Reproducing Privilege or Hippocratic Habitus: A Critical Discourse Analysis of Personal Statements and the use of Capital to Facilitate Matriculation into Medical School

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REPRODUCING PRIVILEGE OR HIPPOCRATIC HABITUS: A CRITICAL

DISCOURSE ANALYSIS OF PERSONAL STATEMENTS AND THE USE OF

CAPITAL TO FACILITATE MATRICULATION INTO MEDICAL SCHOOL

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To: Dean Michael R. Heithaus
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This dissertation, written by Jessica M. Lewis, and entitled Reproducing Privilege or Hippocratic Habitus: A Critical Discourse Analysis of Personal Statements and the Use of Capital to Facilitate Matriculation into Medical School, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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Florida International University, 2019

DEDICATION

I dedicate this dissertation to parents. My father, James Lewis, and my mother,

Dr. Lorraine Calvo Lewis, whose enthusiasm and commitment through her own journey

inspired me to accomplish the unimaginable. I also dedicate this dissertation to my

husband, Moises Jacobs, whose patience, encouragement and support are immeasurable –

I love you with all my heart.

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ABSTRACT OF THE DISSERTATION

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A national physician shortage has prompted calls to diversify the demographics of

medical school student bodies to address the social determinants of health plaguing

underrepresented minority communities. Moreover, the Association of American Medical

Colleges predicts a deficit of 104,900 physicians by 2030. Despite this, admission into

medical school remains competitive, homogenous, and lacking "underrepresented in

medicine" (URM) students.

Underrepresented groups historically absent from medical education show that the

medical degree and overall pursuit of a medical career are tacitly affiliated with a

dominant social group acting as a power agent in the reproduction of an economic class.

Considering the admissions process, one could question the ability to extend existing

cultural-based inequalities into medical education. This dissertation examines how

discourse in an applicant's personal statement shapes the actions of medical-school

admissions committees oblivious to hidden influences of power. Inspired by Pierre

Bourdieu's economic notion of capital, I used his theories to examine how applicants use available cultural and social capital in personal statement to obtain in-person interviews.

The research questions are: (1) How are forms of capital expressed in URM and non-URM applicants' medical school personal statements? (2) Do the expressed forms of capital differ in the personal statements of applicants accepted and rejected for in-person interviews? A critical discourse analysis highlights cultural and social capital among accepted and rejected URM and non-URM applicants with similar academic scores. Key findings revealed URM students lacked expressive values of cultural capital and are less likely to be invited to for interview because of the lack of URM physician mentors evident through cultural relational values. Additionally, non-URM applicants' evolving interpretation of the medical field influenced their motivation to demonstrate cultural capital at the macro level, presenting the likelihood of an interview. The macro level also revealed how non-URM students used celebrity-status relationships and disproportionality larger social networks related to the field of medicine. Implications are related to executing a formal inventory of pipeline programs through institutional representation at the national level, reforming admissions priorities to leverage applicants' personal qualities and potential, and redefining the disadvantaged status in the medical school application process.

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ABBREVIATIONS AND ACRONYMS

Association of American Medical Colleges	AAMC
American Medical Association	AMA
American Medical College Application Service	AMCAS
Critical Discourse Analysis	CDA
Grade Point Average	GPA
Liaison Committee on Medical Education	LCME
Medical College Admission Test	MCAT
Not Underrepresented in Medicine	Non-URM
Underrepresented in Medicine	URM
United States Medical Licensing Examination	USMLE

CHAPTER I

INTRODUCTION

The Heckler Report was a landmark document commissioned and published by the U.S. Department of Health and Human Services in 1985, and it was the first report of its kind that documented the significant health disparities in the United States between Whites and underrepresented minority populations (U.S. Department of Health and Human Services, 2016, p. 12). The report identified and introduced a critical link between the health disparities in underrepresented minority communities and the social determinants of health, which refer to non-medical conditions affecting how people live, grow, and work that, ultimately, have a causal relationship with an individual's health outcomes (p. 12). Today, the same health disparities identified in the Heckler Report continue while the entire medical profession itself faces an overall shortage of not only physicians in general, but mostly physicians of color from underrepresented communities in particular (Association of American Medical Colleges, 2018). In fact, the Association of American Medical Colleges (AAMC), which administers and operates admissions services for medical school and medical-school applicants, predicts a deficit of up to 120,000 physicians by 2030. If left untreated, this problem could further destabilize America's underrepresented minority communities as it perpetuates and potentially worsens a segment of society that has inadequate access to healthcare.

The outcomes in the Heckler Report challenged many medical-education organizations to reevaluate medical-student demographics and the training of future physicians in order to reflect the changing needs of the U.S. population (Vincent &

Velkoff, 2010, p. 4). Some of these organizations include the American Medical Association (AMA) and the Liaison Committee on Medical Education (LCME), the accreditation group that enforces standards for all medical schools in the U.S. and Canada. In the time span since the Heckler Report's publication over 30 years ago, many researchers continue to examine the racial disparities in health and social diseases, while others seek a more in-depth understanding of how race, racism, and bias accumulate as a social determinant of health and how these make their way into the healthcare setting (Smedley BD, 2001, p. 29). Accordingly, the AAMC has put forth a variety of initiatives to help recruit and retain more students who are *underrepresented in medicine* (URM), a category which the AAMC defines as African-American/Black, Hispanic/Latino, American Indian/Alaska Native and Native Hawaiian/Pacific Islander (AAMC, 2018). Among these initiatives is a re-examination of the admissions practices in medical schools. Admissions practices are an area of interest because the number of current URM medical students relative to the increasingly diverse U.S. population remains disproportionate (AAMC, 2016, figure 29). More critically, research continues to demonstrate that URM physicians are more likely than their White and Asian counterparts to practice in underserved communities and care for minority, poor, and uninsured patients (Walker, Moreno, & Grumback, 2012, p. 47).

Statement of the Problem

In recent years, roughly 8.9% of physicians are either Black, Hispanic or Latino ethnicities (AAMC, 2014). Despite empirical evidence showing that URM physicians are more likely than their White counterparts to treat and practice in underrepresented minority communities (AAMC, 2017), the medical students who enter the field remain a

wealthy homogeneous group; in fact, less than 6% of current medical students are from the bottom income quintile and from underrepresented minority communities (AAMC, 2008, p. 3). Because the members of underrepresented groups are disproportionately "not well-off" and have been historically absent from medical education (Kahn & Sneed, 2015, p. 173), it seems possible that the medical degree and overall pursuit of a career in medicine is tacitly affiliated —if not directly aligned— with a dominant social group acting as a power agent in the reproduction of an entire economic class. Studying medical-school admissions practices might elicit questions of how these practices extend existing cultural-based inequalities into medical education and whether these practices have the capacity to change.

The medical school admissions process requires all applicants to use the AAMC's centralized application processing service, the American Medical College Application Service (AMCAS). AMCAS collects, verifies, and delivers application information and MCAT exam scores to each school an applicant may choose. According to AMCAS (2019), there is an associated application fee to process an application which includes one medical school designation. For each additional medical school selection, an applicant must pay an additional application fee. Applicants receive a school-specific secondary application from each designated medical school indicated in their AMCAS that also carries an associated application fee (2019). Once applicants complete the secondary application, members of the admissions team begin reviewing application materials, specifically personal statements, to determine who to invite for an in-person interview.

The personal statement serves as one of the most important documents in the medical-school admission process. According to Ding (2007), as applicants prepare

application materials, the personal statement presents a legitimate challenge to URM

applicants because of their unfamiliarity with the standards of the medical-school

personal statement, discourse within the social field, and its audience expectations (pp.

368-369). Furthermore, Graff and Hoberek (1999) assert that an applicant's supposed

lack specific knowledge is not caused by deficiencies but to ''a lack of interest in

socializing hopeful members of the academic family into its particular customs, beliefs,

and behaviors'' (p. 242). However, little is known about how discourse of URM and non-

URM applicants is presented in the medical-school personal statement, or how

admissions committees might interpret it.

Purpose of the Study

With the above point in view, this study aims to contribute knowledge about how

features of personal statements can affect the complicity of social agents in the field of

the admissions process who are not aware of this influence. More specifically, the

objective of my study is to understand the expressed forms of cultural and social capital

in the medical-school personal statements by URM and non-URM applicants, and

whether these expressed forms differ in the personal statements of applicants who were

accepted for an in-person interview and those of rejected applicants. Using Fairclough's

critical discourse analysis (CDA), a modern approach to the study of language and

discourses in society where unbalanced relations of power are at stake, I will apply

Bourdieu's theories to medical-school admissions practices and to how URM students

position themselves within such practices. Motivated by the notion that a particular group

of students matriculates into medical-education programs over other groups, Bourdieu's

fundamental concepts of capital, field, habitus, symbolic violence, and doxa provide a

valuable frame for analyzing advantage in medical-education programs. In the primary portion of the study, I use Fairclough's CDA approach to indicate how medical-school applicants use indicators of cultural and social capital in their personal statements to advance through the medical-admissions process toward matriculation into medical school and the medical profession.

Research Questions and Design

Using CDA to examine the discourse used in the personal statements of URM and non-URM medical school applicants, the following two research questions framed my study:

1) How are forms of capital, if any, expressed in the medical-school personal statements of URM and non-URM applicants?

2) Do the expressed forms of capital differ in the personal statements of applicants who were accepted for in-person interviews and those who were rejected?

My study uses primary data collected from a medical school. Medical-admissions offices receive application materials from the AAMC's American Medical College Application Service (AMCAS) that include demographic, personal, academic, and institutional information. The data source for my study was received from the admission office of a public medical school in South Florida; data were provided under the request for personal statements from applicants with similar academic credentials, URM status information, and an equal number of male and female applicants of those invited and not invited to interview. All other information and identifiers were redacted; NVIVO 12 was used for the deductive qualitative analysis of cultural and social capital indicators in the personal statements.

Definition of Terms

In 2004, the AAMC published a memo defining the term URM: "Underrepresented in medicine means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population." The URM definition was adopted by the AAMC's executive council to assist a medical school in accomplishing three important objectives:

1) Schools should have a shift in focus from a fixed aggregation of four racial and ethnic groups to a continually evolving underlying reality. The definition accommodates the inclusion and removal of underrepresented groups on the basis of the changing demographics of society and the profession.

2) Schools should have a shift in focus from a national perspective to a regional or local perspective on Underrepresentation.

3) Schools are encouraged to stimulate data collection and reporting on the broad range of racial and ethnic self-descriptions (AAMC, 2018).

Additional terms related to non-minority groups —such as White and Asian—were used to refer to non-URM groups. The term "underserved minority communities" has been adapted from the Health Resources and Service Administration's (HRSA) definition of "medically underserved areas and populations," which identifies geographic areas and populations with a lack of access to primary care services. According to HRSA, underserved minority communities are made up of specific sub-groups of people who may face economic, cultural, or linguistic barriers to health care. Examples include those who are homeless, low-income, Medicaid-eligible, Native American, or migrant farmworkers (Health Resources and Services Administration, 2019). Finally, a key term describing admission into medical school is *matriculation*, which refers to the process of officially enrolling as a member of a student body.

Significance of the Study

Understanding admissions processes are of crucial importance, given how higher education produces social stratification. The most significant critique of education and power in the form of capital comes from French sociologist Pierre Bourdieu. In focusing on how power works to duplicate itself and perpetuate hierarchies in the face of historical change, Bourdieu's view leans toward the postmodern sociology of culture in how he emphasizes the interaction between intellectual and social structures (Lizardo, 2011, p. 19). Regarding contemporary theory, his work is commonly applied within a variety of fields. Although Bourdieu never directly focused on medicine or healthcare, his theories lend themselves well to the study of power in any context. Notwithstanding the differences between America's medical environment and that of other developed countries such as France's, Bourdieu's view remains particularly relevant to the framework of professional and social reproduction, which is a critical focus in America's production of future physicians.

Exposing hidden positions of power and vulnerability based on the level of cultural and social capital is an important task, as they are not evident to those involved in medical education and the admissions process; without exposure, the issues remain almost impossible to fight against (Fairclough, 1995, p. 9). The possibility of perpetuating power through such formal and standardized procedures has the potential of reinforcing supremacy and control from those who have them. Research has clearly shown that the benefits of a diverse physician workforce would produce a substantial improvement to the overall health of our underserved minority communities and overall society (Walker, Moreno, & Grumback, 2012, p. 47). However, society as a whole will

fail to gain these benefits at the current rate of URM matriculants into medical school. The findings of this dissertation offer critical insight to further the understand how both the control of discourse and an individual's ideals have the ability to reproduce dominance and hegemony.

Chapter Summary

In this chapter, I have discussed the problem of an imminent physician shortage in the U.S., specifically URM physicians who are more likely to care for underserved minority communities at risk of further destabilization. The current and projected shortage of URM physicians is critical because of the equally disproportionate number of current URM medical students relative to the increasingly diverse U.S. population. Consequently, I illustrated the importance of increasing the population of URM students in medical education through the examination of cultural and social capital used in personal statements for medical school. I also described the purpose of my study and the medical-admissions process which emphasized the importance of personal statements, and the importance of critically analyzing these statements for their underlying representations of class.

I presented the two research questions that guided my dissertation to examine capital used in URM and non-URM applicants, both invited and not invited to interview. I also gave a brief overview of my study design that included my data source and method of analysis. Following this, I provided a brief overview of key terms used I used in this study, such as *underrepresented in medicine*, or URM. Finally, I identified the significance of the study which introduced Pierre Bourdieu and his theories of capital and how they align with my study. In Chapter 2, I investigate the literature pertaining to the

historical context of URM students in medical education, the diversity as a benefit in medical education, current admissions practices in medical education, and the application of Pierre Bourdieu's theories to medical education and the admissions process.

CHAPTER II

LITERATURE REVIEW

The AAMC serves as a national organization representing U.S. and Canadian

medical schools, teaching hospitals, and healthcare networks. The AAMC provides

AMCAS, the Medical College Admissions Test (MCAT), the United States Medical

Licensing Examination (USMLE), and residency placement programs. Medical schools

under the AAMC's purview are urged to implement specific diversity initiatives to

address the lack of URM physicians by increasing URM student matriculation into

medical school. These initiatives are in line with the accrediting body for medical

schools, namely the LCME. However, admissions committees can use AAMC services

which contain metrics systems for their purposes, and one AAMC service that can be

used for this is the MCAT. More specifically, committees can use these systems to

analyze and adjust applicant pools according to their institution's individual admissions

goals. In other words, an admissions committee can bypass the matriculation goals of the

AAMC and employ traditional selection methods—such as MCAT scores and grade

point average (GPA)—if an admissions committee cannot agree on selected applicants or

new admissions practices. Based on this point, this study explores methods to increase

fairness in admissions practices by utilizing the personal statement, which is a required

admissions document for medical schools, to examine URM and non-URM student

potential based on experiences and access to capital.

Increasing the number of URM medical-student matriculants is not only essential

to addressing health disparities in underrepresented minority communities; it can also

improve the quality of the learning environment in undergraduate medical education and

strengthen the pipeline of diverse physicians. With a healthcare environment that is continually shifting in response to societal and political changes, it is important to examine how medical education accommodates the values of the profession, including values such as upholding ethical standards and commitments to produce culturally diverse and socially accountable physicians.

A range of inquiries into the diversity in medical education demonstrates common themes. Some of these include the barriers formed around significant historical and the current influences that affect URM students' access to the medical field, the benefits of diverse medical-student bodies, as well as current admissions practices aimed at recruiting and matriculating URM students in academically competitive medical degree programs. An analysis of the literature also identifies common theoretical critiques of diversity in medical schools. These relate to admissions practices —such as legal affronts to affirmative action in the admissions process—and also to forms of economic, social, and cultural capital as the most determinative factors of matriculation.

The empirical examination of how URM students access medical education inform much of the literature, and it uses quantitative data from the AAMC by pulling certain information from application and acceptance rates. Such information includes self-identified race and ethnicity, gender, socioeconomic status, financial aid, MCAT scores, total and science GPA, and undergraduate and graduate degrees. These findings are supported by qualitative inquiries on the motivation, persistence, and perceptions of navigating the admissions process. Consequently, these findings offer outcomes that provide insight into the widening initiatives that are implemented to develop the diversity of the medical-student body. In reviewing these outcomes through Bourdieu's theoretical

frameworks, the questions guiding this literature review are as follows: What affiliation do forms of capital have with undergraduate medical education and the practice of medicine? How and why are certain forms of capital used to perpetuate historical and current trends in undergraduate medical education and the practice of medicine?

Current Demographics

Medical education has taken few steps in concretely addressing the racial and ethnic structure of the medical-student body, given that this structure remains unequal with the growing diversity of the U.S. For example, in the 1990s the AAMC sponsored a "Project 3000 by 2000" with the goal of expanding URM medical students to a total of 3000 by the year 2000. Evidence of this program's failure manifested in the AAMC's most recent report on the current status of the U.S. physician workforce, and the report illustrated diversity outcomes as stagnant and consistent with prior years (AAMC, 2014). One example of this is found in a 2014 report by the AAMC, which showed that approximately 8.9% of physicians are considered URM, with only 4% identifying as Black and African-American —a group struggling to keep pace with the nation's demographic shifts (2014). With the U.S. physician workforce diversifying at a much slower pace and with a looming shortage threatening the access to healthcare by underrepresented minority communities, it can be seen that the racial and ethnic distribution of the physician workforce is in part associated with whom the medical schools accept and train as America's future physicians.

In 2015, the AAMC reported that 52,550 individuals applied to medical school, resulting in a total of 20,630 enrollees, including 9.6% Hispanic or Latino applicants, 7.6% African-American applicants, and 1% American Indian and Alaska Native

applicants nation-wide (AAMC, 2015). While these outcomes seem encouraging, additional data from the AAMC shows graduation rates of only 4.6% Hispanic or Latino students, 5.7% African-American students, and 0.1% American Indian and Alaska Native students (AAMC, 2016, Figure 17). Contributions to a medical student failing to graduate include financial debt, difficulties transitioning to a demanding academic environment and performance expectations, burnout, and students' lack of involvement with their peers and faculty (Baars, Stijnen, & Splinter, 2017, p. 6). For URM students, these contributions have a more significant effect with the added challenges that come from being a first-generation college graduate (Grbic, Garrison, & Jolly, 2010, Table 1).

In an analysis on the diversity of U.S. medical school students by investigating the education profiles of parents, Grbic et al. (2010) described how three elements of an individual's socioeconomic status (i.e., parental income, education, and occupation), can inform a child's access to essential foundational experiences, which impact long-term educational success (2010, p. 1). Accordingly, their analysis demonstrated a skewed medical student population with more children of upper-income families and high levels of education. For example, in comparison to 12% of a weighted sample of the median U.S. population, approximately one-half of the fathers of medical students hold graduate-level degrees (2010, p. 1). Likewise, compared with approximately 10% of U.S. women, one-third of medical students' mothers hold graduate-level degrees in comparison with 10% of U.S. women (2010, p. 1). The analysis also illustrated inconsistencies in the distribution of parental education levels by race and ethnicity; there is a high probability of African American and Hispanic students who have parents with no college degree and who would even less likely have parents with a graduate degree. Additionally, Grbic et

al. found an increase in medical students from higher socioeconomic families between 1992 and 2018, and those in this group represent mostly White students. Considering the varying levels of support and experience, symbolic violence defines the inherent barriers that URM students experience when they navigate the medical-school admissions process, and these barriers potentially discourage URM applicants from even completing the application. Thus, medical-school admissions officers experience retention difficulties as early as the recruitment process (Kahn & Sneed, 2015).

