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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

THE DISADVANTAGED STATUS IN THE AMERICAN  
MEDICAL COLLEGE APPLICATION SERVICE:  
MEDICAL STUDENTS REFLECT ON THEIR  
EXPERIENCES

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy

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College of Education and Behavioral Science  
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Higher Education and P-12 Education  
Higher Education and Student Affairs Leadership

May 2017

This Dissertation by: Adam M. Lowrance

Entitled: *The Disadvantaged Status in the American Medical College Application Service: Medical Students Reflect on Their Experiences*

has been approved as meeting the requirements for the Degree of Doctor of Philosophy in College of Education and Behavioral Sciences in Department of Leadership, Policy and Development: Higher Education and P-12 Education, Program of Higher Education and Student Affairs Leadership

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## ABSTRACT

Lowrance, Adam M. *The Disadvantaged Status in the American Medical College Application Service: Medical Students Reflect on their Experiences*. Published Doctor of Philosophy dissertation, University of Northern Colorado, 2017.

The option to identify as disadvantaged in the American Medical College Application Service (AMCAS) primary application may lead to unclear expectations for applicants. Despite its inception more than a decade ago, there are no published materials containing either a comprehensive definition, or explanation of the role of the Disadvantaged Status in student selection. Research on the Disadvantaged Status is similarly lacking. The purpose of this interpretivist case study was to explore how current students made meaning of the option to identify as disadvantaged when they were applying to medical schools. Through this research I uncovered meanings applicants ascribed to the disadvantaged term, how they determined whether they were disadvantaged, and how they decided whether or not to apply as such.

Through open-ended interviews with 15 students at a medical school in the Northeast, document analysis of their AMCAS files, and with a theoretical framework that included symbolic interactionism, social comparison theory, stigma, and impression management, it became clear that deciding whether or not to apply as a disadvantaged applicant in the AMCAS primary application is both complex and fragile. Simply having experienced hardships during childhood was insufficient for many participants in this study to determine whether or not they were disadvantaged or should apply as such. The process of determining whether or not to apply as a disadvantaged applicant was

confounded by a myriad of factors represented by the following nine themes: experience with disadvantage, resources, ambiguity, audience, pride, stigma, ethics, right to identify, and impression management.

I concluded this dissertation with what I considered to be the most significant implications, in particular, that not all applicants are using the Disadvantaged Status consistently. I made recommendations for staff at the Association of American Medical Colleges, faculty and staff at medical schools and undergraduate institutions, and future applicants. I closed this dissertation with my final thoughts on this research experience.

## ACKNOWLEDGEMENTS

This dissertation is the culmination of many years of education, training, and research; there are many people who have supported me along the way.

To the participants, thank you for your willingness to share. I hope your insight will inform research and practice for years to come.

To the admissions personnel at the study site who made this possible, I wish I could thank you by name, without your support, I would not have been able to conduct this research.

To Dr. Matthew Birnbaum, my advisor and friend, thank you for encouraging me when I needed it most, and for the many rounds of revisions we went through together.

To Drs. Flo Guido, Spencer Weiler, and Eugene Sheehan, thank you for being a part of this research process, and for asking the difficult questions that strengthened this study.

To Amy Addams & Sarah Conrad, directors at the AAMC, thank you for your encouragement. Your enthusiasm motivated me to move forward with this study.

To Karen DiMario, thank you for sharing your expertise and teaching me the art of holistic evaluation. I am forever indebted to your mentorship.

To Drs. Lise Eliot & Ted Lorenc, thank you for treating me as a colleague. I strive to work on behalf of medical students with as much passion and dedication as both of you.

To Dr. Tobias Guzman, thank you for your mentorship and friendship. You are an exemplar of leadership and social justice in higher education and I am fortunate to have learned from you.

To Carol Steward and the Graduate School, thank you for your guidance and in depth review. This final product reflects your attention to detail.

To Dr. Chris Cobb, the greatest friend and cohort-mate, your support, even when we lived multiple time zones apart has meant everything.

To Denise and Dennis Tower, thank you for your encouraging words; you lifted my spirits whenever we spoke.

To my grandmother, Carrol Lowrance, our weekly phone conversations have been a cherished part of my life. I am so lucky to be your grandson.

To my parents, Dr. Lynn and Ken Lowrance, I will never be able to thank you for all you have done for me. Your love and support is among my most treasured gifts.

Finally, to my wife, Dr. Dyane Tower, to thank you properly would require me to write an additional dissertation. For your patience, support, and sacrifices, I will love you always.



## TABLE OF CONTENTS

### CHAPTER I

INTRODUCTION .....	1
Why Disadvantage Matters.....	2
Background.....	4
American Medical College Application Service .....	4
Holistic Review.....	5
Medical College Admission Test.....	6
Disadvantage.....	7
Purpose Statement.....	10
Research Question .....	11
Methodological Considerations .....	12
Data Collection .....	12
Significance of the Study .....	12
Chapter Summary .....	14

### CHAPTER II

LITERATURE REVIEW .....	16
Part I: Access .....	16
Historical Perspective .....	17

Access to Medical Education Today.....	30
Part II: Self-Presentation in the American Medical College Application Service Application .....	57
Theoretical Frame .....	58
Self-Presentation in Computer-Mediated Communication.....	84
Chapter Summary .....	92
 CHAPTER III	
METHODOLOGY .....	93
Research Questions.....	93
Sub-Questions.....	94
Researcher’s Perspective .....	97
Story .....	97
Stance.....	99
Paradigm.....	100
Interpretivism.....	101
Symbolic Interactionism: Theoretical Frame Behind the Methodology.....	107
Methodology.....	108
Case Study .....	109
Trustworthiness.....	127
Ethical Considerations .....	129
Limitations .....	130
Chapter Summary .....	131

## CHAPTER IV

FINDINGS .....	133
Part I: Biographical Narratives .....	133
Participants Who Identified as Disadvantaged .....	134
Ariadne	
Charles	
Jane	
Kenny	
Matthew	
Richard	
Sarah	
The Hummingbird	
Participants Who Did Not Identify as Disadvantaged .....	175
Alex	
Ali	
Ana	
Chris	
Kelsey	
Meghan	
Roger	
Summary of Part I .....	205
Part II: Themes .....	209
Overview of Themes .....	209
Summary of Part II .....	224
Part III: Addressing the Research Questions .....	225
Section I: What is Disadvantage? .....	225
Section II: Am I Disadvantaged? .....	236
Section III: How Do Others View Disadvantage? .....	250
Section IV: How Did Social Comparison Affect the Participants' Interpretations of Disadvantage? .....	255
Section V: Should I Apply as Disadvantaged? .....	259
Chapter Summary .....	270

CHAPTER V

IMPLICATIONS AND RECOMMENDATIONS ..... 272

    The Process of Negotiating the Disadvantaged Status ..... 272

        Determining the Meaning of Disadvantage ..... 273

        How Disadvantaged Am I? ..... 274

        The Decision to Apply as Disadvantaged ..... 275

        A Convoluted Process ..... 276

    Recommendations for the Association of American Medical Colleges ..... 277

        Improve the Description of the Disadvantaged Status ..... 277

        Liaison Committee on Medical Education Mandated Training ..... 279

        Reposition the Disadvantaged Status Further  
        from Socioeconomic Status Questions ..... 279

        Create a Less Disenfranchising Label ..... 280

    Recommendations for Faculty and Staff ..... 280

    Recommendations for Future Applicants ..... 282

    Recommendations for Future Research ..... 283

    Closing Thoughts ..... 286

REFERENCES ..... 288

APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL ..... 324

APPENDIX B: CONSENT FORM ..... 326

APPENDIX C: ADDITIONAL PARTICIPANT PERSPECTIVES ..... 330

APPENDIX D: SUPPORTING MATERIAL FROM PARTICIPANTS’  
AMERICAN MEDICAL COLLEGE APPLICATION  
SERVICE APPLICATION AND INTERVIEW ..... 339

## LIST OF TABLES

1. Summary Profiles of Participants .....	206
2. Comments Regarding Definition of Disadvantaged.....	331
3. Comments Regarding Experience With Disadvantage - Definition.....	333
4. Comments Regarding Resources - Definition .....	335
5. Comments Regarding Ambiguity .....	337
6. Comments Regarding Experience With Disadvantage.....	340
7. Comments Regarding Pride .....	342
8. Comments Regarding Stigma .....	344
9. Comments Regarding Audience .....	345
10. Comments Regarding Resources .....	347
11. Comments Regarding Social Comparison .....	348

## LIST OF FIGURES

1. The relationship of prominent themes ..... 211

## **CHAPTER I**

### **INTRODUCTION**

Applicants to U.S. medical doctor (MD) degree-granting programs complete a single online application that is sent to as many institutions to which they choose to be considered (Association of American Medical Colleges, 2017). In addition to collecting standard data about each applicant, the application includes an optional essay question in which a Disadvantaged Status may be described (AAMC, 2017). Applicants are neither provided an official definition, nor an explanation of how medical schools use the disadvantaged essay. Despite the limited explanation, applicants are expected to decide whether or not they are disadvantaged and whether to disclose such information in the high stakes medical school application from which admissions decisions will be made that will shape their professional lives.

Admission to medical school is highly competitive; applicants apply to an average of 15 programs (Association of American Medical Colleges, 2014b). Given both the competitiveness of medical school admissions and the ambiguity in its definition and function, whether or not applicants identify as disadvantaged may be influenced by their perceptions of how admissions officers will view their disclosure. Applicants' lack of either a standardized definition or of understanding in how admissions committees use the disadvantaged essay could affect their response behavior.



In this study, I recognize that the term *disadvantaged* presents two key issues. First, the concept of disadvantage within the medical school application has yet to be defined comprehensively by the Association of American Medical Colleges (AAMC), the governing agency for 147 U.S. and 17 Canadian medical schools, or any other authoritative body (Association of American Medical Colleges, n.d.). And second, not all applicants may be comfortable being labeled as disadvantaged, regardless of the hardships they encountered. Researchers have indicated the disadvantaged term may even represent a negative conception of diversity (Price-Johnson, 2013).

The option to self-identify as disadvantaged, like other predictors of childhood disadvantage, such as socioeconomic status, participation in government assistance programs, and membership in historically disadvantaged racial and ethnic groups, has the potential to provide medical school admissions staff with important data. Consideration of any impediments to an applicant's educational and social development aids in equitable student selection (Association of American Medical Colleges, 2011). Evaluation of medical school applicants without consideration of any disadvantaging circumstances precludes a fair application review and contributes to the perpetuation of underrepresentation trends in the medical student body and, in turn, the physician workforce (Association of American Medical Colleges, 2013b; Association of American Medical Colleges, 2015).

### **Why Disadvantage Matters**

Meeting society's healthcare needs is a shared mission of all U.S. medical schools. Members of groups "underrepresented in medicine" (URM) are defined as racial and ethnic groups with proportionately fewer physicians compared to their national

populations (Association of American Medical Colleges, 2004, p. 1). Members of URM groups comprise about 12 percent of the physician workforce while representing about 30 percent of the U.S. population (Castillo-Page 2010; National Center for Education Statistics, 2010). Although not presently part of the URM definition, individuals from socioeconomically disadvantaged backgrounds are similarly underrepresented in the physician workforce (Grbic, Jones, & Case, 2013).

Inequitable physician distribution within underserved and disadvantaged communities has been a public concern for many years (Association of American Medical Colleges, 1979; Agency for Healthcare Research and Quality, 2010; Bondenheimer, Grumbach, & Berenson, 2009; Coggeshall, 1965; Funkenstein, 1958; Gee & Cowles, 1957; King & Wheeler, 2004; Komaromy et al., 1996; van Ryn, 2002). The lack of diversity in the physician workforce has been linked to poorer medical care among patients from underserved and disadvantaged backgrounds, as measured by the frequency of medical visits, length of conversations with doctors, breadth of treatment options, and recovery and morbidity rates (Bertakis, Robbins, Callahan, Helms, & Azari, 1999; Cooper-Patrick et al., 1999; Gordon, Street, Sharf, Kelly, & Soucheck, 2006; Gordon, Street, Sharf, & Soucheck, 2006; Schrop, 2011; Willems, De Maesschalck, Deveugele, Derese, & Maesseneer, 2005). Physicians from more privileged backgrounds tend to serve disproportionately fewer patients from such circumstances (Cantor, Miles, Baker, & Barker, 1996; Isaac et al., 2014; Komaromy et al., 1996; Lurie et al., 1993; Mertz & Grumbach, 2001; Moy & Bartman, 1995; Rabinowitz, Diamond, Veloski, & Gaye, 2000). Until society is provided more URM physicians, patients from minority and disadvantaged backgrounds will continue to experience inequitable healthcare, and

efforts to ameliorate physician representativeness issues will continue to be an essential component of U.S. medical school admissions (Association of American Medical Colleges, 2006; Castillo-Page, 2010; Gonzalez and Stoll, 2002; Mullan, Chen, Petterson, Kolsky, & Spagnola, 2010).

### **Background**

Medical schools are responsible for selecting the next generation of physicians and competition among applicants for admission is high. In 2014 there were 49,480 applicants who, on average, applied to 15 schools (731,595 applications) across 141 accredited U.S. medical programs, for one of 20,343 new student seats (AAMC, 2014b). High numbers of medical school applications relative to class sizes is not a recent trend. According to the Association of American Medical Colleges (1951), in 1949, 24,434 applicants applied to an average of more than three medical schools; “[s]ome applied to over thirty schools,” for a total of 88,363 applications across the 79 extant programs (p. 9). Applications to American medical schools increased during the 1960s. In 1966 there were 18,000 applicants, although they submitted nearly 90,000 applications (Johnson & Dubé, 1978). Since the 1960s applications have continued to increase and this has led both the AAMC and admissions committees to search for ways to improve the efficiency with which applications are processed and evaluated.

#### **American Medical College Application Service**

In response to surging numbers of applicants and applications, the AAMC established the American Medical College Application Service (AMCAS) in 1969 (AAMC, 1979; Johnson & Dubé, 1978). Today in AMCAS, applicants create a single set of application materials that can be shared with as many participating medical schools as

desired (AAMC, 2017). Through AMCAS, admissions staff and committees are able to evaluate applicants on many forms of data. AMCAS data includes: degrees earned, grades and transcripts, standardized test scores, biographic and demographic characteristics, work experience, medical experience, leadership, service, letters of recommendation, and a personal statement essay. While each school may evaluate applicant data differently, the AAMC promotes a specific methodology—holistic review.

### **Holistic Review**

In 2007 the AAMC established the Holistic Review Initiative to work with medical schools to develop the resources for establishing diversity in the admissions process (Association of American Medical Colleges, 2013a). Holistic review is described by the AAMC as a “flexible, individualized way of assessing an applicant’s capabilities by which balanced consideration is given to experiences, attributes, and academic metrics” (AAMC, 2013b, p. ix). Consideration of non-metric data, the characteristics and experiences beyond the Medical College Admissions Test (MCAT) and undergraduate grade point average (GPA), is at the heart of the holistic review philosophy (AAMC, 2013b). A holistic approach to applicant review recognizes that each applicant comes from unique circumstances that provide context through which all aspects of the application should be considered. This context-driven evaluation stems from data on the relationships between advantages during childhood, college preparation, and admissions competitiveness. Traditional metric-heavy (MCAT & GPA) applicant selection practices have contributed to the long-standing underrepresentation of disadvantaged groups in medical education, research, and practice (Association of

American Medical Colleges, 2014d; Kreiter, Stansfield, James, & Solow, 2009; Smedley, Stith, & Nelson, 2003).

