is pretty dynamic, stuff is just constantly changing, and so you’re sitting there trying to absorb as much of it as possible, you know, it’s sort of like if this happens, then what, and if not, then what, and that’s kind of how you learn about it. And not just when learning about medicine, but like what tools you have available to you, what tests you should run or could run and what the results mean, interpreting stuff and all that kind of stuff. If you’re not completely engaged, you’re going to miss out on a lot.</em> <em>(Mitch, entry interview)</em></td>
</tr>
<tr>
<td>Navigation</td>
<td><em>So it is nice for you know I’m sure you’ve seen like the first 30 minutes. Um so that’s time where it kind of feels good to vent about things that were annoying or to kind of share with each other interesting experiences. Especially if you are struggling with something, it makes you feel good to know that you peers are also struggling. There is a communal kind of...I don’t want to call it misery...but the communal kind of making a tough situation better because you are sharing with other people. So that’s been really helpful. And then getting to know what to expect on the next service and getting to hear people’s experiences like that.</em> <em>(Sam, entry interview)</em></td>
</tr>
<tr>
<td>Managing Expectations</td>
<td><em>Regarding her initial ideas about daily doctor activities: A lot of talking to patients. I think I didn’t realize how much paperwork and computer work there was involved. I think it’s probably one of those things that you know, but you don’t really think about it. So I think I thought it was a lot of reading, being up-to-date on things that are – like research and finding. So that part I think is pretty consistent. I do talk with patients a lot, but I think it’s a lot less talking with patients, and more just figuring out what kind of information you need to assess them and figure out a treatment plan.</em> <em>(Kim, entry interview)</em></td>
</tr>
<tr>
<td>Managing Interactions</td>
<td><em>When asked how typical it was for residents to teach medical student:  I think it is generally. I think the busier services, sometimes it gets difficult to do that because they're so</em></td>
</tr>
</tbody>
</table>
overwhelmed with their responsibilities or immediate responsibilities to the patients. So I think it just depends on the rotation. If there is more free time or more downtime, then obviously there’s more teaching than if there was some service where there’s no downtime at all. That’s kind of more on you, then, to kind of pick up learning experiences and for you to be more proactive in asking questions that may come up. You can’t just expect them to teach you. (Kim, entry interview)

Patient feel like they can relate more to providers and physicians that look like them and so when I’m in a room as the only you know black woman speaking to a black woman about her cancer you know then I... it’s really humbling for me to feel like wow this patient is connecting with me...she wants me to stay after rounds and talk to her. (Nina, check-in interview)

Growth related questioning & clarifying

Questioning

Yeah, and I think there’s a lot of that, like whose job is it to do this or that in the hospital, and you know, I look at it from a very different point of view, because you know, I ran a company that was in the hospitality industry before this, you know, and you teach everybody who walks through a restaurant or walks through a hotel, if there’s something on the floor, you pick it up; you know? I would expect the most experienced surgeon or an orderly to offer somebody a clean sheet, it doesn’t matter, you know, if you walked out of there without doing it, then you would hear about it from me if I were in charge. It’s common courtesy for one, but it’s also like what kind of tone and attitude are we going to set around here, what are the expectations of how people perceive patients. (Mitch, entry interview)

Interviewer: So how do you resolve this like bad behavior, unhappy people, lawlessness with kind of what you imagined being a doctor would be or what you want to be like as a doctor?