Emery, Boatright, and Culbreath (2018) conducted an assessment and action plan for the recruitment and retention of URMs in medical education. In their work, they outlined the realities of meeting the demands for URM physicians by the year 2030 (Emery, Boatright, & Culbreath, 2018). According to an assessment of the AAMC's *Complexities of Physician Supply and Demand* by Emery et al. (IHS Markit, 2017), they reported roughly 787,500 physicians as of 2015, and an anticipated 850,000 are needed for 2030. Assuming the growth rate stays consistent, 975,000 doctors would be needed by 2060. Aligning the ratio of URM physicians with the needs of a growing U.S. population, Emery et al. calculated the need for an additional 6,630 Hispanic or Latino physicians and 3,320 Black or African-American physicians per year from 2018 to 2060 (2018). By 2060, medical schools would need to matriculate 8,000 URM medical students annually to reflect the growing U.S. population; this number shows a large contrast to the current annual matriculation rate of roughly 2,500 URM students.

The current state of URM in medical education persists on the fragments that racial and ethnic disparities have endured throughout history. Systems of bureaucracy, power, and antiquated pedagogies reinforces the inability for academic medicine to

change, and this inability is empowered by the belief that success and reputation are

achieved through the recruitment and matriculation of academically superior applicants.

Following this point, I will discuss key historical events that have shaped the current state

of medical education.

Theories of Capital and the Medical-Admissions Process

Bourdieu's concept of capital emphasizes how an individual's status or position

within a network of relations can privilege specific individuals or groups over others

(Bourdieu & Wacquat, 1992, p. 232). Bourdieu used four forms of capital to explain this

phenomenon:

- *social capital*, which refers to one's proximity to specific resources associated
  with the preservation of long-standing network of relations;

- *cultural capital*, which is the cultural assets made accessible to a specified
  individual through their family upbringing and schooling situation;

- *symbolic capital*, which is any kind of associative resource that is familiar in a
  certain society or group with the ability to define one's social status;

- *economic capital*, which is a product of how the social, cultural, and symbolic
  capital in sum convert themselves to material and financial resources available
  to an individual (Robbins, 1993, pp. 153-154).

Each of these forms of capital is relevant to medical education through Bourdieu's

concept of *field*, which refers to a somewhat self-directed "game" or "competition" for a

position within a specific field, or in this case, the admissions process for medical schools

(Bourdieu & Wacquat, 1992, p. 98). Furthermore, Bourdieu characterized field by the

normalized and long-standing inequalities of social agents (or medical-school applicants)

based on the competitive nature of the admissions process for access into medical school. If we look at the admissions process as a "game" or "competition" in which applicants are engaged, the metric for success in this game would therefore depend directly on one's *habitus*—the embodiment of ways of behaving and thinking through primary and secondary socialization. An individual's habitus may or may not be advantageous to the "rules" of the game played in that field; notwithstanding this fact, examining the habitus of the dominant social agents (i.e., non-URM applicants) and the non-dominant social agents (i.e., URM applicants) can identify the different forms of capital that are emphasized by these students, both in their attempt to facilitate entrance into medical school and in their success in accessing the most difficult point of entry in the admissions process, namely the interview.

Applying the concept of cultural capital highlights the class-based distribution of knowledge, taste, and vernacular that have been acquired from parents and peers (Bourdieu, 1973, pp. 57-58). The origins of these forms of cultural capital have the effect of privileging certain students who are able to profit in the form of educational networks, aid, and associations within a particular career. In other words, students with forms of cultural and social capital have an easier time socializing and gaining experiences from the academic community, and this creates the illusion of a more academically prepared student.

Bourdieu's final two concepts that are related to the reproduction of power within undergraduate medical education are *symbolic violence* and *doxa*. Symbolic violence refers to an effective, efficient, and unperceived force of domination in which members of the dominant classes only need to exert minimal energy to maintain their dominance

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(Bourdieu & Wacquat, 1992, p. 140). Symbolic violence is also seen in the ways that potential medical-school applicants describe their experiences with the intention of boosting their chances for an interview. One example of symbolic violence are the narratives surrounding the financial obligations for medical school applicants via news media, blogs, and materials stressing the tremendous economic cost of medical education from the AAMC. The average cost of medical education stands at roughly $280,000 for private schools and $210,000 for public schools (AAMC, 2016-2018). Other expenses can include the cost of interviewing and applications fees. Emphasizing all these high costs as warnings can be disheartening and discouraging for certain groups of applicants and their families.

For instance, a webpage from the AAMC website meant to guide students and families attempting to navigate financial aid and debt management stresses the steep tuition rates of medical school and cautions potential applicants about the financial burden of interviewing and application fees (Kahn & Sneed, 2015). Even more, a section of that same website titled "Signs You Could Be Heading for Trouble" can also intimidate URM applicants while little information is emphasized on the positive financial and personal investment of a medical degree (AAMC, 2018). This type of symbolic violence dissuades the already small pool of URM students from applying when it alludes to an impossible financial undertaking for those individuals with financial hardship, such as those already in debt. To this point, URM students are less likely than non-URM students to complete advanced degrees prior to applying to medical school (Ovink, 2009, p. 371).

Bourdieu's second concept of *doxa* refers to assumptions that are taken for granted, as well as to the unchallenged reasoning that is accepted as self-evident (Bourdieu & Wacquat, 1992, p. 170). In this context, doxa is theorized as the accepted belief that establishes the field and as an act of symbolic power in which the accumulation and distribution of various capital explains which beliefs, systems, distributions, hierarchies or sets of social relations are suitable and normal. Here, it is possible to consider admissions standards as the doxa in medical education. Traditionally, admissions standards are limited to three academic metrics, namely a total GPA, a science GPA, and MCAT scores. According to the AAMC, URM applicants continue to lag behind non-URM applicants on all academic metrics (Hadinger, 2017, p. 32). Despite the AAMC's push to increase URM students using holistic admissions review practices, a recent study found that admissions committees rated MCAT scores and undergraduate GPAs as the most significant criteria for determining which applicants will be invited to submit secondary applications and interviews. Moreover, interview endorsements and letters of recommendation were ranked as the most significant criteria in determining which applicants to accept (Monroe, 2013, p. 678). This accumulation illustrates the potential of overemphasizing an applicant's ability to "play the game", that is, the ability to adhere to institutional customs within the field of medical education.

Bourdieu's notion of *misrecognition,* which "describes recognizing a violence which is wielded such that one does not perceive it as such," is also important for connecting doxa and symbolic violence (Bourdieu & Wacquat, 1992, p. 168). Misrecognition represents a form of hidden persuasion that diverts attention from other ways of viewing of the world. In relating this idea to medical education, misrecognition

distracts us from understanding priorities and policies, and from pursuing the ability to challenge the dominance of a particular group. Overall, Bourdieu's concepts allow individuals to examine and overcome the ideological conflict between the structure of medical education and a potential applicant's ability to address the social determinants of health in underrepresented minority communities. An inquiry into the use of capital in medical education could assist in advocating for a more balanced and fair way of thinking about the application process. There is potential to enrich areas of admissions practices that appear to overemphasize either individual forms of capital or traditional institutional customs and to overlook the necessity for admitting URM students.

While Bourdieu's philosophies on capital and habitus are established as central concepts in the study of both American and European culture, critiques of Bourdieu's theories assert academic ambiguities and specific methodological gaps when the theories are applied to race —especially within American culture. There are significant disagreements about the relevance of Bourdieu's frameworks, which are grounded in his knowledge of the dominant social class (i.e., White middle to upper class), and which neglect the various ways in which other groups convert cultural goods and resources into capital (Carter, 2003, p. 137).

Two empirical studies demonstrate Black cultural capital as an alternative to the usual use of Bourdieu's cultural capital. First, in Jackson's (2001) ethnographical study of late 20th century Harlem sociology, he outlined authentic cultural status positions to explain the way in which African Americans use racial and class-based social performances to signify "Blackness" in order to gain acceptance within their respective non-dominant communities (p. 221). Alternatively, depending on the field in which

capital is used, African-American youth use non-dominant cultural capital as an instrument to express or obtain affiliations in dominant White groups (pp. 175-185).

The second work is the study by Carter (2005), who discussed Black culture capital in her study of African American and Latino youth in New York. She defined "non-dominant capital" as a combination of cultural routines and tastes that are used in low-income education settings and social networks to develop the social status of the youths (pp. 149-151). Carter's study highlights the value of the capital that is exchanged between racial and class minorities, and the study cautions against the effects of ignoring these resources (pp. 150-152). In other words, Bourdieu's dominant form of capital can paint minority communities in terms of a deficit, and this in turn would neglect the histories of institutional racism that shape their social positions.

Bourdieu's concepts of capital are limited in that they can exclude valuable experiences and uses of cultural capital when applied to race and racism. Both Jackson (2001) and Carter (2005) have illustrated that Black cultural capital is "context-specific and its currency varies across different social spaces, where struggles for legitimation and power exist" (Carter, 2003, p.137). The concept of Black cultural capital suggests the need for inquiry into the co-habitus of racial and class resources. Furthermore, this concept challenges the perception that expressions of cultural capital are associated with whiteness.

Because medical schools and the admissions processes remain predominantly homogeneous playing fields, Bourdieu's framework is applicable as we study ways in which students use capital strategically to gain access to medical school, regardless whether this capital is converted or not. Using this logic, I work with the assumption that

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non-URM students do not have to negotiate strategically between their community, facility, peers, and school spaces, whereas URM students find themselves constantly balancing both dominant and non-dominant cultural capital. This latter point is an issue I explore in my assessment of personal statements.

URM in Medical Education

There are two central tensions in conflict within the medical education's admissions process. The first one concerns the overwhelming demand to address underrepresented minority communities by broadening the student demographics, and the second one deals with the competitive process of matriculating academically strong students. Historically, these two issues do not complement each other, and they serve to further reinforce Bourdieu's notion of the game, as mentioned earlier.

The historical narrative of minorities seeking entrance into the medical profession began in the aftermath of segregation in the U.S. with the 1910 publication of Abraham Flexner's *Flexner Report*. Commissioned by the Carnegie Foundation, Flexner studied the then-existing 155 medical schools and reported on how medical education was conducted at that time (Flexner, 1910, p. 28). As an education theorist, Flexner's principal judgment was that medical schools should be associated with, and incorporated into, the structure of a university to assure its public service character (Brown, 1979, p. 148). Flexner was largely credited with improving the standards and quality of medical education by expanding science requirements, which consequently forced many for-profit, low funded and poorly managed medical schools to shut down due to their inability to meet Flexner's new principles of medical education (1979). The report was especially critical of Black colleges, and it led to the closing of seven out of the nine

existing Black medical schools. In line with the now-antiquated views on race during his time, Flexner argued that "the practice of the Negro doctor would be limited to his own race. However, self-protection not less than humanity should encourage white society to support improved training for Black physicians: ten million of them live in close contact with sixty million whites" (Flexner, 1910, pp. 180-81).

With only two medical schools accepting African American students at the time, there was a sharp decline in physicians serving underrepresented minority communities (Shea, 1985, pp. 933-940). This decline was the beginning of a trend which perpetuated through a higher criterion that was implemented in medical-education curriculum, and the adoption of racial segregation employed through Jim Crow policies affected the quality of primary education for Black students. The Flexner report was an ostensibly noble document that was meant to standardize and situate the study of medicine in the sciences, and simultaneously promote the professionalization of pursuing scientific excellence in medical education. However, the overall impact of scientific medicine within the profession was to legitimize control by elite practitioners and the faculty in medical school (Brown, 1979, p. 80). Despite its good intentions, Flexner's report resulted in an overwhelmingly negative impact for African-American medical students and physicians who had unequal access to quality education, and it further affected the trajectory of URM students in medicine to an even greater extent (La Mar Hasbrouck, 1996, p. 1548).

Flexner's report endures to this day as a principal text in contemporary medical education despite repeated calls for reform in the curriculum, as well as in the general practices of diversity from national medical, educational, and community health organizations. However, reasons as to why Flexner lives on as an iconic figure in medical

education remain vague in the literature. Using insights from Bourdieu, we can examine an alternative version of the narrative of how medical education became what it is today.

In Bourdieu's book, *Language and Symbolic Power*, he described the way a group uses language to represent and establish its shared assumptions, beliefs, practices, and relationships to others (Bourdieu, 1982, p. 43). He provided further theoretical support to explain how spokespersons or delegates (such as Flexner) represent the interests of a group, which in this case is the Carnegie Foundation. In essence, powerful groups such as the Carnegie Foundation can empower certain delegates in social and political situations to speak on their behalf while emphasizing the delegate's statements and actions, which often carry symbolic influence beyond that of their individual social position. Flexner's affiliations with certain powerful groups and the fracture between the report's intended purpose and actual goals of these groups created great potential for misrecognition.

When the Civil Rights Act of 1964 was passed, 97% of medical students in the U.S. were White, and universities were compelled to desegregate in order to receive federal funds for financial aid and facilities renovations (Shea, 1985, p. 935). Further impact on the diversity of medicine was made the following year when Medicare and Medicaid policies forced U.S. hospitals to integrate in order to receive reimbursements for care. The combination of these two events prompted the necessity of affirmative action programs to diversify the students in medical education and the physicians in the profession. URM students climbed to 12% by 1995 but the rate remained stagnant due to the increased legal affronts to affirmative action initiatives (Carlisle, 1998, p. 1314). The circumstances of these events also impeded URM students from pursuing careers of teaching as faculty in academic medicine, which severely minimizes the mentorship

opportunities between students and physicians; this point was a critical element for academic and career advancement of URM students and physicians (Yehia, 2014, p. 2). As illustrated here, there are many structural barriers that URM students encounter in the pursuit of higher education in terms of access and professional preparation. As a response, public policy should be used to facilitate access with the use of across the board affirmative action practices in medical education. As stated by Bourdieu (1973), "it becomes necessary to study the laws that determine the tendency of structures to reproduce themselves" (p. 258). Increased access to medical education can increase socioeconomic advances; this is applicable not only for URM students and future physicians but also for underrepresented minority communities as a whole (Yehia, 2014, p. 6). Overall, the existing critique of minorities in medical education seeks to bridge the gap between the call in the Heckler Report for diversifying the student body and the appeal in the Flexner Report for academic excellence.

Diversity as a Benefit to Medical Education and Healthcare

The life experiences of a student or lack thereof have received much consideration in the context of career preparation, in the sense that a physician's training does not account for the personal experiences of the majority of people who need care the most (La Mar Hasbrouck, 1996, p. 1548). This lack of diverse experience can render the modern-day physician as out-of-touch with their patients. Comparatively, little attention is given to the impact on healthcare, higher-education institutions, and the impact of their policies on medical education. Forewarning such a consequence, Flexner perceived that the "medical profession is an organ differentiated by society for its own highest purpose, not a business to be exploited by individuals according to their own fancy" (Flexner,

1910, p. 148). Consistent with Flexner's concern, today's medical education is at the crux of a complicated relationship between politics, corporations, universities, the medical professional, and America's modern healthcare system. As symptoms of a neoliberal environment, changes in American society continuously re-disturb these relationships and cause medical education to be in a perpetual state of unrest (Cooke, 2006, p. 1399).

Despite the recommendations of both the Heckler and Flexner Reports, modern cultural values have succeeded as the major influences of the most critical facets of medicine that challenge the intentions of both reports; these facets include the quality of medical care, access to health insurance, patient expectations, medical ethics, and trends in medical education (Brown, 1979, p. 139). As a result, corporations, politics, and other powerful stakeholders have commercialized the practice of medicine to embody characteristics of neoliberalism to the point where it is easy to lose sight of both academic and humanistic traditions associated with the profession. In other words, as the healthcare market shifts toward a more corporate business model, so do the professional and personal ambitions of prospective and current physicians (IHS Market, 2017, p. 42). This begs the question: Are we searching for more business-minded individuals to fit into this new healthcare trend, or do we need individuals with knowledge, experience, and altruistic values to counteract this trend?

Consumer-driven healthcare is evident through the marketing of drugs, services, and new expensive technologies, which are created and sold to improve the health of those populations who can afford such technologies. Evidence can also be found in the abundance of online consumer reviews of physicians and their services for those patients who have the luxury of choice (Rothenfluh, 2016, pp. 5-9). As for the effects on higher

education, the medical degree program has essentially been deconstructed into market-rate, accelerated professional healthcare degrees that provide non-physician clinicians the same autonomy once held only by medical doctors (e.g., nurses, physician assistants, and pharmacists) (Laurant, 2009, pp. 37-38). The most notable example regarding meeting the new needs of this systemic change in healthcare is the rising prominence of the MD/MBA dual degree, which is designed to provide students with the necessary skills to operate in hierarchies of managed care systems (Krupat E, 2016, pp. 203-218). The career of a health professional by way of traditional medical education may seem superfluous or disadvantageous to those seeking to care for underrepresented minority communities; this may especially be the case as medical education becomes more dependent on industry funding through the commercialization of medical research and as it shifts from traditional Flexner understandings of medical knowledge (Khushf, 1998, pp. 204-205).

The corporatization of healthcare has the potential to overshadow the core Hippocratic values of ethics related to the profession. This can also shift the focus away from improving the social determinants of health in underrepresented minority communities to profiting from their systemic (yet preventable) chronic diseases. Simply put, in the absence of commitment to these professional values, healthcare becomes just another industry with physicians acting as agents in the advancement of business models over the quality of care, and the underrepresented minority communities remain neglected and disaffected segments of the populace. A question that arises in such a state is whether medicine can preserve its foundation of ethical and altruistic values in such an environment. Numerous medical schools insist that a diverse medical-student body is the

answer and is an essential component in educating physicians to address the needs of an increasingly diverse population, despite this shift in healthcare as an industry. An analysis of the research examining diversity among medical students revealed one core benefit and central theme — an enhanced quality of medical education.

Saha (2008) conducted a unique study on diversity-related outcomes of medical students using self-reported quantitative data from the AAMC's annual graduate questionnaire. The study concluded that White students from more racially diverse programs felt more equipped than their peers who were attending less diverse schools to care for patients from racial and ethnic groups other than their own. Additionally, these students were more likely to view adequate healthcare as a right rather than a privilege (Saha, 2008, p. 1137). Keeping with the AAMC's categorization based on a student's self-reported race and ethnicity, two aspects of diversity were measured, namely *compositional diversity*, which reflects quantities of students from different racial and ethnic backgrounds, and *interactional Diversity*, which measures the levels of promotion of diversity and engagement across various student backgrounds. While the study captured outcomes showing a relationship between diverse medical-student bodies and educational benefits that prepare them to meet the needs of diverse populations, it was unable to capture how students reconciled their self-reported race and ethnicity as well as cultural competence (e.g., whether cultural competence was enhanced because they had more diverse classmates, or whether they were simply exposed to more diverse patient populations). The significant limitation of this study showed that the proportion of URM students do not influence the White student's plans to practice in an underrepresented area. This limitation begs the following question: if students have no desire to practice in

underrepresented areas, what significance is their perceived ability to care for patients

from racial and ethnic groups other than their own? Undoubtedly, this study by Saha

shows that a diverse student body adds to a White student's cultural competence.

However, it does not show influence in student agency to practice in underrepresented

areas.

Other inquiries into the diversity of students in medical education have also

suggested that diverse groups of students may present education benefits. However, these

studies are restricted to survey data from the AAMC and other sources that show how

students perceive the importance of diversity, and these studies ultimately limit the scope

of the research. For example, Whitla (2003) examined the attitudes of non-URM students

from three medical schools and found that their interactions with their URM peers

influenced their own ideas about culture, health, as well as their perspectives about

diversity-related issues during medical school. One question that remains unanswered is

whether this phenomenon is a reflection of the student's ability to inquire knowledge or a

change in a student's cultural capital.

To further examine the limitations in scope for future inquiry, Bourdieu's theory

of habitus can be applied. According to Bourdieu, habitus is shaped by family interaction

early in childhood, and it is present throughout all life stages (Bourdieu & Wacquat,

1992, p. 98). With this definition, habitus has become a widely used concept to interpret

social inequality and how social reproduction operates in higher education. Furthermore,

habitus justifies the construction of dispositions and actions from the inherent

embodiment of the social structure (Bourdieu, 1977, pp. 648-651). By applying

Bourdieu's habitus theory to medical students, we can rationalize how students from

different social groups assume their social position within the structure of medical school into their embodied and instinctive behaviors (Lee & Kramer, 2013, pp. 18-19). Since habitus explains how it produces different social outcomes and why agents from different social groups show different patterns of social behavior and attitude, it also rationalizes the process, stability, and reproduction of a social structure (Horvat & Antonio, 1999, pp. 319-320).

