SOCIALIZATION AND PRE-MEDICAL STUDENT SUBCULTURE
CHASING ACCEPTANCE:
SOCIALIZATION AND
PRE-MEDICAL STUDENT SUBCULTURE

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ABSTRACT

A broad literature on professional socialization largely fails to account for common sets of experiences shared by all entrants to a given profession. In the particular case of medicine, a prolonged period of learning, aspiration and initiation is likely to precede recruitment to formal professional education. Employing symbolic interactionist theory and taking an ethnographic approach to understand the experiences and activities of pre-medical students, this thesis has sought to examine and analyze the pre-medical subculture and its socializing affects. Specifically, subculture is conceived of as both a product and agent of socialization. Information pertaining to the investment in and outcomes of participation in this subculture constituted the main focus of this thesis. Ten semi-structured interviews were conducted with students from the Health Sciences, Arts and Science, and Microbiology programs at McMaster University.

Findings from this thesis reveal that premedical subculture is socially constructed primarily through small-group interaction in local settings. This is done in response to students’ need to master the curriculum and medical school applications while developing a convincing self-image toward legitimators and peers. The pre-medical subculture is found to serve the normative function of a subculture in the interactionist conception, namely providing solutions to collective challenges of adjustment. However, this subculture also uniquely generates additional confounding challenges of adjustment which individual participants must negotiate. A number of other theoretical and substantive findings, as well as recommendations for future research, are presented.
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# TABLE OF CONTENTS

**CHAPTER ONE: INTRODUCTION** ........................................... 1

**CHAPTER TWO: THEORY** .................................................... 5
- SYMBOLIC INTERACTIONISM ............................................. 6
- THE SOCIALIZATION CONCEPT .......................................... 8
- INTERACTIONISM AND RESEARCH METHODOLOGY .................... 10
- SUBCULTURE FROM AN INTERACTIONIST PERSPECTIVE ............. 13
- PROFESSIONAL SOCIALIZATION ........................................ 16
- SYMBOLIC INTERACTIONISM AND THE PROFESSIONAL
  SOCIALIZATION LITERATURE .......................................... 16
- MEDICAL SOCIALIZATION ................................................ 18
- FUNCTIONALIST AND INTERACTIONIST
  PERSPECTIVES: PRODUCT VS. PROCESS ............................. 20
- PRE-PROFESSIONAL SOCIALIZATION ................................... 21
- SOCIALIZATION AND SUBCULTURE ..................................... 24
- THE INDIVIDUAL-SUBCULTURAL INTERFACE .......................... 24
- NEGOTIATING ENTRY INTO A SUBCULTURE ............................. 26
- SUMMARY ........................................................................ 29

**CHAPTER THREE: METHOD** ................................................... 31
- ETHNOGRAPHIC APPROACHES ............................................ 31
- THE PRESENT STUDY ....................................................... 35
- A 'NATURAL HISTORY' OF THE RESEARCH ............................. 36
  - DEFINING AND SITUATING 'PREMEDICAL STUDENTS' ......... 38
  - SELF-PRESENTATION IN THE FIELD ............................... 41
  - ANALYTICAL SETBACKS AND SUCCESS ............................ 44
- SUMMARY ........................................................................ 45

**CHAPTER FOUR: ENTERING AND BENEFITING FROM
  THE SUBCULTURE** ............................................................ 47
- ENCOUNTERS .................................................................... 48
- DEVELOPING INTEREST .................................................... 48
- IDENTIFYING THE SUBCULTURE ....................................... 50
- BENEFICIAL INVOLVEMENTS: LEARNING THE ROPES ............ 51
- PREFERRED VS. STIGMATIZED IDENTITIES .......................... 55
  - THE STIGMATIZED IDENTITY ...................................... 56
  - DEMONSTRATING A PREFERRED IDENTITY ....................... 59
- CANDIDATE BIOGRAPHIES ................................................ 60
  - CURRICULUM VITA OF EXTRACURRICULARS .................... 66
- SUMMARY ........................................................................ 69
CHAPTER FIVE: CHALLENGES PRESENTED BY THE SUBCULTURE.......70
ANXIETY AND THE SOCIAL COMPARISON ‘COMPLEX’ .................71
MANAGING ‘BAD NEWS’..................................................74
DEFINING AND EXPERIENCING BAD NEWS.........................75
PRE-EMPTIVE DEFERRAL.................................................76
DEFERRAL AFTER THE FACT...........................................77
THE PRESSURE OF A POSSIBLE ROLE LOSS.........................80
ANTICIPATING ROLE LOSS.............................................81
RECASTING CAREER GOALS...........................................84
SUMMARY...........................................................................88

CHAPTER SIX: CONCLUSION.............................................89
SUMMARY..........................................................................89
THEORETICAL AND SUBSTANTIVE CONTRIBUTIONS..................91
DIRECTIONS FOR FUTURE RESEARCH.................................95

SOURCES CITED..................................................................98

APPENDIXES......................................................................109
APPENDIX A – RESEARCH INSTRUMENT.............................109
APPENDIX B – ETHICS FORM...........................................110

LIST OF DIAGRAMS AND TABLES

DIAGRAM 1. THE DEVIANCE CORRIDOR..............................27
CHAPTER ONE
INTRODUCTION

In the last thirty years, educators have grown increasingly concerned with the 'dehumanizing' potential of pre-medical education, and the effects this may have on physicians' qualities. Medical educators (Coombs and Paulson, 1990: 21) concerned with this process ask,

Does the system of pre-medical education lead to a lack of physician concern for patients, interpersonal warmth, and humanitarian care? In all likelihood it does. As the first stage of a lengthy and elaborate socialization process, it sets the direction and scope for a pervasive scientism – an overvaluing of numerical empiricism and technology, and a devaluing of less easily measurable, but no less important phenomena...

Critics point out that the pre-medical curriculum and medical school admissions requirements it works to meet influence the development of an intense and highly-driven student culture that is described as excessively competitive and narrowly motivated (Sade et al., 1984; Coombs and Paulson, 1990); this culture adds to the context within which students begin to build professional identities and skills, in addition to moral development in the transition from adolescence to adulthood (Mortimer and Simmons, 1978). Some, including Conrad (1986), believe the most negative traits of pre-medical students to be social constructs developed by these students in order to justify their own competitive behaviours. This notion will be greatly extended by the present study, which will describe
more holistically the entry into a pre-medical subculture as a process of socialization in itself.

A broad literature discusses professional socialization (see Shaffir and Pawluch, 2003), including as it occurs within medical school. However, this literature largely sidesteps the discussion of common sets of experiences shared by all entrants to a profession, prior to overt professional education (Brown, 1991). Specifically, candidates for professional education may be drawn primarily from a particular pool. Individuals in that pool likely must work at becoming ‘approved,’ thus encountering and internalizing features of the professional culture before they enter it. Further, this shared experience shapes the lens through which candidates later negotiate formal professional education.

In the case of medical school, competitive application requirements lead many students to enter undergraduate programs that will help them achieve all of these requirements. In the context of this study, a ‘pre-medical’ student is one who has a reasonable level of commitment to the goal of attending medical school, and undertakes regular efforts in pursuit of this goal. Two particular programs with reputations for supporting successful medical school application studies have been selected as sites from which to draw participants.

In sum, his study will examine whether entry into a pre-professional subculture is an extension of the professional socialization process. In addition to adapting to specific expectations and values of the profession to which pre-
medical students desire entry, I argue that they adapt and acculturate to a tightly-knit and highly-driven student subculture, which itself is both symbolically and structurally influenced by the medical profession. Subcultures are traditionally conceived of as providing support for participants who encounter and must adjust to mutual challenges. Uniquely, in this case the subculture itself also generates a set of challenges, which participants must adjust to, above and beyond the competitive medical school application.

Whereas subcultures are traditionally thought of as beneficial groupings that provide collective solutions to mutual problems of adjustment (Cohen, 1955), participation in the pre-medical subculture uniquely creates and exacerbates other sets of problems. Participating in this subculture provides beneficial support in learning how to master challenging coursework and applications, and set benchmarks on peers' performance. However, participation also leads to the perceived need to avoid particular applicant identities, as well as an intensified fear of failure and rejection, and the inherently associated pressure to outperform one's peers.

Before presenting the substantive content of this paper, with respect to both themes of socialization and subculture and specific observations about the pre-medical subculture, the theoretical framework that informs this research, the scholarship in which it is situated, and the methodological approach through which it has been carried out, will be discussed. Two chapters on the pre-medical
student subculture will then be presented: the first will focus on the nature and process of encountering and entering the subculture, including a discussion of how the subculture provides solutions to collective problems of adjustment; the second will focus on challenges arising out of participation in the subculture, and how participants mitigate these. In the concluding chapter I summarize the issues addressed in this thesis, proposing applications and potential future directions for research.
CHAPTER TWO
THEORY

In order to fully appreciate how human group life is accomplished on an everyday basis I have adopted a 'symbolic interactionist' perspective in this study (Blumer, 1966, 1969; Mead, 1934; Prus, 1996, 1997) and used an ethnographic approach to data collection and analysis (Prus, 1996, 1997). This chapter and the one that follows address the theoretical and methodological approaches taken to investigate the pre-medical student subculture, while at the same time offering insights into the types of theoretical and methodological issues encountered in undertaking this research. These theory and methods chapters provide vital background for a discussion of the central thrust of this thesis: that the pre-medical subculture acts as an agent of socialization, and that, in addition to the expected function of collective problem-solving, this subculture creates additional challenges with which participants must cope.

This chapter is organized into three principal sections: The first section aims to describe symbolic interactionism, its emergence and characteristic assumptions. This section also reviews depictions of socialization and subculture from an interactionist perspective. The second section further addresses the concept of professional socialization, reviewing relevant literature and discussing its application to 'pre-professional' education. The final section clarifies the
conceptualization of socialization for the purposes of this study – namely, as a function of subcultural involvement.

**SYMBOLIC INTERACTIONISM**

In brief, symbolic interactionism has been described as, “the study of the ways in which people make sense of their life-situations and the ways in which they go about their activities” (Prus, 1996: 10). This perspective rests on three core premises (Blumer, 1969: 2):

...that human beings act toward things on the basis of the meanings they have for them... that the meaning of such things is derived from, or arises out of the social interaction that one has with one’s fellows... [and] that these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters.

The works of Cooley and Mead are seen as the most proximally influential to Blumer’s theoretical agenda (Berg, 2009: 10; Prus, 1996). In addition to defining a theoretical field focused on the creation of meanings in and derivation of meanings from human group life, Blumer is described as being responsible for setting the stage for a robust qualitative research agenda in the social sciences.

A description of the terms underling symbolic interactionism further clarifies Blumer’s perspective. In this context, a ‘symbol’ refers to a stimulus that is meaningful to individuals and calls forth a response based on this meaning (Mead, 1934; Turner, 1962). Symbols are expressed within ‘interactions,’
situations involving verbal or nonverbal communication between at least two individuals (Kuhn, 1974: 139; Turner, 1962: 6). During the course of an interaction, individuals will interpret, or give meaning to, the symbols used by others (Blumer, 1962; Turner, 1962). An individual 'takes the role of the other' by acting in a way that reflects understanding of the interpretations or generalized attitude of the other (Mead, 1934; Turner, 1962).

Cooley’s concept of a ‘looking-glass self,’ and Thomas’ notion of a ‘definition of the situation’ are particularly germane pillars of interactionist thought for the discussion of socialization and subculture. The ‘looking-glass self’ is comprised of an imagination of one’s appearance to others, an imagination of others’ judgment of one’s appearance, and the self-conceptions arising out of these imaginings (Cooley, 1922: 133-151). This notion underlies the idea of individual behaviour being regulated, and defining, the group. Mead further elaborates by suggesting that, in addition to being able to view themselves as objects, individuals are able to develop the notion of a generalized other, through which the self-concept is developed (1934). This generalized other serves as a referent in attempting to anticipate how others will perceive and act toward the individual. Thomas’ concept of a “definition of the situation” further addresses how individuals figure out their participation in the group. Their definitions of situations provide a basis for decision-making that guides “adjustive responses” to other individuals and groups (Thomas, 1937: 8). Further, individuals’ definitions
are considered "real facts" of social life, since "if men define situations as real, they are real in their consequences" (Thomas and Thomas, 1928: 572).

The Socialization Concept

A brief clarification of the general concept of socialization may be taken up in the context of formative interactionist thought, in order to portray this framework's high degree of compatibility with research on socialization. One of the earliest appearances of the term 'socialization' in the sociological literature is in Simmel's description of group-formation (1895). Ross promptly takes up the term, refining its definition to "the molding of an individual's feelings and desires to suit the needs of the group" (1896, emphasis added). Burgess reinforces this group standpoint, defining socialization as "the psychic articulation of the individual into the collective," and further distinguishes an individual standpoint as "the participation of the individual in the spirit and purpose, knowledge and methods, decision and action of the group" (1916: 2, emphasis added). Dewey offers a synthesis in his description of socialization as "the education given by the interaction of the individual with his social environment" (1922: 318, emphasis added). Cooley adds that integration involves taking on new roles, and estimating the character of others and future versions of the self (1922). Using this logic, Mead (1934: 160-161) postulates that the self-concept is developed as a result of "taking the role of the other," an aphorism forming the core of many
contemporary descriptions of socialization. Essentially, socialization is conceptualized as a process whereby individuals seeking to bond themselves into a group develop a self-concept based on their interpretation of the group’s expectations.

More recently, functionalist and interactionist scholars have elaborated socialization, leading to divergent definitions of the concept. This divergence is clear in two significant early studies on professional socialization (Becker et al., 1961; Merton et al., 1957), which are further discussed in the next section of this chapter. Essentially, functionalists see socialization as a ‘product,’ that is to say, a set of values and attitudes absorbed by an empty vessel, whereas interactionists see it as a ‘process’ whereby neophytes actively negotiate how they take on not only values and attitudes, but also demeanour and convincing self-presentation.

While the focus of dramaturgy and self-presentation (Goffman, 1958) does not play a highly explicit role in the exposition of this thesis, the idea that applicants must manage a convincing presentation of themselves as deserving candidates to peers, legitimators, and to themselves, is an assumption that undergirds much of my work. This relates to the socialization concept through the idea of reference groups (Merton, 1968). Reference groups can be considered on several dimensions. In this case, the most basic dimension is that one’s action may be judged by an audience of others (Goffman, 1958). On a more detailed dimension, these others may include authorities that establish normative standards
with respect to behaviours and values (Kelley, 1965), as well as peers, role models, and legitimators (Kemper, 1968) – with peers and legitimators arguably most germane to the discussion of pre-medical students’ socialization.