### **Medical College Admission Test**

Aggregate consideration of MCAT scores and GPAs has long-served admissions committees as the primary method to reduce applicant pools to manageable numbers for interview selection, and continues to serve as a heavily weighted admission variable (Association of American Medical Colleges, 1959; Monroe, Quinn, Samuelson, Dunleavy, & Dowd, 2013). In 1959, AAMC leaders described the MCAT as, “the only yardstick against which virtually all medical school applicants and medical school students can be measured”(p. 2). The MCAT, originally the Moss Medical Aptitude Test, developed by physician, F. A. Moss in 1929 and first administered as the MCAT in 1947 (Association of American Medical Colleges, 1994), was touted as a strong measure of an applicant’s “ability to handle the English language and the capacity to understand scientific and mathematical concepts” (AAMC, 1959, p. 2).

Many medical schools continue to rely heavily on the MCAT for admissions decisions. Among the 120 medical schools surveyed by Monroe et al. (2013), the MCAT was rated as a top variable for deciding whom to invite for interview, and again in the final decision for whom to offer acceptance. MCAT was valued as a tool to predict future academic performance; 82 of the 120 survey respondents indicated that the MCAT was used to predict performance in the basic science classes, and 92 of the 120 schools used the scores to predict performance on the United States Medical Licensing Examination Step 1 component (Monroe et al., 2013). This traditional reliance on metrics has contributed to the underrepresentation of medical students and, subsequently,

physicians from disadvantaged backgrounds (Kreiter et al., 2009; Sternberg, 2008; White, Dey, & Fantone, 2009).

MCAT score disparities persist along demographic and socioeconomic lines, and reflect the inequitable distribution of quality primary and secondary schools (Davis, Dorsey, Franks, Sackett, Searcy, & Zhao, 2013). Such disparities are evident in the average MCAT scores among minority applicants and those from the lower socioeconomic quintiles. According to the AAMC (2014d), based on 270,535 MCATs taken between 2011 and 2013, the average score was 25.2; for Hispanics and Blacks, respectively, the averages were 21.8 and 20.2 (based on a 45-point scale). During the 2012 admissions cycle, individuals from the lowest two socioeconomic quintiles accounted for nearly 45 percent of test scores in the 0-19 range (Grbic, Jones, & Case, 2015). Between 2011 and 2013, only 22 percent of applicants with MCAT scores below 24 were accepted to medical school, and for those in the 0-19 range, that figure drops to less than 9 percent (AAMC, 2014d). In recognition of the limitations of the MCAT, the AAMC implemented a new version of the exam in 2015. The new MCAT tests additional areas of discourse and is based on a different scoring scale.

### **Disadvantage**

The AMCAS application includes multiple variables that could be helpful with identifying applicants who have experienced significant hardships. Such variables include: race/ethnicity, sex, language proficiencies, socioeconomic level, family income, need-based financial aid, government assistance, and parents' levels of education. And, through review of applicants' reported experiences, personal statements, and letters of recommendation, circumstances that may be, in a given context, disadvantaging beyond

the aforementioned categorical variables can be uncovered. Such potentially disadvantaging circumstances may fall within themes that include: religion, orientation, and identity-related hardships; physical or cognitive disabilities; and barriers to medical care or personal mentorship brought about by geographic remoteness.

Additionally, AMCAS includes two, more direct, indicators of disadvantage—the Socioeconomic Status Disadvantaged Indicator, and the option to designate a Disadvantaged Status. The Socioeconomic Status (SES) Disadvantaged Indicator was added to AMCAS in 2014 (Grbic et al., 2015) as an automated feature intended to help schools ground “applicant information in context as part of the holistic review process” (AAMC, 2015, p. 82). The SES Disadvantaged Indicator is computed from a series of applicant-entered data: parent/guardian income, parent/guardian level of education, and need-based aid during undergraduate study (Grbic et al., 2013).

**Self-identifying as disadvantaged.** In addition to the SES Disadvantaged Indicator, AMCAS includes the optional Disadvantaged Status essay. Limited documentation exists to define and explain the disadvantaged option or its origins. Based on what has been documented, applicants are provided the option to identify as disadvantaged, and in doing so, to describe any circumstances that adversely affected their preparation for medical school. The extent of explanation on the disadvantaged essay provided to applicants in the *2016 AMCAS Instruction Manual* is as follows:

You will then be asked if you wish to be considered a disadvantaged applicant by your designated medical schools. You might consider yourself disadvantaged if you grew up in an area that was medically underserved or had insufficient access to State and Federal Assistance programs. Click ‘yes’ to be considered a disadvantaged applicant. You will be given an additional 1,325 characters to explain why you believe you should be considered a disadvantaged applicant. (AAMC, 2015, p. 31)

The Disadvantaged Status is intended to “provide applicants the opportunity to share information about their circumstances in hopes that all aspects are considered by admissions committees” (Price-Johnson, 2013, p. 39).

Looking at the wording of the Disadvantaged Status prompt in the AMCAS application, “Do you wish to be considered a disadvantaged applicant by any of your designated medical schools, which may include such factors as (social, economic or educational)?,” the AAMC has adopted a stance that lends deference to each medical school to determine its delimitations and use. The degree to which the Disadvantaged Status factors into the admissions process is left up to each medical school.

Like the definition and purpose, the origin of the Disadvantaged Status is elusive. The Disadvantaged Status predates the AAMC’s Holistic Review Initiative and traces of its lineage can be seen in Internet forum threads going back to 2002. In more than a year of reviewing the extant literature, I was unable to locate any official documentation on the history of the Disadvantaged Status option in AMCAS. According to the director of Holistic Review at the AAMC, “to my knowledge nobody has studied or written about it” (S. Conrad, personal communication, April 27, 2015). Congruent with Conrad’s (2015) statement, I have not found any research focused primarily on the disadvantaged option in AMCAS. The AAMC does not define disadvantaged, which leaves both applicants and medical schools to develop their own interpretations. Ambiguity surrounding the Disadvantaged Status option may lead to inconsistencies in applicants’ use of the option. (Grbic et al., 2015).

In a post on a popular health professions website in 2011, a medical student wrote:



Many premedical students find themselves troubled by this question and wonder, what does it mean to be disadvantaged? How does being a disadvantaged applicant affect my medical school application? According to the information from the Association of American Medical Colleges, the organization that provides the AMCAS application, ‘disadvantaged status is self-determined.’ ... So how is an applicant to know? AMCAS suggests that it may be appropriate for those from medically underserved areas or those of low socioeconomic backgrounds to apply as disadvantaged applicants. AMCAS however, fails to advise those who fall into neither category.

The student contributor goes on to list other circumstances that could cause an applicant to be disadvantaged, “long-term adversity that has nothing to do with living below the poverty line. Learning disabilities, or discrimination due to sexual orientation or gender identity ... [b]eing an immigrant or learning English as a second language.” The ambiguity surrounding the optional AMCAS question not only leads to tedious and unproductive Internet searches, it can even result in students “consulting websites ... where premeds with questionable motives may discourage those who feel disadvantaged,” under the guise of gaming the system (Anyaeibunam, 2011).

In addition to Anyaeibunam’s (2011) frustration, I identified hundreds of Internet posts by confused medical school applicants covering the 15 years since the inception of the Disadvantaged Status, and that was on a single website forum. This study is more than a follow-through on my own academic curiosity; it is a response to the concerns of those many medical school applicants.

### **Purpose Statement**

The purpose of this interpretivist case study was to explore how current students made meaning of the option to identify as disadvantaged when they were applying to medical schools. Components of this study included: the meaning each applicant ascribed to the term disadvantaged; the socio-historical, cultural, and contextual factors

that influenced applicants' decisions whether or not to see themselves through their own definitions as disadvantaged; and, the factors involved in the decision whether or not to declare a Disadvantaged Status in the AMCAS application. Symbolic interactionism, social comparison theory, impression management, and stigma theory formed the theoretical framework.

### **Research Question**

This study was guided by one broad research question:

Q How did medical students make meaning of the option to identify as disadvantaged in the American Medical College Application Service (AMCAS) when they were applicants?

Five sub-questions will inform the research question. Sub-questions include:

SQ1 How did medical students define disadvantage when they were applicants?

SQ2 How did medical students assess their levels of disadvantage when they were applicants?

SQ3 How did medical students perceive others' interpretations of disadvantage when they were applicants?

SQ4 How did social comparison affect medical students' interpretations of the Disadvantaged Status when they were applicants?

SQ5 How were medical students' attributed meanings of disadvantaged used in their decisions whether or not to self-declare in their AMCAS applications?

Exploring these questions shed light on the many and varied influences that each participant negotiated in order to arrive at, first, the decision whether or not to see one's self as disadvantaged, and subsequently, whether or not to identify as such in the AMCAS application.

### **Methodological Considerations**

The theoretical perspective that guided this study was comprised of four social theories—symbolic interactionism, social comparison, impression management, and stigma. I identified Blumer’s (1969) conception of symbolic interactionism (SI) as salient for studying how applicants make meaning of and act towards the option to self-identify as disadvantaged in the AMCAS primary application. Social comparison theory (SCT) added to the framework a way of understanding how individuals apply meaning to within the social world (Festinger, 1950; Festinger, 1954). Goffman’s perspectives of impression management (IM) (1959) and stigma (1963) helped in making sense of how applicants wanted to be seen in their medical school applications.

### **Data Collection**

Primary data sources included open-ended interviews with 15 current medical students enrolled at a prestigious university in the Northeast, and their AMCAS files from when they applied. The transcribed interviews and AMCAS files were coded for themes. The analysis combined themes, quoted materials from participants’ interviews and AMCAS files, theory, and relevant literature.

### **Significance of the Study**

The significance of this study was based on three suppositions. First, there was a lack of research on the option to apply as a disadvantaged applicant and through this research I began to fill that gap. Second, participants had the opportunity for self-discovery. Reflecting on and sharing their experiences with the option to apply as disadvantaged applicants added to their perspectives on diversity and may hopefully be applied to their approaches to patient care. Third, the findings could be used to inform

subsequent implementations of the Disadvantaged Status, which, in turn, could influence the quantity and breadth of diversity among future medical school classes and ultimately, the physician workforce.

A majority of research relating to medical school admissions focused on the impact of admission variables such as: MCAT, GPA, race, ethnicity, sex, and socioeconomic status – and predominately through quantitative methods (Ballejos, 2010; Boyers, 1990; Cantwell, Canche, Milem, & Sutton 2010; Cunningham, 2012; Elam et al., 2015; Gilbert & Johnson, 2013; Grbic & Hafner-Eaton, 2014; Hanson, Kulasegaram, Coombs, & Herold, 2012; Kreiter, 2013; Kreiter et al., 2009; Waldman, 1977). General research on U.S. allopathic medical school admissions processes from students’ perspectives was scarce (Hadinger, 2014; Monroe et al., 2013). There were, when I embarked on this research endeavor, no published studies focused on the disadvantaged option in AMCAS. This study served as one of the first examples of published research on the topic of the AMCAS Disadvantaged Status.

By reflecting on their experiences with the disadvantaged option—how they approached defining it, decided where they fit within their own definitions, and whether or not to apply as such, participants deepened their appreciation of the diversity between people, whether applicants, fellow students, or future patients. Many participants shared that they benefitted from their experiences in this research. Perhaps future applicants will benefit from reading about the experiences of medical students like the ones in this study. Participants’ stories may provide validation to future applicants as they negotiate the Disadvantaged Status.

The final measure of significance for this study was that it would provide stakeholders with new data with which to approach future iterations of the Disadvantaged Status. Stakeholders at the AAMC, medical schools, and undergraduate institutions, should gain insight into applicant behavior and more specifically, any challenges associated with identifying as disadvantaged in the medical school application. It is my hope that the participants' perspectives lead to improvements to the Disadvantaged Status, how medical schools use the question and any derived data, and how and what applicants learn about the option.

### **Chapter Summary**

In this chapter I provided background and context for the study. Research on the option to self-identify as disadvantaged in the AMCAS application has yet to be published. I proposed exploring this topic with current medical students. I relied on two data sources: participants' past AMCAS applications, and open-ended interviews. The theoretical perspective this research included Blumer's (1969) approach to symbolic interaction, Festinger's (1950; 1954) social comparison theory, Goffman's theories on impression management (1959) with its dramaturgical metaphor, and stigma (1963).

The next chapter is in two parts. The first part contains an overview of the history of medical school admissions framed from the perspective of student access. There is an examination of the extant literature pertaining to the Disadvantaged Status following the historical overview. The second part of the literature review contains an exploration of relevant research. Since, at the time of this inquiry, few studies had been conducted with any attention on the Disadvantaged Status in AMCAS, I expanded into the broader discourse on disclosure issues in education and healthcare. The literature review

concludes with an exploration of research in which symbolic interactionism, social comparison theory, stigma, or impression management informed the designs.

## **CHAPTER II**

### **LITERATURE REVIEW**

The literature review is organized into two parts. Part I consists of an overview of U.S. medical school admissions—history, key legal cases, and recent initiatives. I then review the extant literature on the Disadvantaged Status. Research on the topic is scarce and extrapolations were drawn from nearby fields. While I aligned with an interpretivist worldview, a majority of the relevant research has been conducted using postpositivist techniques; most likely due to the dominant research methodologies in the medical sciences, and in many of the sections in this chapter, my language reflects those idioms.

In Part II, Issues relating to identification and disclosure of disadvantage are explored through a theoretical framework based on SI, SCT, stigma, and IM. The act of applying to medical school through AMCAS is presented as a form of computer-mediated communication (CMC), a term used to describe online social interactions. I conclude the literature review by considering issues related to identification and disclosure of disadvantage through the theoretical framework.

#### **Part I: Access**

Many demographic groups have faced societal and/or institutional barriers to medical school. In this study, I focused on the groups that not only faced the most overt resistance, but whose paths impacted the practice of medical school admissions today. The groups discussed here include women, Blacks, and Jews. While other groups have experienced barriers to medical school than those detailed in the history section of this

literature review, prior to the mid-20<sup>th</sup> century, underrepresented and disadvantaged populations beyond women, Blacks, and Jews, had either not yet been identified, captured in the data, or been as thoroughly covered in the literature and court cases. Additional marginalized populations are discussed later in this chapter and correspond with the expansion of diversity definitions and initiatives.

In recent years, interest in medical school diversity has exploded. An abundance of related research now exists—with one exception. For more than a decade applicants have had the option to self-identify as disadvantaged, a trend not reflected in the literature. Due to the scarcity of research on the Disadvantaged Status, I conclude Part I of the literature review with an examination of related research on self-disclosure in higher education and healthcare.

### **Historical Perspective**

Since its inception, the U.S. medical profession has been touted as a public service (Witzburg & Sondheimer, 2013), yet through much of its development society has been dissatisfied with, and distrustful of the profession (Starr, 1982). Concerns centered around two themes: competency of providers and service to society. In 1847, *The Boston Evening Transcript* published an editorial titled, “Physicians: Quacks are at a Premium” (Hunt, 1856/1970, p. 218). And, in 1869, it was said that, to practice medicine was to participate in, “the most despised of all the professions which liberally-educated men [were] expected to enter” (de Tocqueville, 1961/2006). The medical field sought to address public concern through two approaches: the establishment of formalized training governed by professional organizations, and by keeping basic medical knowledge out of the grasp of the layperson (Coggeshall, 1965; Forman, 1947).



The first medical colleges began in response to efforts to enhance the reputation of the profession (Starr, 1982). The Medical College of Philadelphia, established in 1765, now the University of Pennsylvania, was the first American medical college (Starr, 1982). The first professional organization, the Massachusetts Medical Society, began in 1781 so “that a just discrimination should be made between such as are duly educated, and properly qualified for the duties of their profession, and those who may ignorantly and wickedly administer medicine...” (Fitz, 1894, p. 529). Despite these early efforts to reform the profession, dissatisfaction continued to grow.

The American Medical Association (AMA) was established in 1847 in response to concerns over variability in the quality of care at the time (Forman, 1947). Among its responsibilities, the AMA regulated the educational requirements of the field, but progress was slow. In the early 1900s, “less than 10% of practicing physicians were graduates of medical schools” and “only about 20% had ever attended lectures in medicine” (Coggeshall, 1965, p. viii.). Despite limited success in establishing standardized admissions requirements and curriculum, the AMA’s responsibilities continued to expand. Poor educational standards persisted and an additional organization was needed to assume governance over student training and development (Coggeshall, 1965). In 1876, the AAMC was founded to serve as the authority over all aspects of U.S. medical education (AAMC, 1959).