In general, habitus allows us to recognize the process of preserving social structure by examining the relationship between that social structure (i.e., medical school) and social agency (i.e., the will of the medical students). However, Bourdieu's habitus alleges that long-lasting dispositions and actions which are a result of one's social network make the opportunity for social movement or social change impossible (Bourdieu & Passeron, 1977, pp. 101-106). This in turn could explain the reason why non-URM students feel better equipped but are not compelled to dedicate their practice to underrepresented minority communities. Although Bourdieu (1977) admits the possibility of habitus transformation, critics of this theory have shown that habitus can change with new social environments —or another way individuals reconcile their old habitus with a new habitus they achieved through social mobility (e.g., through socialization among diverse student bodies in medical education) (Lee & Kramer, 2013, pp. 18-19). Researchers have demonstrated that the capacity students (or social agents) have to achieve a degree of consciousness and learn the importance of matching habitus with the field, and subsequently they have to adjust their ways of acting to achieve the ideal fit (Lin, 1999, pp. 28-55). Conversely, the ability to adjust ways of acting or thinking

according to the structure of medical education (field) may illustrate the habitus of particular social groups.

Previous literature on the benefits of diverse student bodies in medical education does not explain whether there is a process of habitus modification due to an individual's proximity to diverse peers. Instead, the only considerations are the significance of student attitudes toward diversity and the idea of treating underrepresented populations who are different from their background. Furthermore, previous inquiries do not explain or assess the habitus coming into medical school, the ways in which people acquire new habitus (if at all), or the strategies to develop a student based on the possibilities of acquiring new habitus. Most studies also emphasize medical schools as a social field where medical students develop new habitus.

Current Practices in Medical-School Admissions

Calls to expand the diversity of healthcare professionals is particularly relevant to medical-school admissions committees. Members of the admissions committee are typically made up of an institution's medical faculty, medical students, and executive leadership; arguably, these members have the power to determine the landscape of future physician workforces. The most effective efforts to ensure greater diversity in the physician workforce essentially begins with the admissions practices of medical schools (Mahon, 2013, pp. 1806-1807). The development, implementation, and assessment of medical-school admissions procedures must consider the needs and challenges of the various levels of parties involved in admissions policies. Literature has shown that the most active process for progressing diversity-related evidence into admission practices and policies is the holistic admissions review.

The AAMC defines the holistic review as a flexible and individual way of looking at an applicant's experiences to obtain a more balanced consideration of their potential and value as a medical student and physician (2018). The selection process of medical students presents a range of social and political consequences. Medical-admissions committees often struggle to find students who are motivated to care for the underrepresented minority communities while simultaneously identifying applicants with exceptional academic credentials to enhance institutional ratings and participate in grant-funded research (White & Connelly, 1991, pp. 39-41). Despite AAMC's calls to utilize more holistic approaches in admission practices, many medical schools continue to operate under traditional admissions strategies influenced by performance metrics such as GPA and MCAT scores (Sternberg, 2008, pp. 105-109).

Historically, medical schools have chosen applicants based on the culture of their institution. One possible reason for this is that the holistic review initiative put forth by the AAMC does not force admissions committee members to utilize the process. For example, one study showed that medical-admissions committee members had significant influential factors informing their decisions, such as length of committee service, MCAT scores, letters of recommendation, and interview feedback (Elam, 2002, p. 27). This particular study also found that the most significant factor of applicants' ability to influence a decision was their alma mater because of the belief it would increase their institutions ranking. The complexity of a committee's selection process can no doubt overshadow values and priorities within an institution's missions and goals, which may completely negate the holistic process. This example proves that an applicant's possession of cultural capital can benefit them in the game of the admissions process.

Admissions committee members typically weigh test scores and grades three times more than an applicant's personal characteristics because of predetermined academic standards (Willingham, 1982, p. 143). However, once an application meets the academic threshold set by an institution's committee, evaluating each application becomes the central part of the selection process (p. 77). Many admissions committees consider an applicant's "distance traveled" as a way to identify diverse applicants; some considerations here include extra-curricular achievements and leadership roles (Talamantes, 1985, pp. 708-709). The distance traveled view is a method used to estimate an applicant's URM level according to factors such as economic, social, educational, geographic, and cultural background (pp. 708-709). In other words, what are the capital indicators that informed a URM applicant's path in competing in the "game" within the admission process? An applicant's path is significant because it can inform how a potential medical student adds value to an institution's mission and goals, and it can also show how a medical school values an applicant. In short, understanding the journey of a URM applicant is necessary for addressing underrepresented minority communities.

One primary strategy that assists committee members in identifying specific attributes or the distance traveled is the optional section in the AMCAS application for students to self-identify as "disadvantaged," which then requires a statement that explains why (AAMC, 2018). The purpose of the disadvantaged statement is to offer a space for applicants to disclose specific information about their background and experience. However, AMCAS does not supply guidance for applicants who choose to submit disadvantaged statements. Consequently, the decision depends on how the admissions committee measures an applicant's disadvantage in comparison to other applicants or

how it may or may not consider it at all. Bearing in mind the varying habitus of those participating in admissions committees, one could argue for the committee's inability to accurately interpret the true meaning of a URM applicant's experience. By applying Bourdieu's theories, the habitus of an admissions committee member helps in the reproduction of their institution's structures over time. The accumulation of habitus and significant capital within a large admission committee has the ability to reinforce their institution's current state and to continue benefitting from the capital associated with their institution's reputation (Bourdieu, 1996, p. 193). The overall difficulty in using the disadvantaged statement as a deciding factor is the committees' ability to balance a fair and unanimous interpretation of an applicant's experience with academic potential during the decision process.

With the possibility of unconscious or implicit racial bias in admissions committees, Capers et al. (2017) utilized the implicit association test (IAT) to determine a potential presence the admissions committees of medical schools. The authors built upon the notion that implicit preference to White applicants in medical-school admissions committees could undermine the URM candidates and contribute to a program's deficit of URM students. Based on this point, Capers et al. sought to discover whether having admissions committees take the IAT would have any impact on URM diversity in their program's incoming class. The outcomes of this study showed substantial levels of implicit White preference; men and faculty represented the largest measures of bias (p. 367). Most study participants thought the IAT could be helpful in reducing bias, while almost half were cognizant of their results when interviewing candidates in the next admissions cycle; roughly 20% said that awareness of their IAT results influenced their

decisions in the following admissions cycle. Consequently, the class that matriculated after the IAT exercise was the most diverse in that particular program's history at that time (p. 367). The overall theme of this study, which was overwhelmingly supported by its outcomes, reinforces the idea that identifying and eliminating unconscious elements, such as bias, could ultimately reduce existing racial healthcare disparities. While implicit bias is regularly defined as an inert or involuntary behavior (pp. 365-366), the definition of habitus is somewhat similar, but differs from a number of implicit bias concepts, such as the embodiment of social structures or dispositions, its influence on social reproduction, and its relationship to a specific field (Bourdieu & Wacquat, 1992, p. 98).

Chapter Summary

This dissertation augments the existing literature relating to: (a) the current demographics of URM physicians and medical students; (b) Pierre Bourdieu's theories of capital, habitus, doxa, and symbolic violence in the context of my study; (c) the historic context of URM students in medical education; (d) the diversity as a benefit to medical education and healthcare; and (e) the current practices in medical-school admissions. More specifically, to address the disproportionate numbers of current URM medical students and physicians, this dissertation examines the available cultural and social capital between URM and non-URM applicants and the discourse used to describe it within their personal statements as a means to advance through the admissions process. Due to the scarcity of literature on this initial phase of the application process, it is critical to examine the use of capital in personal statements, particularly between those invited and not invited to interview. I present the methods I used to address my

previously stated research questions in Chapter 3, which outline the methodologies,

rationale for research design, context, data source, procedure, and data analysis.

The purpose of my study is to use the CDA approach to show how medical-school applicants use indicators of cultural and social capital in their personal statements to advance through the medical-admissions process toward matriculation into medical school. Critical discourse analysis is an interdisciplinary approach to the study of language as a form of social practice, and it examines how societal power relations are established and supported through the use of language (Fairclough, 2013, p. 8).

The research questions guiding this study are: How are forms of capital, if any, expressed in the medical-school personal statements of URM and non-URM applicants? Do the expressed forms of capital differ in the personal statements of applicants who were accepted for in-person interviews and those who were rejected?

This chapter firstly presents my role as a researcher, and it then explains the rationale for using CDA in my research design which falls under the general umbrella of qualitative research. Following this, the chapter provides a general overview of CDA as a methodology and shows why CDA is the most fitting method in conducting this research. The chapter also discusses the relevance of Bourdieu's theory to this research; more specifically, it describes the context and setting of this research, as well as data collection, analysis, and considerations.

Rationale for Research Design

Both quantitative and qualitative approaches to research occur in medical education. Quantitative approaches to research are "based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in order to

determine whether the predictive generalizations of the theory hold true" (Creswell, 2014, p. 2). Quantitative research is the most widely used research method in medical education because it is largely science-based by nature. By contrast, the qualitative approach to research "is an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting" (Creswell, 2014, pp. 1-2). When examining discourse or social and cultural power, quantitative research is limited to numeric patterns produced by statistical methods in order to project generalizations about a particular theory. Such questions of discourse and social and cultural power are subjectively assessed. Moreover, the proposed inquiry into the use of Bourdieu's capital is not solely why it is used, but also what forms of capital are used and how applicants use them in medical-school application materials. Such subjective research is the purpose of this qualitative research design.

Research Methodology

Social theory research sees language as a primary means for perpetuating the games of social structures. In recent years, Bourdieu's theories of capital have been a major influence on CDA research as a consequence of the relationship between social power and language (Wodak, 2001, p. 7). In Bourdieu's 1977 piece titled "The Economics of Linguistic Exchanges," he critiqued the traditional study of language maintained by notable linguists and philosophers such as Ferdinand de Saussure and Avram Noam Chomsky; subsequently, he proposed new ideas investigating societal affects that are initiated through the associations between discourse and the many forms of capital (Bourdieu, 1977, pp. 651-653). Bourdieu also presented the theory of *expanded*

competence —or language as a practice —which presents concepts of language as being functional and strategic. Language as a practice is understood as a wider view of linguistic competence or language offered by Chomsky and Saussure. Furthermore, according to Bourdieu, "the structure of the linguistic production relation depends on the symbolic power relation between the two speakers, e.g., on the size of their respective capitals of authority. Therefore, competence is also the ability to command a listener" (Bourdieu, 1977, p. 646). He also stated that "language is not only a tool of communication or knowledge, but also an instrument of power. Individuals speak not only to be understood but also to be obeyed, valued, and distinguished" (Bourdieu, 1977, p. 648). Bourdieu's inquiry also considers the association of symbolic power between the deliverer of discourse and the audience, and his work helps to explore how the production of discourse permits some practices of language to be created or suppressed, as well as exemplified or misrepresented by authority.

In the case of the discourse used in an applicant's personal statement for medical school, Bourdieu's logic describes habitus through an applicant's motives for gaining advantageous positions in a competitive field of culture (i.e., medical school), and this habitus is articulated through the personal statement required by the game (i.e.; admissions procedures). The significance of an applicant's self-reflexive practice is the emergence of networks of power that circulate through multiple levels of discourses. For the purpose of this study, Fairclough's micro and macro levels will be used (2013, p. 30). Among the founders of CDA, Fairclough described the micro-level of CDA as the use of language, discourse, verbal interaction, and communication of the social order, while the macro level is used to analyze discourse for hidden cues of power, dominance, and

inequality between social groups (p. 30). An individual's habitus takes form at points of impact between macro and micro forces in communicative contexts that relate to actions, messages, social status, linguistic forms, and audiences (Alvarez, 2012, pp. 40-41).

To uncover the layers of habitus is to examine "the self" as positioned within certain social and cultural spheres. Through accumulated data of the self, inquiry can expose how society, cultures, and institutions form personal and collective experience (p. 41). The personal statement provides the opportunity for medical-school applicants to demonstrate both their cultural and social capital as it relates to lived experiences and the characteristics of power necessary to play the admissions game. Considering capital within the context of the field, I view symbolic capital as the sum of cultural and social capital once they are perceived and recognized as "legitimate" (Bourdieu, 1987, pp. 3-4). In other words, symbolic capital is only understood by field agents with access to categories of perception, and this access permits them to identify and recognize capital and then give it value. As I am not a social agent in this field, I may hold different perceptions of symbolic capital, and therefore I choose to refrain from using symbolic capital in my framework.

There are many types of approaches and linguistic strategies that are used to dissect and study discourse —which is more commonly and simply known as language. The traditional definition of discourse is the "formal and orderly and usually extended expression of thought on a subject" (Merriam-Webster). However, CDA is not described as a methodology or theory. Rather, CDA's key scholars claim that CDA is as much a theory as it is a method, a toolkit, or simply an approach (Barker, 2002; Fairclough, 2001; Meyer, 2001). The approaches and definitions used by researchers from various

theoretical backgrounds may contain a number of differences, but they also share many standard features such as the application of discourse as a social system and the use of CDA as a crucial focal point to examine the power of language.

Another common belief among scholars of CDA is that the use of language not only affects a particular situation, organization and society, but discourse is also affected by society. Through this recurring influence between discourse and society, CDA is used for examining the relationship between the use of language and power. Using the CDA method allows individuals to explore ways in which language is used to maintain, perpetuate, or change a particular social structure. One important trait of CDA comes from the idea that all discourses are historical and can therefore only be understood when they are positioned within their context (Titscher, 2000, p. 166). Therefore, CDA refers to factors beyond the bounds of language such as culture, society, and philosophy. These factors as a notion of context is fundamental to CDA as it unequivocally includes social-psychological, political, and ideological factors, and it thereby assumes an interdisciplinary method (Meyer, 2001, p. 15).

In viewing language as social practice, CDA critically considers the context of the language used (Wodak, 2001, p. 87). Critical discourse analysis researchers concur that knowledge of the interconnected socio-historical origins within the context of specific discourse is fundamental in analyzing and defining its significance. Critical discourse analysis does not identify the links between language and society simply through previous or existing causes; rather, it promotes possible interventions (Meyer, 2001, p. 27). Another shared feature by all CDA researchers is what also differentiates CDA from discourse analysis. When a political position is expressed and when a theory or

assumption is proposed on how such power can be challenged, the "critical" part of CDA is embeds the data in the social realm in order to take a specific stance on a political or social matter (Wodak, 2001, p. 90). The word critical implies the exposure of hidden connections and causes; it also implies intervention, such as providing resources or support for those who may be disadvantaged through change (Fairclough, 1997, p. 276). In line with Bourdieu's doxa theory, CDA aims to expose hidden ideas (i.e., misrecognition) as they are not recognizable for the people involved (i.e., symbolic violence) and are therefore not challenged (Meyer, 2001, p. 15). By and large, CDA researchers have a significant role as advocates for groups who experience social and cultural discrimination.

One leading assumption of CDA is that there is a relationship between society and the manner in which society communicates. Other assumptions exist that support this idea as expressed by CDA scholars such as Fairclough and Wodak (Fairclough, 1997, pp. 258-284; Rogers, 2005, p.370). These assumptions are listed as follows:

- Discourse does ideological work.

- Discourse represents the accumulation of society and culture.

- Discourse is specifically positioned in context and historical.

- Power relations are sometimes informal.

- Facilitation of power relations requires a socio-cognitive approach.

- CDA is a socially focused scientific paradigm that challenges social problems.

- Discourse analysis is interpretive, descriptive, explanatory, and uses a systematic approach.

- The role of the researcher is to examine the relationships between texts and social practices.

My Role as a Researcher

This study deals directly with the access that medical school applicants have to capital, and how such capital manifests itself in the form of societal and professional advantages. Given that my research study speaks to the effect in which capital has on how applicants are classified and positioned in society, it is imperative that I attempt to address my own subjectivity.

As a doctoral student of Higher Education, and perhaps even more so as a student affairs professional at a medical school with a strong social mission, I believe firmly it is both a privilege and an obligation to help future physicians gain a better understanding of how they have the power to address, help, and support our most vulnerable populations suffering from systemic health disparities as a result of social determinants of health. This exercise in self-reflection requires acknowledging and understanding my own characteristics as a human and as a researcher, including the limitations I face —whether perceived or actual —and it also requires believing in my capacity and ability to confront such complex social inquiries.

In pursuing my Ph.D. in Higher Education, I have encountered numerous opportunities to deliberate issues of policy, race, and society. On a more meaningful level, I have worked directly with medical students who are passionate about their calling to help those in need. My role in medical-student affairs expanded when I began working in co-curricular programs with medical students from diverse backgrounds. These co-curricular programs provided opportunities for medical students to apply knowledge from the classroom to tangible action for the purpose of helping our neighboring

underrepresented communities. These encounters made me immediately aware of how some students reveled at the opportunity of becoming involved with these communities through developing into future medical professionals, while others adamantly refused or described the very idea as unpleasant, ineffective, and unrelated to their pursuit of medical careers.

While observing these students, I started to question why some of the more vocally critical students wanted to pursue careers in medicine in the first place, and how they each matriculated into medical school despite such conflicting ideals. It has often struck me as an odd contradiction of values for those students who are not naturally compelled to use their knowledge to serve in underserved minority communities, yet they were eager to compete for a spot to attend a medical school with one of the more progressive social missions in the country. Recognizing this apparent contradiction, I sensed the need to acquire a deeper comprehension of both the motivations and structures affecting the ability of medical school applicants to describe their capacity and passion for practicing medicine.

In crafting this positionality statement, I would be remiss not to reflect on my own privilege in being able to attend respected universities and my upbringing as a White, middle-class, educated female with afforded access to resources and opportunities that made it possible to be where I am today. Accordingly, my declared responsibility as a researcher has been to reposition myself continually throughout my research, thus allowing me to reflect mindfully on my own habitus throughout the process.

Context

According to Bourdieu, academic achievement is the product of the distribution of class in forms of knowledge, taste, and the way language is used to communicate and display other forms of capital. Grounded in educational settings, medical schools represent the primary context of Bourdieu's theories. My study uses a CDA approach to deductively examine the use of Bourdieu's capital in personal statements from the medical school applicants. The sampling of personal statements come from various admissions cycles in a public medical school located in a large urban city in the south-east region of the United States. The applicants of this institution are also a sample of convenience, in that they have been chosen in order to provide proximity to the researcher and the admissions office.

The institution where my research takes place is considered a public, urban campus that annually matriculates 123 medical students (AAMC, 2019). The South Florida medical school is one that puts itself forward as an institute that produces URM graduates and has an equal distribution of URM students and non-URM students because of the the school's position in one of the most diverse cities in the United States. For example, during the 2017 –2018 admissions cycle, this institution received roughly 4,800 applicants (AAMC, 2018-2019). The average matriculation rates from the last two years show an average of roughly 37% White, 30% Asian, 10% Black or African American, 35% Hispanic, Latino, or of Spanish origin, and .08% American Indian or Alaskan Native (2019).

The institution used in my research participates in AAMC's AMCAS application process. Applications verified by AMCAS is the first step in the applicant screening

process. The academic requirements for applicants to this institution include the following: applicants must (1) be a citizen or permanent resident of the U.S., (2) have a bachelor's degree at the time of matriculation, (3) have completed the required prerequisite courses at the time of matriculation, and (4) have taken the MCAT (AAMC, 2019). The focal medical school also requires a minimum of three letters of recommendation, two from a science faculty, and one from another faculty member who has taught the applicant. Applicants can also submit up to three supplemental letters from physicians, researchers, mentors, and employers (2019). The average statistics for accepted applicants are a score of 509 for MCAT, a 3.6–3.7 overall GPA, and a 3.5 – 3.6 combined GPA from biology, chemistry, physics, and math (BCPM) courses. Applicants seeking an early decision admission to this particular medical school must meet the minimum academic criteria of a 3.70 overall GPA, including a combined BCPM GPA of 3.50 and an MCAT score of 517 (2019). Specialty data reflecting the plans of the most recent graduating class show internal medicine, pediatrics, and general surgery as the top three specialties.