**Interactionism and Research Methodology**

The ideas of Cooley, Thomas and Mead provided an early contemporary framework for considering the social life of individuals and human groups, and the interactions among and between these individuals and groups. Cooley strongly advocated research by means of ‘sympathetic introspection’ (1909: 7), which involves the researcher

\[ \text{...putting himself in intimate contact with various sorts of persons and allowing them to awake in himself a life similar to their own, which he afterwards to the best of his ability, recalls and describes.} \]

Despite the proposal of this method, and some ensuing research, a strong research agenda was still lacking. Blumer undertook this next vital step, while also further consolidating the theoretical assumptions of his predecessors, including his mentor, Mead (Prus, 1996: 67-68). Blumer’ elaborated a methodological approach stemming logically from the principles of symbolic interactionism, thereby laying down firmer principles for ethnographic sociological research. These principles form the backbone of my research methodology. A discussion of interactionism
and research methodology not only sets the stage for my own research methodology, but also sheds additional light on interactionism itself.

Blumer argues that purportedly empirical approaches to social scientific research fail to capture the “empirical social world” – namely, “what people experience and do, individually and collectively, as they engage in their respective forms of living” (1969: 35, 38). He further contends that positivistic research treats “social interaction as merely the medium through which determining factors produce behaviour... grossly [ignoring] the fact that social interaction is a formulative process in its own right” (1969: 52). These methods are therefore ill-fitting “substitutes for the interpretive process” (1966: 538, emphasis added), which takes place within highly individual lives and worlds (1969: 38), and is therefore most effectively observed using interpretive techniques. However, Blumer insists that these concepts can and should play a role in the exploratory aspect of research, providing ways of focusing on various dimensions of the subject at hand (1928: 439). Concepts from a positivistic social science are “admissible [in interactionist research]... in terms of how they are handled [within] the interpretive process” of the actors being studied (1966: 538, emphasis added).

These actors, and the participants in all social relations “have the same common task of constructing their acts by interpreting and defining the acts of each other.” Therefore, an interpretivist approach to social research “is able to
cover the full range of the generic forms of human association” (Blumer, 1966: 538-539). This notion is taken up by Hughes, who strongly encourages a comparative approach to researching occupations (1958; 1971), and Prus, who has developed an array of ‘generic social processes’ based on a thorough review of situational ethnographies (1997). Beyond gaining data that reflect richness of life as participants experience it, interactionist researchers are able to place themselves in the role of those they are observing, providing an assessment of the participants’ life-worlds that is analogous to that of the participants themselves. According to Hughes (1961: xiv-xv), this high degree of participation is both the key benefit and challenge of the method Blumer advocates:

The outstanding peculiarity of this method is that the observer, in greater or less degree, is caught up in the very web of social interaction which he observes, analyzes and reports ... This has a particular corollary. The problem of learning to be a field observer is like the problem of learning to live in society.

While providing a beneficial richness and depth of data, interpretive field research poses the methodological challenge of performing as a convincing participant, while taking care not to cross so far into the world of participants as to lose the perspective of being a researcher, termed “going native” (discussed in depth in Berg, 2009: 190-238).

The Symbolic Interactionist approach has endured in its own right as an approach to sociology, following in the footsteps of extremely influential ethnographic work in the ‘Chicago school.’ The significance of Blumer’s legacy
is also in its influence on the flourishing of qualitative approaches in social science research. Direct derivatives include the ‘Iowa school’ of interaction, with a more functional and measurement-focused approach (Kuhn, 1964; Maines, 1986, 1989; Couch, 1984); dramaturgical sociology, emphasizing the centrality of impression management in ongoing community life (Goffman, 1959, 1961, 1963; Lyman and Scott, 1970); and labeling theory, focusing on definitions of deviance and the phenomenon of deviant subcultures (Becker, 1963). Furthermore, scholars such as Lyman and Vidich (1988) acknowledge Blumer as the most important social theorist of the twentieth century due to his legacy of securing a position for qualitative methodologies in the entire arena of social science research.

Subculture from an Interactionist Perspective

From the interactionist point of view, subculture can be defined as, “...a set of interactionally linked people characterized by some sense of distinctiveness (outsider and insider definitions) within the broader community” (Prus, 1997: 41). Generally, subcultures begin with the central element of a social world (Strauss, 1993: 212-213), that is,

...at least one primary activity (along with related clusters of activity) [that] is strikingly evident; such as climbing mountains, researching, collecting...
Participation in a shared activity or setting leads to the meaningful association of the individuals involved in a wide variety of contexts. Goffman (1961: ix-x) suggests that,

...any group of persons – prisoners, pilots, patients – develop a life of their own that becomes meaningful, reasonable, and normal once you get close to it.

Subcultures imply an interlocking group culture, rather than a simple typification or categorization of individuals (Fine and Kleinman, 1979). Individuals thus do not inherently form a subculture as a result of a shared trait, such as the desire to pursue a career in medicine. Rather, this shared trait may lead individuals to engage in shared sets of activities that lead to meaningful association, and the formation of a subculture.

In interactionist research, concepts of ‘life-worlds’ and ‘subcultures’ have emerged from ethnographic research on marginal settings (Cressey, 1932; Gans, 1962; Liebow, 1967; Whyte, 1943; Wirth, 1928), and deviant activities or lifestyles (Anderson, 1921; Becker, 1963; Cohen, 1955; Lofland, 1966; Prus and Sharper, 1977, 1991; Sanders, 1989; Shaw, 1930; Simmons, 1969). The subcultural concept has been subsequently taken up with respect to structured, group-oriented activities (Fine, 1983; MacLeod, 1993) and the recruitment of individuals entering social movements (Wolf, 1994) and professions, including nursing students (Davis, 1968) and medical students (Haas and Shaffir, 1987).
A meaningful association develops among the participants of shared activities through a process of symbolization (Mead, 1937: 38) or objectification (Berger and Luckmann, 1967). Prus (1997: 39) explains that these agreed-upon objects and their associated meanings endure when...

...people attach names to these; share these notions with contemporaries; transmit these notions to newcomers; continue to act toward those particular objects in the manner indicated; adjust their activities to accommodate or acknowledge these notions; more explicitly recognize these practices on a collective or community-wide basis; and envision collective and individual interests or uses for perpetuating these practices.

The result, according to Simmons (1969: 88-89) is that subcultural groups become... their own little communities or social worlds, each with its own local myths..., own legendary heroes..., own honorary members..., its own scale of reputations..., and its own social routine.

In addition to shared activities, relationships, perspectives, and styles and modes of communication, Prus further distinguishes subcultures as “characterized by some sense of distinctiveness (outsider and insider definitions) within the broader community” (1997: 41).

This separation can exist at varying levels of intensity, ranging from occasioned or casual (Chester, 1995; Vaughan, 1986), to totalizing involvement in highly-focused environments (Goffman, 1961; Lesieur, 1977; Prus and Dawson, 1991). Certain occupational pursuits and work roles “lend themselves to more totalizing involvements in their respective settings” (Prus, 1997: 53; see for
example Haas and Shaffir, 1987; Prus and Irini, 1980; Prus, 1989). The intensity of involvement affects both the degree of contrast and communication between the subculture and the broader community, and the magnitude of the subculture’s capacity to influence its participants (Prus, 1997: 43-48).

PROFESSIONAL SOCIALIZATION

Symbolic Interactionism and the Professional Socialization Literature

The main achievements of symbolic interactionism arguably lay in the areas of subculture and socialization (Shaffir and Pawluch, 2003: 896). Early occupational studies associated with the University of Chicago (Anderson, 1923; Cressey, 1932; Donovan, 1929; Hayner, 1936; Shaw, 1930) explore the internal dynamics of occupational life with an exploratory and highly descriptive approach. Subsequent interactionist researchers have focused on situational learning among new entrants adjusting to training or work, or “learning the ropes” (Geer et al., 1970) in a number of occupational contexts (Haas, 1974; Lewis, 1999; Prus, 1989). Neophytes encounter and internalize an occupational culture, which includes an image of the occupation as well as a set of justifications both for its existence (Becker et al., 1968; Van Maanen, 1984) and its related activities (Bowles and Garbin, 1974; Bryan, 1966; Hong and Duff, 1977; Salutin, 1971; Sykes and Matza, 1957). Ethnographies of diverse occupations (including Barley, 1983; Case, 1984; Maurer, 1964) also point to self-presentation including
costume, jargon and tools expected and demanded of members. Fine (1985: 5) extends this description to include “specific standards, beliefs, and moral concerns.”

With respect to professional training, this type of situational learning can be conceived of as a hidden curriculum (Apple, 1971; Jackson, 1968). In addition to technical skills, learning the ropes involves the development of professional skills (Becker and Geer, 1958; Becker et al., 1961; Geer, 1966; Light, 1980), values and attitudes (Davis, 1968; Meyer, 1960; Simpson, 1967) and strategies for emotion- and impression-management (Haas and Shaffir, 1977; Hochschild, 1983; Lief and Fox, 1963; Loseke and Cahill, 1986; Olesen and Whittaker, 1968).

A subset of the professional socialization scholarship focuses on training in professional school. Davis describes a process of “doctrinal conversion” during training, wherein students undergo a “moral and symbolic transformation from layperson into the honorific status ‘professed’ by professionals” (1968: 235, 251) – in other word, from “outsider” to “insider” of the professional culture. This process is reflected in descriptions of the ritual ordeals of medical students (Haas and Shaffir, 1982) and residents (Light, 1980), as well as nursing students (Davis, 1968; Simpson, 1979) and law students (Lortie, 1968). Light (1980: 327, emphasis added) contends that,

Professional socialization has more than a passing semblance to conversion ... It is more than learning roles or situational adjustments. In professional socialization, certain aspects of a person’s identity and
Life pattern are broken down (de-socialized) so that a new identity can be built up. While the person actively participates in the process and to some extent negotiates the terms of his or her new identity, this activity serves more to co-opt the person into using the concepts, values, and languages of those in power.

Light’s elaboration of the professional socialization concept captures the interactional nature of the transition from lay to professional status, or from outsider to insider of the professional subculture.

**Medical Socialization**

In the mid-20th century, parallel developments in the fields of medical education and sociology created a climate extremely favourable to cross-disciplinary work (Hughes, 1958; Lee, 1961; Merton et al., 1957, 42-53; Parsons, 1951; Reader et al., 1954; Wolff, 1954). Within this environment, two landmark studies on student socialization in medical school were undertaken (Becker et al., 1961; Merton et al., 1957).

Merton and colleagues, working in the Columbia University Sociology Department, were commissioned to evaluate a new experimental curriculum at Cornell medical school, leading to the publication of *The Student Physician*. This publication traced a socialization process throughout the entire four-year experience, conceiving of medical students as physicians-in-training and identifying specific aspects of socialization including attitudinal development, “training for uncertainty” (Merton et al., 1957), and the development of “detached
concern” (Lief and Fox, 1963) as key themes or outcomes. In essence, the work of Merton and his colleagues focused on the transmission of cultural values from faculty to physicians-in-training.

In contrast, Becker and colleagues at the University of Chicago Sociology Department set out to investigate a ‘typical’ medical school, settling on the University of Kansas, leading to the publication of Boys in White. This work also traced a socialization process throughout the four-year experience, but examined more closely students’ roles and attitudes, and the formation of a student subculture as a means of adjusting to a challenging environment. The socialization process described in this work was based on the evolution of students’ own tacit goals, working agreements, and solutions developed when confronted with common problems such as being assigned more work than could possibly be completed; in clinical years, similar collective adjustment to circumstances was observed, with respect to using impression-management strategies to maximize opportunities for clinical learning. The work of Becker and his colleagues focused on the development of a student culture as a means of students adjusting to their low social position in the curriculum – hence ‘boys’ rather than ‘student physicians.’

Little subsequent follow-up work has been done by sociologists on the social psychology of student development (Light and Levine, 1988), due in part to a change in the discipline’s focus toward professional dynamics at an
organizational and institutional level (Hafferty, 2000; see also Bucher and Stelling, 1970; Friedson, 1970; Hafferty, 2000; Larson, 1977) and a change in the research funding priorities of the medical establishment (Bloom, 1979). Despite a diminishing focus, select studies have further distinguished between formal and latent learning (see Fox, 1989), highlighting specific experiences such as normative processes surrounding cadaveric anatomy (Hafferty, 1988, 1991, 2000: 241), the transition from moral ambiguity to a ‘growing sense of mastery’ (Light, 1980), and medical students’ adoption of a symbolic ‘cloak of competence’ (Haas and Shaffir, 1987).

**Functionalist and Interactionist Perspectives: Product vs. Process**

The early studies of Merton, Becker, and their colleagues are notable for identifying and describing formative social processes inside and outside medical school classrooms, in the socialization of new professionals. These works are also notable for demonstrating the differences in functionalist and interactionist approaches to describing and studying socialization. In fact, due to tensions between these approaches in the discipline, original publications of both studies were met with many unfavourable reviews (Hafferty, 2000: 239-240).

The functionalist perspective (Merton et al., 1957) characterizes professional socialization as “a process in which neophytes move incrementally from junior college to full-fledged professional, acquiring the knowledge, skills,
values and attitudes they will need” to perform the professional role (Shaffir and Pawluch, 2003: 899, emphasis added). Whereas Merton and colleagues present the trainee as an “empty vessel,” maintaining that “professional training consists of pouring skills, norms, values, and professional identities into [a profession’s] newest members” (ibid.), interactionists “see socialization as a process through which neophytes learn … to “play” the professional role with convincing competence and confidence” (Shaffir & Pawluch, 2003: 899-890, emphasis added). The interactionist perspective (Becker et al., 1961) describes how, when “presented with the institution’s curriculum and the profession’s culture … [the neophyte will] actively negotiate the acquisition of appropriate skills, demeanor, and self-presentation to be judged as trustworthy colleagues and members of the profession” (Shaffir and Pawluch, 2003: 899, emphasis added).