Despite the founding of professional organizations that sought to improve physicians’ reputations through formalized training and licensure, it was efforts to demystify medicine for the layperson that led to the national adoption of medicine as a serious endeavor worthy of professional status. The establishment of the American

medical profession was rooted in the publishing of medical guides containing basic explanations of common ailments and treatments understandable by laypeople. Ironically, “while the domestic medical guides were challenging professional authority and asserting that families could care for themselves, they were also helping to lay the cultural foundations of modern medical practice—a predominantly secular view of sickness” (Starr, 1982, p. 37). Guides, such as Buchanan’s *Domestic Medicine*, served to provide the everyday person with the necessary knowledge to treat common ailments (Buchanan, 1771/1784). Buchanan’s guide was so popular, it went through more than 30 editions throughout the mid-1800s and by simplifying that which many physicians wanted to keep veiled, the public became more aware of the breadth and complexity of healthcare, and the need for specialized practitioners (Starr, 1982).

While medical guides marked a beginning of open access to medicine and medical knowledge, the profession, as a whole, remained guarded (Starr, 1982; Walsh, 1977). Historically, medicine as a degreed profession has been the domain of White males of means (Bonner, 2000; Starr, 1982). The same attitude of exclusion that fought against the medical guides for the common person, worked similarly to keep medical knowledge and privileges out of reach (Walsh, 1977).

**Limited access for women and minorities.** Access in US medicine has been an issue since the profession’s inception (California v. Bakke, 1978; Curtis, 1971; Disadvantaged Minority Health Improvement Act of 1990; Fisher v. University of Texas at Austin, 2013; Grutter v. Bollinger, 2003; Hunt, 1856/1970; Walsh, 1977). The barriers for women, Jews, and Blacks were less to do with admission merit and more to do with biases of the gatekeepers. The majority of college leaders throughout the 1800s and into

the latter half of the 1900s favored social homogeneity, particularly with regard to keeping women, Blacks, and Jews out of the classroom and out of the profession (Starr, 1982). Many faculty and administrators at American medical colleges worked to prevent the enrollment of non-White and non-male applicants (Curtis, 1971; Starr, 1982; Walsh, 1977); statements by medical college deans have confirmed this attitude. In 1961, a dean stated, “[h]ell, yes we have a quota; yes, it’s a small one. We do keep women out, when we can. We don’t want them here—and they don’t want them elsewhere, either, whether or not they’ll admit it” (Walsh, 1977, p. 243). In a report by a Special Subcommittee on Education, Discrimination Against Women of the Ninety-first Congress, based on a survey of admissions officers at 19 northeastern medical colleges, it was admitted that preference was given to men except when a woman was noticeably superior (Walsh, 1977).

*Women’s access.* Women’s access to the profession was driven by society’s demands for competent and relatable practitioners. Many women avoided medical care due to embarrassment over their bodies and the unprofessional demeanor perpetuated by male physicians of the time. Male physicians advertised never needing to remove a woman’s clothing during examination or even during delivery (Walsh, 1977). Others, including Samuel Gregory, in the mid 1800s wrote and lectured on the immorality of male midwifery, comparing such male physicians to bank tellers, for whom the banality of money may tempt its handlers to misappropriate it. Walsh (1977) credited Gregory with the following: “So the physician, by constant familiarity, comes to consider female delicacy and reserve as not worth preserving” (p. 48). Another physician, in his widely distributed pamphlet, stated that husbands should accompany their wives because male

doctors may be “too free with women’s persons, manually, ocularly, and instrumentally” (Fores, 1793, p. 143). Women’s access to medicine, both as patients and prospective students, reflected the larger social issues of the day.

As with healthcare, education was almost exclusively a male pursuit. The early years of higher education, on through the beginning of the 20<sup>th</sup> century, were dominated by male perspectives and enrollments. Stemming from Puritan culture, society viewed women with suspicion and made little room for them outside the home (Palmieri, 2007). The coming industrialization meant that women, whether single or married, could work without stigma (Perkins, 2007). Although, throughout the 19<sup>th</sup>, and even into the 20<sup>th</sup> century, the dominant view held that, “extensive learning for women was . . . inexpedient and dangerous” (Palmieri, 2007, p. 205). Puritanical views gave way to romanticized imagery that cast women as innocent, emotional, and symbols of virtue (Palmieri, 2007; Perkins, 2007). Women were valued as caretakers, the first line in the cultivation of a moral and productive citizenry. Women’s pursuit of professional aspirations, such as medicine, challenged the social order.

Like the other minority groups detailed in this section, women’s access to medical education emerged, only after public pressure (Walsh, 1977). Throughout the 1800s, a sentiment pervaded medical school admissions; women were viewed as, not necessarily intellectually inferior to men, but rather, the “masters of their appropriate and separate sphere – the home” (Walsh, 1977, p. 7). As a result of this obdurate view of society that placed men and women in different roles, educational opportunities for women, particularly to pursue advanced degrees such as medicine, were limited (Hunt, 1856/1970; Starr, 1982).

The story of one woman's struggle to gain admission to medical school illustrates the barriers to the medical profession faced by women throughout the 1800s. In 1847, at the age of 42, Harriot Hunt, already an apprentice-trained physician, applied to Harvard Medical College (Hunt, 1856/1970). Hunt sought formal medical training for two reasons: a desire to learn the best practices of the time, and to benefit from the upward mobility of the degreed physician. In her application to Harvard Medical College, Hunt asserted that she applied not out of any "love of novelty" but out of a "simple and single desire for such medical knowledge, as may be transmitted through those professors, who from year to year, stand as beacon lights to those who would be aided in more full knowledge of the healing art" (Hunt, 1856/1970, pp. 217-218). Hunt wanted the formal training that medical schools had been created to provide and that the governing organizations deemed necessary to the advancement of the profession.

Despite already being a practicing physician, and with support of the Dean of the Medical College at Harvard, who endorsed Hunt as a peerless applicant, the President and Board of Trustees denied her application (Walsh, 1977). Encouraged by the expanding feminist movement, Hunt applied again (Butcher, 1989; DuBois, 1987; Stanton, Harper, Gage, & Anthony, 1970; Wellman, 1991); this time the Board decided she could attend classes but would not be allowed to earn the degree (Hunt, 1856/1970). However, pressured by the other students who claimed that no woman of "true delicacy" should pursue the profession, and; in order "to preserve the dignity of the school," Hunt's pursuit of the medical degree was ended (Walsh, 1977, p. 32). While Hunt never again applied to medical school, the social injustices caught public attention, even fueling the beginnings of women's medical colleges.

Women's access to medical training remained limited through the mid-20<sup>th</sup> century. Much of the early momentum in the mid to late 1800s came from the larger efforts of the women's rights movement, although many URM's received the same fate as Hunt. In the early 1900s, approximately five percent of U.S. physicians were women (Chin, 2010), of whom not all had received formal medical training (Starr, 1982; Walsh, 1977). By 1960, little had changed; still, just five percent of U.S. medical students were women (Jagsi et al., 2006).

*Access for Black applicants.* Women were not alone in their struggle for access to medical education. In the same meeting at which Hunt was conditionally accepted, so too were three Black men, though it was stipulated that they would immigrate to Liberia upon completing their studies (Walsh, 1977). As it was with Hunt, the White students protested their admissions, finding it "socially repulsive" to allow Black students to study medicine (Walsh, 1977, p. 32). The first U.S. educated Black physician, James Derham, a former slave, began practicing based on the apprentice model in 1789; however, the medical degree was not conferred on an African American until 1847, when David J. Peck graduated from Rush Medical College (Curtis, 1971).

The aftermath of the Civil War created the impetus for the first Black medical school—Howard University (Curtis, 1971). Following the Civil War, in Washington, DC alone, there were more than 22,000 African Americans in need of work, medical care, or both (Curtis, 1971). By 1900 there were 10 medical schools where Black students were welcome (Savitt, 2006), though; similar to what was outlined in the rescinded Harvard acceptance, initial graduates sought employment abroad where discrimination was less severe (Curtis, 1971).

In 1920 there were 3,885 Black physicians and this number remained largely unchanged until the 1960s (Curtis, 1971). During the first half of the 20<sup>th</sup> century, Black doctors represented about 2.5 percent of the physician population (Walsh, 1977). While progress for Blacks and women had so far been slight, momentum was about to take a turn for the worse (Walsh, 1977; Starr, 1982).

*The Flexner Report.* Wanting to improve the quality of medical education, the AMA and AAMC recommended more rigorous curriculum standards across degree-granting programs. However, because the AMA and AAMC were comprised of representatives from the medical colleges, and since few could meet the proposed curriculum standards, there was little buy-in (Coggeshall, 1965). The AMA strategized that support from an outside organization would be necessary and sought the assistance of the Carnegie Foundation for the Advancement of Teaching (Lagemann, 2007).

In 1908, the Carnegie Foundation tasked Abraham Flexner, formerly a preparatory schoolmaster, with creating a report on the state of medical education (Flexner, 1910). Flexner (1910) determined that the training of medical students varied too much from school to school, and was inadequate for the production of skilled doctors. Flexner (1910) extolled the progress of American medicine, but criticized the inadequate access to such innovation; “[s]ociety reaps at this moment but a small fraction of the advantage which current knowledge has the power to confer. That sick man is relatively rare for whom actually all is done that is at this day humanly feasible” (Flexner, 1910). Flexner (1910) blamed medical education for the inconsistencies in patient care; he wrote, “there is probably no other country in the world in which there is so great a distance and so fatal a difference between the best, the average, and the worst [doctor] (p.

20). Flexner's call for higher standards of physician competency led to a dramatic shift in American medical education.

Support for higher academic standards following the Flexner report contributed to the closing of more than half of all medical schools. In 1910, the year the Flexner report was issued, there were 155 medical schools, 10 years later there were 85, and by 1930 there were 76 (Coggeshall, 1965). While the Flexner Report may have addressed growing concern over academic and professional standards, longer and costlier training decreased access for groups already at a disadvantage (Curtis, 1971; Norris, 1951; Starr, 1982).

The increased entry requirements and cost of education resulted in a decline in minority and female applicants (Ehrenreich & English, 2010; Walsh, 1977). Only two Black medical colleges were not on Flexner's (1910) list of those deemed so substandard as to warrant immediate closure. By 1925, 78 medical schools had closed including all the Black schools Flexner found unsatisfactory; only Howard and Meharry survived (Miller & Weiss, 2012).

*Access for Jewish applicants.* As was the case for women and Blacks, the first half of the 20<sup>th</sup> century was marred by discriminatory admissions practices against Jews as well. As noted by Smedley et al. (2003) noted, "Jewish Americans face and have endured the most severe and persistent levels of discrimination and anti-Semitism of all 'White American' ethnic groups" (p. 486). Similarly, Levine (2007) wrote that while Blacks and other underrepresented groups also faced discrimination during the early part of the 20<sup>th</sup> century, "their numbers were too small to command the attention focused on Jewish students" (p. 457). As Jewish families emigrated from Europe, their college



enrollments rapidly increased. Like many immigrant groups, Jewish families tended to place a high value on education. Jewish applicants tended to score well on college entrance exams, the primary admissions tool at the time; and as a result, they matriculated into top-tier colleges at higher rates than many of their White upper class peers (Schmidt, 2007).

Campus leaders needed to devise a new approach to student selection, one that would allow for a justified exclusion of Jewish applicants. Since colleges could not reject Jewish applicants on the basis of test scores and GPAs, “colleges started trying to gauge applicants’ character through personal interviews and letters of recommendation out of a conviction that good character was something most Jewish applicants lacked” (Schmidt, 2007, p. 22). Colleges even spun geographic diversity as a goal, but this too was aimed at limiting Jewish student numbers, since many such applicants were located in large Eastern cities (Karabel, 2005). While today, admissions quotas are most often thought of a means to ensure access for certain student populations, they were originally devised to do just the opposite, to solve “the Jewish Problem” (Wechsler, 1984, p. 646). To restrict Jewish student matriculation, Harvard president Abbot Lawrence Lowell advocated for a “quota of Jews” at 15 percent (Reiter & Maccoon, 2007, p. 229). Medical school admissions biases were not the only barriers to the medical profession for Jewish students. Jewish applicants who were successful in gaining entry past medical school admissions committees faced crippling barriers to professional advancement.

Regarding medical resident selection, according to a hospital administrator in the late 1940s, in order to keep Jews out, since it was “more than likely the persons who did the best on the written examinations would be Jewish,” administration “had to

discontinue” such tests (Hall, 1948, p. 331). Hall (1948) noted that hospitals served as a significant instrument to limit the advancement of Jewish physicians; he wrote of the hospital, that there is an “inner core” of doctors, like a fraternity, “they have roughly similar educational and social-economic backgrounds” and it is through them that advancement occurred (pp. 335-336). Hall went on to describe “the Jew” as warranting prejudice, lacking “a sense of balance,” and justifiably overlooked for advancement. On the subject of promotions, Hall (1948) wrote, “I was always approached privately by the administration and asked who should go ahead . . . and Jews don’t seem to catch on there. Many of them get tired of waiting, especially when they see themselves get jumped” (p. 334). New admissions tactics came into practice because of prejudice towards Jewish students in the first half of the 20<sup>th</sup> century—quotas, flexible and broad views that deemphasized the weighting of standardized scores and instead emphasized personal statements and letters of recommendation.

Women, Blacks, and Jews experienced discrimination throughout the early years of U.S. medical education. Walsh (1977) noted “certain broad parallels;” all three were vulnerable populations singled out for “unequal treatment” in the form of restrictive quotas that contributed to their underrepresentation in medical school well into the 20<sup>th</sup> century (p. 194). And, of the three groups, enrollments among women and Blacks suffered the most. It would take prolonged national attention before a noticeable and positive change in medical school enrollments among women and Blacks would be observed. Similar access issues existed for other underrepresented and disadvantaged groups; however, most had yet to be formally identified, captured in the data, or of sufficient collective voice to be heard. While the concept of diversity has undergone

multiple revisions, and now makes room for American Indians and Alaskan Natives, Hispanics and Latinos, other groups, such as individuals who identify as LGBTQ, religiously oppressed, or disabled, have yet to be included beyond institution-specific admissions initiatives (AAMC, 2004; Council on Graduate Medical Education, 1998).

**Underrepresented in medicine: the original definition.** National attention on the underrepresentation of minorities in medicine, spurred by the Civil Rights movement led to medical school access in the 1960s for all racial and ethnic minority groups (Petersdorf, Turner, Nickens, & Ready, 1990). The 1964 Civil Rights Act brought attention to the state of diversity in medical schools. With the introductions of government subsidized healthcare programs in 1965, Medicare and Medicaid, under Title VI of the Civil Rights Act, hospitals were compelled to ensure non-discriminatory practices in order to receive reimbursements (Nickens, Ready, & Petersdorf, 1994).

In 1969 the AAMC established both its Office of Minority Affairs and the AMCAS centralized application database; the former focused specifically on minority involvement in medicine (Petersdorf et al., 1990), and the latter on, “an improved national database for admissions research and more extensive feedback to both medical schools and the undergraduate colleges” (Johnson & Dubé, 1978, p. 933). Diversity efforts increased throughout the 1960s and 1970s and with them came new terminology.

In 1970, the Association of American Medical Colleges “coined the term ‘underrepresented minority’ to reflect the disparity between the proportion of health care providers from certain racial and ethnic groups and their total U.S. population” (Council on Graduate Medical Education, 1998, p. 3). The AAMC’s 1970 definition of URM included: “Black Americans (born in the United States), Mexican Americans, Mainland

Puerto Ricans (who received a large proportion of their primary education in the continental United States), and American Indians/Alaska Natives” (Council on Graduate Medical Education, 1998, p. 4). The AAMC’s goal was “population parity” (AAMC, 2004, p. 1) by “relieving or eliminating inequitable barriers and constraints to access to the medical profession” (Association of American Medical Colleges, 1970, p. 1). This initial use of the term, URM, reflected the focus at the time on race-based diversity.