The focal institution is a community-based medical school that prides itself in their innovative medical-education curriculum, which focuses on the social determinants of health both in the traditional classroom and in community households (AAMC, 2019). Through team-based and household-centered care, medical students learn through longitudinal, interprofessional, and service-learning experiences where they translate classroom learning into practical applications within partnered underserved communities of need. The relatively new medical school was granted full accreditation by the LCME

in 2013, and it has received many recognitions for their unique, community-based

approach to medical education.

Personal Statements

The personal statement is a required part of a completed application. However, all

application materials received by the institution are saved indefinitely and kept in an

internal password-protected database that is accessible only to select personnel through

the office of admissions. The personal statements are reviewed holistically by an

admissions committee who determines specific criteria for selecting applicants to

interview. Made up of faculty voting members, students, and administrators, the

admissions committee may also review and make recommendations to the faculty and

administration concerning admissions standards and policies. Information provided

publicly by the institution broadly describes what an applicant should include in their

personal statement, such as " tell us about yourself," and "include why and how you

decided to pursue a career in medicine, and do not make it generic." However, the

AAMC's AMCAS Application Guide (2018, p. 53) steers medical-school applicants to

address the following questions and topics when writing their personal statement:

> *Why have you selected the field of medicine?*
>
> *What motivates you to learn more about medicine?*
>
> *What do you want the medical school to know about you that hasn't been disclosed in other sections of the application?*
>
> *Unique hardships, challenges, or obstacles that may have influenced your educational pursuits.*
>
> *Comments on significant fluctuations in your academic record that are not explained elsewhere in your application.*

The overall task of identifying desired traits in medical-school applicants may be more challenging than determining whether a candidate has the academic capability (Wright, 2014, p. 628). As previously mentioned, this study uses the CDA method to examine the cultural power imbalances explicitly seen in the discourse of medical school personal statements. The use and review of the personal statements were not to be used to critique experiences or credentials, but rather as facilitation of capital used in exchange for advancement through the admissions process and into matriculation. Of the available selection of techniques, personal statements are one of the most widely used tools. The majority of U.S. medical schools reportedly use the personal statement —typically a 5,300-character essay— which is submitted by all applicants to the central medical-school admissions body, the AMCAS (Witzburg RA, 2013, pp. 1565-1567). The use of personal statements serves a practical purpose because it is unrealistic to interview every applicant, given the high volume and demand from potential applicants. For example, during the 2017 –2018 medical-admissions cycle a total of 816,153 applications were sent to 147 AAMC registered medical schools through AMCAS; one medical school in particular received 14,275 applications, which was the most for any school (AAMC, 2017-2018).

Additionally, the personal statement is the most economically practical strategy for screening large numbers of applicants before selecting favorable applicants to interview (Bloom, 2016). The personal statement is also the applicant's first chance to demonstrate their qualification for the medical profession by describing their experiences, achievements, motivations, skills, education, and hobbies. While medical schools do not use a formal structure in their assessment of personal statements, many schools report

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looking for evidence of motivation and commitment to a medical career, teamwork, leadership, responsibility, extra-curricular interests, and work experience in health or social care (Witzburg, 2013, pp. 1565-1567). Evidence also shows that the background information obtained from personal statements does predict who is selected for interviews (McManus, 1984, pp. 1288-1290). Supported by previous predictive validity of this technique, personal statements are therefore significant in the selection process (pp. 147-151).

I used purposeful sampling to ensure appropriate representation of both non-URM applicants and URM applicants who have self-identified their status through the AMCAS (AMCAS, 2018). Purposeful sampling requires that representative applicants are chosen out of a particular subgroup, such as URM and non-URM students from both rejected and accepted applicants with equal gender distributions (Patton, 2002, p. 46). In my study, accepted applicants comprised those who were selected for in-person interviews — although it is possible that these applicants might have been rejected in subsequent parts of the process. I considered rejected applicants to be those who were not selected for in-person interviews and were thus rejected from this medical school. For the data, I requested an equal number of personal statements from accepted male and female URM and non-URM applicants, and an equal number from rejected female and male URM and non-URM. I also requested that essays come from applicants who are similar in academic standing, thus providing the assumption that the essays come from academically equal applicants who have all met academic thresholds required by the institution's standards. The sampling process was therefore purposeful and not random.

Similar qualitative research studies using discourse have estimated sample sizes according to five factors: the topic of research, the scale of the study, the quality of the data, the research design, and the use of shadowed data (e.g., describing experiences of others as well as their own) (Morse, 2000, pp. 3-5). Approaches to discourse analysis involve the use of purposeful sampling procedures to obtain appropriate documents to extract the data. However, since the research focuses on the *producer* of the text and not the actual text itself, quota sampling was selected as the necessary approach. The concepts or language under examination represent the unit of analysis; given that an individual applicant can produce hundreds or thousands of concepts, large samples are essentially not required to generate rich data sets (Wood, 2000, p. 77). Additionally, it is essential to sample diverse groups that participate within a given discourse, as they can provide insight into how applicants appeal to external discourses and connect their influences on the discourse under study (2000).

In this study, I used 40 personal statements from five non-URM accepted female and male applicants, five URM accepted females and male applicants, five from non-URM rejected female and male applicants, and five from URM rejected female and male applicants (Table 1).

Table 1
Personal Statements

Rejected	URM	Non-URM	Interviewed	URM	Non-URM
Female	5	5	Female	5	5
Male	5	5	Male	5	5

According to discursive psychologists Potter and Wetherell (1987), small samples are acceptable for examining an essential range of phenomena (p. 161). The authors

recommended no more than 10 samples; they regard this number of samples to be capable of providing the same amount of usable information as compared to several hundred responses to a structured opinion poll. However, the significant factor of sample size must be relative to the research question (Potter, 1987, p. 161). In other words, significant variations in linguistic patterning can emerge from a small number of people.

Procedure

The primary source of data collection in this study were personal statements from both male and female URM and non-URM medical students; these were submitted through the AMCAS and were sent to the aforementioned public medical school in Florida. After approval from the Institutional Review Board (IRB), electronic communication through the researcher's email was used to request the purposeful sampling of the 40 personal statements from the institution's medical-admissions office, which has the exclusive access to these records. The medical-admissions personnel selected the personal statements based on my requested sample profile to avoid researcher bias. Personal identifiers, such as name and application year, were redacted for anonymity purposes. Because of my day-to-day proximity to the medical students at this particular institution, the electronic personal statements were initially reviewed to confirm that the identity of the applicants was not evident. Once I obtained the 40 unidentifiable statements representing the requested applicant profiles, no further engagement with the medical admissions office was necessary, and I proceeded to perform data analysis.

Data Analysis

According to Fairclough (1989), there are three levels of discourse when

analyzing text (pp. 24-26). The first level accounts for social conditions of production

and interpretation, which refers to the societal factors that have led to the production of a

text and how these factors influence interpretation. For the purposes of my research,

medical school applicants have achieved Fairclough's first level because they have

already completed and met the academic and admission requirements set by the

individual institutions through the AMCAS, and their personal statements have populated

into the institution's admissions database. The second level refers to the process of text

production, and it examines how that process affects interpretation. Accordingly,

applicants in my study achieved this second level through the use of the AMCAS

framework, which informed them about providing the appropriate responses and

requirements needed in the composition of their personal statements. Finally, the third

level signifies the text as the summation and product of Level 1 and 2—this is in essence

the personal statement. Therefore, data analysis of the personal statements began at the

third level of discourse.

Fairclough categorized his CDA framework into three main groups: vocabulary,

grammar, and textual structures (Smith-Barrow, 2015). Because the focus of my study is

to identify specific capital described in personal statements deductively, Fairclough's

vocabulary group was adapted from his framework in analyzing the personal statements.

The vocabulary group is applicable, as many forms of vocabulary can simultaneously

represent the same type of capital. Since many forms of vocabulary can represent the

same type of capital, Fairclough's grammar and textual structure groups were not utilized

under the assumption that many personal statements may be written with the assistance of editors or professional services that can influence grammar and textual structures (2015).

In *Language and Power*, Fairclough (1989) cited his intent to "examine how the ways in which we communicate are constrained by the structures and forces of those social institutions within which we live and function" (p. iv). To achieve the objectives of my study, I developed a framework (see Table 2) that uses Bourdieu's approach to capital in order to analyze the collected personal statements according to Fairclough's CDA framework (Fairclough, 1989, pp. 122, 127). I arrived at my adapted framework through an examination of Bourdieu's forms of capital viewed within Fairclough's (2013) framework at the micro level, followed by a consideration of possible indicators of capital at the macro level (Table 2).

Table 2
Micro and Macro Level of CDA

Micro Level	Macro Level
Experiential values: Knowledge and beliefs (e.g., applied knowledge from education, family upbringing, and work experiences; intrinsic beliefs affecting how knowledge is applied) **Relational values:** Reflecting social relationships (e.g., trust, the perceived social relationship between the applicant and individual described in the text) **Expressive values:** Attitudes towards subjects and social identities (e.g., descriptions based on attitude or opinion, the evaluation of reality or social identities based on experiences of the applicant's natural or social world)	**Interpretation and explanation**: Capital used as cues to hidden elements of power that are not obvious at first glance (e.g., descriptions of authority, dominance, and inequality between social groups, celebrity and high-profile relationships, unique access related to larger networks related to the social field)

The analysis at the micro level uses Fairclough's experiential, relational, and expressive values to examine vocabulary, grammar, and communication of the social

order (Shahbazi, 2017, p. 99). Fairclough's three values are essential to the interpretation of CDA within my adapted framework in this study. Experiential values show how an applicant's experience of the natural or social world affected the text, as well as how the applicant is positioned in the text (Fairclough, 1989, p. 112). Moreover, I classified the applicant's views of the world using experiential values to analyze the formal features of the text. Identifying relational values uncovers how the applicant perceived the social relationship between themselves and the intended recipient. Finally, the expressive value reveals the applicant's general evaluation of the aspects of reality that they were attempting to relate to. In other words, the expressive value can expose how an applicant reflects on or identifies with certain social identities.

Fairclough's macro-level CDA reveals hidden power relations through descriptions of authority, dominance, and inequality between social groups. The macro level interprets whether the use of capital signaled a cue for hidden power relations. The purpose of this stage determines whether cues in the text lead to certain assumptions or other elements that are not obvious at first glance (Fairclough, 1989, p.129). Fairclough's CDA framework also includes a third level between the micro and macro levels called the meso level, and this is used for analyzing the producer of the text and its intended audience (1989, pp. 112-113). I chose to leave out the meso level in my framework since the intent of the producers (i.e., URM and non-URM medical-student applicants) was already determined, and the audience (i.e., medical-school admissions committees) were already identified.

Fairclough stressed that any formal feature of text can demonstrate more than one of these values. Since the data content was likely to suggest multiple meanings (Miles &

Huberman, 1994, p. 56), I used simultaneous coding, which applies two or more codes

within a single datum (sentence), to analyze the personal statements for indicators of

cultural and social capital. Multiple meanings within data necessitate more than one code,

since complex "social interaction does not occur in neat, isolated units" (Glense, 2006, p.

150). Critiques of simultaneous coding have suggested a risk of indecisiveness on the

researcher's part if the technique is used excessively (Saldana, 2009, p. 80). To reduce

this risk, I used the analysis method created by Ritchie and Spencer (1994) to identify

main issues, concepts, and themes according to which the data can be analyzed and

referenced (pp. 179-180). I determined the themes for data analysis through a literature

review, and I classified them according to cultural and social capital, and Macro levels of

CDA to order to provide a clear lens for data analysis and organization (Table 3).

Table 3
Capital and Macro Level Classification

Cultural Capital	**Social Capital**
grades, education, family, hardships, possession of cultural goods, values, skills, taste, personality, medically related knowledge, beliefs, location/residency, economic resources, work/healthcare experience, research	non-economic resources, advantageous relationship, trust, community organization participation, networks/memberships (AMSA, AMA, fraternity)

Macro Level of Discourse

- Repetitive information from other application materials: high grades, academic achievements, elite alma mater
- Unique medically-related experiences obtained through, or provided by family members
- The use of unfamiliar medical jargon
- Connections to celebrity-status individuals, or abnormally large networks of physicians

During the coding process of the statements using NVIVO 12, I read each personal

statement twice. The first read provided context of the personal statement. During the

second read I identified indicators of capital within the sentences through the lens of

Bourdieu's capital theory, and classified the type of capital using experiential, relational,

or expressive values at the CDA micro level. Finally, I indicated whether an applicant's

use of capital held multiple interpretations, which signified the embodiment of power at

the CDA macro level (Table 4).

| **Table 4** |
| *Adapted Framework* |

Level 1: Classification of Capital	
Cultural Capital: grades, education, family, hardships, possession of cultural goods, values, skills, taste, personality, medically related knowledge, beliefs, location/residency, economic resources, work/healthcare experience, research	**Social Capital:** non-economic resources, advantageous relationship, trust, community organization participation, networks/memberships (e.g., AMSA, AMA, fraternity)

Level 2a: Micro Level of CDA		
Experiential Values: Knowledge and beliefs	**Expressive Values:** Reflecting social relationships	**Relational Values:** Attitudes towards subjects and social identities

Level 2b: Macro Level of CDA
Interpretation and Explanation: Capital used as cues to hidden elements of power that are not obvious at first glance

When reporting the data, I generalized specific names and places to protect the

anonymity of the applicants. The process of anonymity offers the reader context and to

engage themselves in various levels of social consciousness while also protecting the

anonymity of research participants (Clough, 2002, p. 6). In my study, I highlighted short excerpts from selected personal statements for the purpose of illustrating themes of capital used in each CDA value category rather than generate a relationship between the reader and the applicant through their stories. Generalizing narratives has become a common practice among qualitative researchers to protect anonymity and to address apprehensions from research ethics boards (Caine, Murphy, & Estefan, 2017, p. 216).

Alternatively, modifying certain critical points of data has the risk of either raising doubt related to the problem identified by the researcher, or weakening outcomes needed to answer specific research questions (Baez, 2002, pp. 40-41). There is no intention on my part to produce an illustration of a reality that is independent of the applicant's true story. Instead, I addressed the ethical concerns around anonymity by using Markham's (2012) model of interpretive authority to fictionalize selected excerpts of personal statements by (1) changing the names of individuals mentioned in the excerpts, (2) generalizing the location of specific places, (3) excluding or generalizing irrelevant details that could identify the applicant, and (4) using only short statements to avoid incorporating too much information (p. 342-348).

Chapter Summary

Chapter 3 discussed the method of inquiry on how URM and non-URM applicants— both the ones invited and not invited for an interview—use cultural and social capital in medical-school personal statements. I explained the rationale for my research design which supported using the CDA approach for analysis using Bourdieu's theories on capital as a framework. I presented my role as a researcher and provided context of the minority serving institution where I obtained my data and where my study

took place. Finally, I detailed the procedure for data analysis and how my study uses

fictionalization to highlight excerpts from selected personal statements. The following

chapter presents the results of my analysis of the personal statements using CDA and

Bourdieu's theories of capital.

CHAPTER IV

RESULTS

The purpose of my research is to examine whether Bourdieu's theory of forms of capital can be identified in the personal statements of medical school applicants, and whether these forms of capital influence an applicant's ability to gain access into medical school. Using CDA, I examined how these applicants expressed the existence of resources, such as cultural and social capital in their personal statement, in an attempt to secure in-person interviews. The research questions that guided my study are:

1) How are forms of capital, if any, expressed in the medical-school personal statements of URM and non-URM applicants?

2) Do the expressed forms of capital differ in the personal statements of applicants who were accepted for in-person interviews and those who were rejected?

Data analysis was conducted using NVIVO 12. The data measured throughout the analysis refers to "percent coverage," meaning the percentage of the total source as categorized according to the code.

A general analysis of the personal statements suggests that the applicants had similar views on the most appropriate and necessary topics in the competition for medical admissions. It is important to note that the AAMC's AMCAS Applicant Guide (2018, p. 53) directs applicants to address the following questions and topics:

Why have you selected the field of medicine?

What motivates you to learn more about medicine?
What do you want the medical school to know about you that hasn't been disclosed in other section of the application?

Unique hardships, challenges, or obstacles that may have influenced your educational pursuits.

Comments on significant fluctuations in your academic record that are not explained elsewhere in your application.

Applicants also touched on their perceptions of the study of medicine, and on what kind of physicians they aspire to be. As discussed in the findings below, the AMCAS guide provides a framework according to which applicants use experiential, expressive, and relational values to illustrate their motivations and qualifications, using available resources as capital. As mentioned in Chapter 3, all excerpts from the personal statements used in this chapter have been fictionalized using Markham's (2012) interpretive authority framework to protect the applicants anonymity by: (1) changing the names of individuals mentioned in the excerpts; (2) generalizing the location of specific places; (3) excluding or generalizing any irrelevant details that could identify the applicant; (4) using only short statements to avoid incorporating too much information (pp. 342-348).

I developed a working definition of the three CDA values and capital (Table 1, p. 49) to explore the complexity of individual experiences and life stories within the context of Bourdieu's theories of capital. Although the personal statement is the most widely used practice among medical schools' admission processes, and the most individualistic element of the medical school application process, there are other factors taken into account. While academic indicators such as GPA, test scores, and letters of recommendation were not considered when investigating the discourses of capital, it is likely they were a factor in some applicants' success in securing an invitation for an in-

person interview. To minimize this factor, the 40 selected personal statements represented similar academic criteria.

Cultural Capital

Cultural capital in my study is defined as the cultural assets made accessible to a specified individual through their family upbringing and schooling situation. Cultural capital was the most common form of capital used because of the large number of attributes related to the AMCAS application guide's suggested prompts. Using CDA to further examine the use of cultural capital, I found that there were more coding references of cultural expressive values, with 590 references, than cultural experiential values, with 477, or cultural relational values, with 145 (Table 5). Non-URM applicants had slightly more coverage of cultural capital overall at 50.99%, while URM applicants had 49.01% coverage (Table 6).

Table 5
Cultural Capital CDA References and All Applicants

CDA Values	Coding References
Experiential Values	477
Expressive Values	590
Relational Values	145

Table 6
Cultural and Social Capital, URM and Non-URM

Capital	URM	Non-URM
Cultural Capital	49.01%	50.99%
Social Capital	50.96%	49.04%

Cultural Experiential Values

Experiential values under cultural capital describe the use of cultural capital in a personal statement through application of intrinsic knowledge and beliefs (Fairclough, 1989, p. 112). URM applicants both invited and not invited to interview used more cultural experiential values by 8% (Table 7).

Table 7			
Cultural Capital, URM and Interview Status, and CDA Values			
	Experiential Values	**Expressive Values**	**Relational Values**
URM	54.25%	47.86%	34.43%
Non-URM	45.75%	52.14%	65.57%
URM Interviewed	24.18%	22.74%	21.56%
URM Rejected	30.07%	25.12%	12.87%
Non-URM Interviewed	25.43%	22.72%	38.82%
Non-URM Rejected	20.32%	29.42%	26.75%

This suggests that URM applicants used more applied knowledge and beliefs obtained from experiences within their natural and social environment. Indeed, URM and non-URM applicants described very different natural and social environments, which may explain the discrepancy. For example, the following excerpt represents the cultural experiential values of a URM applicant:

> A woman was experiencing terrible pain and her family brought her to my father's clinic. The family attempted to take her to a local clinic earlier but were denied care because they had no money. Those were my earliest memories of my family's homeland, which continue to inspire my desire to serve those with little or no access to healthcare.