**Pre-Professional Socialization**

The professional socialization literature has typically focused on formal institutions of professional training, examining the acquisition (functionalist) or development (interactionist) of professional identities and skills after students have entered these institutions (Brown, 1991). In these works, the starting point of the professional career is commonly conceived of as the time when institutions of professional education bid for students, and students commit to institutions (Becker and Strauss, 1956; Eron, 1958; Kleinman, 1984). Paradoxically, sociologists describe career choice as a gradual process beginning in childhood.
and adolescence (Ginzburg, 1972; Hughes, 1958; Ritzer and Walczak, 1986).

Whereas prospective professionals must in many cases prepare rigorously to qualify for professional education, the socializing potential of the shared preparatory experiences is largely missed in the literature on professional socialization.

Since institutions do not induct candidates in a vacuum, the predominant conception of professional recruitment is obstructively narrow. Brown demonstrates that, “professional socialization recruits, generates professional commitment, and aids in the adoption of a professional identity prior to... training and education” (1991: 157). This is concurrent with concepts of anticipatory socialization (Merton, 1988 [1957]: 438-439) and the career contingency (Hughes, 1958: 67, 120). Both notions reflect an extended process occurring prior to professional training, in which candidates develop an anticipatory commitment to and identity with respect to a selected profession.

Theoretical postulates developed in tandem with early works on professional socialization support the investigation of professional socialization prior to formal professional training. In a functionalist framework, Merton (1988 [1957]: 438-439, emphasis added) defines anticipatory socialization as,

...the acquisition of values and orientations found in status and groups in which one is not yet engaged but which one is likely to enter. It serves to prepare the individual for future statuses in his status-sequence.
This notion is similarly captured in the interactionist framework, where Hughes speculates that the career “contains a set of projections of [one]self into the future, and a set of predictions about the course of events in the [professional] world itself” (1958: 126-127). According to Hughes, these projections occur throughout an escalating “period of learning and initiation” that begins when prospective professionals develop an interest and prepare to become successful recruits (120, emphasis added).

Prospective professionals can be exposed to a suite of expectations and ideas related to the profession as they approach the gates and before entering. In addition they are faced with a set of challenges and expectations unique to the pre-professional experience. In a book chapter alluding to the later Boys in White study, Hughes calls for pursuing “various lines of inquiry [into professional socialization] concurrently, starting in the pre-medical [or pre-professional] phase and following the aspirant through into his early years of practice” (127, emphasis added). Nevertheless, the study that emerged from this call makes little mention of participants’ lives before medical school, save for basic demographic contrasts (Becker et al., 1961). The present study addresses both the career trajectory and notion of commitment to a professional goal, as well as other salient themes in the pre-medical student subculture.
SOCIALIZATION AND SUBCULTURE

The previous sections of this chapter have laid out the interactionist perspective on subculture and socialization, alluding in several ways to a relationship between these concepts, especially with respect to professional subcultures. The symbolic interactionist perspective is characterized by a focus on communication and activity in order to understand how culture develops and spreads (Blumer, 1969; Fine and Kleinman, 1979; Prus, 1996, 1997; Shibutani, 1955). In what immediately follows, I arrive at the ultimate conceptualization of socialization for the purposes of this study, that is, *socialization as a function of subcultural involvement*. The remainder of this chapter serves to clarify this conceptual notion. Subsequently, through analysis of my data, I describe how participants become acculturated to the pre-medical subculture as their involvement in the subculture intensifies. I further describe the ensuing support and challenges that the subculture generates, and the strategies developed to mitigate these challenges.

The Individual-Subculture Interface

Inherent in an interactionist conceptualization of subculture is the notion that subcultures both influence and are influenced by the individuals who participate in them. Several scholars support and further explore this notion.
Whereas subcultures serve to generate solutions to mutual problems within the group, these solutions are, according to Cohen (1955: 59-60)

...adequately motivated provided that [one] could anticipate a simultaneous and corresponding transformation in the frames of reference of [one’s] fellows. Each would become a sign from the others that a new departure in this direction would receive approval and support.

Fine and Kleinman (1979) add that membership requires adoption of a group’s cultural elements, while Shibutani asserts that “Culture is not a static entity, but a continuing process; norms are creatively reaffirmed from day to day in social interaction” (1955: 564). Irwin (1970: 111) adds that this continuing process changes over time, and that, “…subculture must be examined historically. … to understand the behavior of the subculture participants…” Examination of a subculture over time includes individuals’ escalating level of participation in and alongside, and identification with the subculture.

Interactionists further assert that, as an individual encounters the subculture, and other constituents’ perspectives, the way in which the individual thinks about the world will be affected on some level. Specifically, Fine and Kleinman (1979) suggest that the meanings people attribute to objects in the world around them may be challenged, confirmed, or refined through this interchange.

Subcultures can be described or observed with a set of conceptual characteristics based on a body of theoretical work (Fine and Kleinman, 1979;
McCaghy and Capron, 1997; Prus, 1997; Shibutani, 1955).¹ These include ideology or perspective, rituals or routines, argot (distinct language that allows for the group to develop new symbols or place new meanings on words used by both outsiders and insiders), norms, artifacts (objects representing symbolic items of a particular subculture), and identity (how insiders see themselves, and how outsiders see them). While this set of conceptual characteristics can guide the investigation of a subculture along these lines, it is also useful as a holistic depiction of elements that make up a subcultural identity. These elements must be gradually adopted in order for individuals to achieve subcultural participation and identity.

Negotiating Entry Into a Subculture

The socializing effect of membership in a subculture is demonstrated by a study of the negotiation of deviant identity and establishment and maintenance of situated morality in a nudist subculture (Weinberg, 1976):

Throughout the continuous process of socialization, people learn how they are expected to act in a variety of situations. As a consequence, people usually perform as others expect them to act. The result, of course, is a

¹ The idea for presenting these characteristics of subculture came from a personal conversation with Dr. Dorothy Pawluch, who has developed this segmentation for a lecture on 'subculture' presented to an undergraduate course on Deviant Behaviour at McMaster University.
body of routine practices that people come to see as natural.

Weinberg observes that, in this social world, the ‘deviants’ come to rationalize their behaviour, routinizing it while defining and organizing new boundaries constituting ‘normal’ behaviour. General principles are developed by consensus within the subculture respecting what is appropriate and inappropriate behaviour.

Subcultural involvement can be generalized as a series of escalating involvements in which individuals develop motivations or behaviours, or experience certain conditions, that lead them to encounter the subculture. Upon discovering the parameters of this subculture, individuals may proceed to interact with other members of the subculture, becoming participants and acquiring the participant label from outsiders. Individuals may then contribute to and internalize the mutual goals and goal-attainment strategies of the subculture, and upon undertaking these in tandem with other members of the subculture, achieve subcultural identity.

In this vein, Rubington and Weinberg (2005: 251-254) have proposed and visualized a model of deviant careers as a “long corridor.” In order to aid in the depiction of this model, a diagram from their original work is reproduced below:

Diagram 1. The Deviance Corridor (Rubington and Weinberg, 2005: 252)

1. Imputed act
2. Definition
3. Deviant status
4. Official process
5. Deviant group
6. Deviant identity
A corridor of involvement reflects a series of escalating involvements. Defining agents (signified by broken lines) facilitate the progression of some entrant individuals, while ejecting others from involvement. Individuals may also be able to enter at any midpoint, or choose to autonomously exit from any point on this progression of group identity. Rubington and Weinberg (2005: 251-252) further note that,

The rate and direction of a person’s progress through the corridor are based largely on the person’s responses to others’ symbolic definitions of him or her. In addition to conventional people, those who type and respond to the deviant often include members of the deviant group; thus these people can be an important influence in solidifying a person’s career.

This notion of a corridor of involvement corresponds with earlier research and discussion of status and identity, perhaps reflecting influences on Rubington and Weinberg’s model of deviant careers.

Glaser and Strauss’ (1971) work on ‘status passages’ is extremely relevant to the discussion of socialization as it relates to subcultural involvement. This work also provides a framework for demonstrating and investigating the socializing effect of the student subculture that develops in response to the challenges of the medical school application. The preceding model of a long corridor comprised of several chambers can be recast as a series of status passages, explained thus (Glaser and Strauss, 1971: 439):
The individual moves more or less continuously through a sequence of statuses and associated roles, each phase of which does not greatly differ from the one which has gone before. Although his “official” (socially acknowledged) transfer into a new status may seem sudden, more often than not this is only because the informal antecedent preparation has gone unnoticed. There is less discontinuity in status-sequences than might appear on the surface, with its celebrative rites de passage and legally enacted changes of status.

While Glaser and Strauss state that “the individual moves more or less continuously” through the status-sequence, they also acknowledge that (ibid.),

...the individual is more or less continuously subject to appraisal, by others, of the adequacy of his current role performance... In effect, by orientation to the norms of prospective statuses, the individual engages in trial behavior and tends to move at a pace which is controlled by the responses of those in his current role-set.

The process of acculturation to the pre-medical student subculture is characterized by an intensifying series of involvements wherein individuals encounter a variety of challenges to their ongoing participation in the subculture, and must reconcile individual and subcultural identities.

SUMMARY

In the preceding section, the theoretical underpinnings of this research, namely the Symbolic Interactionist perspective and ethnographic methodology, were introduced. The interactionist perspective lends itself well to discussions of
subculture and socialization, evidenced in part by the logic presented, and in part by a selected review of the literature. One subset of this literature, on socialization into professions, lays a particularly helpful foundation for a discussion of socialization into the pre-medical subculture. Building upon the entire prior discussion, the following chapter will further elaborate on the ethnographic approach to social research, and will introduce the methods and evolution of the present study.
CHAPTER THREE
METHOD

The methodological approach to this study is informed by the interpretivist research agenda situated within symbolic interactionism. I endeavoured to take guiding principles from the ethnographic approach into account when entering the field and carrying out a series of semi-structured interviews. In what follows, my methodological approach will be laid out by way of describing the foundational ethnographic approach and adaptations to it, and providing a "natural history" (Becker, 1958) of the development of the present study.

ETHNOGRAPHIC APPROACHES

When researching human beings, the methodology selected will inherently affect how these people will be viewed (Bogdan and Taylor, 1975). Social scientific research may be done on a continuum including entirely uncontrolled techniques in natural settings to fully-controlled procedures of experimental observation (Douglas, 1976: 12). Where methods are "symbolically reduced" and "statistically aggregated," conclusions may be more "arithmetically precise" (Berg, 2009: 8). However, such methods are less likely to fit the subjective social realities of the people being studied (Berg, 2009: 8-16; Mills, 1959).
Engaging an interactionist perspective on human group life affects the selection of an ideal approach to studying human behaviour. The symbolic interactionist research agenda, articulated by Blumer (1966; 1969) and further clarified by Prus (1996; 1997), endeavours to capture social life in the field being observed as faithfully as possible to the way that participants in this field themselves experience it. The primary method of doing this, based on Mead and Cooley’s notion of ‘sympathetic introspection,’ is participant-observational ethnographic field research. This precise methodology may not be appropriate for every setting, due to practical constraints and unique features of the group being observed. Gold (1958) elaborates a spectrum of fieldwork roles of varying degrees of distance from the subjects of the research. At any level, the principles of participant observation provide a useful foundation, serving as a keystone method for field research that provides a set of principles for the use of other methods, including interviews.

Ethnography refers to the study of individuals’ everyday lives “in their own terms,” attempting to grasp the symbolic meanings that participants define as important and real – their “definitions of situations” (Thomas and Thomas, 1928) and “constructions of reality” (Berger and Luckmann, 1967). The flourishing of this type of research is often traced to the sociology department at the University of Chicago in the early to mid-20th century, and is described as the hallmark of Chicago sociology (Park and Burgess, 1921; Herman-Kinney and Verschaeve, 2003: 227; McKinney, 1966: 71). Early studies focus on the urban environment,
with the view that the city should be approached as a dynamic social ‘laboratory’ (Kurtz, 1984). Early subjects of ethnographic study include the homeless (Anderson, 1921), juvenile delinquents (Cohen, 1955; Shaw, 1930), ethnic ghettos (Wirth, 1928), marginal institutions (Cressey, 1932), and social life in lower-class neighbourhoods (Gans, 1962; Whyte, 1943; Liebow, 1967). In each case, researchers describe living among the subjects of their research, joining participants’ social lives for the purposes of study.

Interviews can also be a valuable tool for ethnographic field research, as a supplement to (Becker, 1953; Shaffir, 1974; Herman, 1987, 1993) or substitute for (Charmaz, 1991; Ebaugh, 1988; Shaffir and Rockaway, 1987) participant observation. In situations where participant observation is not feasible or appropriate, researchers can rely on interviews guided by principles similar to those that undergird participant observation, in order to depict group life from the perspective of those participating in it.

Scholars favouring participant observation (including Becker and Geer, 1957; and Denzin, 1989) note that researchers relying on interviews can in some cases fail to “penetrate the veil” (Boas, 1943: 312). This aphorism refers to appropriate acquisition and employment of the group’s symbols and meanings, leading to a rudimentary understanding of the group that ensures the accuracy of interview questions (Herman-Kinneuy and Verschaeve, 2003: 232). Researchers relying on interviews can attempt to approach and observe the world from a
perspective as close as possible to that of the participant by "adjusting the level of language of given scheduled questions or through unscheduled probes" (Berg, 2009: 107; Gubrium and Holstein, 2003). Supplementary or follow-up questions can evoke more detailed responses to specific structured questions (Skipper and McCaghy, 1972), or elicit detailed discussion of topics spontaneously raised by participants (Berg, 2009: 107-109; Berg et al., 2004).

Interviews may facilitate the establishment of rapport with participants (Douglas, 1985) and an exploration of their salient concerns (Kinney, 1993). In addition, interviews enable the researcher to gain further information from specific or key informants (Adler, 1985) and shed light on unclear observations or statements (Herman, 1987; 1993; Herman and Musolf, 1998). Structured conversations can guide the interviewer and enable comparisons across interviews (Berg, 2009: 107). On the other hand, flexibility encourages richer accounts from participants who can spontaneously initiate lines of discussion (Ireland and Berg, 2006, 2008). Semi-structured interviews combine these benefits, enabling higher internal validity while still reflecting awareness that individual participants may understand the world and their situations in varying ways (Gubrium and Holstein, 2003).