*The rise and stagnation of diversity efforts in the 1960s and 1970s.* In 1950 there were 1,806 women attending medical school, comprising just over seven percent of the total enrollments (AAMC, 1951). Women’s acceptance to medical school was, in the words of Jordan Cohen, a medical school graduate of the class of 1960, “not on the agenda at the time” (Association of American Medical Colleges, 2014a, p. 27). Cohen went on, “there were zero African Americans or Hispanics in my class, and only six women for that matter” (p. 27). During the 1960s and 1970s, minority enrollments rose from three percent of all students in 1968, to approximately eight percent by 1974 (AAMC, 2000). In 1964, 76 percent of Black medical students attended one of the two Black medical schools, Howard and Meharry, while the other 81 medical schools enrolled an average of one Black student every two years (Hutchins, Reitman, & Klaub, 1967).

For the new additions to the AAMC’s minority definition, representation was even poorer. In 1971, there were 19 Mexican American, 14 Mainland Puerto Rican, and 2 American Indian U.S. medical school graduates (Nickens et al., 1994). By 1974, there were 2,295 Black applicants (5.4 percent of total pool), 127 American Indian (0.3 percent of total pool), 424 Mexican Americans (1.0 percent of total pool), 113 Mainland Puerto

Ricans (0.3 percent of total pool) (Association of American Medical Colleges, 2005). For the 1974-75 academic year, total first-year URM enrollments were: 1,106 (7.5 percent) Black Americans, 71 (0.5 percent) American Indians, 227 (1.5 percent) Mexican Americans, and 69 (0.5 percent) Mainland Puerto Ricans (AAMC, 2005). By 1975, URM acceptances began to decline (Petersdorf et al., 1990). The drop in URM enrollments was most notable for Black applicants, followed by Mexican Americans. Acceptance rates for Black applicants declined from 44.7 percent in 1974 to 41.6 percent in 1975 and 37.9 percent in 1976 (AAMC, 2005). For Mexican Americans, both applications and acceptances stagnated (424 applicants and 50.2 percent acceptance rate in 1974, 348 applicants and 50.9 percent acceptance in 1975, and 400 applicants and 48.0 percent acceptance in 1976) (AAMC, 2005). Throughout the late 1970s and into the 1980s acceptance rates for URM applicants declined despite rising application numbers; all the while, non-minority acceptance rates rose 15 percent, from 35 percent in 1974, to 50 percent in 1983 (AAMC, 2005; Frierson, 1988).

### **Access to Medical Education Today**

This section is divided into five parts: (1) why diversity still matters; (2) descriptive data on the kinds of diversity discussed in medical education and physician workforce; (3) holistic review and the Initiative's role in advancing admissions practices with respect to increasing applicant diversity to meet patient needs; (4) the lack of information available on the disadvantaged option in AMCAS; and (5) a broader view of disadvantage extrapolated from other fields.

**Why diversity matters.** According to the AAMC (2015) "the goal [of the medical school admissions process] is not to admit students mechanically, based on

numerical criteria or to mirror the country's demographics, but rather to produce a class of physicians that is best equipped to serve *all* of society" (p. 6). As the AAMC (2004) stated, "both the AAMC and its member medical schools must avoid this formulation [racial balancing] as the animating force of our efforts" (p. 2). The need for diversity in the physician workforce is inextricably tied to society's increasing heterogeneity and effective patient care depends on preparation for serving all patients, not just those with whom a physician shares concordant values and identities. Thus, diversity is not an end goal but rather a means to serve all members of the population.

*Association of American Medical College's revised definition of underrepresented in medicine.* Instead of considering racial composition in education as a goal in and of itself, through which racial balancing would be the means, the AAMC (2004) views diversity as enhancing the quality of medical education through its positive affects on students' social, moral, and cultural development. The AAMC (2004) broadened their definition of URM from one depending on specific racial groups, to a more flexible set of delimitations, "those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population" (p. 1). To reflect this broader view of diversity, the AAMC (2004) updated "underrepresented minority" to "underrepresented in medicine," the term commonly referred to as URM (p. 1).

*Diversity as a reflection of health and educational disparities.* While the AAMC's (2004) most recent URM definition adds inclusion of other minority groups by eliminating stringent race-specific delimitations, URM still excludes forms of diversity outside of race/ethnicity. The Agency for Healthcare Research and Quality (AHRQ), through the Department of Health and Human Services (HSS), and in collaboration with

other agencies publishes an annual report to Congress stipulated by the Healthcare Research and Quality Act of 1999. In the AHRQ's most recent report, based on an ongoing dataset of more than 250 healthcare disparity measures, researchers identified three main populations for whom healthcare access and outcome disparities persist (Agency for Healthcare Research and Quality, 2016). Those populations include racial and ethnic minorities, and individuals from low-income, or LGBTQ backgrounds. While the latter two groups (low-income and LGBTQ) are presently excluded from the AAMC's (2004) URM definition, acknowledgement of their disadvantages may foreshadow future inclusion in the medical community's view of diversity, and, as shown later in this chapter, the view of the Disadvantaged Status in AMCAS.

*Diversity affects health outcomes.* Health disparities persist across more than just the categories of diversity currently included in the AAMC's current definition. Patient health outcomes differ among socioeconomic, geographic, and racial/ethnic groups (Institute of Medicine, 2011; Link, 2008). Patients from underserved backgrounds have higher rates of maternal death, cancer diagnoses, repeat visits for illness and injury, and missed appointments. At the same time these underserved and underrepresented populations have less access to physicians and new medical technologies (Labig & Peterson, 2006; Link, 2008; National Center for Health Statistics, 2012; Santry & Wren, 2012; Weissman, Campbell, Gokhale, & Blumenthal, 2001; Walker, Moreno, & Grumbach, 2012). Amelioration of healthcare disparities begins with access to demographically concordant and culturally competent physicians (Isaac et al., 2014; The Fenway Institute, 2012).

Underrepresented and disadvantaged medical students tend to go on to serve similar patient populations (Rabinowitz et al., 2000; Cooper-Patrick et al., 1999). According to Cooper-Patrick et al. (1999), not only are physicians of a given racial or ethnic background more likely to serve similar patient populations, but also patients are also more likely to attend and rate visits higher when the patient/physician relationship is demographically concordant. On the AAMC's graduating medical student questionnaire, more than 50 percent of Black, 40 percent of Native American and Alaskan Native, and 32 percent of Hispanic students reported desires to practice in underserved areas (AAMC, 2005). And, patients from minority backgrounds prefer physicians from a similar demographic when the option is available (Saha, Arbelaez, & Cooper, 2003).

*Doctor-patient race concordance.* Cooper-Patrick et al. (1999), an interdisciplinary team of researchers representing medical, public health, nursing, and business backgrounds, conducted telephone surveys between 1996 and 1998 with 1,816 adults across 32 primary care practices. Of the patients, 43 percent (n=784) identified as White; 46 percent (n=814) identified as African American, and the remaining 12 percent (n=218) identified as Other (Cooper-Patrick et al., 1999). The patients reported higher satisfaction with respect to physician/patient interactions in race-concordant relationships (Cooper-Patrick et al., 1999). The likelihood of shared culture, values, and experiences between patients and physicians, appears to be positively correlated with racial and ethnic similarities (Hall, Roter, & Katz, 1988; Kaplan, Gandek, Greenfield, Rogers, & Ware, 1995; Pendleton & Bochner, 1980; Willems et al., 2005). Race and ethnicity are not the only predictors of patient satisfaction or outcomes. Link (2008) indicated that, through examination of public health research across social, racial, ethnic, educational, and



financial categories, a wide array of disadvantages contribute to disparities in healthcare access and outcomes.

*Doctor-patient socioeconomic status concordance.* Researchers have found that beyond patients' racial characteristics, SES influences physicians' attitudes (Hall et al. 1988; Kaplan et al., 1995; Pendleton & Bochner, 1980; van Ryn, 2002; van Ryn & Burke, 2000; Willems et al., 2005). By studying video recordings from 79 patient-doctor interactions in general practice settings across low, medium, and high SES strata, Pendleton and Bochner (1980), after accounting for any possible SES-related trends in reasons for visits, found a significant difference in length of consultation and the amount of information the physicians provided during visits. Based on analysis of 41 independent studies focused on correlates of provider behavior, of which nine included social and economic consideration, Hall et al. (1988) reported a positive, albeit weak, relationship between patients' SES and providers' information ( $Z=2.39$  at  $p=0.01$  and  $r=0.12$ ).

Through analysis of 12 prior studies published between 1965 and 2002, all of which examined some combination of social class, education, income, and occupation, Willems et al. (2005) noted that physicians behave differently based on patients' SES. With higher SES patients, physicians provided more description, exhibited more positive attitudes, and involved those patients more in treatment decisions. Physicians were not alone in acting differently based on demographic and SES variables. The patients with more education engaged more with their physicians. Willems et al. (2005) suggested that SES, particularly the education component, forms a cultural element through which doctors and patients are more or less relatable depending on the level of education.

Doctors van Ryn and Burke (2000) surveyed 193 physicians, primarily White males, to investigate potential relationships between patient SES status and physician bias. Based on the physicians' perceptions of their patients (618 office visits) and their feelings towards their patients, van Ryn and Burke (2000) noted lower physician scores assigned to Black, as well as low SES patients. Patients' race was associated with perceptions of intelligence, likelihood to comply with treatment plans, and substance abuse. van Ryn and Burke (2000) found that patients' SES correlated with physician perceptions of patients. However, the race-based assumptions were "harder to accept;" even after controlling for patient SES, Black patients were still rated by the physicians as "significantly less educated" (van Ryn & Burke, 2000, p. 822). The Black patients were rated as less intelligent, less educated, and less likely to be people with whom the physicians could see themselves friends (van Ryn & Burke, 2000). Low SES patients were seen as less successful and less responsible. van Ryn and Burke's (2000) findings are congruent with the conclusions from Willems et al.'s (2005) meta analysis—the level of racial and social concordance between physicians and patients seems to affect doctors' perceptions of their patients.

The doctor-patient relationship is not the only measure of medical care quality correlated with disadvantages associated with diversity. Health outcomes, now more than ever, are linked to social, economic, cultural, and other forms of demographically related privilege. With each passing year, life expectancy in the U.S. is improving, as are overall measures of health and healthcare. In the last 100 years, life expectancy has gone from 47 years in 1900 to 77 years in 2000 and, "a man turning 65 in 2000 could expect to live about a year longer than a man turning 65 in 1990" (Link, 2008, p. 369).

Based on survey data, researchers are observing a decline in disability among elderly Americans and even as individuals live longer, they report feeling healthier (Cutler, 2001; Warren & Hernandez, 2007). Between 1972 and 2004, elderly patients reported good health at increasingly higher rates; “57 percent of 60-69 year olds born between 1910 and 1920 reported good to excellent health, whereas 63 percent of those born between 1920 and 1930, and 74 percent of those born between 1930 and 1940 did so” (Link, 2008, p. 369; Warren & Hernandez, 2007).

While advancements in medicine and technology are contributing to longer and healthier lives, they are inequitably and unevenly distributed across socio-demographic groups (Cutler et al., 2007). As healthcare advances, outcome disparities across demographics widen. According to Link (2008), “once the capacity to address disease and death has been placed in human hands those hands deliver the benefits unequally so that individuals and groups with more resources of knowledge, money, power, prestige, and beneficial social connections benefit more” (p. 379). Addressing access barriers to medical care for disadvantaged populations go beyond healthcare outcomes. Diverse groups and individuals add to the quality of both the learning and social development environments at institutions of higher education (Hurtado, Milem, Clayton-Pedersen, & Allen, 1999; Milem, 2003; Saha et al., 2003).

*Diversity affects educational outcomes.* Greater diversity in medical school is linked to richer learning experiences associated with social, moral, and cultural development, which is integral to quality patient care (Cantor et al., 1996; Guiton, Chang, & Wilkerson, 2007; Komaromy et al., 1996; Moy & Bartman, 1995; Rabinowitz et al., 2000). Education environments with diverse student representation lead to improvements

in learning outcomes and social outcomes (Astin, 1993; Gurin, 1999; Gurin, Dey, Hurtado, & Gurin, 2002; Milem, 2003; Smith & Associates, 1997). Furthermore, diverse education environments positively affect social engagement and sense of purpose (Bowman, Brandenberger, Hill, & Lapsley, 2011). Through diverse student and faculty interactions, physicians are more likely to be prepared for positive interaction with patients of similarly diverse backgrounds.

Guiton et al. (2007) found that the degree to which physicians valued diversity was positively correlated with the opportunities for diverse experiences during medical school. Similarly, Bowman et al. (2011) found in their survey of more than 400 college graduates in their mid-30s, college participation in racial/cultural training workshops and ethnic studies courses had a lasting positive impact on respondents' "personal growth, purpose in life, recognition of racism, and volunteering behavior" (p. 737). It follows that exposure to diversity during medical school impacts future interactions with patients.

*Demographic data on diversity.* In terms of efforts to ameliorate medical student and physician underrepresentation, there is still "much work to be done" (AAMC, 2014a, p. 30). Diverse populations continue to be underrepresented in the physician workforce (Cosentino, Speroni, Sullivan, & Torres, 2015). The AAMC (2005) estimates that by 2050, racial and ethnic minority groups will account for nearly half of the U.S. population. Although, at the present, approximately 12 percent of U.S. physicians belong to racial or ethnic minority groups, a problem that, based on recent medical school admissions trends, is a long way from being solved (Cosentino et al., 2015).

In 2015, 51 percent of medical school matriculants were White, 6.5 percent were Black or African American, and 6.4 percent were Hispanic/Latino (Castillo-Page, 2016).

Asian, Hispanic/Latino, and White applicants matriculated at similar rates (42 percent, 42 percent, and 44 percent respectively) (Castillo-Page, 2016). By comparison, only 34 percent of Black or African American applicants matriculated. There is still no means of capturing other demographic data related to diversity, such as sexual orientation, and doing so brings about additional self-disclosure concerns. Data on the Disadvantaged Status continues to be absent in the AAMC's admissions and graduation figures.

**Recent diversity initiatives.** In 1970, the AAMC created a task force specifically focused on increasing minority group participation in medicine. The AAMC (1970) Task Force's primary goal was, "[t]o achieve equality of opportunity by reducing or eliminating inequitable barriers and constraints to access to this profession which have resulted in a representation of racial minorities in the medical profession much less than their representation in the U.S. population" (p. 1). Commissioned by the U.S. Office of Health Resources Opportunity (OHRO), whose charge was "the assurance of equal opportunity for minority group members in the fields of health education and delivery" (p. 18), the Orkland Corporation led an evaluation of the AAMC's diversity efforts following the 1970 Task Force. In assessing the AAMC's (1970) diversity goal, the Orkland Corporation (1977) found that, by the 1975-76 academic year, "only 50 percent of the required number of first-year minority students necessary to meet the population parity goals were enrolled" (p. 71). And while efforts to increase minority representation have continued, schools have yet to matriculate sufficient numbers of diverse and disadvantaged applicants necessary to satisfy society's needs (AAMC, 2005, AAMC, 2014a; Gonzalez & Stoll, 2002). While efforts such as the AAMC's project 3000 by 2000 and the Robert Wood Johnson Foundation's Summer Medical and Dental Education

Program have helped increase minority representation, according to the AAMC (2015), URM applicant and matriculant numbers have stagnated over the last ten years.