Interviewee: It’s very scary. I talk to my classmates all the time about this thing we don’t understand which is just – my classmates, they are all nice, friendly, hardworking. I mean, hardworking ...generous people. How is it that half of us are going to turn into that in two or three years? I don’t understand it. (Rob, entry interview)
<table>
<thead>
<tr>
<th>Clarifying</th>
<th>I just thought it was bullshit and I wouldn’t do anything differently, but I can see how other people would think like okay, part of my job is to know when to do something, when not to do something, because if I spend time on something that, you know, my attending thinks was not worthwhile, then I’m going to hear about it, so I need to walk away. And I think that’s part of how you get trained. (Mitch, entry interview)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I think it was always something that kind of shocked me when an intern would be so disrespectful to myself or another medical student, and I was like, &quot;You're only two years away.&quot; It's like, how quickly people forget, or I don't know. So I think that's another thing that I took out of third year is that it taught me not only what kind of physician I want to be, but what kind of resident I want to be. I want to kind of hold on to these experiences and remember the good residents and the bad ones that I worked with so that I treat medical students that I work with in a way that I felt respected and cared for. (Kim, entry interview)</td>
</tr>
<tr>
<td>Choice related questioning &amp; clarifying</td>
<td>I was like do you think that's something that you have experienced? Burnout and what would you say? She actually just came to the clinic she's in, this is her first year. Um and she's been out of fellowship for ten years... she was saying that she's kind of experienced that. I mean, we've talked about how she exercises and she really has a life that I think she just really has a system that works for her... and she said that she really feels like she has kind of experienced that in the past year and dealing with the transitions that happen and I think that knowing that that's a reality of like anyone's career but like even more so physicians and knowing how draining a lot of it can be. (Nina, check-in interview)</td>
</tr>
<tr>
<td></td>
<td>I had a very tough time identifying and finding my identity as a medical student because I didn't have role models who are doctors. I didn’t come from a family of doctors and so it was really important for me when I matriculated to med school to find that community because I knew that that was how I was going to maintain my -- how I was going to gain strength. How I was going to maintain that connection that was so important to me. That sense of belonging that’s pivotal to me. (Nina, entry interview)</td>
</tr>
<tr>
<td>Clarifying</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td></td>
</tr>
</tbody>
</table>
| The Facilitator states that her boyfriend switched his field several times late in his fourth year. She explains that her boyfriend wanted to do neuro, “but did two weeks in neuro and hated it so he switched to anesthesiology.” She continues that he also disliked anesthesiology and then switched to general surgery and then eventually medicine. The Facilitator stresses in regards to AI scheduling that, “there will be lots of movement” and to “be proactive about elective scheduling. (Fieldnote: SOM-429A-021216)

I have also felt at times that my desire to listen more than talk is a flaw that I need to change, but multiple conversations with patients in which I said no more than a couple words showed me that listening alone is often consoling enough. I realized that being a natural listener is not a flaw, but a skill, and because it is welcomed and beneficial in psychiatry, I feel that I can fully utilize my attributes and let my true self shine. (Jill, Personal Statement) |
Appendix J. Data Table 3. Contextual Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Exemplary quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disruption</strong></td>
<td><em>So that's the disorienting part is that every couple weeks you are starting with a new team or new people and with new expectations and with patients with different problems and different services care about different problems. Like if I'm on the L&amp; D, Labor and Delivery, they want to know is the patient...has the patient had any surgeries has the patient had babies before but if I'm on surgery they don't really want to know that stuff. So that's the disorienting part that I'm constant changing environment, changing the people I'm working with.</em> (Sam, entry interview)</td>
</tr>
<tr>
<td></td>
<td><em>My medical knowledge has grown, although it always feels inadequate, partly because it just is inadequate and partly because we're always moving to something new. So right when you start to kind of figure out medicine, the things you're seeing every day for six weeks, you start to figure them out. Then you're doing surgery. Then you're doing Peds. It's frustrating and I think you just learn to shift gears. Every time you start over, you're a little ahead of where you were before.</em> (Rob, entry interview)</td>
</tr>
<tr>
<td><strong>Forced differentiation</strong></td>
<td><em>The facilitator speaks with such gentle pride and passion for his work. It is almost enviable. Mitch asks him again about his specialty. I think he was there when the facilitator said it the first time, I wonder if he's trying to make some link between the kind of medicine he is practicing and his attitude towards his work. He (Mitch) shares that he has been experiencing a lot of angst. There has not been enough time to seek advice and mentorship and yet at just the halfway point of the clerkship they are already &quot;under pressure&quot; to choose a specialty. This was news to me, I thought they had until their fourth year when they submitted their match applications. (Fieldnote: SOM-IC-011516)</em></td>
</tr>
<tr>
<td></td>
<td><em>Gravity states, “I’ve just decided I want to do something in surgery.” Gravity expresses frustration with scheduling his AI’s and is worried that he will have to cancel one of his AI’s because he signed up for it before he made his decision. Gravity states with anger in his voice, “The most frustrating part is having to decide before you see everything!” The Facilitator shares that her boyfriend switched his field several times late in his fourth year. She explains that her boyfriend wanted to do neuro, “but did two weeks in neuro and</em></td>
</tr>
</tbody>
</table>
hated it so he switched to anesthesiology.” She continues that he also disliked anesthesiology and then switched to general surgery and then eventually medicine. The Facilitator stresses in regards to AI scheduling that, “there will be lots of movement” and to “be proactive about elective scheduling.” Fieldnote: SOM-429A-021216
## Appendix K. Data Table 4. Evidence for Coming Full Circle