Ethnographic studies are normally based on specific observational cases, and are thus criticized for poor generalizability to broader populations. This critique is undermined by the fact that the entire ethnographic approach is not
driven by the desire to test causal hypotheses, but rather to explore emergent themes in the field. According to Atkinson and Hammersley (1994), gathering loosely-structured data from a small number of cases inherently involves

...explicit interpretation of the meanings and functions of human actions, the product of which mainly takes the form of verbal descriptions and explanations.


THE PRESENT STUDY

Semi-structured interviews were conducted with a sample of ten students from the Health Sciences, Arts and Science, and Microbiology programs at McMaster University. Participants were solicited through the researcher’s personal network, and further through a snowball sample incorporating participants’ personal networks. The emergence of this study, as well as procedures and issues of collecting and analyzing the data, will be further explained in the framework of the project’s natural history.
A 'Natural History' of the Research

Given the interpretive nature of interactionist research, an interpretive hindsight is a fitting tool for explaining the execution of one's research. In addition to contributing to a discussion on the research process, this type of explanation leads to the treatment of methodological challenges in the field as data in themselves. For example, Danziger (1979: 513) depicts how challenges encountered in accessing the setting can themselves "demonstrate key features of the setting." In this vein, Becker (1958: 600, emphasis added) advocates the formulation of a natural history of our conclusions, presenting the evidence as it came to the attention of the observer during the successive stages of his conceptualization of the problem. The term "natural history" implies not the presentation of every datum, but only the characteristic forms data took at each stage of the research.

A 'natural history' of the project will depict how successful methods emerged throughout its undertaking.

This project first emerged in the early stages of my M.A. program. I was having difficulty developing a fieldwork research project for a qualitative methods seminar led by my current supervisor. Dr. Shaffir made a number of suggestions including pre-medical students, and this one clicked resoundingly. I had previously attended the University of Toronto as an undergraduate, with particular interest in health policy and the sociology of health and health care, and a side interest in applying to medical school. I consistently delayed taking up
prerequisite courses or preparing for any component of the application as a result of encounters with what appeared to be an intensely unpleasant pre-medical experience. Friends and roommates on the pre-medical track never shied away from engrossing late-night conversations that identified and criticized the pre-medical subculture. This phenomenon had thus long existed within my sphere of sociological curiosity, making it a fitting topic to pursue in coursework on qualitative methods that later evolved into this MA thesis.

In total, ten individuals participated in interviews for the different iterations of this study. Informal interviews for the initial project were conducted in the autumn of 2008 with three Health Sciences students and two Arts and Science students, in their second and third years of study. Two of these participants (one from each program) consented to follow-up interviews in the spring of 2009 for the purposes of the present study. Eight additional participants in their second through fourth years of study, including three from the Microbiology program, were interviewed in the summer and autumn of 2009 and winter of 2010. Three additional follow-up interviews were conducted after the release of MCAT scores in the autumn of 2009. All interviews were conducted in public places on campus, the majority in cafeteria at the Health Sciences complex.

Interviews were based on a discussion guide developed for the initial study (see Appendix A). Participants were asked to sign a document indicating informed consent (see Appendix B) that addressed the study with a cursory
summary and ensured anonymity and the freedom to withdraw from the study. Each interview in the present study was then audio-recorded, with participants’ knowledge and additional consent. I took sparse notes, with efforts made to note of the corresponding time in the recording for follow-up. In addition, notes were taken on a master copy of the interview guide in order to inform subsequent interviews. Recordings were subsequently transcribed and printed, with thematic analysis performed through multiple re-readings and completely unstructured annotation of the transcripts.

Defining and Situating ‘Pre-medical’ Students

While there is no explicit ‘pre-medical’ program at McMaster, I presumed that students with an interest in medical school would tend to gravitate toward particular programs of study. I did not assume that these programs would be home to the majority of medical school hopefuls; rather I operated on the assumption that these programs would have a higher representation or concentration of them. My attention was directed to the Arts and Science and Bachelor of Health Science programs, since the reputation of both programs is that a large proportion of students apply to medical school.

Arts and Science is “designed as a rigorous interdisciplinary program.” While promotional materials point out that the program “prepares students for a wide variety of future paths, and has in its 20 year history established a tradition
of producing graduates who shine in a wide variety of careers,\textsuperscript{2} special emphasis is made on "the accomplishments … of graduates who have gone on to schools of business, law or medicine."\textsuperscript{3} Participant statements reflect the volume of medical school applicants in this program: Leah\textsuperscript{4} remarks that, "at least eight of my ten closest friends in the program are applying to med school, or did last year," while Padma was surprised to "realize after [the MCAT scores were released] that so many of my classmates were applying to med school." Prospective students are told of a "limited-enrolment… intimate intellectual environment that encourages collaborative learning" between students, and between students and faculty, and provides special opportunities for research and extracurricular work.\textsuperscript{5} Entering this environment requires "a minimum overall average in high eighties or low nineties" in high school, as well as completion of a personal statement and supplementary application.\textsuperscript{6} Although the program's administration keeps admissions data secret, admission to Arts and Science is considered to be highly competitive.

The Bachelor of Health Sciences program advertises "a unique interdisciplinary approach to the study of health, wellness and illness… through

\textsuperscript{2} \url{http://www.mcmaster.ca/artsci/about_the_program/strengths.html}
\textsuperscript{3} \url{http://www.mcmaster.ca/artsci/about_the_program/about_the_program.html}
\textsuperscript{4} Participants are referred to by pseudonyms in order to maintain their anonymity.
\textsuperscript{5} \url{http://www.mcmaster.ca/artsci/prospective_students_new/admissions.html}
\textsuperscript{6} ibid.
the integration of foundation and health sciences” and required breadth courses. While the department’s promotional materials acknowledge that many students “go on to professional programs,” they caution that, “this degree may not provide any particular advantage in gaining admission to professional programs. However, the curriculum and teaching philosophy,” they add, “are consistent with the expectations of many health care professional programs.” One student observes that,

A lot of people from our program do go into medicine, and the stats say that our program has a higher likelihood that you’ll get into medicine from our program than from any other program, but that’s not the message the program wants to send. (Luke A.)

In fact, a number of prospective students become interested in the Health Sciences program because of this:

I used to go to the Ontario universities fair with our program, so I got to see the questions people asked, and a lot of people just come and they’re like, “So I get into med school right after this, right?” (Luke A.)

Admission to the Health Sciences program is considered to be highly competitive. The administration did not share admissions data in public materials or a private communication. However, one participant remarked that, “In our year there were 3,000 applicants for I think 150 spots, and this year there were like 4,500 for 160 spots” (Luke A.). In addition to high school transcripts and a supplementary

7 http://fhs.mcmaster.ca/bhsc/about_bhsc.html
8 http://fhs.mcmaster.ca/bhsc/future_students.html, emphasis added.
application, prospective students are screened for admission through interviews, much like in a medical school application.

Through the course of recruiting participants for this study, I was introduced to several students in the Microbiology program as well. Enrolment is competitive, with ten spaces offered to students entering their second undergraduate year with a high cumulative average and a particular coursework background. According to the accounts of the three participants from this program, while applying to medical school is not typical of students in the program, the program provides an excellent preparation. The program is research-focused, with close student-faculty relationships and many opportunities to participate in clinical research.

Self-Presentation in the Field

The initial approach to participant recruitment for this study involved haphazard and abrupt solicitations at the entrance to the Health Sciences Library at McMaster. This proved to be a false start, due to the extreme skepticism and busy schedules of prospective participants. At this and later stages, prospective participants were given minimal information about my research, so as not to influence a reformulation of their perspectives. They were also promised that

9 http://registrar.mcmaster.ca/CALENDAR/current/pg1930.html
participation in this study would provide some preparation for medical school interviews, assisting them in clarifying answers to commonly-asked interview questions.

Although my initial conversational technique could perhaps have used some refinement, this is not a challenge unique to my fieldwork. Danziger (1979: 513) describes the difficulty of a field researcher gaining access to a medical setting, arguing that, “an analysis of the researcher’s attempts to overcome these difficulties can then demonstrate key features of the setting.” Danziger explains that gaining access to the field was challenging in her case since, in the eyes of those she wished to study, she lacked legitimacy and appeared to be a threatening outsider. One tool that enabled her to establish legitimacy was her connection to the field through personal networks. Similarly, I experienced that prospective participants who were introduced to me by a mutual acquaintance were infinitely more receptive to conversations in the field, and later, more formal interviews.

I was only able to gain access to willing participants when introduced through personal networks. My research was presumably given legitimacy and I was perceived as less of a threat or annoyance. In fact, in off-the-record discussions following several interviews, participants indicated that it was easier to share certain experiences and thoughts with someone who appeared to be such a complete and distant outsider to the pre-medical subculture. I chose to exploit the benefit of trust extended in this manner by recruiting participants to solicit
their peers for interviews. This also proved to be frustrating when participants made wholesale promises about access that they were later unable to keep, perhaps reflecting their own time pressures and skepticism toward non-positivist research. For example, the very first participant I was introduced to was a leader of the student body in her program; she offered broad access to lab sessions and application seminars, and then stopped returning my emails. Another participant offered to post information about the study on LearnLink, a student discussion forum, falsely promising this would garner many participants. Despite these setbacks, personal networks proved to be adequate.

No direct acquaintances were solicited to participate in the study; while I did not see my own peers as suitable participants, they were able to provide insights including the general understanding that the majority of students in the Health Sciences and Arts and Science programs apply to medical school. While there is no explicit ‘pre-medical’ program at McMaster, there are many programs that will provide the necessary prerequisites. A prestigious or non-traditional course of study is considered advantageous for a medical school application, since the applicant believes that he or she will seem better suited or more well-rounded, or will receive better guidance and support.
Analytical Setbacks and Success

Several attempts were made at examining the data with qualitative data analysis software, and through rigid thematic coding (see Berg, 2009: 368-370 for a discussion of computer-aided qualitative data analysis, and 341-345 for a broader discussion of manifest versus latent analysis). Successful analysis was later carried out with open coding in pen on printed transcripts of each interview.

Open coding involves “breaking down, examining, comparing, conceptualizing, and categorizing data” on a variety of dimensions and with respect to multiple properties (Strauss and Corbin, 1990: 61). This process is a fundamental extension of the interpretivist research agenda since researchers “must include the perspectives and voices of the people” who are being studied (Strauss and Corbin, 1994: 274). Open coding can be done at any level of focus, and in this case the focus was broad, flexible and holistic. This reflects Glaser’s (1978) notion of “open sampling,” which involves the researcher identifying portions of the transcripts that highlight and lead to a greater understanding of emergent categories and themes.

Analyses were carried out incrementally so as to provide guidance for later interviews. One specific area where this was invaluable was the discovery of a line of questioning involving participants semester-by-semester life histories within their programs. While few data are presented in this chronological format, this line of questioning helped unearth poignant events, including accounts linked
to the curriculum and the application process that could be compared across interviews.

Progress in writing about the data was significantly hindered by a functionalist bias inherent in my early analyses. Specifically, I was looking for the products of socialization, rather than looking at the process. This bias had to do with my internal conceptualization of the socialization process, but was not related to my conduct in interviews. As evidenced by the preceding discussion on data collection, this bias did not influence the actual interview discussions. In other words, I was looking to describe different stages of the pre-medical curriculum and their influence on describable values and attitudes, and instead encountered richly detailed definitions of the situation and discussions of identity and commitment, firmly situating socialization in the adaptation to and participation in a pre-professional subculture.

**SUMMARY**

By maintaining a flexible approach, I was able to respond to challenges and successes in my techniques of data collection and analysis. This supported the interactionist underpinning of my research by better enabling the participants’ perspectives and voices to determine my observations and analyses on the subculture in which they participate. In the following two chapters, I present these analyses. Chapter four focuses on participants’ engagement with the pre-
medical subculture, and the positive functions of the subculture consistent with previous descriptions of the literature on subcultures. Chapter five focuses on the negative functions of the subculture, which are relatively unique to an interactionist discussion of subcultures.
CHAPTER FOUR
ENTERING AND BENEFITING FROM THE SUBCULTURE

Participation in a subculture has been likened to a ‘career of involvement’ (Shaw, 1930; Cressey, 1932; Becker, 1963), beginning with formative initial discoveries and involvements (ibid.; Becker et al., 1961; Haas and Shaffir, 1987; Lesieur, 1977; Wolf, 1991). Several researchers describe the intensifying effects of ongoing participation in the group on the individual’s worldview and affect (Prus, 1997: 60, 77, See also, Adler and Adler, 1991; Lesieur, 1977; Prus and Irini, 1980). Subcultures can be both products and agents of socialization when new solutions to shared challenges of adjustment are motivated by the anticipation of “simultaneous and corresponding transformation in the frames of reference of [one’s] fellows” (Cohen, 1955: 59-60).

Ongoing participation in a subculture is typically thought to benefit participants by offering social support in an environment where it is otherwise limited, and supporting the mutual negotiation of challenges shared by members of the group. This chapter discusses pre-medical students’ engagement in a subculture, the benefits this provides in negotiating challenging coursework and the application process, and the task of portraying oneself with an identity that will be ideal in the eyes of legitimators. The next chapter will address how,
atypically, the pre-medical subculture also generates new collective challenges of adjustment that must be negotiated.

ENCOUNTERS

Developing Interest

For many medical school applicants, the first serious interest in pursuing medical school emerges during high school. This is a result of emerging interests and the need to commit to the appropriate undergraduate path:

Probably in grade 12, when we actually had to start thinking about it, which is weird because you're still in high school (Amanda Q.)

At a minimum, this prospective undergraduate path must cover courses that are required for applying to medical school. There is room for selection of an undergraduate course of study to be far more strategic, as demonstrated by participants' attitudes about and features of the programs selected for this study.

A wide variety of factors may influence a student's initial interest in a career in medicine. The clearest and most frequently discussed by participants in this study are family pressures, success and interest in high school science courses, and an early exposure to medical professionals and settings.