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The above excerpt illustrates the applicant's possession of inherent knowledge from primary socialization to the field of medicine in their specific social and natural environment. The applicant was then able to apply this knowledge in the form of cultural capital to address critical issues relating to access to care and the needs of underserved communities. The above narrative exemplifies a common theme differentiating URM and non-URM applicants: URM cultural experiential values are described through first-hand experiences within social structures, unlike those of non-URM applicants. For example, the following expert from a non-URM applicant uses experiential values quite differently:

> Considering my interest in human anatomy, my father, who is a physician, encouraged me to shadow a medical geneticist. I knew I would love seeing genetics used as a tool to solve medical mysteries, and I did. Through that experience I was able to learn about the day-to-day work of a medical geneticist, which gave me the confidence to pursue a career as a physician.

The applicant is using experiential values here to describe knowledge that could appeal to Admissions Committee members. However, despite both applicants having doctors in their family, the non-URM applicant used cultural experiential values obtained from resources considered advantageous to "the game," while the URM applicant described values that were inherent to their situational experience.

The cultural experiential values between essays from applicants invited and not invited to interview reflect similar themes to the above excerpts; however, essays from URM applicants not invited to interview contained further indicators of possible fluctuations in academic records and hardships (also forms of cultural capital) that influenced educational pursuits – a suggested topic of discussion from the AMCAS

applicant guide. This contrast was also evident in cultural experiential percentage

coverage (Table 7, p. 60). The following excerpt is an example of this experience for a

URM applicant:

> My first lesson upon entering graduate school was to assess and reflect on
> my undergraduate academic performance. Through a reflection on my
> achievements and failures, I was able to acquire the strategies and tools
> needed to avoid a similar occurrence in graduate school.

The above narrative shows that this applicant gained valuable cultural experiential

knowledge from the process of academic reflection. However, in light of the competitive

nature and high-stakes academic environment of medical school, this kind of experiential

cultural capital is considered by admissions committees to be a key limitation for

potential students.

Cultural Expressive Values

Cultural expressive values represent attitudes towards specific subjects and social

identities (Fairclough, 1989, p. 112). Both URM and non-URM applicants invited to

interview shared similar percentage coverage of both cultural experiential and cultural

expressive values (Table 7, p. 60). In most cases, applicants expressed their desire to

become a physician, and described their values and motivations contextualized in the idea

of their future selves as doctors. For example, many applicants expressed a desire to

contribute to the improvement of society by becoming a physician who would give hope

to the most vulnerable people.

In contrast, analysis of essays not invited to interview revealed some key

differences. As illustrated in Table 7, the most significant difference in percentage

coverage between cultural experiential and cultural expressive values are from the non-

URM group not invited to interview with a gap of roughly 10%. Non-URM essays showed a more frequent occurrence of cultural expressive values than cultural experiential values. In other words, these applicants were more expressive in describing their attitudes towards subjects and social identities but were not quite able to apply knowledge and beliefs obtained from cultural capital. The following excerpt from a non-URM applicant is an example of this common theme:

> As I stood in the center of the Capitol, I realized a consistency in my experiences: I looked for opportunities where I could be an advocate and help individuals instead of trying to impact larger populations through politics. I realized that I found greater purpose in work directed at empowering individuals.

In the form of work-related cultural capital, this applicant discusses their unique working experience in the political field but does not apply the knowledge obtained from that experience to a career in medicine; rather, it is applied to why they changed career focus. The applicant expresses their social identity within politics and attitude toward a career in medicine. Conversely, essays from URM applicants not invited to interview contained more cultural experiential than expressive values by roughly 5%; they were able to apply their knowledge but did not do so in expressing their attitudes towards a career as a physician and their social identities within that profession.

Some applicants had the added difficulty of navigating their way through the medical admissions process due to the lack of family-related cultural capital (for example, physician parents), inevitably attempting to express themselves within a corresponding habitus they are unfamiliar with. For example, the following is an excerpt from a URM applicant not invited to interview:

> I was raised by a single mother who fought to make ends meet. This situation came with many challenges I had to overcome. I want to contribute to the betterment of society by becoming a physician who will give individuals with similar challenges hope.

Using family-related cultural capital, this applicant represents themselves as the kind of physician needed to address patients with "similar challenges," making this an example of the valuable and applicable knowledge many non-URM applicants lack. However, they were not able to fully express their attitudes toward being a doctor, or to effectively connect with and situate themselves within a social identity outside their current habitus.

Cultural Relational Values

In my study, relational values under cultural capital refer to an applicant's ability to reflect on social relationships within their cultural capital (Fairclough, 1989, p. 112). These relationships are commonly formed through family, experiences of hardships, and healthcare- related work or experiences, amongst other sources (Table 1, p. 49). In general, non-URM applicants had a higher percentage of cultural relational values than URM applicants by roughly 31% (Table 7, p. 60). Additionally, non-URM applicants both invited and not invited to interview had more percentage coverage than their URM counterparts. This may be explained by common themes that emerged from the analysis for indicators of cultural relational capital. For example, non-URM applicants reflected more on social relationships with physicians they encountered, whereas URM applicants reflected more on social relationships with patients. The following excerpts from four different applicants reflect the difference between cultural relational values of URM and non-URM applicant essays:

> The patients in this program had many similarities with the people of my hometown, and they were so grateful of my time, respect, and kindness during the treatment of their medical conditions (URM).
>
> Through the time I spent with this woman, I recognized that she may have endured personal distress in her life due to the color of her skin (URM).
>
> The physician exemplified the role-model qualities of a woman who had gained her confidence through hard work and most critically, dedication to her patients (non-URM).
>
> Working directly with many different physicians has allowed me to understand the most desirable traits of, and form a personal image of, what makes the best physician (non-URM).

With few exceptions, these examples reflect the key difference in themes between URM and non-URM applicants' use of cultural relational values. This is not necessarily to say that URM applicants did not have access to relationships with physicians, but that perhaps they valued or identified more with their social relationships with patients.

Cultural Capital at the Macro Level

At the macro level, Bourdieu (1984) believes that social classes in different settings of "material existence" generate a deviation from habitus between classes (p. 56). To determine the material conditions of existence specifically advantageous to the admissions process, I used Ritchie and Spencer's (1994) framework analysis method to identify key concepts from the emergent themes, then used these for consistency in establishing the presence of a macro level. These key concepts included descriptions of details from an applicant's admissions file, such as high grades and academic achievements, and an elite alma mater – an attribute known to impress admissions committees and affect school ratings (pp.178-180). Additionally, added details such as unique medically-related experiences available only through familial cultural capital, the

use of unfamiliar medical jargon, and connections to celebrity-status individuals were included. In applications with indicators of the macro level (Table 8), non-URM applicants invited to interview used more cultural capital on the macro level in each value category than URM applicants.

Table 8 *Cultural Capital, CDA Macro Values*			
	Macro Experiential Values	**Macro Expressive Values**	**Macro Relational Values**
URM Interviewed	15.00%	0%	0%
URM Rejected	0%	0%	39.67%
Non-URM Interviewed	85.00%	68.92%	60.33%
Non-URM Rejected	0%	31.08%	0%

The following excerpts from four different applicants reflect the difference between macro-level values used in URM and non-URM applicant essays:

> At (elite university), I majored in International Comparative Studies, where I learned about the impact of colonization in South America and the Caribbean, and the factors behind my parents' immigration to the U.S. (URM invited to interview).

This applicant specifically mentions the elite school they attended. With the limitation of characters allowed in the personal statement essays, this information is not commonly seen (unless the school happens to be considered an elite school) because it is already available in the applicant's admissions file submitted through AMCAS. Although academic indicators were not used in my study, the applicant's use of macro cultural capital was interpreted as a cue for high academic achievement.

> My mother was a physician, as well as several immediate family members. My sister-in-law is a nurse, my father is a physician, and several family friends are Dos (URM not invited to interview).

This applicant is describing their experience of familiarity with all aspects of medicine through their membership within a social group or family network of physicians and healthcare providers. In this essay, the applicant focuses on how they chose to pursue a career in medicine over other occupations, using only their position within their social network as a representation of their notable qualities as a future medical student. Again, other factors outside of the personal statement may have informed the decision on whether to invite this applicant to interview or not

> I became aware of the meaningful service that doctors provide from many years of observing my father, a physician. I frequently worked with him in the clinic assisting patients, documenting patient information, and other essential clerical tasks (non-URM invited to interview).

This applicant's use of cultural experiential capital at the macro level was interpreted as early socialization into the practice of medicine in an apprenticeship role. This is an example of unique experience available only through familial cultural capital.

> Adjusting to science courses was like returning to square one after I had successfully progressed to such an advanced level in other academic areas (non-URM not invited to interview).

This applicant is describing their academic achievements at the macro level, perhaps to balance out possible challenges experienced in meeting the institutions preferred academic standards in science courses needed as a prerequisite for applying to medical school.

Social Capital

According to Bourdieu, social capital, along with similar capital resources, facilitates transformation. As echoed in the themes that emerged from the personal statements, social capital refers to belonging, appreciation, and validation from members of the group to which we belong, or groups to which we seek to belong (Bourdieu, 1986, pp. 51-53). The possession of social capital is also dependent on how much effort one applies to the accumulation of other forms of capital (Nalaskowski & Dejna, 2015, p. 688). In other words, social capital can be multiplied by other forms of capital. Coleman (1988) also suggests that a closed social structure is key as it is a prerequisite for developing and preserving group standards, as exemplified by applicants' obtaining of leadership positions in national groups and organizations (p.107). Closure of the social structure also measures the trust in the given relationship network.

In my study, social capital is defined as any kind of associative resource that is familiar in a certain society or group with the ability to define one's social status. Social capital was the second most common form of capital identified in the 40 personal statements. However, attributes relating to social capital were more explicit than those associated with cultural capital (Table 1, p. 49). With varied social capital value results between groups, applicants mentioned influential one-on-one relationships with family members, physicians, and patients to showcase their social capital. They also used memberships and leadership positions within significant organizations and networks – the focus on and leverage of which suggests that modern cultural values and a corporate lens influence attitudes towards healthcare through a corporate lens.

As with cultural capital, URM and non-URM applicants differed in coverage by roughly 1%. However, under social capital, URM applicants represented the majority of percent coverage (Table 6, p. 59). Applicants' individual habitus and discourse within their personal statements revealed a "cost and benefit" element of social capital. In other words, an applicant's social connections can be both a limitation and a benefit. Based on Bourdieu's theories mentioned in Chapter 2, to focus this study I defined social capital as: responsibilities and networks that allow applicants to engage cooperatively in ways that assist them in the admissions process. This allowed me to focus on the sources of social capital (as opposed to the consequences) while recognizing the important features of social capital such as trust and mutually beneficial relationships (Portes, 1998, pp. 6-8).

The definition of social capital also acknowledges the combination of the three CDA values considering that some applicants can have varied access, connections and attitudes. For example, the URM applicants had a more bonding experiences accumulated from social capital to leverage in the admissions process. However, non-URM applicants did not connection social capital ties between those in underserved communities the same way URM applicants did within their experiences. While definition of social capital is the main source of personal statement analysis, it also explains both the requisition of social capital by individual applicants and how groups are structured according to their association with the field. A closer look at the experiential, expressive, and relational values provides a more detailed understanding (Table 9). Table 9 shows the variation in coverage between URM and non-URM applicants for the three CDA values, with URM

applicants showing higher coverage in social experiential values, while non-URM

applicants showed higher coverage in social expressive and relational values.

Table 9			
Social Capital, URM and Interview Status, and CDA Values			
	Experiential Values	**Expressive Values**	**Relational Values**
URM	62.43%	47.13%	21.99%
Non-URM	37.57%	52.87%	78.01%
URM Interviewed	52.89%	41.88%	21.99%
URM Rejected	9.53%	5.25%	0%
Non-URM Interviewed	12.02%	27.67%	56.52%
Non-URM Rejected	25.55%	25.20%	21.49%

Social Experiential Values

Experiential values under social capital refer to knowledge and beliefs gained

through influential social relationships. The data analysis shows that URM students

invited to interview had more percentage coverage, followed by non-URM not invited to

interview, then non-URM interviewed and URM not interviewed (Table 9, p. 70).

Themes differentiating URM and non-URM groups were evident in the kinds of social

groups and relationships applicants described in their personal statements. Emerging

themes from URM applicants showed more explicit associations with trust and

community organization participation, while those from non-URM applicants were

associated with education and academic achievements. The following excerpts highlight

the difference in themes:

> Working alongside two different general practitioners, I was able to observe how forming personal relationships with patients aids in quality of care. These relationships help to gain the patients' trust and allow for an accurate diagnosis (URM applicant invited to interview).

> The same determination to work hard in my classes filtered through to my research experience in [Dr. Smith's] research lab. Our findings indicate possible environmental sources of various health issues in women. We proudly presented our research and started new research projects in an effort to find specific causes of tumor growth in mice with certain diets (non-URM applicant invited to Interview).

A narrowing of the analysis showed similar themes in the statements. Clearly, URM students invited to interview had more percentage coverage, followed by non-URM not invited to interview, then non-URM interviewed and URM not interviewed (Table 9, p. 70). The reasons why some groups were not extended an interview remain unclear due to lack of academic indicators. For example, URM students not invited to interview reflected the same themes but had less overall percentage coverage of social capital in their personal statements.

Non-URM students not invited to interview also reflected similar themes to those invited, but this group appeared to mention considerably more memberships to groups and time-consuming leadership positions within these groups as leverage in their personal statements. This is not to say that URM students did not have similar memberships and roles in comparable groups; they may simply have chosen to highlight different social capital in their personal statements. Accordingly, collecting experiential social capital experiences via leadership roles may be prioritized over academic performance according to one's perceptions of the "rules of the game" – a sign of modern cultural values influencing ideals in healthcare. The following excerpt from a non-URM applicant not invited to interview illustrates this theme:

These goals were inspired by my work with [this organization] and were further reaffirmed when I joined and obtained mentors through [a larger medical association] and was subsequently elected the regional chair. In this position, I established relationships with people from various careers in medicine and was able to mentor other students on how to start their own pre-medical [medical association] branches around the country.

In this excerpt, the applicant's experiential values focused mostly on the knowledge applied to support the advancement of their group, rather than to a future career in medicine. Bourdieu's theory of symbolic violence explains why applicants obtain and describe their experiences with the intention of boosting their chances for an admissions interview. In this case, symbolic violence may have negatively affected their actual adamic preparedness. Alternatively, this example may be a symptom of an increasingly neoliberal environment where the skills to operate in hierarchies of managed-care systems are viewed as more important than the core Hippocratic values. In other words, the applicant is focusing on gaining strategic experience from a community of leaders.

Social Expressive Values

The non-URM invited to interview group shows distinct differences in percentage covered between social experiential and expressive values (Table 9, p. 70), meaning that this group explained their values more than they applied their knowledge gained through social relationships. It can be inferred that these applicants valued their social identities within their organizations and their roles as leaders more than the applicable knowledge gained through other kinds of relationships. Similarly, the emerging social capital themes between URM and non-URM applicants were consistent for experiential and expressive values. URM applicants leveraged social relationships centered around trust and with

those in the role of patient, while non-URM applicants leveraged memberships and

leadership positions in organizations.

Expressive values under social capital, however, illustrate how applicants

described their attitudes toward subjects and how they identify themselves within these

relationships. For example, the following excerpts illustrate the use of expressive values

under social capital in URM and non-URM applicants accepted to interview:

> The openness with which these patients shared their lives with me and
> their commitment to being knowledgeable about their own health affirmed
> why I want to be at the front line of healthcare as a primary care physician
> (URM accepted to interview).

Here, the applicant expresses how social relationships shaped their attitude toward

continuing a service they provided while positioned in a specific area in medicine. The

applicant describes working with underserviced minority communities, and explicitly

places themselves in the role of a primary care physician, which is the specialty most in

need of future physicians.

> My club members depended on me to successfully present to and convince
> the Student Treasury to fund our biggest event of the year (non-URM
> accepted to interview).

This applicant describes their membership and leadership role in a particular club where

they believed they were solely responsible for the success of the club's event. The

applicant expresses their attitude as a leader throughout their personal statement but does

not fully apply it to a future role as a physician. Instead, this applicant expressed their

belief that physicians must have such leadership qualities. Just as the literature illustrates

how healthcare is evolving, this applicant's statement exemplifies how current attitudes

toward medicine represent a shift to value more business-like skills.

There was little difference in the themes found between URM and non-URM applicants invited and not invited to interview, the main variance being that these groups showed less percent coverage than those invited to interview (Table 9, p. 70). The following excerpts show examples of the social expressive values of URM and non-URM groups not invited to interview:

> I can engage the human spirit on a deeper level, and I feel this is what allows people to divulge their secrets and trust me with their deepest concerns. So, when I got an unforgettable phone call that my friend was considering suicide, I knew I had to act quickly (URM not invited to interview).

This applicant's use of their experience with suicide may highlight a difference in social classes: studies show that people in lower social classes are more at risk for issues such as suicide, revealing the relationship between social inequality and health (Buglass, 1976, p. 107). Without additional data and information, it is difficult to determine why this applicant was not selected to interview.

> The mentors I met at the [national pre-med conference] enhanced my motivation to become a physician and inspired my long-term goals. Excited to share this with my peers back at [my university], I established [my university's first pre-medical chapter]. Instilled with the encouragement from the mentors I met at the conference, I applied to be the national Pre-Medical recruitment chair and was selected (Non-URM applicant not invited to interview).

This applicant focuses on leadership positions within groups or organizations that they hold membership to. However, instead of applying knowledge through experiential values, they expressed their social identity in the context of those they met through a conference and of being a leader selected by members of an organization to hold a chair position. This example may attempt to close a social structure. As with the non-URMs accepted to interview, the focus on leadership positions within groups and organizations

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exceeds the emphasis on meaningful relationships with patients and communities of need seen in URM personal statements.

Social Relational Values

Social relational values refer to one's ability to reflect on social relationships and relate them towards a subject expressed in the modes of necessity and responsibility (Fairclough, 1989, pp. 24-26). Relational values under social capital are significantly more prevalent in non-URM students invited to interview, with URM invited to interview and non-URM not invited to interview showing comparable percentage coverage – but less than half of the non-URM applicants invited to interview. Moreover, the URM not-interviewed showed zero coverage (Table 9, p. 70).

The major theme that emerged from URM and non-URM students' relational values under social capital was around mentorship and working relationships with doctors. However, non-URM accepted students had more percentage coverage, possibly meaning they had more connections and opportunities to work with physician mentors. The following excerpt from non-URM and URM accepted to interview applicants provides an example of this theme:

> The most important lesson came from my mentor, [John Smith MD], who showed me that being a doctor is being a life-long learner: constantly learning from your patients, even after years of practicing medicine (Non-URM invited to interview).

> [Dr. V] is the embodiment of everything I hope to be as a physician. He told me that as a physician it would not matter how long I work in the field, I would spend my entire career as both a teacher and a student. The most important lesson I learned from him is that working with compassion, humility, and grace should not be an idea in medicine, but an absolute necessity (URM invited to interview).

Both applicants understood and expressed the necessity of learning and a heightened responsibility towards patients within the relationship they had with their mentor. Since the selected essays from URM applicants not interviewed did not use relational values of social capital, I am unable to compare the differences to suggest possible explanations as to why they are lacking in relational values.

Social Capital at the Macro Level

The macro level of social capital consists of distinct forms of high-level connections, such as politicians or policymakers, or well-known individuals recognizable to the masses, such as celebrities (Halpern, 2005, p. 24). Halpern (2015) believes there is a level of functional similarity between the micro and macro levels of social capital: a decrease in social capital on one level can account for an increase on another (p. 19). Using this logic, it can be assumed that the six all non-URM personal statements with indicators of social capital at the macro level (Table 10) could potentially lack one or more of the CDA values and therefore overcompensate at the macro level.