<table>
<thead>
<tr>
<th>Key informant (pseudonym)</th>
<th>Initial specialty interest</th>
<th>Final specialty interest</th>
<th>Value affirming justification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diagnosticians</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avi</td>
<td>Internal Medicine</td>
<td>Emergency Medicine</td>
<td>Avi became enamored of Internal Medicine (IM) during preclinical training. During clerkship, he recognized that in practice IM was quite mundane and did not afford the intellectual stimulation that had steered him towards medicine. In exploring career options, he recognized his preference for patient diagnosis over care management. His growing interest in Emergency Medicine (EM) enabled his desired workflow but required greater breadth of medical knowledge (as opposed to depth). He grappled with the implications of these insight and ultimately reframed his desired expertise level (generalist vs. specialist). He clarified his future role stabilizing his patients before directing them to the appropriate specialist for further care.</td>
</tr>
<tr>
<td>Kate</td>
<td>Oncology</td>
<td>Dermatology</td>
<td>Kate initially expressed an interest in an oncological specialty but had no formal exposure during clerkship rotations. Wanted to do more hands on (procedural work). Chose a specialty that could still involve an oncological component but allowed her to spend some of her time doing bench science (looking at skin samples).</td>
</tr>
<tr>
<td>Rob</td>
<td>Ophthalmology</td>
<td>Ophthalmology</td>
<td>The search for a more meaningful career and extensive scientific training (PhD in Physics) guided Rob towards a medical career. Throughout clerkship year he expressed frustration and disappointment with the</td>
</tr>
</tbody>
</table>
Towards the end of the year he repeatedly questioned whether he would persist in this career trajectory. Clarity emerged as a result of a developmental relationship with an ophthalmology researcher. His work in the ophthalmology lab provided the level of structure he desired and reconnected to his value for scientific curiosity. He decided to take a year off to regroup and refocus his efforts.

<table>
<thead>
<tr>
<th>Balanced/Flexible</th>
<th>Rachel</th>
<th>Pediatrics</th>
<th>OB/GYN</th>
<th>Rachel's initial specialty choice was driven by proven competency working with children and their families in the clinical research context. Her gratification came in part from being able to offer the hope of disease resolution rather than simply managing patient symptoms. Her experience of the Pediatric rotation, specifically the emphasis on patient management (as opposed to resolution of disease) did not satisfy her idea of doctoring. She discovered a preference for procedural work (especially working with her hands) and gravitated towards surgical aspects of OB/GYN. Her choice reflected a desire to combine meaningful patient connection with offering meaning resolution to the problems her patient presented.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam</td>
<td>Pediatrics</td>
<td>Physical Medicine &amp; Rehabilitation (PMR)</td>
<td>At the start of medical training, Sam identified pediatrics as his ideal of a doctor. During preclinical training he was exposed to PMR and thought it was ideal in terms or providing a holistic approach to medicine but retained his commitment to pediatrics. During clerkship he discerned important differences between the two largely in terms of interprofessional collaboration. It was</td>
<td></td>
</tr>
</tbody>
</table>
Important to him to choose a specialty that prioritized collaborative work (inclusive of patient). Lifestyle considerations were also important factor in his choice. In his personal statement he explained centrality of family as an orienting value in his choice of medical specialty.