Expectations within the family may guide selection of an undergraduate program, as in Leah's case:
There’s an assumption, maybe it’s cultural or maybe just in my family, that if you have certain marks and you could go to medical school, then you should. My aunt is a doctor and is one of the people pushing for it. I really resented the fact that they were making the decision for me … [but I still] did the research in grade twelve about undergrad programs with med school in mind. (Leah U., emphasis added)

While the initial push from Leah’s family is forceful, and perhaps resented, this is not always the case when family is at the root of influencing career goals. For example, after being prompted by others, Gurmeet takes inspiration from his grandfather’s medical career:

A lot of people asked me if I’m going to do the same thing that my grandfather did. Eventually I started to analyze how people being doctors made differences, and that kind of prompted me along the direction (Gurmeet L., emphasis added)

In addition to familial pressures, success and interest in high school courses can spur initial interest in choosing to pursue medicine:

I feel like it’s always been an idea, since I was a little kid, but in grade eleven I was really into Biology and getting great marks in it, and medicine started to seem like a really exciting option. (Atara B., emphasis added)

Finally, early exposure to medical professionals and settings can instill curiosity or produce encouragement:

When I was younger, I had some health issues and saw my doctor quite a bit. There were some things I didn’t feel comfortable telling anyone else that I knew I could trust him with. To be able to help somebody in that way seemed really appealing. A lot of teachers in high school, and a family friend who works in a medical office, all told me that I could do very well in a
healthcare setting because of my personality (David B., emphasis added)

Presumably it would be difficult to invest significant energy in a professional goal where no personal motivation exists. Initial resistance to external pressures can give way to the discovery of more personal motivations. The development of interest prior to entering university colours participants’ discovery of and adaptation to a pre-medical student subculture.

Identifying the Subculture

As early as their first lectures, students begin to perceive the intimidating affects of classmates’ public and unwavering interest in medical school. At a key juncture in every course,

...the prof asks that standard, ‘who wants to go to med school?’ and EVERYONE sticks up their hand. In all my classes, by fourth year, the hands wouldn’t drop! In other courses you see the hands drop, but not in our [Health Sciences] courses. (Luke A., italicized emphasis added)

Such a large volume of competitors can be daunting, leading students to question their own motivations:

...the prof asked, ‘who wants to go to med school in here?’ And LITERALLY EVERYONE raised their hands. And I was like, ‘Uch!’ First of all, there are so many other professions out there, and I was just like, this is so ... am I being unreasonable by thinking I can get in and all these people can’t? (Atara B., italicized emphasis added)
A conflict emerges between emotional investment in the career goal and the perceived level of competition, which leads to a parallel intensification of efforts (described in the following section on ‘beneficial involvements’) and pejorative depiction of the competition (described in the subsequent section on ambivalent identification with the subculture).

**BENEFICIAL INVOLVEMENTS: LEARNING THE ROPES**

Pre-medical students are collectively faced with the onerous tasks of navigating the application process and succeeding in challenging coursework. Participants describe supportive relationships that have developed in the setting, as a result of association within the subculture, that provide assistance in these areas.

Assistance comes from a variety of sources, both diffuse and individual. Overt efforts at shaping a program’s culture to be supportive and collaborative can lead to supportive overall peer relationships. For example, in Health Sciences, “upper years give a lot of advice, and everyone’s very close... There’s a lot of consultation, a lot of collaboration” (Amanda Q.). While Atara articulates similar overt support in Arts and Science, she sees it playing a less important role. Rather, in her case the most valuable assistance has emerged spontaneously from a broader, less organized background of personal friends with a similar career ambition:
I got more guidance from my friends who, because I took a year off they’re a year ahead of me in school... [and also] I have a lot of friends who are med students. (Atara B.)

While supportive individual relationships may be unrelated to the program of study or campus where challenges are encountered, the general pattern is for individually supportive relationships to emerge out of the environment that engenders supportiveness.

Since the pre-medical subculture involves an environment in which applications and coursework are discussed very frequently, one-on-one supportive relationships may arise directly out of shared experiences learning the ropes.

I have a friend, we both applied and we had come to know each other in first year. We were buddies in physics class and we both had trouble. I think I helped him out there, and he helped me out in bio or something, and we ended up getting to know each other pretty well. (Gurmeet L.)

What some describe as bonds of convenience may be more like critical lifelines to others:

*There’s not a group. There is one friend I talk to a lot, he’s like my life coach pretty much sometimes. A good person. Very knowledgable. I’ve known him since first year.* (David B., emphasis added)

Supportive relationships, of varying degrees of closeness, intensity, and importance, help neophytes to ‘learn the ropes.’ This process begins early in the program of study as students are forced to adjust to a new learning environment with high expectations. Gradually, the expectations with respect to medical
school applications become clear, and this becomes another important context for subcultural involvement.

Involvement with other participants in the subculture helps individuals, especially neophytes, to develop a conception of success and strategies for achieving it. One area where this is particularly useful is in negotiating challenging coursework. Typically, large foundation courses in the sciences do not provide a supportive learning environment or high level of contact with instructors. Students undergoing this challenge together, additionally bound by a common career goal, can lend each other a hand by filling in gaps with complementary skills:

We were buddies in physics class and we both had trouble. I think I helped him out there, and he helped me out in bio or something... (Gurmeet L.)

In addition, the structure of the program can also engender a more supportive environment. Participants in Health Sciences and Arts and Science express the value of collaboration and mentorship borne out from their respective program’s ideology. This is most clearly articulated by Amanda, who remarks that,

It’s hard to ask [a TA in a large class] for help if you don’t really have that kind of support from them, whereas ... I was friends with both of my TAs last semester, so I could call them and be like, ‘I’m going to the lab tomorrow, do you think you can come and help me?’ And they’d be like, ‘Sure! Not a problem.’ (Amanda Q.)
Subcultural involvement can also be highly beneficial “in terms of getting an understanding of the application process” (David B.). The broader peer group can

...actually act as a good resource because if you don’t know something about the application process, someone else will, and all you have to do is ask. (Luke A.)

The broader peer group, and individual relationships, can provide valuable comparison points in the evaluation of the components of one’s own application.

In one individual relationship,

When we applied, we compared our applications to each other, [so that] I did have a reference to whom I could compare mine to. (Gurmeet L.)

Individuals can also adjust to failed strategies, or develop new ones, by drawing on this vast bank of advice and comparison points:

I don’t feel ready because I didn’t do as well as I would have liked on the MCAT, so I don’t think I can get any applications out this year. What I’m going to do [this summer (between second and third year)] is I’m probably going to look at some of the things that I need to be doing so that I can be very organized for next year. I don’t know what ... maybe it’s more guidance from my friends who have applied... (Atara B.)

In the case of strategies for developing and pursuing the application, involvement with other participants in the subculture provides valuable points of comparison and strategic advice.
Participation in the subculture thus provides benefit in navigating basic challenges, by way of a supportive peer culture and supportive individual relationships. Students with a common career goal of medical school gravitate toward each other, providing complementary practical support, and also serving as points of reference and comparison. However, there is a duality inherent in gravitating towards others in the subculture. The remainder of this section will address efforts to establish an individual identity, while a portion of the following chapter will address anxiety arising out of social comparisons to others within the subculture.

PREFERRED VS. STIGMATIZED IDENTITIES

On the surface, perhaps few activities could be seemingly less stigmatized than striving to enter an extremely honourable line of work by developing and displaying high degrees of skill, intelligence and ideological commitment. However, as pre-medical students progress through their programs of study and develop mastery in coursework and with application materials, they become highly critical of others’ motivations for pursuing medical school admission. At the same time, they must present personal accounts of their own motivations and extracurricular experiences that portray an ‘ideal’ identity thought to be more unique, altruistic, and appealing to admissions committees. This is primarily done
through the construction of personal statements and explanations of extracurricular experiences.

At this point, the concepts of ‘motives’ and ‘accounts’ developed in interactionist sociology are highly relevant. Essentially, accounts are linguistic strategies (Mills, 1940; Scott and Lyman, 1968) employed after the fact to reasonably justify one’s actions (Dewey, 1922: 210) within a specific setting or group (Albas and Albas, 2003: 350), whenever these actions are subjected to valuative inquiry (Scott and Lyman, 1968). The principal interest is in the outcome of pronounced justifications, that they defend the continuity of an ongoing sequence of action, rather than the actual sincerity with which they are pronounced (Mills, 1940: 904-905, 906-907). These explanations bridge the gap between action and expectation when activity falls outside of the domain of expectations in a particular culture (Scott and Lyman, 1968). Motive talk is especially useful in “neutralizing” (Sykes and Matza, 1957) behaviour that others have labeled deviant.

The Stigmatized Identity

Participants readily describe the ‘typical’ pre-medical student, using the epithets ‘generic,’ ‘clone,’ and ‘keener.’ Use of these terms involves criticism of an overt, obsessive, aggressive and narrow-minded motivation of the overwhelming volume of peers who wish to attend medical school:
Like people who cry about marks, and cry about like a small quiz and ‘oh, because of this quiz I won’t be able to go to medical school! And because I got this grade on the final mark, oh no I can’t go to medical school!’ (Atara B.)

Many students are quick to form a negative association with the overarching pre-medical ethos. These individuals judge persistent motivation and narrow focus to engender inappropriate behaviour and deficient interpersonal skills unbecoming a caring, empathetic clinician:

They just have this one goal and are willing to step over people in order to achieve it. (Leah U.)

…within Arts and Science there’s this kind of like a stigma against people who are ‘med school keeners,’ and the people who are all the time like, oh, ‘what do I need to do? What do I need to find out? Who do I need to talk to [in order to get in to med school]?’ (Atara B.)

Participants make a corresponding effort to distance or differentiate themselves from negatively-judged elements of the pre-medical culture. Efforts may be direct, as in Atara’s strategy:

If I ever meet someone or … am around people that are very focused and talk about marks, it’s very upsetting to me… [because] I’m here to learn something, not for some piece of paper.

Researcher: So what do you do in these upsetting situations?

I just peace out of there [leave]. It makes me really upset, so I generally avoid working with those people. I have a low threshold… [so] I just distance myself (Atara B.)

Differentiation may also be more subtle, in the form of a more favourable self-description that separates the self from the peer culture one participates in:
I would consider myself one [of them] but not the traditional. I mean, (sarcastic tone and facial expression) probably social skills [are what sets me apart](Alice G.)

There is widespread distaste for classmates whose motivations are overly forceful and narrow, arguably mirroring insufficient interpersonal skills or qualities to practice medicine in an empathetic fashion.

Other participants readily acknowledge that they are part of the ‘pre-med mentality’ so openly and critically described. Participants tend to neutralize (Sykes and Matza, 1957) any negative judgment that may come from identifying with this mentality. This is expressed in a number of ways. Most commonly, participants describe how this negatively-judged identity is characteristic of their entire peer group, perhaps encompassing necessary concerns or desirable traits:

...It’s interesting – we look down upon them on one hand, and on the other hand we’re all still trying to do the same thing! It’s like this running joke, but like I think people don’t want to be that keener that like does everything that they need to do, but still we’re doing some of the things that we’re criticizing in other people. (Atara B., original emphasis).

I think everyone is driven and ambitious. I can’t think of one person who doesn’t have goals and ambitions and you know works really hard. Everyone in some sense is a keener. (Amanda Q., emphasis added)

Upon reflection, some readily admit that, despite their own criticism of the ‘keener’ identity, they themselves embody it:

I guess when I talk about it in this way, I have to accept that I’m a total med keener. I think like mid-way through this year I realized I was freaking out about my
marks because I needed them to look good for my transcripts, and also I was looking though application deadlines, and I realized, ‘oh, now it’s happened’ (Alice G.)

This admission or identification may, however, be restricted to one’s past self:

In first year I definitely had the pre-med mentality, which was, get the good grades, get the volunteer experiences, and apply to medicine. You get a 10 and your life’s over... I’d say [as my perspective widened, that] I moved on a bit... (Chris F.)

Participant statements demonstrate rough consensus on defining a pre-medical mentality. Definitions point to a narrow and intense focus, a realistic strategy for meeting high expectations in coursework and on applications, structural expectations in the curriculum and on the medical school application, and are a pervasive feature in the pre-medical student population. Negative judgment of this mentality in others can serve as a means of externalizing and minimizing one’s own ambitious and narrowly-focused behaviours.

**Demonstrating Preferred Identity**

Pre-medical students must construct narratives of their motivations to study medicine, presented in personal autobiographical statements and in tailored curriculum vitae, for the purposes of a medical school application. In these materials, applicants are able to account for their interest in and commitment to the profession. A significant amount of thought is put into how to construct narratives that are appropriate for and desirable to admissions committees. There
are also significant efforts to avoid challenges to pejorative behaviour associated with the stigmatized pre-medical identity.

Candidate Biographies

On the medical school application, prospective students are given the opportunity to depict their interest in the medical profession by way of a personal statement or biography. In this context, accounts as described above are employed to provide what the student believes to be the most favourable depiction possible:

We talk about which school is looking for a certain kind of candidate, whereas another is looking for another kind of candidate. You write about that in your application, or try to use your experiences to illustrate those two points in those applications. (Luke A.)

…it helps to look ahead of time and really think about why. (Amanda Q., original emphasis)

I need to be able to come up with a really good explanation for why I want to be a doctor, for the interviews… (Leah U.)

Importantly, extracurricular experiences can be used as ‘evidence’ to substantiate claims about an individual’s path to the profession, a point taken up in the next subsection. Participants’ accounts for professional motivations focus on an altruism related to medicine as a vehicle for social change, as well as fulfilling physician-patient relationships; depictions of maturation and exposure to the profession; and the lure of medical prestige.
All participants were asked a form of the question, “What would you say in an interview when asked the inevitable question, *why do you want to be a doctor?*” Frequently, applicants wishing to portray altruism described medicine as a vehicle for meaningful contribution to society. Amanda offered this description, implying that being a medical professional would afford her a cloak of legitimacy:

> *Once I’m in medical school, and once I become a physician, I’ll have something important to say and something important to contribute.* (Amanda Q., emphasis added)

Others portrayed more articulately that medicine can be a “sort of vehicle for change” (Padma F.) rather than merely a platform. The largest area where this type of social change was discussed was with respect to international development. One student

> …started thinking about how you can make a difference in a professional capacity, and medicine’s actually a very good way to do that. The goal is eventually to work in development. (Leah U.)

However, another may have been relying on a cloak of legitimacy when using international development work as a justification for a career in medicine:

> I have a strong interest in social justice and global health, and I’ve been involved in a lot of work with HIV/AIDS globally and locally. It came to a point where I want to be able to effect more change in my career, but felt I would be limited without an MD. *Medicine seems like an all-encompassing opportunity to allow me to pursue those other things that I really want to be doing.* (Atara B., emphasis added)
Accounts of professional motivation also frequently focused on descriptions of the ideal physician that involved close and meaningful physician-patient relationships:

[It's] the most amazing thing. [You have to] talk to them, get their life experiences, and form a relationship with them (David B.)