*Project 3000 by 2000.* In 1991, the AAMC initiated Project 3000 by 2000, a “groundbreaking program designed to address the critical need for minority physicians” (AAMC, 2014a, p. 5). With a specific mission of addressing race-based underrepresentation in medical school, the primary goal of the Project, as the name implied, was to matriculate 3000 URM medical students per annum by the year 2000. While the 3000 by 2000 goal was not met (there were 1,744 URM matriculants in 2000), it advanced stakeholder buy-in for a broader view of diversity that takes into account “broader social issues.” (AAMC, 2014a, p. 5).

*Summer Medical and Dental Education Program.* The Summer Medical and Dental Education Program (SMDEP), sponsored by the Robert Wood Johnson Foundation (RWJF), seeks to assist minority and socioeconomically disadvantaged students through a free six-week summer preparatory program between Junior and Senior undergraduate years (Cosentino et al., 2015). Researchers were commissioned by the RWJF to evaluate the effectiveness of the SMDEP. Based on analysis of 3,758 prospective medical school participants between 2006 and 2012, Cosentino et al. (2015) found that fewer applicants from the SMDEP group applied to medical school as compared to the comparison group (41.8 and 42.0 percent respectively). However, the SMDEP seems to positively affect applicants’ preparation for the medical school application process, as SMDEP participant matriculation rates were over three percent higher than the comparison group (28.4 versus 24.9 percent respectively). Cosentino et

al. (2015) suggested that the relatively low program impact might be skewed by comparison group member participation in similar, school-sponsored programs.

*Holistic review.* As the MD accrediting body in the United States and Canada, The Liaison Committee on Medical Education (LCME) (2014), sponsored jointly by both the AMA and AAMC, stipulated that,

A medical school has effective policies and practices in place, and engages in ongoing, systematic, and focused recruitment and retention activities, to achieve mission-appropriate diversity outcomes among its students, faculty, senior administrative staff, and other relevant members of its academic community. (p. 5)

The LCME further addressed diversity, “a medical school does not discriminate on the basis of age, creed, gender identity, national origin, race, sex, or sexual orientation” (LCME, 2014, p. 5). As the gatekeepers to the medical profession, faculty and administrators “have obligations that extend beyond their individual students to society at large” (AAMC, 2015, p. 3). To develop competent and compassionate medical care across diverse populations requires that future physicians be “educated in environments that reflect the ever-increasing diversity of the society” (Amici Curiae AAMC et al., 2012, p. 3). For these reasons related to competent and compassionate treatment for all patients, medical school is not to be determined solely by metrics.

Best practices in medical school admissions focus on holistic evaluation of applicants. The roots of holistic evaluation as a unified effort trace back to the 1970 AAMC Task Force that was formed to address minority underrepresentation in medicine. One of the many byproducts, along with the coining of URM and establishment of a diversity valuing philosophy, was the Simulated Minority Admissions Exercise (Smedley et al., 2003). The exercise served to train admissions members on the importance of non-

metric applicant characteristics. Such characteristics included: altruism, leadership, commitment to service, and empathy (AAMC, 2014a). The Simulated Minority Admissions Exercise became the Expanded Minority Admissions Exercise (EMAE) in 2002. The EMAE represented an effort to increase awareness of diversity goals among the medical schools (Association of American Medical Colleges, 2008). The EMAE, through input from legal experts, AAMC staff, medical school leaders, and students, grew to become the Holistic Review Initiative, as it is known today (AAMC, 2008).

*Defining holistic review.* A holistic approach to applicant review recognizes that each applicant comes from unique circumstances, to which all aspects of the application are inextricably linked. Therefore, the foundation of holistic review includes careful consideration of each applicant's unique experiences. Glazer and Bankston (2014) described holistic review as, a “university admissions strategy that assesses an applicant's unique experiences alongside traditional measures of academic achievement such as grades and test scores” (p. 2). Holistic admissions processes have been defined in varying ways, although always around this consistent theme—individualized, context-driven applicant consideration.

*Association of American Medical College's definition of holistic review.* The Association of American Medical Colleges (2010) defined holistic review as, “a flexible, highly-individualized process by which balanced consideration is given to the multiple ways in which applicants may prepare for and demonstrate suitability as medical students and future physicians” (p. ix). Holistic evaluation allows for balanced consideration of an applicant's experiences, attributes, and metrics, and has been shown to elicit increased student diversity along multiple associated criteria (AAMC, 2010). Experiences include:



research, volunteer service, employment, community and collegiate involvement. Some of the possible attributes include: race, languages and proficiencies, location of residence, age, family income, applicant's education level, and parents'/guardians' levels of education. Metrics are comprised of preadmission grades and MCAT scores.

According to the AAMC (2011) the experiences/attributes/metrics model was conceptualized in order, "to help medical school admission committee members broaden the lens through which they view applicants" (p. 3-10). Additionally, "reducing an individual to any single factor, whether it is MCAT scores, race and ethnicity, undergraduate alma mater, etc., denies the complexity of that person's identity and all that has influenced it" (AAMC, 2011, p. 3-10). The holistic approach to application review emphasizes the importance of context in an applicant's preparation for medical school.

*Holistic review in action.* A national survey intended to investigate the extent to which public universities in the U.S. adopted holistic review and whether holistic review affected incoming class diversity, retention, and student success measures, was sent to 163 public universities having at least two health professions schools (Glazer & Bankston, 2014). Glazer and Bankston (2014) reported of the 163 initial universities, 104 participated, of which the majority of schools self-identified using holistic review techniques specifically to affect student body diversity and 72 percent of the surveyed schools reported increases in incoming class diversity through holistic review (p. 14). Of the 104 respondent schools, 70 percent reported an increase in student engagement, 75 percent noted improvements in students' openness to different perspectives, and 66 percent observed an increase in student cooperation (Glazer & Bankston, 2014).

As medical school admissions processes trend toward greater reliance on non-metric data, the rate of matriculation among top GPA and MCAT-scoring applicants is declining. Between 2011 and 2013, eight percent of applicants with the highest combined MCAT scores and GPAs (MCAT = 39-45 & GPAs > 3.79) received rejections from every medical school to which they applied (AAMC, 2014d). Between 2012 and 2014 the percentage of applicants rejected with the highest combined MCAT scores and GPAs rose to nearly nine percent (8.8 percent of applicants with MCAT scores between 39-45 & GPAs > 3.79) (Association of American Medical Colleges, 2014c).

*Holistic review concerns.* While holistic review can take on many forms (Foley, 2010), approaches rely on reviewer judgment and this has led to concerns regarding subjectivity. Gilbert and Lewis (2008) criticized reviewer judgment as a flaw in many forms of holistic evaluation. The researchers (2008) posed a challenge to provide two admissions teams trained in the same holistic process the same sample of college applications for the same number of enrollments; “if there is no guarantee that the two teams will reach the same decisions, then the process is not scientific, it’s subjective at best; therefore, it is not reproducible” (p. 42). Gilbert and Lewis (2008) did not test their challenge, although they did review a software program designed to remove human bias from the selection process, software one of the researchers Gilbert (2006) developed and made commercially available. While Gilbert’s (2006) software was shown to provide aggregate-level multi-variable comparisons, likely useful for analysis of differences across an applicant pool, it was not shown to execute individualized or contextual understanding of applicants’ experiences, backgrounds, or motivations. While holistic processes have been criticized due to concerns over reviewer reliability and time and

resource intensiveness, the individualistic and context-driven evaluation of medical school applicants remains a necessary means to ensure a physician workforce that can meet the needs of an increasingly diverse society (AAMC, 2015).

**Disadvantage.** As the U.S. population has transformed, so to have medical school enrollment goals. Rather than limiting diversity to racial and ethnic characteristics, the AAMC (2010; 2013) recommends a multidimensional approach. In addition to race and ethnicity, diversity may include an applicant's personal experiences with hardships, such as: cultural, language, socioeconomic, physical or cognitive barriers (AAMC, 2010; 2013).

By focusing on the factors that disadvantage applicants, admissions professionals can identify, understand, and matriculate, not only the historically underrepresented groups, but also other individuals who experience significant hardships that affect social and educational advancement. However, not all causes of disadvantage are readily quantifiable, overtly solicited, or even, generally known. The expanding array of less-quantifiable disadvantaging circumstances that contribute to admission barriers requires a different approach to applicant evaluation, one that is flexible and individualized. AMCAS includes two mechanisms for assistance in identifying disadvantaged applicants, one based on SES and the other on self-identification.

*Socioeconomic status disadvantage.* The impact of socioeconomic variables on educational opportunities has long been a pervasive theme in matters of educational policy. Following the Civil Rights Act of 1964, at the urging of the President of the United States and Congress, the National Center for Educational Statistics published a report on the state of school segregation, educational differences across schools, and

learning outcomes. In the report, the researchers concluded that high school graduation rates correlated with SES more than with race (Coleman et al., 1966). For example, at the time of the 1965 census there were approximately 6,467,000 adolescents ages 16 to 17 who had not yet graduated high school and were not already enrolled in college. Of those high school eligible 16 to 17 year-olds, approximately 681,000 had dropped out all together. On first glance, Coleman et al. (1966) observed a nine percent drop out rate among the White students (553,000/5,886,000) and a seventeen percent drop out rate among the Black students (128,000/775,000). However, after controlling for SES, the difference in dropout rate between the races dropped to one percent (Coleman et al., 1966). Of the 681,000 non-completers, approximately 65,000 (3 percent) were from higher SES strata—63,000 White, and 2,000 Black (Coleman et al., 1966). The remaining 616,000 non-completers (13 percent) were from low SES backgrounds—490,000 White, and 126,000 Black (Coleman et al., 1966). SES, not race, explained the dropout rates.

The Coleman et al. (1966) report was the first published attempt at a comprehensive set of data with the purpose of studying disadvantaging circumstances and their effects on education and opportunities for education. Since the Coleman study, there has been a steady stream of research on the need for consideration of diversity in medical school admissions, although beyond the categorical variables of race and ethnicity, studies have primarily investigated other readily available quantitative data; among them, SES has been foremost.

*Socioeconomic status in the American Medical College Application Service.*

Since its recent inception in the AMCAS application in 2014, the SES Disadvantaged Indicator is already more prominent in the literature than the Disadvantaged Status (Grbic

et al., 2013; Grbic et al., 2015; Nakae, 2014). Researchers describe SES as encompassing three categories: parents'/guardians' levels of income, education, and occupation. These three categories tend to positively correlate with access to resources—advantages, or negatively correlate with barriers to educational and social opportunities—disadvantages (Blau, & Duncan, 1967; Grbic et al., 2015; Hauser & Warren, 1997). In AMCAS, the SES Disadvantaged Indicator uses the latter two categories, parents'/guardians' level of education and occupation, to formulaically assign applicants into one of five categories (EO1 – EO5), where EO1 indicates the most SES disadvantage and EO5, the least (AAMC, 2015). Applicants whose parents'/guardians did not complete a bachelor's degree and work in service, clerical, skilled, and unskilled labor fields are designated EO1 (AAMC, 2015). Conversely, applicants whose parents'/guardians earned professional or doctoral degrees and work in executive, managerial, or professional fields are designated EO5 (AAMC, 2015).

SES is one of the strongest mechanisms of opportunity in an individual's life, whether beneficial or disadvantaging. Where SES is a powerful source behind the generation of privilege for one individual, for another, it is the shackles that keep opportunities out of reach. As an example of the power of SES on applicant matriculation, consider the impact of parental and family wealth. Using U.S. census data, Jolly (2008) divided annual household incomes into quintiles; the lowest quintile denoted \$19,178 per year and under, and the top quintile indicated household annual incomes greater than \$91,705. Jolly (2008) found that applicants from wealthy backgrounds tended to matriculate at higher rates than lower income applicants—more than 75 percent of accepted students came from families in the top two income quintiles

versus less than 10 percent from the lowest two quintiles (Jolly, 2008). Since 1987, medical students from the lowest income quintile have never comprised more than 5.5 percent of first-year enrollments; whereas matriculants from the top quintile have never comprised less than 48.1 percent (Jolly, 2008). The rather-unchanged financial disparity of medical school students is no surprising considering the undergraduate data is similarly skewed (Jolly, 2008).

*Socioeconomic status indicator concerns.* So far, SES EO indicators have not been foolproof. Based on the 2012 application pool in AMCAS, as many as 36 percent of applicants in the EO1 and EO2 categories had no corroborating indicators of socioeconomic disadvantage and likely more appropriately belonged to non-disadvantaged SES categories—EO3-5 (Grbic et al., 2013). Alternatively, about 9 percent of applicants not coded as EO1 or EO2 had multiple indications of socioeconomic disadvantage. The Grbic et al. (2013) findings provide support for the need to rely on many forms of data when considering types and levels of disadvantage that may have affected an applicant. Multiple data points help enrich committees' understandings of applicants' life experiences and any adversities surmounted (Witzburg & Sondheimer, 2013).

Additional SES Disadvantaged Indicator reliability concerns have resulted due to applicants unable or unwilling to provide necessary information, or without U.S. citizenship or permanent resident status (same for parents/guardians), or having parents/guardians in the military, AMCAS cannot provide an EO designation. In 2012, 4,884 (11.2 percent) of applicants were not assigned an EO status due to the following reasons: being International/neither U.S. citizens nor permanent resident visas (3.9

percent), having parents without U.S. legal residence (1.7 percent), and/or unable/unwilling to provide sufficient parental data (5.8 percent) (Grbic et al., 2013; Grbic et al., 2015).

*The Disadvantaged Status.* To identify disadvantaged individuals in the admissions process, the AAMC provides an opportunity for applicants to self-identify as disadvantaged. While the AMCAS application contains other measures within the larger definition of disadvantage, such as: SES, Pell, Fee Assistance Program (FAP), which provides financially disadvantaged individuals with MCAT and application fee assistance, parents'/guardians' education levels, and language proficiency, self-identifying as disadvantaged is the only means of reporting any categorically ambiguous barriers to normal social and educational opportunities. The details of applicants' disadvantages add to the "context of their backgrounds", that in turn, can add to the perspectives of their applications (Albanese, Snow, Skochelak, Huggett, & Farrell, 2003, p. 320).

*Disadvantaged Status ambiguity.* Applicants considering the disadvantage status option are provided minimal guidance. Based on my review of the application via a staff-accessible staging area, an applicant can elect to be considered disadvantaged by answering "yes" to the question, "Do you wish to be considered a disadvantaged applicant by any of your designated medical schools that may consider such factors (social, economic or educational)?" According to the *2016 AMCAS Instruction Manual*, "you might consider yourself disadvantaged if you grew up in an area that was medically underserved or had insufficient access to State and Federal assistance programs" (2015, p. 31). The AAMC does not define the term disadvantage. AMCAS applicants are

instructed that, the “disadvantaged status is self-determined and each medical school has their own policies for how they use this information” (Disadvantaged Status, n.d.). The “less-is-more” approach to the disadvantaged instructions reduces the projection of authoritative biases and their constricting effects on the many possible ways adversity can manifest; however, such vagueness leads to ambiguity for applicants. Without sufficient explanation of definition or purpose, applicants are left to question whether they should disclose a disadvantage within the context of the AMCAS application, even if they identify as such within the contexts of their own social worlds.

*Socioeconomic Status Disadvantaged Indicator versus Disadvantaged Status.*

There appear to be unexpected self-disclosure behaviors in AMCAS. Considering Grbic’s et al. (2013; 2015) study of the 2012 admissions cycle, nearly 30 percent of applicants who used the Disadvantaged Status option were from non-disadvantaged EO classifications—EO3-5. Either the reasons for identifying as disadvantaged do not tend to overlap with socioeconomic variables, or possibly, applicants from socioeconomically-disadvantaged circumstances do not tend to see themselves as disadvantaged, at least not in ways that need explanation beyond what they believe the SES indicator signifies.