<table>
<thead>
<tr>
<th>Wayne</th>
<th>Cardiology</th>
<th>Internal Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wayne's motivation for pursuing medicine was untimely death of a close relative and his own health challenges. In his description of his experiences, his enjoyment of the intellectual aspects of medicine emerged as often as his concern for his patients' well-being. He demonstrated early and maintained throughout his clinical training an inclination towards independent practice. Even during his clerkship he wanted to &quot;take ownership for his patient load&quot; and he relished the opportunity to do this in AI. His decision to pursue Internal Medicine was a combination of the recognition of the lifestyle demands of cardiology and an acknowledgement that he had not been systematic enough in developing the expertise and exposure to be competitive for a cardiology residency.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jill</th>
<th>Palliative Care</th>
<th>Psychiatry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jill initially pursued a career in medicine in the hope of establishing the same level of patient connection she enjoyed as hospice nurse. She struggled with perceived disapproval of her interest in patient connection. She established a strong mentorship relationship with a her psychiatry preceptor which encouraged her to put her best foot forward. While working on outpatient psychiatry, her strengths were valued and she was afforded the opportunity to make meaningful connection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
with patients. These initial experiences were validated when she had her Acting Internship.

<table>
<thead>
<tr>
<th>Mitch</th>
<th>Orthopedic Surgery</th>
<th>Internal Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dissatisfaction with his previous career and critical medical events in his immediate family propelled Mitch to pursue a medical career. Negative attitudes during his surgical rotation underscored his humanistic values (concern for patient, workplace collegiality). He realized that his initial selection was primarily driven by a desire for status and prestige. A faux ideal. He reconnected with the image that first motivated him to become of doctor (as a child), a doctor practicing community medicine. This cemented his choice of Internal Medicine.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nina</th>
<th>Psychiatry</th>
<th>Psychiatry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nina's original motivation for pursuing a medical career was the desire to address mental illness in her family. Throughout the year she considered a number of different specialties including IM-Psychiatry and Pediatrics. Each new specialty consideration was driven by the relationships she forged with attending physicians on this service. When it finally came down to it she realized that her IM experiences were not as renewing as her psychiatric experiences. She learned that renewal in her work emerged from the depth of her connection with patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career motivation</td>
<td>Diagnostican/ Scientist</td>
<td>Caregiver</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Career motivation</td>
<td>So I wanted to get back into research a little bit. Teaching was fun but it kind of wasn’t stimulating enough the way I was doing it. It was challenging in a lot of ways, but it wasn’t really intellectually challenging enough to be just teaching the same thing over and over on a pretty basic level. So I wanted to get into more healthcare related research. I looked into things like medical imaging and radiation and things like that, and through that I got a little bit of exposure to the clinical side of medicine, which I really had no exposure to before. And I just kind of got the bug. I thought that’s really – I like the people-oriented aspect of teaching, but I need like more of a challenge and medicine seemed like a way to do that. (Rob, entry interview)</td>
<td>It was always something that I was aware of as a child and recognizing that mood and you know how people felt, and stress affected everyone really deeply and I always wanted to figure that out and try to understand it. And the more I didn’t, the more I realized that it was something that I was passionate about wanting to help people to kind of um become better versions of themselves. You know help encourage people to break through some of the barrier emotionally and mentally that can prevent people from having functional relationships and striving, progressing. Yeah! (Nina, entry interview)</td>
</tr>
<tr>
<td>Sources of gratification</td>
<td>I loved my trauma rotation, you never knew what was going to come</td>
<td>When it comes right down to it and you have to do a lot of soul</td>
</tr>
</tbody>
</table>
through the door. You had to think on your feet and be prepared for changing circumstances with the patients. A person might be stable in one moment and in the next moment you might realize that they are hemorrhaging into their abdomen and you didn’t uh...you just got the clue then and there and you know so of all the routes care can go maybe someone gets better, maybe they need to hang out for a while. Maybe you need to suture up a laceration. Maybe all of a sudden they seem like they are fine and then next thing you know you are racing down the hallways to go to the OR with them. (Avi, entry interview)