Where else do you get to talk to people, get their life experiences, and form a relationship with them, while being able to care for their health and apply all that science? (Chris F.)

I can’t think of any other career that would give me the chance to see people grow and build those kind of relationships with people (David B.)

Discussions of exposure to medical professionals, and a maturation of perspective, also characterize the majority of discussions of applicants’ motives. Prior experience with physicians, or a description thereof, leads to the development of a professional interest that appears grounded in reality, rather than being falsely idealistic or centered on the profession’s prestige. One participant recounts,

I had a lot of doctors around as I was growing up ... I started to analyze how people being doctors made differences, and that’s something that kind of prompted me along in that direction... I felt noble about the profession, and had the chance to see several people living up to that potential. (Gurmeet L., emphasis added)
This exposure may also come from extracurricular experience in a hospital or clinic, leading to the orientation of the professional goal around specific professional tasks and roles:

I worked at a hospital after first year, and I got to do a handwashing audit. I walked around the hospital looking at all of the different staff working and I was watching the doctors. I was just really interested in what they were doing, I saw them talking to patients and discussing, talking through problems with each other, interacting with all the different staff and providing leadership in the department, and so I was really excited by the setting... My parents actually remember that I came home one day and was like, ‘oh, it was so cool, I got to watch them the whole day!’ (Alice G.)

Exposure to real healthcare work, through extracurricular experiences and studies, enables some participants to portray how their perspective has matured:

Three years ago I would have said, ‘because I want to be able to help people, and I want to be able to do something that I think I’ll enjoy.’ Now I look at all of my experiences and I can say that, yes, I do want to help people, and yes, I do want to do something that I’ll enjoy. But now I know that I will enjoy it, and I also know that sometimes you can’t help everyone. Sometimes the best you can hope for is a satisfactory ending, where you used your skill and learned something about humanity. Ultimately then, medicine is a profession where you can learn about who people are, and learn about yourself in the process (Chris F.)

A depiction of the exposure to the realities of healthcare work, including the likelihood of unsuccessful treatment outcomes and the ensuing emotion work done by the professional, creates the appearance of authenticity of motive; it
portrays a professional motivation firmly grounded in the unglamourous reality of medical work.

The lure of the medical profession’s prestige affects the motivations and attitudes of some pre-medical students;

A lot of people want the status. Someone in my lab was talking to another person, both of them had been accepted, and said, ‘isn’t it great? We’re like the elites of society.’ Already you’re turning into a poor physician right off the bat (David B.).

Students acknowledge they are likely to draw criticism for expressing this desire for prestige so blatantly. In some cases, the desire to counteract an appearance of medical paternalism becomes a component of an applicant’s vision of a future in the profession. For example, Luke explains that,

…it’s sort of the way our society is set up, that we value the input of the physician more than we do allied health professionals…That’s something I’d like to see changed… Right now as an MD you have a lot more power to influence change and to influence the patient… but a physio could provide more seamless care if they were able to write prescriptions for some meds, for example (Luke A.)

Others are less critical of an attitude of superiority, and in fact reproduce this attitude when defending their professional goal. For example, Padma remarks:

If I were a nurse, I would think, well, that I could have done more. I kind of see it like that, as a lower rung… (Padma F., emphasis added)
Despite a seemingly well-grounded interest in patient-oriented health care work, some are quick to denounce pursuing alternate health care professions. These are held in lower regard due to limitations to their authority, with authority being conflated with professional potential.

In later years, professional interests are presumably better thought-out, and there is a clearer understanding of appropriate and inappropriate ways to discuss these; the insistence on medicine shifts to become more task-oriented:

There’s only so much social medicine you can do without all the training and the clinical ability. A lot of people in the field have told me it’s very limiting if you don’t have an MD. That’s reflected in international health, but also locally, with drug addiction for example. An MD can prescribe medication or refer someone to counseling (Atara B.).

In another case, the ability to call upon medical training in an emergency is used as a means of painting oneself as altruistically-motivated:

It’s a skill set that I’ve always wanted to know, and I can get the same skill set being a nurse or a paramedic, but I like being in charge of my patients’ care. I like being out on the street or on an airplane, and if someone’s injured or sick, being able to say, ‘I’m a doctor!’… (Chris F.)

However, when this superficial expression of motivation is challenged, a more traditional, paternalistic attitude emerges:

*Researcher: Why wouldn’t a paramedic be helpful on an airplane? Are you also interested in the prestige and status of the medical profession?*

Well, there is that paternalism of medicine, which isn’t always a negative thing. Patients and students look up
to you because you know something that they don’t. There needs to be that kind of asymmetry in the relationship… (Chris F.)

Despite openly criticizing professional motivations based on the prestige of medicine, its lure appears to influence many students’ motivations for entering the profession.

**Curriculum Vita of Extracurriculars**

The curriculum vita provides the applicant an opportunity to document an identity in addition to the one depicted in the personal statement. This opportunity is not taken lightly, as the CV is seen as a crucial tool for the expression of one’s prospective professional identity; Chris F. remarks that, “the experiences that I have define me,” while Alice G. notes: “extracurricular experiences helped me with defining an identity…” (emphasis added). Participants pejoratively discuss a certain way of doing extracurricular activities, seeking to differentiate themselves from this ‘deviant’ identity. The single most highly criticized activity is volunteering in a hospital:

How does volunteering in a hospital make me stand out? I have no idea, because everybody does it, or everybody who applies usually does it. (Martin P.)

I think there’s a certain kind of push from students who are applying to med schools to do certain things. But why would I volunteer at a hospital if I’m going to just end up delivering food? I could do the same activity at a grocery store and get more experience interacting with people. When I was asked about not volunteering at a hospital in one of my interviews, I explained to
them what I just said to you, and they were like, “that’s exactly right”... (Luke A.)

Criticism is directed toward a broader way of thinking that extends beyond hospital volunteering to include inauthentic motivations behind any extracurricular work:

The typical student defines themselves by what they do instead of by what they think. They’ll see an opportunity to volunteer or go to a conference, and they’ll say right away ‘this will look great on my CV.’ (Chris F.)

In addition to criticizing this undesirable identity, participants distance themselves from it by demonstrating a continuity of intent in their extracurricular experiences, and defending non-medically-relevant activities.

Accounts of extracurricular involvements will, in the estimation of some participants, ideally reinforce prior accounts of interest in the medical profession, demonstrating a continuity of intent.

One of the things they ask you [on applications and in an interview] is what makes a good physician. Obviously you want to show that you’d be an ideal physician and show how your experiences make you that (Martin P.)

Each extracurricular experience may serve as evidence or the origin of attraction to, or suitability for, the medical profession. For example,

I volunteered in a family clinic... going back to one of my main reasons for wanting to be a physician, the type of engagement you have with people – I got a taste of that engagement (David B.)
On my application I describe nonjudgmental as one of the most important attributes in a physician. One of the big things where I learned this was through my residence life experience. I had to deal with a bunch of different students, different behaviours, and at the same time, treating people equally but still addressing problem behaviours (Martin P.)

Finally, many participants have adopted the strategy of defining necessary or medically-relevant skills in any given set of activities. This is done in order to counter challenges about doing certain activities at the expense of medically-related activities such as volunteering in a hospital. The two most salient examples involve the justification of central involvement in athletic activities, at the expense of medical volunteering.

... swimming is great because you can work with a team and you can encourage your teammates, but it’s also up to you to work as hard as you possibly can. (Alice G., emphasis added)

I’ve been careful to avoid doing activities just to help me get into med school... I chose to do athletics, and if I’ve learned anything, it was not to take the coach’s yelling and comments personally, to use it to my advantage, and then to let it go... I think this is a great quality in a physician (David B., emphasis added)

In these cases, participants attempt to extrapolate generalized skills from activities not obviously medically-related as a means of justifying their ongoing sequences while neutralizing potential criticism.
SUMMARY

Pre-medical students come together in the face of mutual challenges in a manner quite characteristic of typical subcultures. Collective solutions are engaged to deal with mutual challenges. A definite subcultural identity is encountered, and participants grapple with how to situate themselves in it. Encounters with, and efforts to differentiate from an undesirable identity foretell of a darker side to the subculture, in which comparisons within a relatively homogenous group fuel anxiety and cyclical efforts to differentiate and outperform. This will be further discussed in the next chapter.
CHAPTER FIVE

CHALLENGES PRESENTED BY THE SUBCULTURE

Typically, subcultural involvement is viewed as positive in that social support may be derived where it would otherwise have been scarce, and mutual solutions can be developed for collective problems of adjustment. What is unique in the case of pre-medical subculture, however, is its additional, negative impact on participants. Participation highly exposes individuals to others’ academic performance, extracurricular activities and achievements, and progress with medical school applications. While this provides useful points of comparison, it also escalates internalized standards for defining success, elevating fears of failure and rejection.

This chapter is divided into three principal sections. The first describes in detail what some participants call the ‘comparison complex’. The following section discusses how students deal with ‘bad news,’ such as unexpectedly low marks and setbacks on applications. The third section discusses the pressure stemming from the possibility of losing the role of ‘future medical student,’ which is central to pre-medical students’ identity; anticipating rejection in this context can either amplify or strategically reduce this pressure.
ANXIETY AND THE SOCIAL COMPARISON ‘COMPLEX’

Learning about other pre-medical students’ academic standing, application successes, and extracurricular involvements can provide a valuable point of reference for strategizing or navigating one’s own work. Nevertheless, comparisons may become excessive: “We pretty much compare grades all the time,” remarks Chris F., “comparing interview notices and MCAT scores also.” This leads one participant to observe that, “it’s beyond fascinating the complex that develops when you see people around you who do so well and study so hard” (Amanda Q., emphasis added)

The term ‘complex’ is fitting, describing a sense of inadequacy that arises out of perceived competition from others. Alice observes that, “There’s definitely a lot of anxiety. Competitiveness, but not useful competitiveness. Just comparing” (Alice G.). Students come to be defined by rank: “People don’t fully disclose it, but you can get a rough idea of who’s on a higher rung and a lower rung, et cetera” (Martin P.). In Health Sciences, Anatomy “starts defining people. There’s the people who are really smart, and automatically they’re viewed as smart, and everyone wants to study with them, get tips from them” (Amanda Q.).

Whereas applicants compete against literally thousands of others whom they have not met when submitting an actual application, competition for medical school seats is primarily lived out on campus, within programs of study and
classrooms, among groups of friends – within the subculture. Comparisons lead to a sense of pressure wherein the observable successes of peers are regarded as threatening:

_There’s always this pressure to BEAT somebody else._
You always have to BEAT them, because if you don’t BEAT them, then you think you’re not going to get into _med school_ [italics emphasis added], ’cause you’re not ‘smart’ (David B., italicized emphasis added)

This threat leads individual students to escalate the standards to which they hold themselves: “When I see everyone around me being so successful… it makes me harder on myself than anyone else is” (Padma F).

Peers’ successes can result in an escalation of individuals’ internalized definitions of success, in academics, prestige of extracurricular work, and progress on medical school applications:

I think peers [can] act as a sort of fear factor … you do the best you can, but there’s _always going to be someone that’s better than you_. … You hear about people who will be like, ‘oh, I have interviews here, here, here, here, and here.’ While you got one interview. Then you feel like you’re doing something wrong, and you get all nervous… _People try, I guess, to intimidate you_. I don’t think it’s intentional, but maybe I’m just being optimistic. (Luke A., emphasis added)

Going into the summer after first year, I definitely had that kind of complex, being like, oh my gosh, everyone has all these _incredible lab positions_, or works with these great doctors, or is doing organic chemistry a year early… Hearing THEM constantly say, ’I’m not good enough, I’m not going to get in,’ it’s like, _well, what the hell does that make me?_ (Amanda Q., emphasis in italics added)
The increased pressure perceived to result from peers’ success is not necessarily viewed as a source of tension, however:

Your friends are doing well and so you also want to do well. I’m surrounded by people that are amazing. *People smarter than me. *And it keeps you motivated to always be better. (Chris F., emphasis added)

The anxiety resulting from social comparisons is perceived in some cases to put relationships in jeopardy. This risk can be mitigated, and one’s ego shielded, by favouring friendships with students who are performing poorly:

A lot of people are happy to be friends with people who are doing really badly, simply because you know there’s not going to be like animosity later on, like they’re not going to take your place or anything like that. … I know a lot of med school applicants and I don’t feel there’s any sort of competition. It might be because … our GPAs and credentials vary quite a bit, so you could say we’re not exactly rivals, if you catch my drift. (Martin P., emphasis added)

More frequently, animosity is avoided by isolating friendships from discussions of the medical school application:

_We don’t talk about it_, like we sort of keep to ourselves on these things, but be _friends at the same time_. Nobody really outwardly says, ‘oh let’s talk about med school things.’ I didn’t even know half of these people were writing the MCAT until a few days ago. (Padma F., emphasis added)

The end goal was to get into medicine but _they weren’t really applying this year_. *Maybe that’s why we’re still friends…* (Martin P., emphasis added)
The perceived threat from peers’ successes leads individuals to increase what they define as standards of success, making these standards harder to achieve. This in turn escalates the fear of failure and rejection.

In careers of subcultural involvement, occasionally certain defining agents will threaten the ongoing progression of the individual’s participation in the subculture. The unique case in the pre-medical subculture is that fellow students’ performance may become the defining agent that limits an individual students’ self-conception. Participants’ ‘definition of the situation’ with respect to standards of performance is often developed by observing the activities and accolades of students who are more successful. A proportion of the perceived competition is based on this definition of the situation, meaning that perceived standards continually escalate through participants’ ongoing interactions. This escalation of commitment is real in that participants in the pre-medical subculture perceive it as such, and respond to it as such.

MANAGING ‘BAD NEWS’

Specific roles and activities can be central to an individual’s identity (Goffman, 1959; Hughes, 1945), including ‘future’ roles one has staked out (Hughes, 1958). This is particularly the case with respect to the formative steps toward a coveted career. This ‘future medical student’ component of pre-medical students’ identities is threatened upon receipt of ‘bad news,’ or failure to
adequately complete a task perceived as necessary for the continuity of the pre-
medical role. These challenges range from an unexpectedly low mark on a quiz
or assignment, to receiving a failing grade, to being rejected by a medical school.
Even the first, least damaging case is treated as a threat.