*Extant literature on the Disadvantaged Status.* Research on the Disadvantaged Status is sparse. The self-identification of disadvantage in AMCAS has been mentioned in several articles (Garrison, 2009; Grbic, et al. 2013; Grbic et al., 2015; Kreiter et al., 2009; Nakae, 2014; Price-Johnson, 2013; Yzquierdo, 2011), and has been the focus of one other dissertation (Espinoza-Shanahan, 2016), which I discovered after completing my own study. Beginning with the articles in which the Disadvantaged Status has been briefly mentioned, Garrison, previously a researcher at the AAMC, reviewed applicants



from the 2002-07 admissions cycles and found that 12.4 percent of the total pool identified as disadvantaged of whom 9.9 percent were accepted (Yzquierdo, 2011). However, Garrison's (2009) research was not published. At the time of this research, Garrison's (2009) unpublished conference paper and is no longer hosted on the AAMC's website.

Grbic et al. (2013; 2015) published on the creation of the AAMC's SES Disadvantaged Indicator that was implemented in 2014 with the intent to establish criteria to validate its efficacy using correlations from six other SES disadvantage predictors: FAP approval, the Disadvantaged Status, self-reported family income below \$40,000, contributions to family income, family receipt of government assistance, and high need/low family contribution to education financing. The Disadvantaged Status, while it includes an open-ended essay, was treated as a binary variable (yes/no) and was found to have a "moderate" association ( $\gamma = -0.64$ ) with the soon-to-be implemented SES Disadvantaged Indicator (Grbic et al., 2015, p. 3). Among the variables tested, the association between the Disadvantaged Status and the SES Disadvantaged Indicator was second in strength only to the Fee Assistance Program.

Kreiter et al. (2009) sought to test whether the Disadvantaged Status, as a binary (yes/no) variable, could be used in student selection to elicit comparable class diversity when compared to race/ethnicity variables. Through correlations using a weighted analysis known as constrained optimization with a random sample of a theoretical applicant pool, Kreiter et al. (2009) concluded that the Disadvantaged Status could be used as a single variable to "easily shape a simulated optimal racially representative class" (p. 121). Kreiter et al. (2009) were concerned that, if the Disadvantaged Status is

seen as a valuable component of the application, some applicants may see the option as a way to increase their competitiveness and thus, compromise its usefulness through over reporting.

For her dissertation, Nakae (2014) performed multivariate analysis on the 2010-11 admissions pool to describe characteristics and admissions behaviors of successful and unsuccessful applicants. The Disadvantaged Status was considered, although it was omitted; Nakae (2014) stated that it was “not practically implementable for an SES variable due to large portions of missing data and the inherently qualitative criteria for disadvantaged” (p. 104). Nakae (2014) did note in her analysis that URM applicants applied to fewer schools than White and Asian applicants, and was able to explain much of this finding through differences in parents’ level of education. Applicants with at least one parent with a doctorate submitted an average of 3.7 times as many applications than did applicants whose parents had completed some college but with no earned degree (Nakae, 2014). Nakae (2014) reported that 31 percent of Asian applicants had at least one parent with a doctorate degree and for White applicants the proportion was 28.5 percent; for Blacks and Hispanics those percentages were 16.6 and 22 respectively. Nakae’s observations regarding parents’ level of education and number of applications submitted were not extended to applicants who self-identified as disadvantaged.

Price-Johnson (2013) conducted a comparative case-study dissertation on the implementation of holistic admissions practices at two medical schools. While the Disadvantaged Status was not the impetus for the study, it did come up in several places. Price-Johnson (2013) first addressed the disadvantaged option in her literature review where she points out the lack of guidance as to what “constitutes being disadvantaged”

and that “it is up to the committee to determine the extent to which a student is truly disadvantaged” (p. 39). Price-Johnson (2013) questioned whether the essay is useful to committee members given that it “falls outside the realm of cognitive variables” that are more readily useful given the number of applications many schools receive (p. 39). Price-Johnson’s (2013) other concern dealt with the language of the Disadvantaged Status; it suggests “a particular conception of diversity framed by the AAMC as more of deficit than a robust factor when creating diversity” (p. 89). Furthermore, while the AAMC promulgates a holistic and context-based evaluation of applicants, they also require the MCAT, an objective approach to measurement in the admissions process. Price-Johnson (2013) suggested that the promotion of both holistic and objective evaluation strategies influences admissions committees in opposing directions.

Espinoza-Shanahan (2016) used a Critical Race Theory framework to investigate the effectiveness of the Disadvantaged Status as an instrument to assist medical school admissions committees with identification of applicants from URM groups. Espinoza-Shanahan’s (2016) research built on the assumption that the Disadvantaged Status was implemented as a race-neutral means of capturing racial/ethnic diversity in the event that such data is no longer allowed to be included in the application, an assertion that was uncited, except for the mention of an unnamed employee at the AAMC sometime between 2006 and 2008. Espinoza-Shanahan’s (2016) study goals included understanding the impact of the high stakes admissions process on applicants’ willingness to align with the label, and how applicants “navigated the disadvantaged status question” (p. 111). Espinoza-Shanahan (2016) examined the demographics of applicants who selected the Disadvantaged Status. Additionally, the researcher analyzed 644 disadvantaged essays of

both minority and majority applicants from the 32,192 that were submitted between 2002 and 2008 (Espinoza-Shanahan, 2016). Espinoza-Shanahan used Computer Assisted Qualitative Data Analysis Software to code and analyze the essays with the intention to uncover any patterns in content that could be attributed to racial/ethnic demographics.

Espinoza-Shanahan's (2016) most relevant research question to this present study, "[h]ow do applicants define disadvantage?" was explored through analysis of disadvantaged essays. The researcher categorized the disadvantaged essays as either conforming to or reframing the Disadvantaged Status. Essays that conformed contained information on applicants' hardships in matter-of-fact descriptions so as to satisfy the perceived purpose of the question. Essays that reframed the Disadvantaged Status question elaborated on any listed hardships by explaining how they were character building and bolstered the capacity to be an effective caregiver.

Espinoza-Shanahan (2016) found that the majority of applicants (58.5 percent) between 2002 and 2008 who identified as disadvantaged were from relatively high income households (>\$92,553), but had at least one parent who had not earned a bachelors degree or higher. Furthermore, the majority of disadvantaged applicants earned scores of 27 or lower on the MCAT (72.6 percent) and cumulative undergraduate GPAs less than 3.46 (59.3 percent) (Espinoza-Shanahan, 2016).

It must be pointed out that, by only examining essays, all applicants who did not apply as disadvantaged, but may have had a perspective on the definition, were precluded from contribution. Furthermore, by limiting investigation of the research question to analysis of disadvantaged essays, there is an implicit assumption that the delimitations of an applicant's definition of disadvantage can be extrapolated solely based on the content

disclosed in the essay. The study does not account for the possibility that applicants may disclose only the details about their circumstances that they perceive to be relevant to support their use of the Disadvantaged Status. Or, the essay content may simply be representative of what an applicant perceived admissions committees would find desirable or philosophically congruent.

*Related admissions research.* Personal statements have been examined to learn how applicants decide what content to include (Belkins, Huckin, & Kijak, 2004; White, Lemay, Brownell, & Lockyer, 2011; White, Brownell, Lemay, & Lockyer, 2012). Price-Johnson (2013) and Yzquierdo (2011) researched what committee members value in applicant selection. Hood (2014) and Hadinger (2014) each explored minority student experiences with the admissions process.

Belkins et al. (2004) surveyed 15 health professions applicants, including nine to medical school, to learn how applicants interpret the meaning of the personal statement and how they act upon those perceptions through the essay statement. Admissions committee members were asked to evaluate and score each personal statement. The researchers found that all but one of the participants rated their essays higher than the committee reviewers, indicating a lack of awareness of the values of the medical admissions community. Belkins et al. (2004) stressed the importance for applicants to connect experiences with thoughtful reflection on their decision to pursue a career in medicine.

White (2009) conducted a grounded theory study at a Canadian medical school to explore the role of the personal statement in the admissions process. Through text analysis of 70 essays and follow-up data-checking interviews with 20 participants, the

researcher found multiple layers of motivation undergirding applicants' response approaches. Addressing the question, "What do they want me to say?" entailed a deeper set of suppositions: "How should I respond in terms of the question?"; "How can I answer in a way that is most likely to enhance my chances of admission?" (White, 2009, p. 132). Participants contemplated how a "perfect applicant" would answer the essay and consideration of committee members' "perceptions and expectations" resulted in the question, "who is reading and how can I impress them?" (White, 2009, pp. 133-34). Participants expressed frustration with a process they perceived as too objective to allow them to showcase the parts of themselves of which they were proudest. At the same time, White (2009) suggested that the way in which the essay was being used in admissions selection was too subjective and recommended specific questions be provided to evaluators to reduce the likelihood that potentially extraneous variables, such as writing ability, would influence the scoring of the content itself.

Yzquierdo (2011) conducted analysis of survey data from 86 medical school committee members across five programs. Yzquierdo's (2011) purpose was to examine the values and experiences of committee members and their impact on applicant selection bias. Analysis of committee members' self-reported demographics revealed the majority were White (53 percent), male (59 percent), and clinical faculty (41 percent) (Yzquierdo, 2011). The participants' demographics were congruent with the AAMC's (2012) national data on faculty composition—White 61.1 percent and male 57.5 percent. Overall, Yzquierdo (2011) found that participants placed an emphasis on applicants' conveyances of compassion and empathy. Differences in values along generational lines were observed; faculty from the Baby Boomer generation rated integrity, desire to learn,

and reliability and dependability as more important in applicant evaluation than did millennial generation faculty (Yzquierdo, 2011). While the study contained connections between faculty age and what applicant criteria was most valued, similar findings related to race/ethnicity or gender were neither present nor was their omission explained.

Hood (2014) conducted a phenomenological dissertation to explore the lived experiences of a group of Hispanic medical students. Hood's (2014) focus was on the participants' experiences with the admissions process—the perceived barriers, facilitators, and influences on their degree aspirations. Socioeconomics seemed to undergird the findings. Participants attributed academic preparatory opportunities, family support, and the resources that come with healthy family incomes as positive enablers. Hood (2014) identified pipeline programs and undergraduate opportunities for research as positive influences for all participants in the study, but especially so for those from lower socioeconomic backgrounds. Hood (2014) connected socioeconomic findings with Bourdieu's (1977) social capital theory in which mobility in life is inextricably connected to financial and social stations.

Similar to Hood (2014), Hadinger (2014) conducted a dissertation based on the problem of minority underrepresentation in the physician workforce. Hadinger's (2014) research involved Black and Hispanic medical students and their experiences with the admissions process. Like Hood (2014), Hadinger's (2014) findings shared socioeconomic level as a foundational influencer of applicants' experiences with their path to admission.

## **Part II: Self-Presentation in the American Medical College Application Service Application**

Self-disclosure, or the “process of making the self known to others” (Jourard & Lasakow, 1958, p. 91), requires the internal act of self-identification—seeing one’s self within a particular category. Self-identification and self-disclosure, while possible to use interchangeably, have differences in denoted meanings. To self-disclose is to reveal information about one’s self to others, and to self-identify is to see one’s self a certain way; in the case of this dissertation, as disadvantaged, regardless of whether one chooses to share that information.

As supported by the existence of the option in AMCAS, and by the lack of any conflicting research findings, it is expected that applicants who identify as disadvantaged will self-disclose their circumstances. While it has been suggested that applicants cannot be trusted to self-report, that they are prone to exaggerate, take advantage, and game the system (Siu & Reiter, 2009), there has yet to be published concern regarding underreporting—that applicants will not only not embellish, but will not advocate on their behalves when appropriate. It is because it cannot be assumed that all applicants who see themselves as disadvantaged, that is to say that self-identify as such, will disclose a Disadvantaged Status in AMCAS. The interplay between self-identification and self-disclosure of a Disadvantaged Status from this point on will be connoted by the term *self-presentation*. I believe self-presentation reflects, more comprehensively, that how applicants see themselves and how they represent themselves are not necessarily the same. Furthermore, self-presentation acknowledges the performative element of social life, which can be extrapolated to the act of applying to medical school. After review of



social theories that undergird similar areas of research, I determined that application to medical school, and through it, self-identification and disclosure of a Disadvantaged Status, falls within the larger social phenomenon of self-presentation. In this part I consider issues associated with self-presentation in AMCAS through the social theories of symbolic interactionism, social comparison theory, impression management, and stigma.

### **Theoretical Frame**

To explore the medical school applicants' perceptions of the disadvantaged term, and subsequent application behaviors, I weaved together a theoretical framework comprised of complimentary social theories amenable to the study of meaning. These social theories included: SI, SCT, IM, and stigma. Finally, issues related to the presentation of self in online and asynchronous spaces are considered.

**Symbolic interactionism.** SI is an "American perspective on life, society and the world" (Crotty, 1998, p. 72), with tenets that originate with Mead (1934) and Blumer (1969). Mead (1934) stated that, as humans we make meaning of the world, and we do so through symbols. Furthermore, as humans, we owe our minds to symbols; it is through them that thinking takes place (Mead, 1934).

Symbolic interactionists are concerned with the meaning of things since it is through such meanings that individuals interact with the world, and as with other theoretical perspectives, the goal of SI is to understand human behavior, particularly social behavior (Blumer, 1969; Charon, 2007; Mead, 1934; Shibutani, 1955). Symbolic interactionists are interested in the construction of meaning, since it is how individuals define a thing that determines how they will act towards it (Shibutani, 1955). A thing can

be an object, event, or element of an individual's life, whether tangible or abstract (Charon, 2007).

The foundation of SI consists of three tenets (Blumer, 1969). Individuals act toward things based on the meanings those things have for them; this is the first tenet of SI. Furthermore, the meaning of those things is created, rather than intrinsic, and its creation occurs through social interaction; this is the second tenet. The third tenet states that individual meanings are reached through self-reflective, interpretive, internalized negotiation between what is known about a thing from past experiences and what is presently being attributed as meaning (Blumer, 1969).

I reframed the tenets of SI through this present study and arrived at the following assumptions Medical school applicants approach the option to apply as disadvantaged based on what they understand the term to mean. What disadvantaged means is socially created, not objective or pre-existing. And, applicants apply their own meanings to the concept of disadvantage through introspection, by considering all known information on the term, as well as any relevant experiences, and must negotiate any differences between what they and others believe about the term.

*Defining premise of symbolic interactionism.* Symbolic interactionists view the individual as social not only through interactions with others, but through interactions with the self as well (Blumer, 1969). The significance of this premise, that individuals by themselves are social, is supported by Bourdieu's (1977) observation that the social world, while tending toward discernable patterns of behavior, is just as much the deviant product of exceptions to social order. A world, in which construction is entirely social, in the group sense, would necessarily preclude individualism. But, to Bourdieu's point, the

social world is not always predictable. Individuals may act both with and separate of large social orders.

Because human beings are not merely products of our environments, we make meaning as groups and as individuals (Blumer, 1969, Mead, 1934; Shibutani, 1955). The space where individuals, as individuals, make sense of the world is often overlooked as matter-of-fact, but it is why SI was conceived and where it continues to excel. It is in this space that we study the ordinary and everyday life (Goffman, 1963). And, as Charon (2007) explained, it is as individuals, in one's private mind, that the effects of our actions are contemplated, and in turn, our identities revised. Charon (2007) posited that human learning "results primarily from taking the role of the other" and imagining how others view us (p. 113).

*Making sense of place.* As individuals, as we treat ourselves as objects and evaluate ourselves as we would any other object, we consider what we believe society thinks about our beliefs, values, and actions. In considering ourselves in this way, we judge and place limitations on ourselves through our interpretations of what we believe society empowers or restricts us from doing or being; Goffman (1951) called this, "*the sense of one's place*" (p. 297). Such delimitations can be as overt as laws and regulations, or as tacit as self-worth governed by emotions and perceptions. In line with Goffman, Bourdieu (1985) wrote, "the sense of one's place as a sense of what one can or cannot 'permit', implies a tacit acceptance of one's place, a sense of limits ('that's not for the likes of us', etc.)" (pp. 201-202). That we as individuals act upon ourselves as we would any other thing, and that we do so through our perceptions of what society, particularly individuals and groups with power, thinks of us, has profound effects on how

we see ourselves. The sense of one's place was relevant in studying disclosure in the AMCAS; applicants navigate their own meanings of disadvantage, the perceived meanings of authoritative others, and decide where they fit within those. This negotiation provides the impetus for research questions (2), (3), and (4).