searching about what your career is going to be like and how you are going to happiest and you realize what motivates you the most, it is seeing people out in the community who you have been able to help. They come up and talk to you and you have a lot of patient contact and relationships with people over a long period of time. (Mitch, PS interview)

some people experience and some people not is this idea that in order to make time for the studying people have tried to find ways to just not be as engaged with patients...to do as little as possible. Did you have to grapple with that?

Interviewee: No not really because I really like being with patients so that would be my relax time you know at different times they’d be like go and see this new patient and I’d be like "yes!" I get to like go and actually talk to somebody and use the information that I’ve gained in the first two years of medical school and everything that I’ve learned in this clerkship to try to figure out what’s going on with them. (Rachel, entry interview)

<table>
<thead>
<tr>
<th>Attitudes towards patient</th>
<th>I think even before med school I always thought oh doctors are there to care for patients, and like doctors do care but I think a lot of the criticism that people give, and I think I mentioned this during my interview with you earlier, it seems like doctors may not just be sitting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>So I was trying to think of a way to convey how important having relationships with the patients that I had when I was a nursing assistant was, and how much I wanted to be able to continue to have that. So I just – I don’t know. I just remember that time, that day. I felt like that was</td>
</tr>
<tr>
<td></td>
<td>Probably one thing that is nice because we have less like, we have less responsibility in terms of like the busy work of writing notes that things is I get to hang out with patients and getting to know them. The best part is, the best part is when you are in the room with the</td>
</tr>
</tbody>
</table>
there and caring about the patient because they have to go around to order the tests or you know think about the problem. So you might not be able to have as much bandwidth to kind of sit there and care...because you have all these other things to do. So I think it was a lot more about balancing and kind of being that source of strength for a patient, even if they are you know distraught, more so than caring. So I realize there are a lot of different ways that doctors can be there for patients other than the emotional aspect. But then also like I mentioned before I think keeping that in check, the emotional aspect. (Kate, PS interview)

They’re all the same patient. Eventually, once you’ve seen that patient enough times, there’s not much more to learn. Again, not saying that to diminish experience, because there’s always something to learn, but when you’re talking about doing this in the context of rounds, by the time you’re on patient number 20, people are ready to just an example of the trust and the relationship that went on. I don’t know why it stuck out to me so much. It was just kind of like – like I said, it just made me feel special. (Jill, PS interview)

We all had the same Peds clinic. I mean we worked with different doctors, but we all had that and I think I had heard some people say they didn’t enjoy it as much or weren’t getting as much out of it because you see a lot of healthy kids, like well child care. So it’s not like anything that’s wrong with them or sick visits where you would maybe learn more I guess. But I actually – I mean I guess maybe that is true somewhat, but I did still enjoy it just because I think there is still a lot to be learned from well child care and just the basics...I was kind of happy to get a little bit away from the actual medicine stuff and talk about other things with the parents and the kids. (Jill, PS Interview)