**Defining and Experiencing Bad News**

Given the competitiveness of medical school applications, minor and
moderate 'bad news' can exact an emotional toll on students who have committed
a component of their identities to entering the medical profession. This identity
becomes tied to high achievement at every juncture, such that when one fails to
meet one’s own expectations, the entire enterprise is called into question, even if
briefly, to varying degrees of intensity:

I failed one physics quiz. It did not feel good to fail. *There was a moment of despair.* (Padma F., emphasis added)

...there’s a lot of pressure after certain courses I take because my average is really good now, really high, and all it takes is one or two courses to completely bring me down. It’s in those courses *where I feel a complete pressure* on the exam and things like that... I got a 55 on one of my lab reports ... At the time, instantaneously, I thought it was going to crash my whole average. (David B., emphasis added)

Last year when I didn’t get in, I was pretty upset. That was a pretty bad three months for me. I just kept asking myself, “what did I do wrong?” and you saw other people who got in and it was like, “how did they get in and I didn’t? I must have done something
wrong, I’m a terrible person, a failure, never going to get in. It’s a very emotional ride. (Luke A., emphasis added)

Success at minor and major junctures is considered critical to the continuation of an individual identity that is bound up in a high-stakes professional goal, while unexpectedly low marks or poor performance on a component of the application are seen as threats to the continuation of this identity.

Pre-emptive Deferral

One way of neutralizing the effects of ‘bad news’ is to constantly expect it, thereby preemptively experiencing its impact. Several participants describe maintaining low expectations of themselves, including Gurmeet and David:

I was quite surprised to get in [to medical school this year]. I wasn’t really expecting anything! ... Starting off, I think I’m just a dumb kid, and I think that actually helps a lot. (Gurmeet L., emphasis added)

Somehow it’s always turned out that I did better than I thought I had. (David B.)

By constantly expecting the setback of poor ratings of performance, merely acceptable performance becomes a success while bad news validates existing doubts. However, observing others’ doubts can intensify one’s own:

There are all these people around me who might have better medical school applications on paper than I do, and hearing them constantly say ‘I’m not good enough, I’m not going to get in’ is really frustrating. What the hell does that make me? (Amanda Q.)
This notion is addressed more fully in the preceding subsection on the social comparison 'complex.' Use of this device across the board supports the perspective that competition is accelerated or reinforced by the applicant pool itself, in addition to admissions policy. Perceived standards inflate when the entire pool of applicants believes they are unworthy.

**Deferral after the fact**

Another tactic for neutralizing bad news in coursework and applications is to externalize sources of blame for unexpected poor outcomes. In a discussion of how delinquents neutralize labels of deviancy, Sykes and Matza (1957: 667) use the term ‘denial of responsibility’ to refer to an individual’s self-definition that eliminates one’s personal responsibility for deviant actions. The individual engaging in this tactic relies on a “billiard ball conception of himself” as being acted upon, rather than acting (ibid.). Further, Sykes and Matza argue that these “interpretations of responsibility are cultural constructs and not merely idiosyncratic beliefs” (ibid.). Participants do this by maintaining artificially low expectations of their own potential for success, constructing after-the-fact rationalizations, or externalizing sources of blame.

While receiving a poor mark is not deviant, the resulting process is comparable in that the individual wishes to isolate him or herself from the unwanted identity that is, nonetheless, attached to the outcome of his or her
actions. In an ethnography of politicians who have lost elections, Shaffir and Kleinknecht (2003) discuss how their participants engage in a ‘rhetoric of deflection’ shifting responsibility for electoral defeat squarely away from themselves. In both cases, intervening circumstances the individual relies upon the circumstances in order to depict him or herself as being in no way directly responsible for his or her failings.

Participants neutralize the impact of bad news after the fact by using technical rationalizations, or by externalizing sources of blame for their poor performance ratings. In the first case, these rationalizations revolve around a number of means by which a low mark can be excluded from the transcript, or its impact blunted. Before developing a vocabulary of technical rationalizations,

Getting an 11 versus a 12 can feel like the world, because you don’t really understand that you … [can] kind of dilute it (Chris F.).

Participants come to realize that certain low marks can be shunted from official transcripts as a result of allowances in how courses are structured:

What are you going to do? I looked actually at the grade conversion and realized that I was still going to be okay. (Alice G.)

There was a moment of despair before I realized that the mark wasn’t going to have to count toward my course mark. (Padma F.)

If these unexpectedly low marks will not affect official transcripts, then they stand not to affect medical school applications either. Where this set of rationalizations is used, anxiety related to role loss is therefore successfully avoided.
Participants describe and employ a number of external factors as sources of blame for any poor performance that is perceived as damaging to the likelihood of successful medical school admission. Unfamiliar material in a course required for breadth fuels anxiety when Alice receives an evaluation that she is not accustomed to:

I was anxious that all my marks be good. I’ve always had good marks, but I think last year especially, in Art Sci you have to take a certain number of electives, so I remember one of them was a religious studies course or something. In a lot of arts courses it’s harder to get 12s than in the sciences, and they give less of them. So I got my first 10 and I was like, ‘Oh my gosh, this looks terrible!’ (Alice G.)

Additionally, course content is blamed for a student’s lower than expected mark when the instructor is accused of covering material with too broad a scope:

I worked really hard and didn’t feel like the course was fair because he did cover a lot of material and his exam was too long for the three hour time limit. A lot of us thought it was unfair. (Padma F.)

A similar externalization can be made in the assignment of responsibility for unsuccessful medical school interviews. For example, Luke blames one medical school rejection letter on an interviewer who asked questions that “you wouldn’t normally expect in a med school interview…

On one of my interviews they asked very abrupt intrusive questions. That was one interviewer. We did not get along. I sort of lost faith in the system. (Luke A.)
Furthermore, blame can be assigned more impersonally and vaguely. For example, David (as many other students have surely done), shifts responsibility for his low mark onto the standards of evaluation, which he deems unfair:

The entire class got in the 60s and I got a 66 [on a lab book mark]. I thought that mark was undeserved... we should at least know what you want, and if you tell us to do our own thing then you should be a little more lenient (David B.)

THE PRESSURE OF A POSSIBLE ROLE LOSS

An individual’s social identity is primarily determined by the totality of social roles the individual plays (Goffman, 1959). A certain role, or ‘master status,’ may take precedence in given situations or settings (Hughes, 1945). When such an important role comes to an end, the individual must renegotiate his or her past, present, and future identities (Cumming and Henry, 1961; Ebaugh, 1988). Ethnographers trace the challenges of disengagement from a variety of social roles, arguing that these challenges are exacerbated by prolonged involvement (see Prus, 1997: 61). Further, an abrupt and unexpected termination of a role can be highly traumatic to the individual; unseated politicians and forcibly-retired athletes have described this to ethnographers as a form of social death (Drahota and Eitzen, 1998; Rosenberg, 1984; Shaffir and Kleinknecht, 2003). When an individual pursues a goal necessitating long-term preparation and an escalating series of commitments, he or she stakes an “identity claim”
(Hughes, 1958) on occupying this role or status in the future, such as ‘future medical student’ or ‘future doctor.’

Anticipating Role Loss

Anticipating and neutralizing the impact of role exit by way of failure in the application process is a common theme across all of the interviews conducted for this study. Since significant time and energy are invested in academics and extracurricular activities with the intent of applying to medical school. Thus, the committed applicant’s identity is bound up in the expectation of attending medical school and the future identity of becoming physician. For example, Atara remarks,

I feel like I should be there already, like it’s a no brainer, not that I’m entitled to be there but I genuinely feel that I deserve to be there and that I would be a good learner and that I would contribute well to specifically Mac med school. I just feel like it’s there… (Atara B.)

Realistically, the overwhelming majority of applicants to any MD program are rejected; a significant portion of those who desire to become a physician will therefore end up becoming something else. Every participant discusses the possibility of ‘not getting in anywhere.’ The coveted role is threatened by circumstances involving ‘bad news,’ such as an unexpectedly low mark or an unsuccessful application to medical school. While the certainty of this role loss
only becomes fully clear after completing the undergraduate degree, these circumstances threaten an applicant’s perceived eligibility.

Participants’ discussions of this perceived risk of being ejected from the medical career path reflect a range of sentiments. At one end of the spectrum, the risk can be deferred, while at the other, it poses an immediate threat to an important aspect of an individual’s identity. The possibility of potentially infinite re-applications helps one participant to avoid dealing with the impact of being denied entry into the medical profession:

[Medicine] is something I want to do, and I’m going to pursue it until I get there... [If I don’t get in this year,] I’m going to reapply, I know that for sure, keep applying. During that time I can also travel and gain new experiences.

Interviewer: I hate to ask in this way, but how many years in a row will you reapply before it might be time to move on?

I hope that doesn’t happen. I’m not sure what will happen if I don’t get in again, ... but that’s a problem for then. (Chris F.)

In other cases, a secure but pragmatic approach is taken, retaining confidence and security by isolating oneself from ever making a complete identity claim on successful admission to medical school:

Being in global health has made me realize that if it doesn’t happen right after undergrad, that’s not a bad thing. I definitely know this is something that I’ll do eventually, I KNOW this is what I’m supposed to do. (Amanda Q., original emphasis)
I’m going to do whatever I want, and if it takes me to where med school is, then fine. And if it doesn’t, then so be it. (David B.)

I wouldn’t say that I was fully committed at any point ... [and] I think a person would be lying if he says he is fully committed in applying to medical school ... what if I don’t get in? So no, I was never fully committed, but say 85 percent. (Gurmeet L.)

The most secure perspective acknowledges an element of chance while retaining legitimate contingency plans:

This year I’m very nonchalant about it. If the lottery works in my favour, then I’ll get in, and if not then I’ll just go do these other things which are still awesome anyway. (Luke A.)

In other cases, participants are far less secure when the perceived risk of not getting in directly affects confidence and self-worth:

Maybe I’m not [going to get in] ... maybe it’s just not something I shouldn’t be doing, maybe they just won’t accept me into any program where I apply. (Padma F.)

Mid-way through second year I realized that I was freaking out about my marks because I needed to have them look good for my transcripts. I realized that medicine is what I really wanted to do, and I started to feel some anxiety because I realized I didn’t really know what I wanted to do besides that. All of a sudden I was sure and I didn’t really know what else to fall back on (Alice G., emphasis added)

Applicants who acknowledge the uncertainty of the application process deal with the possibility of role exit from different perspectives, and to different extents. While the potential trauma of role loss is not necessarily articulated clearly, participants demonstrate motivation and strategies for inoculating against it.
Recasting Career Goals

Pre-medical students endeavour to develop compelling applicant narratives incorporating sentiments of idealistic commitment to the medical profession, as demonstrated in the previous chapter. While expressing this deep level of commitment, participants encounter the firm possibility of a traumatic role loss resulting from unsuccessful applications to medical school. Associated with this is a need to maintain a future identity that is not associated with medical school, which is done by expressing a devaluation of the medical career path, and developing contingency plans.

Despite sentiments of idealistic commitment to the medical profession, most participants use “hedging statements” (Hughes, 1958: 43; Glaser and Strauss, 1971) in order to deal with the pressure of the possibility of role loss. None of the participants discussed getting into medical school as if it was a ‘sure thing.’ As pre-medical students progress through the undergraduate curriculum, they become increasingly aware of the high expectations and low odds of medical school admission. In this context, uncertainty grows as to the appropriateness of career choice, further stoked by the perception of inadequate performance.

This broad concern becomes more trenchant when students fall behind their own and others’ standards of performance. A realistic sense of uncertainty
develops, bearing out a refusal to fully commit to medicine as a professional goal.

For example, Luke says of his professional direction:

> It's still very much in flux. Ultimately I want to be in the healthcare stream ... there are so many different ways that I can go about doing ultimately what I want to do, and [becoming a physician] is not necessary. (Luke A.)

This noncommittal attitude may help mitigate the anticipated trauma of involuntary role loss associated with wholly unsuccessful medical school applications. A sense of doubt can be applied to one's own career path, as above, or to the entire medical school enterprise. For example, Leah muses that,

> ... a lot of people stay on track, but a lot also find their passion along the way... maybe med school is a plan B, and plan A is to find your passion. If A never materializes, they stay on the path to medicine and then if they find their passion they go there. I doubt that anyone can have a good idea of what medicine is and really be sure that it's their passion.

*Interviewer: When did you take on this value that you should learn your passion first and foremost?*

> Probably sometime during university when I just started doubting going to med school (Leah U.).

Rather than expressing her own non-commitment to medicine, Leah portrays an inherent emptiness in anyone's commitment to medicine. In both cases, ambiguity and evasiveness concerning commitment to professional goals emerge from generalized doubts about the likelihood of admission.

> This sense of doubt may also emerge as a result of specific incidents of 'bad news,' poorer than expected performance on coursework or key components
of the application such as interviews and MCAT scores. These situations provide poignant reinforcement for the existing pervasive sense of doubt. In one case, a participant has received an unexpectedly low MCAT score. In her estimation, based on the general consensus of her peers as well as online applicant discussion forums, the score is too low to be reasonably competitive, and therefore not worth using for an application. The resulting sense of disappointment has initiated doubt about her career goal:

Whenever you are disappointed with something that you do, you always question whether that’s what you want to be doing actually... I can’t help but wonder about my other options. Is this a good option for me? I’m not sure. (Atara B.)

Forming contingency plans can help partially mitigate the anticipated trauma of medical school rejection. These contingency plans may arise out of doubts expressed above, or legitimate parallel interest. Participants frequently refer to contingency plans as “backups,” which can either be intermediate reinforcement for subsequent applications or fully alternate career paths. The sincerity of contingency plans is, however, often questionable:

I hate when people call them backups, because that’s not what they are for me. I know a lot of people who will say, ‘oh my backup is going into physio.’ [They’re] taking a spot away from someone who actually wants to do that... I like to think of it as something that will enhance my learning and understanding of what it is that I want to do (Luke A.)
A number of participants express interest in completing an intermediate master’s degree before attending medical school. While this contingency plan can serve as a step toward an alternate career, it is more commonly referred to as a worthy activity when one has completed a bachelor’s degree but wishes to continue applying to medical school in future years. When a graduate degree is not fully thought out, it is seen largely as an acceptable time-filling activity:

If I don’t get in this year, I might do a one-year master’s and then reapply. (David B.)