*Relevant research on symbolic interactionism.* Del Prato (2013) was interested in nursing students' experiences with faculty incivility. Phenomenological methods were chosen and SI informed the frame. Del Prato conducted 18 interviews ranging from 50-120 minutes with 13 participants of varying demographics (five engaged in follow-up interviews). By selecting participants from a wide array of backgrounds, Del Prato (2013) hoped to account for thematic differences in their experiences with the phenomenon. The author identified four themes that the participants perceived as forms of faculty incivility: abusive and demeaning behavior, subjective treatment, rigid expectations, and intentional weeding out. Del Prato (2013) provided examples from the transcripts for each theme; she concluded that faculty incivility toward the nursing students manifested as debilitating impediments to their professional development. While symbolic interactionism was mentioned prior to her methods, Del Prato did not consider the data through the theory in any noticeable way; it was used more as an opportunity to ensure that any readers of her study would be familiar with its epistemological tenets.

Harris (2001) conducted a phenomenological dissertation study on the meaning of equality for married couples. Harris included SI in the framework for the study due to its tenet that individuals act towards a thing based on the meaning it has for them. In

exploring married couples' experiences with the idea of equality, SI framed the importance of definitions to the inquiry.

In previous research on marital equality, researchers did not consider definitions of the term, at least not from the perspective that individuals may attribute to it unique meanings, and not from the position that an individual's meaning attributions affect how the social construct will be acted upon. In presenting the findings, Harris (2001) selected portions of the participants' interviews through theories and perspectives of previous scholars. Because previous researchers carried out their studies based on assumptions of a ubiquitous conception of equality in marriage, where as Harris (2001) sought to first understand the meanings for each participant, Harris reported comparatively unique accounts of experience. For example, one participant shed light on equality through the strain on the relationship brought about by chore division. The participant described placing a tally sheet above the toilet paper dispenser to prove to her partner that she the one who most often replaced the roll. One of Harris' (2001) findings, less frequently cited in the literature, dealt with a similar notion of distribution in a relationship—this particular participant believed equality was an issue in his relationship since his partner had more bookshelves in the apartment. Like Del Prato (2013), Harris described SI; however, only Harris strained the findings through the theoretical framework as a means to go beyond reporting, to extrapolating.

Drawing both from symbolic interactionist and social comparison theories, Brown and Lohr (1987) investigated the relationship between self-concept and peer-group affiliations among 327 adolescents in grades seven through twelve. The students were stratified among individuals who belonged to a social group as recognized by their peers,

“populars (n = 25), athletes (61), druggies/toughs (52), nobodies (32), or normal (51) . . . 106 students classified as outsiders, that is relatively unknown by classmates and not consistently associated with any crowd” (Brown & Lohr, 1987, p. 49). The authors thought that the 106 outsiders would present lower self-esteem than any of the 221 students from the recognized social groups. Furthermore, the authors thought that students’ self-esteem would correlate with position within a social group hierarchy, such that as status diminished, so too would self-perception. Brown and Lohr (1987) were influenced by Festinger (1950; 1954) who, as a part of his theory on social comparison, asserted that an individual’s level of self-worth is affected by, and correlated positively with, the way others see that person. The researchers found that self-esteem was associated with position within particular social group, as determined by self-perception and the perceptions of peers (Brown & Lohr, 1987). To glean more information from the data on the 106 students labeled as outsiders, the researchers stratified them into three groups—“*distorters*, who saw themselves as part of a crowd; *independents*, who acknowledged being an outsider but attached little or no importance to being part of a crowd; and the *envious*, who recognized they were not part of a group but rated crowd affiliation as somewhat or very important” (Brown & Lohr, 1987, p. 51). For the outsiders group, the independents exhibited higher self-esteem than those who were either aware of their status and were envious of peers who belonged to in-crowds, and the distorters who thought they were part of a group. The researchers concluded that belonging to a peer-group did not necessarily correlate to self-esteem, but rather that, self-perceived status within a peer-group and of the peer-group affected the students’ self-perceptions. Brown and Lohr (1987) found that “one’s perceptions of others’

appraisals . . . help account for the differences in self-esteem that were observed among subgroups of outsiders” (p. 53). This finding, that the students’ self-perceptions were influenced by what peers thought of them, or at least what they as participants thought peers thought of them, is supported by SI. Self-worth was not based on objective position, but instead on symbolic meaning, how they perceived others saw them. Considered through a symbolic interactionist perspective, the way students saw themselves was influenced by how they perceived peers to see them; their social groups influenced their sense of place, and their self-worth.

**Social comparison theory.** In the seminal work on SCT, Festinger (1950; 1954) posited that individuals form and modify beliefs and opinions based on physical, objective, or social information—the attitudes, beliefs, and opinions of others. When physical reality cannot be depended on, such as in social matters, individuals must rely on other people’s opinions and attitudes to inform their own perspectives. Festinger (1950) illustrated this tenet through two examples. To paraphrase, if an individual is confronted with an unknown surface and desires to determine whether it is fragile or durable, a hammer can be swung down on it; if the surface breaks, the surface is fragile, and if it holds, it can be considered durable. The opinions of others are likely of low value in confirming the surface’s integrity. However, if a voter believes that the candidate who lost the election would have been the better choice, the physical world can offer little in the way of information to confirm that belief. Instead, the voter must gauge the attitudes and opinions of others.

As in SI, SCT builds on the premise that individuals have a fundamental need to evaluate their opinions, beliefs, and attitudes (Festinger, 1954). When those opinions,

beliefs and attitudes cannot be evaluated through exploration of the physical world, the opinions, beliefs, and attitudes of other individuals must be relied upon. Festinger (1950) posited two external sources of pressure affect an individual's opinions, attitudes, and beliefs. First, understanding our place in the social world is affected by pressures to conform to the uniformity of groups and hierarchies, and second, the desire or need to conform affects access to, and status within a group.

Because disadvantage is socially constructed, it stands to reason that applicants must rely on comparison with others in determining their level of fit with the Status. Furthermore, pressure to understand the perceived authoritative audience's (that being admissions committees) interpretations of the definition of disadvantaged may affect applicants' understandings of the term, outlook on whether or not they are disadvantaged, and whether or not they should apply as such.

If applicants see the "group" as the medical profession and admissions members as the gatekeepers, they may be pressured to conform in order to increase their likelihood of agreement, and in turn their prospects of gaining admission to medical school. Festinger (1950) explained that conforming to others is an effort to influence the guardians of the group they mean to move up within, gain, or maintain access. If applicants see the "group" as peers, their access to individuals with whom to draw comparisons may be limited to the communities in which they grew up and the colleges they attended. So, it may be that an applicant from lower socioeconomic circumstances may have a more homogenous peer group, which in turn, may affect how they define the term, disadvantaged, and whether they themselves within that definition.



Because self is developed through social interactions, it is a product of specific communities in which that individual belongs. This relativistic process through which an individual establishes self-awareness has a profound implication with the option in AMCAS to self-identify as a disadvantaged applicant. The process an applicant goes through in determining whether or not to self-identify as disadvantaged is subject to the context in which that individual has lived. If an applicant is from an impoverished neighborhood and is low-income, but to a lesser degree than others in the community, that individual may not identify as disadvantaged. The low-income individual may identify as well off in comparison to peers. Alternatively, an applicant who is less privileged than others within a high socioeconomic peer group may identify as disadvantaged by comparison, even though that individual could still be better off than most other applicants.

The comparative nature of identification is complicated; it is also plausible that some applicants understand that others view aspects of their circumstances as disadvantaging, even if, for the applicant, those same characteristics are sources of pride. Characteristics that disadvantage an individual may not be seen as disadvantage, depending on sociocultural perspective. In this case those applicants must decide whether to identify as disadvantaged based on how they believe the social group, in this case the AAMC and its participating medical schools, view their circumstances, or based on their own interpretations; one way leads to identifying as disadvantaged applicant and the other may not.

*Relevant research on social comparison theory.* Clarke and Bennett (2013) conducted in-depth interviews with 16 men and 19 women, all over the age of 72. The

researchers sought to explore how aging adults made sense of their increasing ailments and physical limitations. The researchers investigated multiple study questions, among them—“how are older adults’ experiences of illness influenced by age and gender norms?” (Clarke & Bennett, 2013, p. 342). Through analysis of the transcript data, Clarke and Bennett (2013) found social comparison to be a prominent theme. The researchers (2013) noticed that 14 of the participants contextualized their experiences with age-related physical degeneration to other adults that suffered similar ailments. Through social comparison, participants normalized their circumstances, “thereby positioning their own health situations as less onerous and distressing” (Clarke & Bennett, 2013, p. 354). The participants who compared their age-related maladies with peers were less inclined to see themselves as abnormal; instead, their negative feelings towards their circumstances were likely to be lessened, just another aspect of growing older.

Finkley (2016) conducted a phenomenological dissertation on the perceptions of body image among 15 African American women ages 18 to 22 at an all-female historically Black university; SCT formed the theoretical framework. Based on data from the open-ended interviews, Finkley (2016) found that the participants idealized a different body image than that of mainstream norms. The women in Finkley’s (2016) study preferred fuller figure body images; some participants even expressed desires to gain weight. The researcher attributed deviations in preferred body image to the relative isolation from societal norms. The participants compared themselves within their encapsulated campus environment where body image trended toward different features than socially promoted standards for White women. However, the researcher noted that

11 of the 15 participants shared that they would feel differently about their bodies if they attended a predominantly White college (Finkley, 2016).

Wilson, Siegle, McCoach, Little, and Reis (2014) analyzed 442 high school students' responses to questions from two academic self-concept instruments in order to investigate influences on participant's' self-perceptions. Social comparison was found to be a statistically significant predictor of participants' conceptions of academic self-worth (Wilson et al., 2014). The highest achieving students tended to have favorable self-concepts as they were more likely to see themselves as successful when they compared themselves to others. For similar reasons, low-achieving students who engaged in social comparison tended to harbor less favorable self-concepts. Low achieving students who did not often compare themselves to others were more likely to have positive self-images (Wilson et al., 2014). Data from this study can be extrapolated to illustrate the influence of social comparison on whether or not medical school applicants identify as disadvantaged. Wilson et al. (2014) demonstrated that with whom an individual makes comparisons significantly affects identity. For the high school students in the study, a high level of academic achievement did not necessitate a favorable self-image. The way the participants felt about themselves was influenced not only by academic performance, but also by social comparison and level of concordance between those with whom the comparisons were made.

**Impression management and dramaturgy.** In *The Presentation of Self in Everyday Life*, as a means of understanding the social world, Goffman (1959) provided a way to understand human behavior through the metaphor of the theater. Goffman's theories on impression management and dramaturgy come together as a model through

which the everyday phenomenon of social interaction can be examined. Goffman observed that individuals, in going about their everyday lives, do so much as actors in a play. Goffman (1959) was aware that such a metaphor “is hardly novel”, instead, he valued investigating how individuals engage with the meanings of things and act upon them (p. 252).

In keeping with the metaphor, Goffman (1959) described human behavior in terms of actors, audiences, and performances. At any given moment, each individual is assuming the role of actor or audience. Thought of through SCT, in efforts to advance their causes, actors present themselves in ways they perceive as pleasing to audiences who have power over them (Goffman, 1959; Festinger, 1950; Festinger, 1954).

Performances depend on an individual’s place in society and that place affects the types of behaviors that are appropriate. An individual’s place in society is an outcome of SES, level of education, languages and proficiencies, age, gender, race, ethnicity, appearance, and physical and mental ability. In the context of the present study, applicants to medical schools are actors, admission committees are audiences, and the application, what an actor chooses to include or leave out, serves as the performance.

In everyday life people do not rely upon statistics to make decisions. As sociologist William I. Thomas stated, “[y]ou do not know, you cannot determine scientifically, that I will not steal your money or your spoons. But inferentially I will not, and inferentially you have me as a guest” (Volkart, 1951, p. 5). Considered through SI, meaning is interpreted through experience and context. What is known about the dinner guest, the situation or stage comes both from experience and inference. Similarly, an

applicant must choose, not only how to act in the AMCAS, but first, how to interpret the meanings and intentions of the various questions therein.

Oftentimes the inspiration for the way we behave come from “socially negotiated, generally agreed to standards” described as fronts (Birnbaum, 2013, p. 78). Goffman (1959) observed that people act in accordance with what they think their audiences expect of them in a given role or context. The more an act is in line with what the audience expects, the more relatable, believable, and in turn, desirable the actor appears.

*Relevant research on impression management and dramaturgy.* Ford and Vaughn (2011) explored the experiences of a doctoral education administration cohort involved in distance and face-to-face classes. More specifically, Ford and Vaughn (2011) were interested in how the students’ self-perceptions developed over time. The researchers began the study as a phenomenological inquiry, but as they became increasingly interested in the students’ interactions, they added both SI and dramaturgy to their framework. One of the two researchers was a student member of the cohort and the other taught four of the courses, although it was not clear how those dual roles affected the research. The findings were framed as a four act play centered on the back-and-forth between the multimodal-classroom—local, distance, and blended elements.

I was initially distracted by Ford and Vaughn’s (2011) use of metaphor, describing their findings through devices of the theater, but as their focus on esoteric language gave way to a rich narrative; the participants’ everyday cohort experience became accessible, even engaging. Through the dramaturgical narrative, the researchers present, rather than describe, the participants’ personalities, which works well for a study involving shared experiences and personal growth. The authors concluded that on-

campus faculty interactions with the distance students, while positive, were less indicative of any relationships formed across their disparate locations, and more to do with managed impressions and a desire to be viewed in a positive light.

Beal (2007) conducted an ethnographic case study dissertation to explore the concept of becoming a scholar among first-generation disadvantaged students in a McNair Postbaccalaureate Achievement Program, a federal program designed to prepare underserved students for graduate studies. Beal's (2007) framework included SI, IM, and stigma theories. Beal (2007) described her study as emergent in that its scope of questions broadened to reflect the participants' lead. Data included classroom observations, interviews, and documents, such as students' personal files including personal statements, advising session notes, journals written in the seminar course, transcripts, and letters of recommendation.

Beal (2007) originally conceived the study as participant observation but due to the researcher's role as director of the program, discovered during preliminary fieldwork that the students expressed discomfort with her presence. At times Beal (2007) conveyed frustration with the levels of completeness and verisimilitude in students' interview responses, for example, "as director I experienced a level of angst when I realized how students skillfully omitted the fact that so many of them had few interactions with their faculty mentors ..." (p. 142). In the analysis section, Beal (2007) described how the selected theories informed the themes. Both SI and the dramaturgical metaphor informed the theme of "negotiating cultural identity to construct a scholar's identity" (Beal, 2007, p. 150). The scholar identity was role-played (Goffman, 1959) and mimicked (Blumer, 1969) throughout the program through student presentations and interactions with faculty

and mentors in which participants tried out the role of scholar, dressing the part, attending graduate lectures and conferences, conducting research, and teaching lectures. Beal's (2007) use of SI and dramaturgy appeared throughout the study and informed the design and analysis. Participants navigated an array of stigmas and subsequently, managed self-presentations during their time in the Program. Participants brought some stigmas with them, from their disadvantaged backgrounds and identities, and others manifested during the program—results of the perceived pressures to succeed and live up to the expectations of others.