Table 10
Social Capital, CDA Macro Values

	Macro Experiential Values	Macro Expressive Values	Macro Relational Values
URM Interviewed	0%	0%	0%
URM Rejected	0%	0%	0%
Non-URM Interviewed	33.03%	72.19%	49.77%
Non-URM Rejected	0%	27.81%	52.23%

This logic proves some consistency between social capital at the macro level and the lack of certain CDA values among this group of non-URM applicants. Common themes that emerged from the non-URM applicants' use of macro social capital are celebrity connections and access and relation to a large network of physicians. The following excerpt from an accepted non-URM applicant provides an example of the celebrity theme:

> During my appeal for funding, I saw myself as a doctor expertly explaining to a patient why this treatment option would produce the best results. The appeal was successful, and the figure skater was funded, but my work wasn't finished. Like a physician monitoring his patient, I served as the figure skater's main contact and was involved with every detail of her itinerary. From the type of water she drank to the type of mic she preferred, no detail was too small to consider. Having the opportunity to build a relationship with the figure skater gave me the confidence to perform similar duties as a physician.

Here, the applicant applied relational values of social capital on the macro level to the duties of a physician. This particular applicant had few indicators of social experiential values and theoretically attempted to overcompensate with relational values on the macro level using the relationship he developed with a celebrity-status individual.

Chapter Summary

In relation to cultural capital, Non-URM applicants had slightly more overall coverage than URM applicants. Non-URM applicant used cultural experiential values obtained from resources considered advantageous to "the game," while the URM applicant described values that were inherent to their situational experience. Non-URM applicants not invited to interview used more expressive values when describing their attitudes towards subjects and social identities but were not quite able to apply knowledge and beliefs obtained from cultural capital. URM applicants not invited to

interview were able to apply their knowledge via experiential values but did not discuss their attitudes towards a career as a physician and their social identities within that profession. Non-URM applicants used cultural relational values to describe social relationships with physicians they encountered, whereas URM applicants reflected more on social relationships with patients. The macro level of cultural capital showed non-URM applicants invited to interview used more cultural capital on the macro level in each value category than URM applicants.

Examining social capital URM applicants had more coverage than non-URM applicants and showed consistent themes throughout the three CDA values. Emerging themes from URM applicants showed more explicit associations with trust and community organization participation, while themes from non-URM applicants were associated with education and academic achievements. In relation to social experiential values, URM applicants showed more explicit associations with trust and community organization participation, while those from non-URM applicants were associated with roles in academic groups or organizations. URM applicants used social expressive values to leverage social relationships centered around trust, while non-URM applicants leveraged memberships and leadership positions in organizations. Additionally, both non-URMs accepted and not accepted to interview focused on leadership positions within groups and organizations which exceeded the emphasis on meaningful relationships with patients and communities of need seen in URM personal statements. Non-URM applicants used indicators of macro levels of social capital to focus on distinct forms of high-level connections, such as politicians or policymakers, or well-known individuals recognizable to the masses, such as celebrities.

From these themes emerged several significant findings. First, cultural capital expressive values showed the difficulty URM applicants have expressing attitudes toward being a physician or positioning themselves in that role because of their social positions and upward mobility challenges. Second, the difference in themes between URM and non-URM applicants when using cultural relational values showed how URM applicants valued or identified more with the social relationships with those in patient roles than their non-URM counterparts who valued or identified more with those they encountered in a physician role. Next, doxa and habitus can be used to explain why some applicants describe cultural capital at the macro level.

Significant findings under social capital include experiential values that showed how non-URM applicants viewed the rules of the game, suggesting a shift in ideals of the practice of medicine from Hippocratic to a corporate focus; an act of symbolic violence that could have affected some non-URM applicant's ability to gain an interview. In addition, expressive values in social capital show how URM applicants value trust among those seeking care, as opposed to their non-URM peers who value the trust of their own network. Relational values of social capital showed themes focusing on mentorship for both groups, except for URM applicants not invited who had no coverage in the relational values of social capital highlighting each group's unique access to beneficial social networks. Finally, non-URM applicants were the only group showing indicators of social capital on the macro level using social connections to describe their network affiliation to a specific audience. Chapter 5 examines these findings in detail relating to my research questions, their implications for practice, and provides recommendations for future research.

CHAPTER V

FINDINGS AND IMPLICATIONS

This chapter summarizes the purpose and research design of my study and discusses implications of the findings with recommendations for future research. The chapter is organized into four parts: (a) summary of study, (b) research questions, (c) implications and recommendations, and (d) conclusion of study. The summary reviews the purpose of my study, applied methodology, and significance. Key findings and implications will review results outlined in Chapter 4 and discuss explanations of the research questions based on my review of the literature. Finally, I discuss limitations as well as considerations for future research.

Summary of Study

As demonstrated in the literature in Chapter 2, numerous studies have identified the current lack of URM physicians and the predicted shortage of physicians by 2030, especially in the field of primary care (AAMC, 2017). These studies reflect a collective concern that underrepresented minority communities, already at a significant societal disadvantage, will be further disadvantaged and destabilized by virtue of their pervasively inequitable access to healthcare. Furthermore, the literature in Chapter 2 demonstrates the benefit URM physicians have on underrepresented minority communities (Relman, 2007). Not only are URM physicians more likely than their non-URM counterparts to practice in underrepresented minority communities, but as students, the literature shows how they increase educational benefits that prepare entire student bodies to meet the growing needs of our diverse populations (Saha, 2008). Literature also supports that increasing URM access to medical education can increase socioeconomic advances, not

only for URM students and future physicians but for the communities themselves (Yehia, 2014).

In addition to current influences, the perpetuation of historical and current influences continually affects URM students' access to medical education and the profession as a whole (La Mar Hasbrouck, 1996). The first and most effective steps to increase diversity in medical education and the physician workforce begins with a complete and thorough examination of medical-school admissions practices (Mahon, 2013). In response to such an examination and as a means of increasing matriculation rates for URM applicants, the AAMC developed new strategies including the optional disadvantaged statement for applicants, as well as a call for increased holistic admissions approaches. However, because the AAMC's recommendations are non-binding on medical schools, many admissions committees continue to use traditional methods such as test scores, grades, alma mater, and the personal statement. Of the available selection methods, personal statements are one of the most widely used for both practical and economic purposes to screen large numbers of applicants before selecting favorable candidates to interview (Bloom, 2016).

Because the personal statement is an applicant's first, and sometimes only, chance to demonstrate their qualifications for the medical profession, evidence shows that background information obtained from personal statements is a consistently reliable predictor for which applicants are offered the opportunity for an in-person interview (Bloom, 2016). Qualitative research focusing on how applicants demonstrate their qualifications relative to advancement through the admissions process is limited. However, my application of Norman Fairclough's critical discourse analysis to Pierre

Bourdieu's theory on capital demonstrates a framework to understand the way language in personal statements is used to convey achievement and an applicant's perceived qualification for a specific field through descriptions of knowledge, taste, and access to resources. Using this adapted framework, my study's purpose was to understand what forms of capital are expressed in URM and non-URM applicants' medical school personal statements, and whether the expressed forms of cultural and social capital differ in the personal statements of applicants accepted and rejected for an in-person interview.

Purposeful sampling was requested to obtain 40 personal statements evenly allocated between gender, URM status, interview status, and with similar academic and MCAT scores. The personal statements were selected and stripped of personally identifiable information and academic and test information prior to my access. Through the process of simultaneous coding of the URM and non-URM personal statements invited and not invited to interview, I first identified indicators of capital, then determine the experiential, relational or expressive values within the micro level. Finally, I evaluated whether the findings demonstrated a hidden presence of power at the macro level.

The context of this study was a minority-serving institution in the south-east region of the United States. This institution's medical school annually matriculates roughly 120 applicants and is one that puts itself forward as graduating URM students due to the school's position in one of America's most diverse cities. Upon my request, the institution's admissions office selected 40 personal statements according to my purposeful sampling criteria and de-identified the personal statements before providing them for my analysis. The following research questions guided this study: How are forms

of capital, if any, expressed in URM and non-URM applicants' medical school personal statements? Do the expressed forms of capital differ in the personal statements of applicants accepted and rejected for in-person interviews?

My examination of cultural capital unveiled serval themes, as follows: (a) Non-URM applicants had more cultural capital; (b) cultural experiential values showed what resources URM and non-URM applicants consider advantageous to "the game;" (c) non-URM applicants were able to express their values easier than applying them in their personal statement, and URM applicants were able to apply their experiences, but not express their attitudes; (d) URM and non-URM used cultural relational values to describe different kinds of relationship; and (e) non-URM applicants invited to interview used more indicators of cultural capital on the Macro level than URM students.

Themes found in my examination of social capital in my study were as follows: (a) URM applicants had more social capital; (b) URM applicants value community participation while their non-URM peers focused more on academic achievements;(c) URM applicants used social expressive values to leverage trusting relationships in underserved minority communities, while non-URM applicants leveraged leadership roles within professional organizations, exceeding any emphasis on relationships within underserved minority communities; and (d) the only group using indicators of social capital on the macro level were the non-URM applicants.

Next, I will discuss the key findings derived from the themes mentioned above to address each research question of this study. Additionally, the implications and recommendations for practice are discussed along with recommendations for future research in discourse used in student's medical-admissions personal statement.

Forms of Capital in Personal Statements

URM and non-URM applicants differentiate themselves in their personal statements using cultural and social capital. These differences are critical to the way admissions committees read personal statements when selecting ideal candidates to advance in the medical-school admissions process because they reveal hidden elements that highlight the potential of an applicant beyond traditional qualifications. By applying Bourdieu's theories on class and Fairclough's CDA values to each of the 40 personal statements analyzed for this study, I uncovered distinct and critical findings from the previously stated common themes.

Cultural Capital

The use of cultural capital is evident in the personal statements and leads to the following critical findings. First, examining the expressive values between URM and non-URM applicants reveals that URM applicants conveyed expressive values in their personal statements differently than non-URM applicants. This difference is directly tied to their inability to effectively portray themselves in manners befitting what admissions committees see a future physician. This, in turn, results from URM applicants lacking both the background and societal benefits that are compatible with the admissions committee's general interpretation of the correct social identity of a physician. As I reference in Chapter 2, Bourdieu describes determining an individual's social position as contingent upon their access to, and use of, resources and power available via cultural capital (Bourdieu, 1977, pp. 72, 95). Habitus, therefore, can connect an applicant to a field by "laying out the rules of the game" so that an individual can attempt to act according to "suitable" tastes, norms, and behaviors (1977). Habitus is described in the

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literature as a form of institutional power that is simultaneously individual and collective. Habitus also explains how and why the attitudes and social identities of these applicants are reproduced in the broader structures of society. As such, Bourdieu's habitus is key to understanding why URM applicants are unable to associate with an external social structure, in this case, that of the physician (1977).

Through the examination of cultural relational values, a second key finding revealed that URM applicants with significantly less relational values identified more with patients or community members seeking care or aid, whereas the non-URM group with more relational values identified mostly with physicians and assimilated easily to the field of medicine. As I presented in Chapter 2, above all else cultural capital is generally understood as a connection introducing relations of domination between those who have it and those who do not (Serre & Wagner, 2015, p. 446); in this case, it explains why non-URM students had more cultural relational coverage. Further, relationships between an applicant's habitus and access to capital show that "the prolongation of schooling, the diversification of cultural offerings, and the international circulation of ideas and elites have indeed altered the conditions of access to cultural capital and thus its role in how social relations are structured" (p.435). Moreover, in the social structures of the working classes, the value of educational capital from school or work experiences is never secured; instead, it is established relationally (p. 445). It is therefore reasonable to posit that one's habitus plays a conclusive role in differentiating areas of taste, practices and positions, and is therefore a key factor causing URM applicants to feel insecure, and out of place among physicians.

Additionally, corresponding to the literature, the AAMC's current demographics show that just 8.9% of physicians are demographically considered to be URM, making it difficult for URM applicants to find available work and volunteer experiences with other URM physicians with whom they may more readily relate. The literature therefore supports a URM applicant's struggle to relate to non-URM physicians in an unfamiliar social network and structure. Accordingly, when considering an applicant's health-related experiences in the form of cultural capital as education, non-URM applicants inherently relate to a physician and comfortably establish social relationships due to the embodiment of certain types of cultural capital, such as elite schooling or having physicians as family members. URM applicants of different habitus therefore feel more comfortable or familiar when relating to patients and their struggle to obtain equal healthcare.

Social Capital

My review of the personal statements also revealed that social capital is equally evident and uncovered two key findings accordingly. My first finding is that all applicants with indicators of expressive values in social capital discussed and emphasized trust. However, URM and non-URM applicants obtained trust from two very different areas. URM applicants valued trust among patients from the community seeking care, as opposed to non-URM applicants with more overall expressive values who placed a high emphasis on the trust they acquired from relationships as leaders in a variety of professional organizations' social networks. For example, one URM applicant discussed their relationship with a friend who reached out for help with thoughts of suicide. The applicant represented their social identity as someone who can easily engage with others on a deeper level (the act of earning trust) while situating themselves within a specific

social group (e.g., a social group more susceptible to suicide). As I identified earlier in Chapter 2's examination of the literature social capital is the combination of the actual or potential resources linked to membership in a group and validates the benefits of diversity in the field of medicine (Bourdieu, 1986, p. 47). The quality of trust between patient and doctor is therefore particularly valuable as a key mechanism underlying healthcare disparity resulting in part from the lack of trust URM patients have of non-URM physicians (Alsan, Garrick, & Graziani, 2018, pp. 1-6).

Alternatively, my literature review in Chapter 2 also supports how non-URM applicants value trust earned within leadership roles and professional organizations. For example, non-URM students earned trust through obtaining funding, votes needed for national positions, and group mentorship. In accordance with the literature, the growing relationship between corporations, politics, and other powerful stakeholders and the medical field have blurred the lines between the humanistic traditions associated with the medical profession and the corporatization of healthcare. More specifically, as the healthcare market shifts toward a more corporate business model, so do the professional and personal ambitions of future non-URM applicants who overlook the importance of the relationship between patient and doctor.

A second key finding under social capital is that non-URM applicants use social capital at the macro level to divulge relationships with celebrity-status individuals and accentuate connections to a large network within the field of medicine. However, an applicant's use of these relationships at the macro level did not determine their ability to receive an in-person interview. The non-URM applicants leveraging celebrity did so using relational values, meaning they were able to reflect on the social relationship in

existence between them and their celebrity connection. As I mentioned in Chapter 2, Bourdieu's misrecognition bridges symbolic violence and doxa to explain that the use of celebrity in social capital is a form of "hidden persuasion" intended to divert attention away from other priorities many admissions committees may seek in their applicant pools (Bourdieu & Wacquat, 1992, p. 168). That is, experiences or relationships that enhance one's understandings of social determinants of health or even the role of a physician in general.

The use of celebrity in personal statements aligns with Bourdieu's theories on social class and elites as I outlined in Chapter 2. Celebrities within Bourdieu's definition of elite are those who are well-known within society and the larger cultural field at hand (in this case, medicine), and can hold the attention of large groups by taking advantage of available symbolic capital to demonstrate a specific talent or achievement (Bourdieu, 1984). Linking celebrity interactions with developing one's perceived social capital has the effect of overcompensating for weakened social ties at Fairclough's micro level (2013). Therefore, leveraging celebrity relationships at the macro level of social capital is an attempt to either distract attention away from weaknesses in an application or to make up for a lack of social capital on a particular level of CDA. Accordingly, the non-URM applicants using celebrity connections attempted to divert attention away from their complete lack of experiential values of social capital derived from work or experiences in underserved communities.

In addition to using celebrity at the macro level of social capital, non-URM applicants leverage access and connections to a significantly large network within the field of medicine. As mentioned earlier, a social structure can be difficult to change for

URM applicants because of the strong ties between people within a particular social network (Bourdieu, 1977, pp. 72, 95). Lin (1999) describes ties made within this structure as strong, resilient, and representing a network of exclusive group members. As a result, accessing larger and exclusive field networks for URM applicants is challenging and unlikely. The difference between applicants who used one-or-two physician connections as opposed to a large network of physicians in a personal statement was the difference between experiential and/or expressive values used at the micro level, and relational values used exclusively by non-URM applicants at the macro level, respectively. The central features of the relational values of social capital are trust and dependability, norms and agreements, obligations and expectations, and identity and recognition (Fairclough, 1989, p. 112). In "the game" of the admissions process, an applicant leverages these networks under the assumption that their audience includes members of these larger networks who may favor applicants they feel they can trust as a representative of their network.

Differences in the Personal Statements

The differences between URM and non-URM applicants use of cultural and social capital reveal four key findings in their ability to obtain an in-person interview. Together, Fairclough's CDA and Bourdieu's theories of habitus, symbolic violence, doxa, and misrecognition as applied to indicators of capital validate why some groups were invited to interview, while others were not. Consistent with the literature in Chapter 2, Bourdieu theorizes that habitus is acquired during primary and secondary socialization of a particular field. For example, one key finding shows that URM applicants not invited to interview had less expressive values of cultural capital based on their interpretation of the

field (Bourdieu & Wacquat, 1992, p. 98). In other words, URM applicants with less overall cultural capital are unable to transform their habitus and express themselves as future agents in the field of medicine the same way non-URM students did. Therefore, URM students lacking expressive values of cultural capital are less likely to receive an invitation to interview.

Upward social mobility challenges Bourdieu's view that a social structure is resilient. Divisions between social structures persist despite individuals who move between them (Lin, 1999, pp. 28-55); it is the individual who changes rather than the social structure which that individual inhabits. Because of the persistence of social divisions, upward social mobility and habitus transformation is a challenge for most URM applicants attempting to gain access to medical school. Most URM applicants lack the family-related cultural capital that non-URM applicants have (e.g., physician parents), which makes career possibilities mostly independent of their knowledge and beliefs. Therefore, many URM applicants face the added difficulty of having to independently navigate their way through social structures and the corresponding habitus they are unfamiliar with, leading to their inevitable attempts to cross habitus boundaries.

A second key finding revealed that non-URM applicants invited to interview both possessed subjectively larger CDA levels of cultural capital and overemphasized their ability to "play the game" by describing their capital on a macro level as a form of doxa. Bourdieu's doxa and Fairclough's macro level of CDA work together to describe an applicant's ability to wield power in the admissions process. As evident in the personal statements, many applicants did indeed have advantageous and unique resources assisting them in the admissions process. However, consistent with Bourdieu's doxa, only non-

URM applicants chose to use their cultural capital as a form of hidden persuasion by demonstrating it on the macro level, essentially establishing uniformity of non-URM applicants' habitus. Therefore, URM applicants who already enter the medical-admissions "playing field" with less cultural capital are less likely offered an interview if they are unable to employ it on the macro level by leveraging qualities such as exceptional grades and academic achievements (e.g., an elite alma mater, unique experiences provided by family members, the ability to use advanced medical jargon). This preceding scenario also justifies the necessity to diversify medical student bodies. As I cite in Chapter 2, White students from more racially diverse programs feel more equipped than their peers attending less diverse schools to care for patients from racial and ethnic groups other than their own.

A third key finding discovered through an examination of experiential values of social capital confirmed that most non-URM applicants have yielded to a growing neoliberal environment where the skills needed to operate in hierarchies of power (e.g., leadership positions within large student organizations) are valued over core Hippocratic values. Non-URM applicants identify most with this finding, as they possess more overall social capital aligned with considerably more memberships to groups and time-consuming leadership positions within organizations that take away from time dedicated to academics. In contrast, the URM applicants prioritized socializing and gaining experiences within underserved communities.

Consistent with Bourdieu's theories, habitus justifies the creation of dispositions and actions from the inherent embodiment of the social structure (Bourdieu & Wacquat, 1992, p. 89). Since habitus explains why different social groups show different patterns

of behavior and attitude, it also rationalizes the process, stability, and reproduction of a social structure (Horvat & Antonio, 1999). Here, the literature supports how non-URM applicants with similar habitus and access to social networks are more likely to prioritize group membership in the pursuit of valuable leadership experiences within certain organizations. The prioritization of leadership roles within a social network will over time alter the perceptions of the "rules of the game" among the affiliated social agents and group participants. Non-URM applicants who overemphasized the "rules of the game" by obtaining a disproportionate amount of leadership positions and group memberships, while dedicating no time discussing anything else, did not receive an invitation to interview. More research is needed to determine if this form of symbolic violence affected their ability to maintain their academic priorities while managing multiple leadership roles.