I don’t know what it means to be a patient, but I think that I would like to, as a practicing physician, to pay attention to them as well because I think sometimes when they’re coming – I don’t know if I told you this; we look at them as medical cases...As cases and forget that those are patients and they have real emotions and they have other things that are going on besides the disease. So it’s not just the disease that is – but just try to think of them as an entity, as a whole rather than the disease. (Wayne, PS Interview)
| Doctor ideal | The belief that we know the diagnosis, then inflexibly adhere to it despite contrary evidence, can be the difference between life and death. Without reconsidering, this patient would have deteriorated. I love this kind of objective thinking and decisive action - driving factors in my desire to become an Emergency Physician. No single activity has reinforced my decision to enter Emergency Medicine as much as patient care experiences involving logical analysis, deductive reasoning, and quick thinking. (Avi, Personal statement) | In thinking back to what attracted me to medicine so many years ago, I remember Dr. Frank Beeler - my family’s doctor. He delivered me and all three of my brothers, signed off on our sports physicals, and coordinated our mother’s care throughout her battle with cancer. He was a close family friend and the first person my father called when my mother passed away at home. He was a pillar in our community and always available to my family when we needed him. Though times have changed ....the community practitioner who can treat all members of the family remains my vision of what it means to be a great doctor. (Mitch, Personal Statement) | Coming to medical school, my image of what a doctor was a pediatrician. That was the doctor that I had the most contact with. Then, I still wanted to be that kind of doctor and that I didn’t want to take care of one organ system. Cardiologist, GI doctor. Then I also liked that, especially at Case, a lot of what we learn is more about the emotional side of medicine. What a patient cares about isn’t the same as what you care about as a physician. You have to find a common ground there. That was ... When I realized that there was field that valued that, that was my realization moment that I could ...maybe find myself in that field. (Sam, PS interview) |
| Identifying priorities | And I think I decided dermatology was good because I realized I like clinic more so than inpatient, which is kind of what I learned from my third-year experience. Yeah, and so I went to the fields that were primarily clinic based, and medical oncology was not that. And then it | I think its just hard for residency because as an attending you can kind of make, find the career you want and make it your own. But as a resident I don't know if there is as much, like I just see myself feeling as though I really want to love what I am doing as a resident because it's | Yeah. The workflow. Very important to me, as like a slightly older person who has been in the workforce before. I think that had a huge part in deciding what specialty I wanted to do. It’s not that I – a lot of people choose their specialty based on lifestyle. It’s not |
seemed like radiation oncology and it seemed like it’s not as hands on as I would’ve liked, so I think I decided more so on dermatology where it’s a little more hands-on experience, a little bit more of the procedural aspect, and the more visual aspect of the disease. But it still kind of allows me to maintain my interest in oncology as well, so...So I think kind of like the procedural aspect, like where you can see, you can feel lesions. You know you get the biopsies. You can test the samples and look at it under the microscope yourself. So I think just those kinds of aspects. You know it’s very visual but also you kind of have to get your hands in there. So I like that aspect of it. (Kate, PS Interview)

exhausting hours and you know like things are a lot more out of your control. Um and so I just don’t know if I would feel that way if I were to go into PEDS or if I were to do even Medicine, I think it would just really drain me more than fortify me or like giving back some to me the way that Psych does. (Nina, PS Interview)

The number one thing that really changed it for me was that feeling of just being helpless if it is your wife, your parents, or whoever it is who need help and you can’t do anything about it. You can’t even answer a question. It’s a horrible feeling to me. In contrast to my business career, people had all of these motivations and priorities and most of it was driven by greed. I also realized that as soon as something changes with your family – someone gets sick or hurt or whatever – none of that matters anymore. None of it does. You could be the most powerful person in business and then you need to seek help from trained professionals; it’s really humbling. (Mitch, PS Interview)

like I didn’t do that, but at the same time I would rather be really excited and work longer hours than be bored and work shorter hours. And that’s how I was feeling in a lot of the other rotations. (Rachel, PS Interview)