In other cases interests are more specific yet are still not fully thought-out:

I probably won’t pursue past a master’s degree. [If I don’t get in after that], I might go into industry or do something along the lines of getting an MSc and an MBA (David B.)

Well, I’ve sort of developed this interest in psychology already, even though I’ve only been back for a couple of weeks. I’m taking intro to psych now. And I’m also taking social psych and human sexuality. So I’ve developed an interest in that already, and I thought if this doesn’t work out, I could do my PhD in psychology (Padma F.)

Finally, such a degree is seen in some cases as a legitimate pursuit of interests tangential to medicine, which would provide further qualification for applications to medical school:

I’m also thinking about doing a master’s because if I want to eventually work in global health, I could do a global health master’s and then go into med school from there. (Atara B.)
I also applied to a grad program in teaching clinical anatomy, and I would use that as a springboard to apply again [to medical school] (Luke A.)

Unexpectedly, no participants clearly articulate a fully separate career interest. This seems to support the notion that contingency plans are more a device for allaying the fear of failure than they are legitimate and well-formed alternate career routes.

SUMMARY

Pre-medical students engage in frequent social comparison, in what likely begins as an effort to discover strategies, activities, and reasonable benchmarks for adequate performance and the development of a desirable applicant identity. An intensification of comparisons leads to high sensitivity to poor performance in coursework and on applications, leading students to engage in a variety of strategies to defer the pressure associated with personal responsibility for their failings. Fear of ultimate failure and rejection in the enterprise of preparing for medical school operates in the background, but is called forth when students believe they compare unfavourably to their peers. Anticipating rejection in this context intensifies pressure, which some students manage to strategically avoid through recasting or devaluing their career goals, or maintaining a concrete and reliable career contingency plan. This entire level of complexity is introduced and intensified through contact with other members of the subculture.
CHAPTER SEVEN
CONCLUSION

SUMMARY

In light of the analyses presented in the last two sections, based on the foundation developed in prior sections, the remainder of this work is dedicated to a brief summary of the overall work, its theoretical and substantive contributions, and ideal future directions for research. This section describes the juncture in the literature from which this overall work developed, and the suitability of the research methodology selected. Further, the principal analyses presented previously are briefly summarized and discussed.

Notions of comparisons between self and others, and the influence of proximal social groups, comprise the foundation of the socialization scholarship as described in the theory section of this work. Interactionist conceptions of socialization focus specifically on situational learning wherein entrants negotiate a new occupational culture and undergo the transition from ‘outsider’ to ‘insider’ of that culture. This professional socialization scholarship largely does not address experiences prior to recruitment into the occupational setting, adding value to the contributions of this work.
I was well-positioned to represent the world of the pre-medical student as pre-medical students see it, given my research methodology and approach. This approach enabled the flexible integration of new insights over the course of the investigation, including in subsequent interviews as well as in the analysis and presentation of the data. Since the pre-medical process occurs over the course of four years, the most practical way to gather the richest data is through in-depth interviews where participants are prompted and encouraged to share their experiences through role-playing and anecdotes.

The pre-medical subculture emerges in response to the collective challenge these students face with difficult coursework and the complex medical school application process. Driven by initial interests or encouragement, students may strategize before entering university, and it is at this point that they are then likely to encounter pre-existing student culture. Participants quickly become involved in this culture, which serves as a source for guidance, collaboration, and a reference for setting benchmarks for success. This key involvement intensifies participation, while at the same time seeding an ambivalent identification. Participants delineate preferred and stigmatized applicant identities. The former is applied to altruistic and unique motivations underpinned by high academic and extracurricular success; the latter is applied to a false altruism, generic motivations, and an obsessive level of effort. Ironically, then, in efforts to meet one subcultural standard, participants risk crossing a poorly-defined line to the
other negative standard. Comparisons within a relatively homogenous group fuel self-similarity and a certain degree of anxiety.

Whereas subcultures are expected to serve the positive role of providing solutions to collective problems of adjustment, there is little if any discussion in interactionist sociology of the negative affects of subculture. In this research, the unanticipated, negative role of the pre-medical subculture makes it a unique case. In what begin as efforts to develop points of comparison, participants describe the development of pervasive social comparisons, claiming these are responsible for the setting of unattainable benchmarks. Peers’ performance comes to be categorized as advantageous, neutral, or threatening. In the latter case, participants continually escalate the standards to which they hold themselves. Since these standards are falsely equated with those of admissions committees, this escalation stokes the pressure associated with a fear of being unable to attain said standards. Participants thus develop and engage in a variety of strategies to neutralize or defer the impact of indicators of unsuitability for medical school.

THEORETICAL AND SUBSTANTIVE CONTRIBUTIONS

Beyond the findings already discussed in the last section of this concluding chapter, several theoretical and substantive conclusions can be drawn about the pre-medical subculture. Six principal reflections with respect to this research are presented below. These address the existence of a subculture, its
socializing affect of unexpected negative consequences. The differentiation of preferred and stigmatized identities provides a primary foundation for the subculture's negative affects, as participants make significant, perhaps futile efforts to reflect the preferred identity. These points provide context for defending the importance of pre-professional education in the discussion of professional socialization. Finally, this section concludes with a discussion of implications of and insights associated with the research methodology used for this study.

First, findings confirm the existence of a pre-medical subculture. While students' individual interests and courses of study are somewhat diverse, their narratives portray a subculture encountered and reinforced through interactions within peer groups, and overlapping activities mediated by the undergraduate curriculum and medical school application requirements. Participants in this subculture negotiate mutual sets of perspectives through these relationships, consequently attributing new sets meanings to themselves, and certain elements of the world around them including their prospective profession. In this way, specific identities are idealized, realized through sets of appropriate behaviours and values, and presented through strategic descriptions of these.

Second, this study in both its approach and findings demonstrates the process of socialization as a function of entry into and escalating involvements within a subculture. The notion that subcultures may act as agents of socialization
is implicit in interactionist discussions of socialization. Research on professional education that stems from this discussion largely focuses on the function of subculture, and the development of specific strategies to negotiate challenges encountered, rather than the process of the subculture itself. I have demonstrated that, by engaging in and deriving support from the subculture, participants’ involvement in this subculture inherently escalates. Ongoing participation comes to be equated with continued pursuit of the shared goal. Essentially, participants in the subculture acculturate to and then act within a set of ideal attitudes, values and behaviours determined by consensus within the subculture.

Third, the process described above leads to a unique conclusion in this study: whereas subcultures are expected to provide benefits to participants, the pre-medical subculture is also responsible for an entirely new set of challenges to individual participants. In addition to collective problems of adjustment to the high expectations of the curriculum and application process, prospective medical students must also navigate the challenge of adjusting to a highly-driven and self-similar peer group.

Fourth, a key feature of the challenge described above is the delineation of preferred and stigmatized identities. These identities exist with respect to self-presentation to a legitimating audience (admissions committees), as well as to peers in anticipation of this ultimate legitimation. Somewhat ironically, an obsession with well-roundedness in efforts to achieve the preferred identity and
eschew criticism attached to the stigmatized identity encourages a narrow homogeneity within the pre-medical subculture.

Fifth, the concept of ‘pre-professional’ socialization, largely passed over by most professional socialization research, is reinforced by the findings of this study. The professional socialization literature largely focuses on the initiation of new recruits into a professional culture. However, in order to be recruited, prospective recruits must engage the profession to some extent prior to commencing formal training. This is particularly the case with medical school, which has a multi-step, long-term recruitment process to which many undergraduate programs are specifically tailored. A long trajectory of aspirations and preparations may be attached to this eventual recruitment. Whereas professionals’ perspectives, values, and sets of appropriate behaviour are shaped in part by shared experiences, challenges, and strategies developed to negotiate these challenges; a discussion of the pre-medical subculture demonstrates how this process extends to the pre-recruitment phase.

Finally, in-depth conversations were essential in understanding students’ engagements in pre-medical life. This form of investigation has the potential limitation of being too far removed from participants’ lives, thereby losing some of the accuracy and richness of detail that can be observed firsthand, especially during decisive moments related to the phenomenon being studied. Nevertheless, in-depth conversations were essential in understanding students’ engagements in
pre-medical life. Formal access to pre-medical programs, for the purposes of sanctioned observation or recruitment of interview participants, is extremely difficult; in addition, many participants approached informally are also highly skeptical. This inaccessibility can be described as an observation in itself, indicating a feature of the population and phenomenon being studied.

In this setting, portraying my research in as cursory a manner as possible and reinforcing an open-ended interpretivist agenda (when asked of my agenda) helped eliminate any perceived threats. In fact, select participants indicated in off-the-record discussions after the interviews that they were more comfortable discussing their experiences with someone who appeared to be a distant outsider. While I may have lost certain richness in my data by not actively participating in the subculture, appearing to be an outsider provided a decisive advantage.

DIRECTIONS FOR FUTURE RESEARCH

Examining socialization in the context of joining and being in a subculture suggests an additional dimension to a subculture’s potential to confound collective problems rather than solving them. In the case of the pre-medical subculture, in addition to helping participants ‘learn the ropes,’ participation in the subculture has the unique drawback of escalating perceived pressure, competition, and standards of performance. Further research could explore the potentially generalizable negative outcomes of subcultural participation.
Further, this richly detailed cross-sectional discussion of pre-medical life comes with the trade-off of distance from the discussion of lasting products or outcomes of this socialization process. At the outset of this research, I had hoped to explore or determine concrete outcomes of pre-professional socialization. However, the prominent themes in my discussions with participants guided my analyses in a different direction. This complicated the writing process, as my interest and agenda did not match my data.

Research on the enduring consequences of this process for future professionals could effectively bridge the remaining gap between this study and the body of literature on socialization in professional schools. In turn, this would provide an important contribution to the discussion of physician socialization. Contemporary scholars (DiMatteo and DiNicola, 1982) cite Hippocrates' contention that,

The patient, though conscious that his condition is perilous, may recover his health simply through his contentment with the goodness of the physician.

More recent research demonstrates a number of ways in which physicians’ demeanour, interpersonal and clinical skills play in patients’ recovery outcomes. Work tracing the development of specific skills and demeanours during undergraduate education, and the development of values with respect to these

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96
skills, would fit into existing discussions in the medical education community
with respect to pre-medical students, admissions procedures, and, the
development of clinical (interpersonal) skills in physicians.
SOURCES CITED


108
APPENDIX A: RESEARCH INSTRUMENT

RESEARCH INSTRUMENT
Preliminary participant interview schedule – semi-structured

• Reasons for program of study / choice to pursue medicine
  o How long have you known that you wanted to be a doctor?
  o What generated your interest in the profession? Why does the interest remain?
  o Who or what influenced your decision to pursue a medical degree?
  o If you had known when you originally committed what you know now, would you still be here? Why or why not?

• Experience within program
  o Would you describe your program or classes as competitive? To what extent? Examples?
  o How often do people discuss admissions, requirements, grades?
  o What kinds of skills have you picked up in your program that you think better suit you to being a physician?
  o Describe the ideal doctor
  o Do you think any of your experiences have influenced you to be something different than this ideal? Any experiences of your peers in your program have influenced them? Anyone who is premed in general been influenced?

• Application process
  o What are the most important parts of the application? How do you make yourself stand out?
  o How much do you know about what schools are looking for? How did you come to know this?
  o Discuss MCAT, experience of preparation, perceived usefulness, experience in prep courses over the summer
  o Contingency plans if you are not admitted this cycle?

• Extracurriculars
  o What extracurricular activities are you proudest of
  o What is the bearing of these activities on your application?
  o What types of activities are sought after by medical schools?
  o How do students come to understand what schools are looking for?
  o What did your extracurricular involvement teach you? What did it take away?

• Personal life
  o Do you think your decision to pursue medical school has affected your personal life? How?
  o Do you think your decision … has made your life more stressful or caused you harm in any way?
  o To what extent are the standards that you pursue established by your peers? Where else do you derive these standards from? This is an awkward question and will need to be worked into the conversation.
APPENDIX B: ETHICS FORM

January 2009

Letter of Information / Consent

Principal Investigator: Avram Shack
Department of Sociology
McMaster University
Hamilton, Ontario, Canada
shackar@mcmaster.ca

Purpose of the Study
The intent of this study is to explore the experiences of undergraduate students who are preparing to apply (or have already applied) to medical school. Data collected in this study may be used in subsequent studies and publications by the principal investigator, Avram Shack.

Potential Harms, Risks, or Discomforts:
It is not likely that you will find any questions in this interview upsetting. However, if there are any questions that make you feel uncomfortable, you may choose to move onto the next question or leave the interview.

Confidentiality:
Your identity will remain completely anonymous in reports generated for this and subsequent studies. Only your program and year of study will be reported, and you will be referred to by a pseudonym (which you may select). If you disclose any information that you believe could make you easily identifiable, you may ask that this information be modified or excluded.

Participation:
Your participation in this study is voluntary, and you can change your mind about participating at any time. If at any point during the interview you decide that you do not wish to continue, you may withdraw from the study without any consequence.

Recordings:
If you consent by checking the appropriate box below, your responses will be digitally recorded. This is done in order to make it easier for the researcher to listen to your responses. The digital recording files will be assigned a number and will not be identifiable in any results presented. The files will be encrypted and password protected, and will be erased after the completion of this study. Transcriptions of the recordings will be kept in the same fashion.

Information about Study Results:
If you are interested in the results of this study, please send an email to shackar@mcmaster.ca any time after June of 2009.

This study has been reviewed and approved by the McMaster Research Ethics Board. If you have concerns or questions about your rights as a participant or about the way the study is conducted, you may contact:

McMaster Research Ethics Board Secretariat
Telephone: (905) 525-9140 ext. 23140
c/o Office of Research Services
E-mail: ethicsoffice@mcmaster.ca

Consent: By signing below, I indicate that I have been given the above information in verbal form (and, if requested, in written form) about a study being conducted by Avram Shack of McMaster University; I agree to participate in this study, and I understand that I may withdraw from the study at any time if I wish.

Signature: __________________________ Date: ____________

Please check one:
☐ I consent to my responses being digitally recorded, as described above.
☐ I request that my responses not be recorded.