A fourth key finding showed that URM applicants not invited to interview had no coverage of relational values of social capital. Overall, relational values of social capital showed themes focusing on physician mentorship. For URM applicants not invited to interview, this meant they lacked valuable mentorship experiences putting them at a severe disadvantage. Consistent with the literature, there is clear justification for the contrasting relational values of social capital between URM and non-URM applicants. Historical events and processes that occurred in the field of medicine have indeed contributed to the inequality that has caused the current deficit of URM physicians in the field as well as academic medicine. The lack of URM physicians and faculty in academic medicine, therefore, severely minimizes the mentorship opportunities between URM

students and URM physicians – a critical element for academic and career advancement (Yehia, 2014, p. 2).

Because social capital is a resource of inequality, those outside of the dominant social group are limited and isolated from access to beneficial information and influence from others. Medical school applicants looking to acquire valuable experiences that will help them in the admissions "game" mostly obtain these experiences through connections within their networks (school, family, organizations, etc.). URM applicants therefore experience difficulties acclimating and relating to the culture of medicine due to the lack of URM faculty available to mentor and help students adapt to the process. Such difficulties explain why URM students with little to no relational values in social capital did not receive an invitation to interview. Accordingly, the lack of URM physicians therefore plays a role in affecting a URM applicant's ability to relate socially to the role of a physician.

Implications and Recommendations for Practice

The findings of the study have implications for practice and future research. The findings of this study are related to (1) the need for required institutional representation to enhance pipeline programs, (2) personal qualities and potential of applicants, and admissions committee priorities, (3) application guidelines, (4) social agents in the medical-admissions process, (5) the disadvantaged status, and (6) the "rules of the game."

Required Institution Representation to Enhance Pipeline Programs

This study reveals that URM applicants have less access to both social and cultural capital, which in turn limits their access to valuable mentorship opportunities and experiences their non-URM peers have. By way of my literature review and analysis of

the personal statements, I have demonstrated that many URM applicants appear to lack an accurate interpretation of the field of medicine and the medical-admissions process as a whole. In accordance with LCME's standard 3.3 "Diversity/Pipeline Programs and Partnerships," many medical schools address these issues by offering courses, experiential learning opportunities, and additional advising to select groups of premedical students with the goals of both recruiting and preparing URM students for medical school and in turn recruit and retain URM faculty. However, such initiatives are not discussed as a central feature of an applicant's cultural or social capital, and URM applicants may be left with the impression that these opportunities are of less critical importance than they actually are when it comes to creating a successful application portfolio. These programs — also called "pathways," "pipelines," "bridges," or "early assurance" programs (AAMC, 2019) lack intervention studies, research on best practices, and longitudinal program data outcomes. This in turn weakens the actual potential of these programs and the ability to obtain federal funding and other grants in an effort to support and enhance URM access to resources and mentors.

In the context of the foregoing and as a means of increasing diversity in the physician workforce by developing a meaningfully diverse student body, I recommend a requirement that every medical school must delegate a medical student and faculty or administrator to participate in the AAMC's Pathway, Pipeline, and Bridge Program (PPB). The PPB program is a new forum for conducting a baseline census of the programs currently in existence, developing consensus documents about the definition and mission of these programs, and laying the groundwork for sharing best practices and conducting research. Mandating participation in these valuable initiatives will

provide opportunities to effectively develop change agents in each medical school. These change agents will be a critical piece in order for institutions to expand resources and implement improvements in pipeline program development, ultimately benefitting students and the medical profession as a whole.

Personal Qualities, Potential, and Admissions Committee Priorities

Discourse in medical school personal statements is viewed as conveying intimate stories of the development of one's habitus. This is especially significant as this study showed how URM applicants used cultural expressive and relational values to illustrate the development of their identity working with patients and community members seeking care in preference to working with physicians. As these applicants developed their habitus through their work in the communities, they also developed their trust reflected through social expressive values.

Indeed, both URM and non-URM applicants in this study described a desire to care for those in need, but what differentiates the narratives is how some direct their focus solely on academic performance and other roles that granted a degree of power. The applicants who chose to focus on these features were likely unaware of their potential and worried about the consequences of not including these features in their statements - especially given the perceived associations of how an ideal candidate should fit into the priorities of admissions committees and therefore the social construct of the practice of medicine. Institutions should apply these associations in the form of limitations to demonstrate how these social constructs are reproduced in the choices admissions committees have made. This practice in critical reflexivity is a catalyst for

change and will add value to other applicant characteristics such as cultural experiences

attending to the needs of underserved and overcoming adversity.

Social Agents in the Medical-Admissions Process

My study also highlights how education in and of itself does not intersect with the

changes occurring in our society at the same rate it contributes to the reproduction and

legitimization of a social group. Medical schools must be prompted to change the current

"field" and instead fill it with social agents representing the current distribution of ethnic

and racial populations within the U.S. and local communities. Such a change will assist

the admissions committees and the institution itself in matriculating more URM

applicants that are representative of society at large. Changing a culture from the status

quo to one that places an equal emphasis on an applicant's "distance traveled" (as I

described in Chapter 2) will require new insight about how committees arrive at their

decisions, while also engaging *all* stakeholders in the admissions process to involve those

outside of traditional faculty participants, such as staff, patients, and community members

alike. The influx of these stakeholders will allow them to serve as new social agents in

the medical-school admissions process in effecting positive change to eliminating health

care disparities for our most vulnerable populations.

Application Guidelines

This study showed that many non-URM applicants not only had exclusive access

to high-status individuals, but that they also used these relationships to leverage their

ability "play the game." As many pre-medical student blogs and online forums explore

the pros and cons of name-dropping in the personal statement, the AAMC's AMCAS

Applicant Guide presented in Chapter 3 must be effectively revised to include more

explicit "don'ts" to accompany their "do's" in order to level the playing field and minimize the opportunity for unfair advantage. While the AAMC communicates its admission priorities to medical students through their holistic admissions initiatives I presented in Chapter 2, communicating these expectations will have the effect of communicating the same standards and priorities to the applicants. If high-profile individuals are in fact significant to the applicant's development, the appropriate forum to communicate that should be through letters of recommendation. After all, the personal statement should be about the applicant, not the high-status individuals or large networks they have access to. And as I have shown throughout, the URM applicants are systematically disadvantaged by virtue of not having these high-profile individuals in their application arsenal to deploy at-will to the admissions committees.

The Disadvantaged Status

The new theoretical considerations presented in this study can be used to assess the futility of various secluded changes in the admissions process, such as the lack of accountability measures for actual holistic reviews of applicants, and the "disadvantaged" status that all applicants can use at will to self-identify their own version of inadequacies. Identifying the ideal medical student candidate according to the needs of our communities is much more than simply segregating our applicants into categories or judging their potential to impact the health of our most vulnerable communities simply by grades and scores. This study proves that habitus, specifically, is an important theoretical piece to the extent that it prevents an applicant's access to capital from becoming a disproportionate link between given systems and certain agents, such as medicine admissions committees. Habitus allows a more comprehensive analysis of the

medical school applicant as a real, embodied participant, hindered by developmental, psychological and emotional limitations shaped by existing environmental and institutional structures.

To put it plainly, the "disadvantaged" status must change. This study reveals a more concrete definition of disadvantage through the URM applicant's lack of expressive values of cultural capital. The URM students I examined struggled to understand the field and lacked the social network necessary to access valuable resources and experiences, and ultimately failed to navigate the admissions process as effectively as their non-URM counterparts in the context of the currently existing structure. I recommend that "disadvantage" be redefined to shift the focus on identifying and supporting first-generation applicants. In this process of redefining "disadvantaged," the development of critical reflexivity in the admissions process is needed to define how the ideal candidate can address the needs of our communities rather than the needs of the medical school. Supported by the need for unconscious bias training for medical admissions committees as I identified in Chapter 2, admissions committee members should be encouraged to understand the ways that their evaluation of applicants is affected by their individual values and innate perceptions, which in turn deeply affect how applicants are characterized as having the necessary skills, knowledge and ability to practice medicine. Admissions committee members might finally think through the ways in which capital influences an applicant's ability to express perception and ability to situate themselves in a medical career, and whether this is a concrete indicator necessary to succeed in medical school.

Rules of the Game

The Flexner ideologies of medical education primarily associates academic quality and excellence with notability, while modern cultural values and characteristics of neoliberalism continue to influence a trend toward the corporatization of healthcare. The care and future of our underserved minority communities are often afterthoughts and secondary to the opportunity to join the powerful, elite status that comes with earning a medical degree. Institutional change will necessitate the construction of new knowledge and principles addressing both organizational and cultural components of access, education, and the practice of medicine. As this study has shown, the rules of the game are interpretive, evolving, and mostly benefit a certain group who has the capital necessary to overemphasize their ability to play the game.

As stated in Chapter 2, many medical schools continue to operate under traditional admissions strategies influenced by performance metrics such as GPA and MCAT scores despite AAMC's calls to utilize more holistic approaches in admission practices (Sternberg, 2008, pp. 105-109). The organizational structure of medical school admission practices should be changed to reflect a holistic applicant review coupled with accountability measures. Such a change would increase access for URM applicants instead of increasing institutional rankings. Accountability measures need to take place at (1) the institutional level for each medical school to its own mission, vision and goals, (2) the public level with neighboring communities and stakeholders, (3) national level for a more diverse physician workforce, and (4) accreditation level to ensure medical schools

not only meet, but expand on standards set for admission practices, diversity standards, and pipeline initiatives.

Future Research

This study aims to contribute knowledge about how features of personal statements can affect the thinking and actions of admissions committees who are not aware of their subconscious influence. The exposure of hidden positions of power and vulnerability based an applicant's access to capital is important to examine, as they are not evident to those involved in medical education and the admissions process, and therefore cannot be fought against (Fairclouch, 1995, p.9). The possibility of perpetuating power through such formal and standardized procedures has the potential of reinforcing the supremacy and control of those who have it. Framing the medical admissions process to examine how applicants use cultural and social capital informs us that there is still much to learn about medical admissions committees and the motivation behind the decisions they make. Three limitations of this study are considered for future research, as follows.

First, the examination of capital was limited to the applicant but did not delve into the committee members reviewing the personal statements. In future research, a spotlight must be shown on committee members' power (and access to) over the decision-making process, including the discourse which occurs during the committee's group assessment of an applicant. This would shed a light on the variables that make up an institution's "ideal" candidate and why. Examining members of the committee has the potential to reveal additional social structures at play and their impact on admissions committee outcomes. For example, do members of diversity offices have an impact on the decision-

making process? Future research should also critically examine the possibility of cultivating new social structures from the inside out through mindfulness and critical reflexivity. Expanding upon IAT initiatives that bring attention to implicit bias, is it possible to shift from reproduction to transformation by fostering a kind of radical habitus maintained by a new system based on social justice and equality? By framing reflexivity and mindfulness as a type of crisis, or what Bourdieu describes as the deconfiguration of habitus and the aligning field, we can examine the possibility of creating new social structures while simultaneously identifying barriers that exist in the "game" of the current admissions process.

Second, while this study focused on URM students on the basis of race and ethnicity, it did not account for an applicant's socioeconomic status (SES). Therefore, research is also needed to examine the issues of SES by exploring class structure and institutional power in terms of the normalizing nature of medical education itself and its power effects on individuals and society. The idea of adapting one's habitus to the culture of medicine provides a new lens to examine how institutions and those who occupy it have established a "regime of truth" that defines its individual values, scientific procedures, rules of the game, and methods of matriculation (Foucault, 1975, p. 23). More specifically, what are these institutions teaching future physicians when low-SES individuals are essentially suppressed as non-intellectual or unsophisticated because there is a perceived level of choice? For example, medical students are taught that techniques such as motivational interviewing is effective in cultivating healthier habits and choices in patients such as diet, exercise and smoking cessation. What are students learning when a patient's inability to change is associated with low-SES and not simply by choice?

Consistent with the literature on Bourdieu's theories of capital, an individual's SES affects both access to education and health outcomes. It has long been accepted by a homogenous majority that the choices we make in the social sphere relating to health, education, and career choices are straightforward subjects informed by our agency and judgment. The delusion that opportunity is equally distributed in our society does nothing but perpetuate a dominant social group's attempt to reproduce an entire economic and social class by controlling access to resources, networks, and overall power. This lack of sociological awareness as it relates to access to education and healthcare also reflects a relative unease toward the subject of social class. With low-SES applicants superficially grouped into the URM category, the continued negligence of medical schools identifying the importance of social class is especially unusual considering the growing income inequality due to America's slowly disappearing middle class, and the recent efforts to holistically expand admissions criteria.

Additionally, because there is an equal need for more physicians from lower-SES backgrounds as there is for URM physicians, there is clear justification to support policy that requires increasing the evaluation of SES. Like URM physicians, recruiting more physicians from low-SES backgrounds would improve access to health care because such physicians are theoretically more likely to practice in their home communities. However, there has been limited research on students' SES background and its influence on their areas of practice or communities of service as a physician. Research in this area is especially critical as a result of the intertwining of race, ethnicity, and socioeconomic status relative to the admissions process. Research examining lower-SES applicant access to medical education will also shed light on how an applicant's deficiency of economic

capital coupled with the growing debt levels among medical students decreases

educational opportunity for SES students who represent both URM and non-URM.

Furthermore, there are numerous scenarios that support changing medical

schools' admissions criteria for the sake of furthering social policy objectives, such as

class-based affirmative action. For example, moderating social class in admissions

decisions could potentially result in the perpetual enrollment of medical students

primarily from the middle and upper classes, in turn influencing accountability measures

to controlling and improving their institution's medical student debt scores. In this

respect, more research is needed to identify how admissions committees weigh an

applicant's SES. More specifically, research applying theories in the sociology of

education may offer new methods of student selection and inform modern approaches to

assist in the selection of aspiring physicians.

The third limitation of my study is that my framework focused strictly on cultural

and social capital in the medical school admissions field. While the justification for fair

admissions practices in medical education is imperative as it relates to the overall access

and quality of healthcare for a significant portion of the U.S. population, future research

should examine other competitive programs (e.g., law schools and universities traditional

categorized as "elite") and additional forms of capital used to facilitate entrance, such as

economic capital. For example, legacy preference in university admissions practices is

widespread, especially in elite institutions and law schools. Through the lese of

Bourdieu's social reproduction theory, the examination of legacy preference is mainly

determined by the value, composition, and trajectory of one's capital holdings and

embraces all categories of capital. The use of legacy preference is almost equal to the

practices based on race and ethnicity, which questions the priority of other programs'

admissions standards. Because there is very little agreement among college applicants

and admissions officers about appropriate or legal admissions assistance, research must

examine the influence economic capital and legacy preferences have on students of color,

as well as the impact of restricting preferences for alumni children on affirmative action

policies. Research relating to the use of economic capital and macro levels of social

capital in these areas would also lend itself to supporting inquiries and investigations with

respect to possible curruption in the admissions field. These controversies, of which we

are only just beginning to learn about, allege the use of large amounts of economic capital

in exchange for fixed college entrance exam scores and matriculation. Research outcomes

realting to economic capital and macro levels of social capital can also aid in the

development of safeguards and policies to combat against the abuse of such privilege.

Final Thoughts and Concluding Remarks

As I have demonstrated throughout this study, the personal statement is where

applicants find themselves struggling to compete with others in the admissions process

through their perceived "rules of the game." While the focus of my study was on the

applicants themselves, it is the social agents of the admissions committees who have the

power to reproduce privilege and maintain what they believe to be in the best interest of

the medical profession, their institutions, and the integrity of their social networks. To be

sure, it is not the health and wellbeing of those within the elite and privileged social

networks that is of anyone's concern. Only when (or if) their priority shifts to those in

underserved minority communities who need access to quality healthcare the most, we

would see progress toward a truly Hippocratic field filled with social agents whose habitus are more suitably aligned.

Changing the admissions process would mean forming new ways of thinking, implementing new ways of functioning, and changing the social structure that perpetuates itself in the effort of those who do nothing but conform to the current systems. Fortunately, despite these antiquated structures, some medical schools are indeed invested in change. More medical schools are going tuition-free in an effort to remove barriers for URM applicants and low-SES applicants. Given that we are several years away from seeing the results of longer-term efforts (i.e., accepted URM students finishing medical school, matching into a certain specialty, and becoming licensed physicians), medical schools are using creative efforts to attack the issue in other ways by structuring their programs to make a positive impact on communities in need. Some medical schools have found ways to provide free healthcare to communities in need by integrating household visits of teams of students and faculty in underserved communities into their curriculum. This and other new education initiatives are teaching students to understand the needs of those communities and offer significant exposure to individual populations beyond those traditionally defined as URM, such as low-socioeconomic communities, LGBTQ patients, etc. In other words, these networks have the ability to adapt and become flexible, so it is a question of when, not if large-scale change possible.

LIST OF REFERENCES

Abernathy, A. D. (1999). A Mentoring Program for Underrepresented-Minority Students at the University of Rochester School of Medicine. *Academic Medicine*.

Advisory Committee on Training in Primary Care Medicine and Dentistry. (2016). *Addressing the Social Determinants of Health: The Role of Health Professions Education.* Washington, DC: United States Department of Heatlh and Human Services.

Alsan, M., Garrick, O., & Graziani, G. (2018). Does Diversity Matter for Health? *National Bureau of Economic Research* .

Alvarez, S. (2012). Arguing Academic Merit: Meritocracy and the Rhetoric of the Personal Statement. *Journal of Basic Writing*, 32-56.

Association of American Medical Colleges. (2016). *Current Trends in Medical Education.* Washington, DC: Association of American Medical Colleges. Retrieved from http://aamcdiversityfactsandfigures2016.org/report-section/section-3/#figure-29

Association of American Medical Colleges. (2008). *Diversity of U.S. Medical Students by Parental Income.* Washington, DC: Association of American Medical Colleges. Retrieved from https://www.aamc.org/download/102338/data/aibvol8no1.pdf

Association of American Medical Colleges. (2014). *Diversity in the Physician Workforce: Facts & Figures 2014, Section II.* Washington, DC.

Association of American Medical Colleges. (2015). *Medical School Applicants, Enrollees Reach New Highs.*

Association of American Medical Colleges. (2016-2018). *Financial Aid.* Retrieved from https://students-residents.aamc.org/financial-aid/

Association of American Medical Colleges. (2017). *AAMC Faculty Roster.* Washington, DC.

Association of American Medical Colleges. (2017). *Analysis in Brief* . Washington, DC.

Association of American Medical Colleges. (2017-2018). *Table A-1: U.S. Medical School Applications and Matriculants by School, State of Legal Residence, and Sex.* Washington, DC. Retrieved from https://www.aamc.org/download/321442/data/factstablea1.pdf

Association of American Medical Colleges. (2018, May). *Financial Aid, Taking Control of Credit Card Debt*. Retrieved from AAMC.org: https://students-residents.aamc.org/financial-aid/article/taking-control-credit-card-debt/

Association of American Medical Colleges. (2018). *Medical Minority Applicant Registry*. Retrieved from aamc.org: https://students-residents.aamc.org/choosing-medical-career/article/medical-minority-applicant-registry-med-mar/

Association of American Medical Colleges. (2018, Aptil 11). *New Research Shows Increasing Physician Shortages in Both Primary and Specialty Care.* Retrieved from aamc.org: https://news.aamc.org/press-releases/article/workforce_report_shortage_04112018/

Association of American Medical Colleges. (2018). *The Medical Minority Applicant Registry*. Retrieved from www.aamc.org: https://students-residents.aamc.org/choosing-medical-career/article/medical-minority-applicant-registry-med-mar/

Association of American Medical Colleges. (2019). *Medical School Admission Requirements.* Washington, DC. Retrieved January 28, 2019

Association, J. o. (2015). *Diversity in Graduate Medical Education in the United States by Race, Ethnicity, and Sex.* Boston, MA: American Medical Association.