So on medicine you come up with these really broad differentials and on rounds there is a lot of teaching that’s going on and you might spend ten minutes examining the patient with the attending and everyone can see the findings and then you talk about the patient with the patient and you talk about what’s on the differential and what tests you might want to order and the tests three days to come back and the patient is there for a long time and it just drags on and I am a very immediate gratification person and I was just like I cannot, like I just can’t. I think like in the first and second years I was like wow this is really conceptually interesting but in practice I was like I don’t have the patience. I just don’t have the patience and half the time...this is
| Identified Strengths | And so when I went on to my next rotation which was inpatient internal medicine at MEDPRO I was miles ahead of other people who were around me just for having been with him for those three weeks. I knew exactly what to ask about particular patients. Not because I had done it before but because I had learned a system. I had developed a new mindset for how to approach things like this. I got comments from people on the teams that I was working with that I was operating at an intern level, a first year resident level. And you know they were quick to point out that that didn’t mean I could stop trying (laughs) but just that I have clearly learned well. (Avi, entry interview) | Yeah, so I think psychiatry, they definitely value things like compassion and listening and they value the relationships a lot and more communication skills and interpersonal type of things. It’s like a huge part of it. Much more than other specialties. I mean; in general, but so I feel like during my rotations in psychiatry I have – because I feel like I always am the same way. I always act the same way and I feel like in some rotations that is received as badly or they look at me as like not doing a good job or as negative and like, oh, why you this way or why you doing this. But coming from a different viewpoint, like in psychiatry that is something positive and it’s like, you’re doing such a good job with this. So that’s what I was kind of trying to say is like those the most frustrating part...half the time you never find out what was wrong and you just sent them on their way. I was like this doesn’t feel like medicine, this doesn’t feel like doctoring to me." (Rachel, entry interview) | A lot of times I would do it in sort of a diminutive way though, like make is somebody else’s idea that the patient needed x y or z cause sometimes it's not appropriate for the lowest person on the totem pole to be like directing the patient’s care...I definitely would slip things in like, by the way has anyone looked at her white count? Stuff like that, so I never got feedback that I was doing anything inappropriate because I would always make is someone else’s idea (laughs) Whatever is good for the patient. (Rachel, entry interview) | I remember my last clerkship, my last rotation internal medicine. I was taking care of this patient who wanted to see the team that was gonna come see them and the team was...they delayed... they didn't |
| Accommodating humanity (self) | And then at the end of the day you realize people are still people whether they are in medicine or they are in something else. I was also expecting some of my peers to work harder than I perceive that they are doing. In retrospect that should not have been that much of a surprise because I am coming into this with a different point of view than people who come to it fresh out of school. You know. A lot of them are trying to find themselves, they are still figuring out this social position, they are looking for significant others or spouses in addition to whatever else they have going on for them. I didn’t have any of those other distractions. So for me studying from 8 am until 8 pm every day. | types of traits are considered more useful I guess. (Jill, PS Interview) | come on time and I constantly went back and forth to check on the patient because I didn’t have much to do and so the patient really appreciated it. As a matter of fact the patient pulled my attending aside and told my attending he should give me a good grade because I was that good. (Wayne, entry interview) |

| | I was like do you think that’s something that you have experienced? Burnout and what would you say? She actually just came to the clinic she’s in, this is her first year. Um and she’s been out of fellowship for ten years... she was saying that she’s kind of experienced that. I mean, we’ve talked about how she exercises and she really has a life...she just really has a system that works for her...and she said that she really feels like she has kind of experienced that in the past year and dealing with the transitions that happen and I think that knowing that that’s a reality of like anyone’s career but like even more so physicians and knowing how how | | To be honest with you, I think that there were some times that I felt like what they were asking me to do they did not consider the fact that I am also – I can also get stressed out or I can get angry. I can get frustrated by the situation. We can’t always just pretend that something is not happening or something is disturbing us. It’s not disturbing us. I think sometimes people forget that. Even when you’re working with your colleagues, you can actually see the stress being expressed in ways that are not always professional, towards the patient, or towards each other. That’s also something I tried to guard myself against; being aware of my own frustrations and trying |
day of the week wasn’t really too big of a deal because for me my evening before I went to bed were spent with my wife, my dog or whatever else I wanted to do but they weren’t spent in counterproductive pursuits. (Avi, entry interview)

draining a lot of it can be. (Nina, check-in interview)

not to let that affect my professional relationship with my colleagues or even the patient. (Wayne, PS Interview)
REFERENCES