Baars, G., Stijnen, T., & Splinter, T. (2017). A Model to Predict Student Failure in the First Year of the Undergraduate Medial Curriculum. *Health Professions Education*, 5-14.

Baez, B. (2002). Confidentiality in Qualitative Research: Reflections on Secrets, Power and Agency. *Qualitative Research*, 35-58.

Barker, C. (2002). The Dynamics of Vagueness. *Linguistics and Philosophy*, 1-36.

Barth, F. (1969). *Ethnic Groups and Boundaries.* Long Grove, IL: Waveland Press, Inc.

Bloom, A. (2016, September 29). *Survey findings: How Does Your Admissions Budget Measure Up?* Retrieved from www.EAB.com: https://www.eab.com/research-and-insights/enrollment-management-forum/expert-insights/2016/survey-findings

Bourdieu, P. (1973). *Cultural Reproduction and Social Reproduction.* Oxford University Press.

Bourdieu, P. (1977). The Economics of Linguistic Exchanges. *Social Science Information*, 645-668.

Bourdieu, P. (1982). *Language and Symbolic Power.* Cambridge: Polity Press.

Bourdieu, P. (1984). *Distinction: A Social Critique of the Judgement of Taste.* Cambridge: Harvard Univeristy Press.

Bourdieu, P. (1986). The Forms of Captial. In J. Richardson, *Handbook of Theory of Research for the Sociology of Education* (pp. 46-58). Greenword Press.

Bourdieu, P. (1996). *The State Nobility: Elite Schools in the Field of Power.* Cambridge: Polity Press.

Bourdieu, P., & Passeron, J.-C. (1977). *Reproduction in Education, Society and Culture.* Thousand Oaks: SAGE Publilcations.

Bourdieu, P., & Wacquat, L. (1992). *An Invitation to Reflecive Sociology.* Cambridge: Polity Press.

Brown, E. R. (1979). *Rockefeller Medicine Men: Medicine and Capitalism in America.* Los Angeles: University of California Press.

Buglass, D. (1976). The Relation of Social Class to the Characteristics and Treatment of Parasuicide . *Social Psychiatry*, 107-119.

Caine, V., Murphy, S., & Estefan, A. (2017). Exploring the Purpose of Fictionalization in Narrative Inquiry. *Qualitative Inquiry*, 215-221.

Capers, Q., Clinchot, D., McDougle, L., & Greenwald, A. (2017). Implicit Racial Bias in Medical School Admissions. *Academic Medicine*, 325-369.

Carlisle, D. (1998). The Entry of Underrepresented Minority Students into US Medical Schools: An Evaluation of Recent Trends. *American Journal of Public Health*, 1314-1318.

Carter, P. L. (2003). "Black" Cultural Capital, Status Positioning, and Schooling Conflicts for Low-Income African American Youth. *Social Problems*, 136-154.

Clough, P. (2002). *Narratives and Fictions in Educational Research.* Open University Press.

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, S95-S120.

Cooke, M. e. (2006). American Medical Education 100 Years After the Flexner Report. *New England Journal of Medicine*, 1339-1344.

Creswell, J. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* Thousand Oaks: SAGE Publications.

Dean Whitla, e. a. (2003). Educational Benefits of Diversity in Medical School: A Survey of Students. *Academic Medicine*, 460-466.

Dewey, J. (1938/1997). *Experience and Education.* MacMillan.

Ding, Y., Qiu, L., & Li, D. (2012). Celebrity-Following And Social Capital: A Study. *Association for Information Systems*.

Driessens, O. (2013). Celebrity Capital: Redefining Celebrity Using Field Theory. In *Theory and Society* (pp. 543-560). Springer.

Elam, C. e. (2002). How Admission Committees Decide: Influence of Committee Members' Experience and Applicants' Academic Characteristics. *Academic Medicine*, 26-28.

Emery, C., Boatright, D., & Culbreath, K. (2018). Stat! An Action Plan for Replacing the Broken System of Recruitment and Retention of Underrepresented Minorities in Medicine. *National Academy of Medicine* .

Fabia Rothenfluh, e. a. (2016). Consumer Decision-Making Based on Review Websites: Are There differences Between Choosing a Hotel and Choosing a Physician? *Journal of Medical Internet Research*, Published online 2016 Jun 16.

Fairclough, N. (1989). *Language and Power.* New York: Routledge.

Fairclough, N. (2001). Critical Discourse Analysis as a Method in Social Scientific Research. In M. M. Ruth Wodack, *Methods of Critical Discourse Analysis* (pp. 121-138). Thousand Oaks: SAGE Publications.

Fairclough, N. (2013). *Critical Discourse Analysis: The Critical Study of Language*. New York: Routledge.

Flexner, A. (1910). *Medical Education in the United States and Canada.* New York: The Carnegie Foundation for the Advancement of Teaching. Retrieved from http://archive.carnegiefoundation.org/pdfs/elibrary/Carnegie_Flexner_Report.pdf

Foucault, M. (1975). *Discipline and Punish. The Birth of a Prison*. New York: Vintage Books

Gamson, J. (1995). Stopping the Spin and Becoming a Prop: Fieldwork on Hollywood Elites. In R. Hertz, & J. B. Imbar, *Studying Elites Using Qualitative Methods* (pp. 83-92). SAGE Publications, Inc.

Gazley, J. L., Remich, R., & Naffziger-Hirsch, M. E. (2014). Beyond Preparation: Identity, Cultural Capital, and Readiness for Graduate School in the Biomedical Sciences. *Journal of Research in Science Teaching*, 1021-1048.

Glense, C. (2006). *Becoming Qualitative Researchers: An Introduction* . New York: Peraosn Eduation, Inc.

Grbic, D., Garrison, G., & Jolly, P. (2010). *Diversity of U.S. Medical School Students by Parental Education.* Washington, DC: Association of American Medical Colleges.

Hadinger, M. (2017). Underrepresented Minorities in Medical School Admissions: A Qualitative Study. *Teaching and Learning in Medicine*, 31-41.

Halpern, D. (2005). *Social Capital.* Cambridge: Polity Press.

Health Resources and Services Administration. (2019, January 24). *Shortage Designation*. Retrieved from Bureau of Heatlh Workforce: https://bhw.hrsa.gov/shortage-designation/muap

Horvat, E. M., & Antonio, A. L. (1999). "Hey, Those Shoes Are Out of Uniform": African American Girls in an Elite High School and the Importance of Habitus. *Anthropology & Education Quarterly*, 317-342.

I.C. McManus, P. R. (1984). Audit of Admissions to Medical School: II-Shortlisting and Interviews. *British Medical Journal*, 1288-1290.

I.C. McManus, P. R. (1989). Reliability of Short-listing in medical student selection. *Medical Education*, 147-151.

IHS Market. (2017). *The Complexities of Physician Supply and Demand 2017 Update: Projections from.* Washington, DC: Association of AMerican Medical Colleges. Retrieved from https://aamc-black.global.ssl.fastly.net/production/media/filer_public/c9/db/c9dbe9de-aabf-457f-aee7-1d3d554ff281/aamc_projections_update_2017_final_-_june_12.pdf

IHS Markit. (2017). *The Complexities of Physician Supply and Demand: Projections from 2015-2030.* Washington, DC: Association of American Medical Colleges.

Jackson, J. (2001). *Harlemworld: Doing Race and Class in Contemporary Black America.* Chicago: University of Chicago Press.

Jaclyn Sanders March, e. a. (2017). *Fiction as a Method in Qualitative Research.* Hoboken: John Wiley & sons.

Jonathan Potter, M. W. (1987). *Discourse and Social Psychology: Beyond Attitudes and Behavior.* London: SAGE Publications.

Kahn, M., & Sneed, E. (2015). *Promoting the Affordability of Medical Education to Groups Underrepresented in the Profession: The Other Side of the Equation.* Chicago: American Medica Association.

Kathleen Raquel Page, L. C.-P. (2011). Faculty Diversity Programs in U.S. Medical Schools and Characteristics Associated with Higher Faculty Diversity. *Academic Medicine*, 1221-1228.

Khushf, G. (1998). A Radical Rupture in the Paradigm of Modern Medicine: Conflicts of Interest, Fiduciary Obligations, and the Scientific Ideal. *Journal of Medicine and Philosophy*, 98-122.

Krupat E, e. a. (2016). Medical Students Who Pursue a Joint MD/MBA Degree: Who Are They and Where Are they Headed? *Evaluation and the Health Professions* , 203-218.

La Mar Hasbrouck, M. M. (1996). Minorities in Medicine: The Flexner Report. *Journal of American Medical Association*, 1547-1548.

Laurant, M. (2009). The Impact of Nonphysician Clinicians: Do They Improve the Quality and Cost-Effectiveness of Health Care Services? *Medical Care Research and Review*, 36s-89s.

Lee, E., & Kramer, R. (2013). Out with the Old, In with the New? Habitus and Social Mobility at Selective Colleges. *Sociology of Education*, 18-35.

Liaison Committee on Medical Education. (2018, March). *Standards*. Retrieved from LCME.org: http://lcme.org/publications/#Standards

Lin, N. (1999). Building a Network Theory of Social Capital. *Connections*, 28-51.

Lin, N. (2001). *Social Capital: A Theory of Social Structure and Action.* New York: Cambridge University Press.

Linda Wood, R. K. (2000). *Doing Discourse Analysis.* Thousand Oaks: SAGE Publications.

Lizardo, O. (2011). Pierre Bourdieu as a Post-cultural Theorist. *Cultural Sociology*, 1-22.

Mahon, K. e. (2013). Selecting Tomorrow's Physicians: The Key to the Future Health Care Workforce. *Academic Medicine*, 1806-1811.

Markham, A. (2012). Fabrication as Ethical Preactice. *Information, Communication & Society*, 334-353.

McDonald, S., & Day, J. C. (2010). Race, Gender, and the Invisible Hand of Social Capital. *Sociology Compass*.

McPherson. (2001). Birds of a Feather: Homophily in Social Networks. *Annual Review of Sociology*, 415-444.

Merriam-Webster. (Accessed 2018). *Dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/discourse

Meyer, M. (2001). Between Theory, Method, and Politics: Positioning of the Approaches to CDA . In M. M. Ruth Wodak, *Methods of Critical Discourse Analysis* (pp. 13-30). Thousand Oaks: SAGE Publications.

Miles, M., & Huberman, M. (1994). *Qualitative Data Analysis.* Thousand Oaks: SAGE Publications.

Misagh Shahbazi, M. R. (2017). Reflection of Ideology on Translation: A Critical Discourse Analysis Perspective. *Journal of Applied Linguistics and Language Learning*, 97-101.

Monroe, A. e. (2013). An Overview of the Medical School Admission Process and Use of Applicant Data in Decision Making: What Has Changed Since the 1980s? *Academic Medicine*, 672-681.

Morse, J. (2000). Determinig Sample Size. *Qualitative Health Research*, 3-5.

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review* .

Nalaskowski, F., & Dejna, D. (2015). The Innovative Method of Measuring the Symbolic Capital of Youth. *Journal of US-China Public Administration*, 686-694.

Norman Fairclough, R. W. (1997). Critical Discourse Analysis. In T. A. Dijk, *Discourse as Social Interaction.* London: SAGE Publications.

Patton, M. (2002). *Qualitative Research and Evaluation Methods.* Thousand Oaks: SAGE Publications.

Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology*, 1-24.

Putnam, R. (2001). Social Capital: Measurement and Consequences. *Canadian Journal of Policy Research* , 41-51.

Rebecca Rogers, E. M.-B. (2005). Critical Discourse Analysis in Educaiton: A Review of the Literature. *Review of Educational Research*, 365-416.

Relman, A. (2007). Medical Professionalism in a Commercialized Health Care Market. *American Medical Association*, 2668-2670.

Ritchie, S. (1994). Qualitative Data Analysis for Applied Policy Research. In B. Bryman, *Analysing Qualitative Data* (pp. 173-194). London: Routledge.

Robbins, D. (1993). The Practical Importance of Bourdieu's Analyses of Higher Education. *Studies in Higher Education*, 151-163.

Robert Witzburg, H. S. (2013). Holistic Review - Shaping the Medical Profession One Applicant at a Time. *The New England Journal of Medicine* , 1565-1567.

Saha, S. e. (2008). Student Body Racial and Ethnic Composition and Diversity-Related Outcomes in US Medical Schools. J*ournal of the American Medical Association*, 1135-1145.

Saldana, J. (2009). *The Coding Manual for Qualitative Researchers.* Thousand Oaks: SAGE Publications.

Sarah Ovink, B. V. (2009). More Than "Getting Us Through:" A Case Study in Cultural Capital Enrichment of Underrepresented Minority Undergraduates. *Research in Higher Education*, 370-394.

Schwalbe, M., Godwin, S., Holden, D., & Schrock, D. (2000). Generic Processes in the Reprodiction of Inequality: An Interactionist Analysis. *Social Forces*, 419-452.

Serre, D., & Wagner, A.-C. (2015). For a Relational Approach to Cultural Capital: A Concept Tested by Changes in the French Social Space . *The Sociological Review*, 433-450.

Service, A. M. (2018). 2018 AMCAS Application Guide. Washington, DC.

Smedley BD, S. A. (2001). The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in the Health Professions: Summary of the Symposium on Diversity in Health Professions in Honor of Herbert W.Nickens, M.D.. *National Academies Press*. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK223632/

Smith-Barrow, D. (2015, April 30). Consider Choosing a Medical School Amdissions Consultant Carefully. Retrieved from https://www.usnews.com/education/best-graduate-schools/top-medical-schools/articles/2015/04/30/consider-a-medical-school-admissions-consultant-carefully

Sternberg, R. (2008). Assessing Students for Medical School Admissions: Is it Time for a New Approach? *Academic Medicine*, 105-110.

Steven Shea, M. T. (1985). Entry of Black and Other Minority Students into U.S. Medical Schools — Historical Perspective and Recent Trends. *New England Journal of Medicine*, 933-940.

Talamantes, E. (1985, November 22). Strengthening the Community College Pathway to Medical School: A Study of Latino Students in California. *Society of Teachers of Family Medicine*, 703-710.

Titscher, S. (2000). *Methods of Text and Discourse Analysis: In Search of Meaning* . Thousand Oaks: SAGE Publications.

Vera Caine, e. a. (2017). Exploring the Purposes of Fictionalization in Narrative Inquiry. *Qualitative Inquiry*, 215-221.

Vincent, G., & Velkoff, V. (2010). *The Next Four Decades - The Older Population in the United States: 2010-2050.* Washington, DC: US Census Bureau.

Walker, K., Moreno, G., & Grumback, K. (2012). The Assoication Among Specialty, Race, Ethnicity, and Practice Location Among California Physicians in Diverse Specialties. *Journal of the National Medical Association*, 46-52.

White, K., & Connelly, J. (1991). The Medical School's Mission and the Population's Health. *Medicine and Public Policy*, 968-972.

Willingham, W. (1982). *Personal Qualities and College Admissions.* College Entrance Examination Board, 1982.

Witzburg RA, S. H. (2013). Holistic Review - Shaping the Medical Profession One Applicant at a Time. *The New England Journal of Medicine*, 1565-1567.

Wodak, R. (2001). The Discourse-Historical Approach. In M. M. Ruth Wodak, *Methods of Critical Discourse Analysis* (pp. 63-94). Thousand Oaks: SAGE Publications.

Wright, S. (2014). Medical School Personal Statements: A Measure of Motivation or Proxy for Cultural Privilege? *Advances in Health Sciences Education*, 627-643.

Yehia, B. (2014). Mentorship and Pursuit of Academic Medicine Careers: A Mixed Methods Study of Residents from Diverse Backgrounds. *BMC Medical Education*, 14-26.

Zimdars, A. (2010). Fairness and Undergraduate Admission: A Qualitative Exploration of Admissions Choices at the University of Oxford. *Oxford Review of Education*, 307-323.

Table 1
Personal Statements

Rejected	URM	Non-URM	Interviewed	URM	Non-URM
Female	5	5	Female	5	5
Male	5	5	Male	5	5

Table 2
Micro and Macro Level of CDA

Micro Level	Macro Level
Experiential values: Knowledge and beliefs (e.g., applied knowledge from education, family upbringing, and work experiences; intrinsic beliefs affecting how knowledge is applied) **Relational values:** Reflecting social relationships (e.g., the perceived social relationship between the applicant and individual described in the text) **Expressive values:** Attitudes towards subjects and social identities (e.g., the evaluation of reality or social identities based on experiences of the natural or social world)	**Interpretation and explanation**: Capital used as cues to hidden elements of power that are not obvious at first glance (e.g., descriptions of authority, dominance, and inequality between social groups)

Table 3	
Capital and Macro Level Classification	
Cultural Capital	**Social Capital**
grades, education, family, hardships, possession of cultural goods, values, skills, taste, personality, medically related knowledge, beliefs, location/residency, economic resources, work/healthcare experience, research	non-economic resources, advantageous relationship, trust, community organization participation, networks/memberships (AMSA, AMA, fraternity)

Macro Level of Discourse
- Repetitive information from other application materials: high grades, academic achievements, elite alma mater   - Unique medically-related experiences obtained through, or provided by family members   - The use of unfamiliar medical jargon   - Connections to celebrity-status individuals, or abnormally large networks of physicians

Table 4		
Adapted Framework		
Level 1: Classification of Capital		
Cultural Capital: grades, education, family, hardships, possession of cultural goods, values, skills, taste, personality, medically related knowledge, beliefs, location/residency, economic resources, work/healthcare experience, research	**Social Capital:** non-economic resources, advantageous relationship, trust, community organization participation, networks/memberships (e.g., AMSA, AMA, fraternity)	
Level 2a: Micro Level of CDA		
Experiential Values: Knowledge and beliefs	**Expressive Values:** Reflecting social relationships	**Relational Values:** Attitudes towards subjects and social identities
Level 2b: Macro Level of CDA		
Interpretation and Explanation: Capital used as cues to hidden elements of power that are not obvious at first glance		

Table 5
Cultural Capital CDA References and All Applicants

CDA Values	Coding References
Experiential Values	477
Expressive Values	590
Relational Values	145

Table 6
Cultural and Social Capital, URM and Non-URM

Capital	URM	Non-URM
Cultural Capital	49.01%	50.99%
Social Capital	50.96%	49.04%

Table 7
Cultural Capital, URM and Interview Status, and CDA Values

	Experiential Values	Expressive Values	Relational Values
URM	54.25%	47.86%	34.43%
Non-URM	45.75%	52.14%	65.57%
URM Interviewed	24.18%	22.74%	21.56%
URM Rejected	30.07%	25.12%	12.87%
Non-URM Interviewed	25.43%	22.72%	38.82%
Non-URM Rejected	20.32%	29.42%	26.75%

Table 8

Cultural Capital, CDA Macro Values

	Macro Experiential Values	Macro Expressive Values	Macro Relational Values
URM Interviewed	15.00%	0%	0%
URM Rejected	0%	0%	39.67%
Non-URM Interviewed	85.00%	68.92%	60.33%
Non-URM Rejected	0%	31.08%	0%

Table 9

Social Capital, URM and Interview Status, and CDA Values

	Experiential Values	Expressive Values	Relational Values
URM	62.43%	47.13%	21.99%
Non-URM	37.57%	52.87%	78.01%
URM Interviewed	52.89%	41.88%	21.99%
URM Rejected	9.53%	5.25%	0%
Non-URM Interviewed	12.02%	27.67%	56.52%
Non-URM Rejected	25.55%	25.20%	21.49%

Table 10
Social Capital, CDA Macro Values

	Macro Experiential Values	Macro Expressive Values	Macro Relational Values
URM Interviewed	0%	0%	0%
URM Rejected	0%	0%	0%
Non-URM Interviewed	33.03%	72.19%	49.77%
Non-URM Rejected	0%	27.81%	52.23%

VITA

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