Rivera (2008) conducted a case study to examine how the government of Croatia has represented the country to international audiences; IM and stigma informed the framework. According to Rivera (2008), in an effort to display themselves favorably, some governments have gone as far as to hire “the world’s highest profile consulting firms to help shape their images” (p. 615). As a result, Rivera (2008) likened governments to “Goffmanian actors on a world stage” (p. 615). Because national reputations have implications for political and economic health, Rivera (2008) argues that Goffman’s (1963) work on stigma informed the research on how governments manage the impressions they give off. Rivera (2008) used Goffman’s notes on stigma, originally conceived for understanding how individuals cope with “characteristics considered shameful or embarrassing by mainstream society” (p. 615) and applied them to his framework for understanding how countries manage their reputations.

Rivera (2008) identified the case as the tourist industry in Croatia. The case was bounded in Croatia due to its recent history of conflict during its secession from the former Yugoslavia and to the tourist industry since it is a leading source of contact

between people of different countries. The war resulted in extended international attention that led to the tarnishing of its perception as a travel destination (Rivera, 2008). Multiple forms of data were used, including: tourist brochures to examine promotional language; in-depth interviews with government officials, consultants, hoteliers, and policy analysts; and, three months of field notes as a tourist in Croatia. The in-depth interviews with the many different stakeholders served as a “backstage” perspective, not meant for the audience to see, where “illusions and impressions are openly constructed” (Goffman, 1959, p. 112). Rivera (2008) concluded that the Croatian government managed its impressions through exclusion rather than revision; it elected to manage stigma through concealment by focusing on the ways in which the country is similar to others in the area. This IM technique, or form of information control as Goffman (1959) described it in his earlier work on stigma, according to Rivera (2008), for Croatia, may have resulted in a loss of identity for the country and its people. Identity issues adversely affected Croatia’s tourist industry as there was little else to leverage in terms of geographic or cultural uniqueness. For the people of Croatia, the tactic of covering, or managing its reputation through concealment resulted in internal tensions, as citizens were not provided sufficient opportunity to celebrate or mourn the unique elements of their national culture (Rivera, 2008).

Berbrier (1999) conducted a case study on a White supremacy leader’s IM tactics. Berbrier (1999) reviewed documents written by a contemporary figurehead of the White supremacy movement to examine impression management and stigma. In Berbrier’s (1999) case study, the White supremacist did not work to sway society’s opinions on racism or what constitutes it, but rather to change the views on White supremacists from



the “uneducated southern ‘redneck’” to that of “irreproachable erudition . . . by relying on science and ‘letting the facts speak for themselves’” (p. 420). In other words, the White supremacist sought to manage impressions through distancing himself and his followers from the stereotypes associated with the supremacist stigma, while continuing to promote the same beliefs in what he felt would come across as less reproachable methods. In distancing from the stigma, the supremacist sought to evade detection of an otherwise “discreditable” (Goffman, 1963, p. 42) characteristic by “passing” (p. 73) as normal. While both the emphasis on stigma and the limit of the case to documents reduced the influence of this study for my research, the interplay between IM and stigma supported their complimentary usefulness in an inquiry involving identity disclosure.

**Stigma.** The term stigma comes from the ancient Greeks and was used to describe physical marks, oftentimes intentionally placed on an individual who exhibited character flaws (Goffman, 1963). Such marks were often carved or burned into flesh to signify traitors, slaves, and criminals. The idea of stigma was later expanded to include signs of extreme holiness as represented by crucifixion-like wounds, as well as represent physical maladies (Goffman, 1963). Today, stigma is used to represent the conditions society finds disagreeable (Goffman, 1963).

In response to criticisms that stigma definitions were too vague, Link and Phelan (2001) described stigma as the “co-occurrence of its components—labeling, stereotyping, separation, status loss, and discrimination . . .” (p. 363). Link and Phelan (2001) characterized stigma by the inherent power dynamic. Often power over the stigmatized is exercised through the degree to which social resources are exercised (Reidpath, Chan, Gofford, & Allotey, 2005). Goffman (1963) identified three forms of stigma: physical,

character, and cultural differences. Regardless of type of stigma, all are characterized by undesirable deviations from what is considered to be normal by society and somehow justifying of discrimination through which literal and figurative mobility is hindered. However, of the three categories of stigma, only the latter two—character and cultural differences, have the potential to be hidden so that a stigmatized individual can pass as normal (Goffman, 1963). In this way, the three types of stigmatized individuals are reduced to two, those with readily apparent characteristics “*discredited*” and those with less apparent conditions “*discreditable*” (Goffman, 1963, pp. 41-42). While the discredited individual, with difficult to conceal characteristics, is more apt to minimize negative attention through isolation or acknowledgement and amelioration, such as may be the case for a person of color who chooses either to limit interactions with groups likely to harbor or exhibit discrimination, the discreditable individual may try to pass, or conceal such characteristics, as could be the case for members of a particular religious affiliation, or of the LGBTQ community.

It is also possible that stigmatized individuals may not see themselves as such when not in the presence of advantaged groups (Crocker & Major, 1989). Conversely, the greater the perceived difference between stigmatized and normal individuals, the more apparent a stigma becomes. Stigma may be based on skin color (Brigham, 1974; Hartsough & Fontana, 1970; Karlins, Coffman, & Walters, 1969; Samuels, 1973), physical or mental ability (Centers & Centers, 1963; Farina, Sherman, & Allen, 1968; Foley, 1979; Marsh, 2008), sexual orientation (Durso & Meyer, 2013; Endo, Reece-Miller, & Santavicca, 2010; Hatzenbuehler, 2014; Hollenbach, Eckstrand, & Dreger, 2014; Lapinski & Sexton, 2014), or gender (Cokley et al., 2015).

Concern over stigmatizing language associated with diversity goes beyond medical admissions (Desmond, 2004; Hadinger, 2014; Harper, 2012). There seems to be a stigmatizing effect in the choice of language and labels found throughout post-secondary school websites, media pieces, and scholarly research. Since research has yet to be published on the disadvantaged option in AMCAS as viewed through stigma theory, relevant literature was drawn from the aforementioned categories: race/ethnicity; disability; sexual orientation; mental health; and gender.

*Relevant research on stigma.* Researchers have found self-disclosure behavior to vary along social and environmental factors (Hood & Back, 1971; Jourard & Lasakow, 1958). Disclosure is dependent on the individual's self-perceptions, which, in turn, are dependent on environmental and social variables. The individual tends to rely on environmental and social stimuli based on the degree to which they affirm existing perceptions (Hawk, 1967).

Much can be learned about disclosure from the LGBTQ community. (Herek, 2002; Horn, 2006). LGBTQ individuals comprise one of many subgroups that regularly face stigmatization. In a survey of 1,334 osteopathic medical school students, Lapinski and Sexton (2014) revealed that LGBTQ students perceived lower levels of social support than did their heterosexual peers. Merchant, Jongco, and Woodward (2005) surveyed 14 LGBTQ physicians and 27 medical students about disclosure of sexual orientation on medical school applications; 95 percent of the respondents indicated they did not disclose sexual orientation; fear of rejection was a major concern.

In addition to fear of rejection, LGBTQ students have cited concerns of being devalued once others learn their orientations (Schatz & O'Hanlan, 1994). Baum (2012),

an undergraduate admissions leader focused on recruitment of LGBTQ individuals validated students' disclosure concerns. He explained, "few professional processes are more personally intrusive than the college application" (Baum, 2012, p. 24). Admissions processes can exacerbate stigmas for members of marginalized groups.

*Trust and stigma disclosure.* People are less likely to acknowledge characteristics about themselves seen as socially undesirable when it is unknown how the receiving party will use that information, or even who will comprise the receiving party (Goffman, 1963). Goffman (1963) stated that stigmatized individuals, when uncertain how others will judge them, act with concern for whether they will be defined by their stigmatizing differences. Similarly, researchers have concluded that disclosure reluctance increases with level of intimacy of requested information (Cialdini, 1993; Cozby, 1973; Hood & Back, 1971; Joinson, Woodley, and Reips, 2007; Larson & Chastain, 1990). And, when high-intimacy information relates to personal beliefs or feelings, reluctance to disclose is amplified (Reis & Patrick, 1996). As level of vulnerability increases, so too does the level of risk. Risk associated with self-disclosure can manifest as psychological, material, or physical harm (Moon, 2000).

There is "one notable exception" to this finding of adversity toward high-risk disclosure; individuals tend to share intimate details more openly when those they share with do so first (Moon, 2000, p. 324). When one party reveals sensitive details about themselves, the other party is likely to engage in more personal self-disclosure (Archer, 1979; Cozby, 1973; Cohn & Strassberg, 1983; Dietz-Uhler, Bishop-Clark, & Howard, 2005; Miller & Kenny, 1986; Shaffer & Tomarelli, 1989).

Researchers have measured the relationships between online survey respondents' willingness to share sensitive information and perceived confidentiality: non-response; breadth (word count); depth (content); and, when available, selection of a 'prefer not to answer' option (Joinson et al., 2007). Joinson et al. (2007) noted a conflicting trend. Internet survey respondents in a study of 3544 randomly selected participants from Open University, displayed less interest in breadth and depth of response, if responding at all, the less identifiable they felt; however, when easily identifiable, the same participants exhibited "competing desires to 'respond well' and to protect their privacy" (Joinson et al., 2007, p. 283).

*Social desirability and stigma disclosure.* Social desirability is based on the premise that there are socially agreed upon good and bad behaviors. Good behaviors are arguably impossible to achieve, such as, always listening when others are talking (Miller, 2012). When failure to achieve a socially desirable trait results in repeated and public criticism, avoidance of those situations is likely.

*Stigma disclosure in medical school admissions.* There are many reasons why an applicant may hesitate to disclose a Disadvantaged Status in AMCAS. Applicants may be uncertain whether committees will agree with their claims, unsure whether their levels of disadvantagedness are significant enough in comparison to other applicants, or fearful that individuals evaluating their applications will react negatively. To explore these issues, I examined research on related topics.

Based on data from several surveys, some medical school faculty have ranked LGBTQ applicants lower than those from non-LGBTQ backgrounds and LGBTQ applicants have even been rejected on the basis of their identities (Oriel, Madlon-Kay,

Govaker, & Mersy, 1996; Ramos, Tellex, Palley, Umland, Skipper, 1998). LGBTQ applicants face stigma and many perceive identity disclosure as risky (Hollenbach et al., 2014; Risdon, Cook, & Willms, 2000). Schatz and O'Hanlan (1994) surveyed LGBTQ physicians and noted a prevalence of discrimination based on sexual orientation that manifested as barriers to promotion, verbal harassment, and even denial of medical practice privileges. Eliason, Dibble, and Robertson (2011) conducted similar research and also found higher rates of discriminatory practices afflicted on LGBTQ physicians. Female LGBTQ physicians report harassment based on sexual orientation four times as often as heterosexual counterparts (Brogan, Frank, Elon, Sivanesan, & O'Hanlon, 1999).

In a survey of 1,335 osteopathic medical student participants, Lapinski and Sexton (2014) examined the relationships between sexual orientation, gender identity, perceived social support, and mental health; they found that LGBTQ students reported higher levels of depression than their heterosexual peers (28.5 percent of LGBTQ and 11.8 percent of heterosexual respondents presented depression criteria). LGBTQ students reported greater discomfort with the idea of disclosing their sexual orientation than did their heterosexual peers (43.9 percent of LGBTQ and 16.7 percent of heterosexual respondents) (Lapinski & Sexton, 2014). And, LGBTQ respondents felt their campus climates were less inclusive than did their heterosexual peers. Other research into LGBTQ student perceptions yielded similar results. Rankin (2003) found nearly 74 percent of LGBTQ students felt the campuses they attended were not inclusive.

Researchers of mental health stigmas and self-disclosure have reached similar conclusions to those in the LGBTQ community (Jones, 1971; Martin, 2010; McLean & Andrews, 1999). Many students and graduates alike either do not recommend disclosing

a stigmatized mental health condition or regret a previous disclosure. In a 1999 survey of 256 college students diagnosed with mental illness, McLean and Andrews (1999) noted that 65 percent of the students would not recommend disclosing a mental illness to others.

In an exploratory study, Martin (2010) surveyed 54 students at an Australian university (1,517 survey invitations were sent for a response rate of 3.6%). The majority of respondents reported depression (n=35) or anxiety (n=23) with over half reporting multiple illnesses (n=28). Martin's (2010) study supports the notion that negative labeling and in turn, negative societal perceptions, or at least respondent-harbored fears that others would judge them unfairly, leads to disclosure reluctance. One respondent wrote, "I felt very uncomfortable telling them because I am worried that they will think I'm lying or that my condition's not bad enough and I just want privileges" (Martin, 2010, p. 265). Another respondent shared similar concerns:

I feel that I can't tell staff or students, that I might be resented for being given special treatment that they won't understand. Sometimes I wish I could explain why things might be difficult for me, but it seems pointless. (p. 265)

Fear of being perceived as dishonest presented as a major theme; twelve respondents felt there was no need to disclose and ten were concerned university administrators would perceive them as being dishonest or taking advantage (Martin, 2010).

Martin (2010) also noted a fear of being treated differently. In addition to the fear of being perceived as dishonest or trying to take advantage, other respondents cited fears of being treated differently if people knew about their conditions. Such responses included: "I'm stubborn and want to pretend like it doesn't affect me . . . I don't like many people to know about it, I don't want the staff to treat or view me any differently;"

another student wrote, “I fear being found out and considered somehow less than acceptable” (Martin, 2010, p. 265). Defensiveness presented as a similar theme with students indicating, “Its nobody’s business”; “Its not their problem”; and “I have concerns with confidentiality being breached and this impacting on chances for future employment” (Martin, 2010, p. 265). And for the students whose fears of being treated differently were most internalized, feelings of shame precluded them from almost all social interactions, even with family (Martin, 2010).

Martin’s (2010) study can be considered in terms of discreditable and discredited and the impact of either classification on one’s ability to pass or retreat (Goffman, 1963). Because the participants described their disadvantages as sources of crippling stigmas, those who could go undetected—discreditable sought to do so as a way to preemptively reduce what they anticipated would be negative experiences brought about by peers or faculty finding them out. For the participants who felt the most vulnerable—discredited, they knowingly cut themselves off from others, in order to avoid discomfort. And for some, the anticipated discomfort was so severe they resorted to self-harm as a coping mechanism. Martin’s (2010) findings may foretell a similar issue with respect to the Disadvantaged Status. There may be medical school applicants who see themselves as disadvantaged, but are fearful that sharing could be perceived as either inflating the severity of their circumstances in order to receive any benefits associated with the application status, or simply, that disclosing could subject them to the very shame and discomfort that they have worked throughout their lives to avoid.

In what may be the most similar of the selected examples of stigma research to my inquiry, Jones (1971), for the U.S. Department of Health, Education & Welfare,



explored students' perceptions of negative labeling. Based on a review of studies comprising more than 10,000 individuals – dropouts and graduates from public schools, college students, teachers and counselors, Jones (1971) concluded that children reject labels involving negative language such as those that involve the word, disadvantaged.

At the time, special education used the terms *culturally disadvantaged* or *culturally deprived* to describe students from lower SES backgrounds (Jones, 1971). In a previous study, Jones (1971) surveyed 7,252 students in grades 4, 6, 8, 9, 10, and 12, with significant representation across socioeconomic classes. The students were asked questions such as, “Do you see yourself as culturally disadvantaged? Do you see yourself as middle class? Do you see yourself as lower class?” (Jones, 1971, p. 5). Jones found that regardless of socioeconomic strata or grade level, the students rejected the labels culturally deprived and culturally disadvantaged to describe themselves.

Jones was not convinced that the students, particularly those who were younger, understood what the two terms meant. Therefore, in a follow-up study, 259 fifth and sixth graders were asked to provide definitions; “virtually none of these young subjects could give satisfactory responses to the key terms culturally deprived and culturally disadvantaged” (p. 7). While the younger participants were unable to satisfactorily define the terms of interest, Jones wondered whether there were any trends in their ascribed connotations. To learn more about the meanings the terms had for the children, the fifth and sixth graders were asked questions such as, “if someone called you culturally disadvantaged, would that be good or bad?” (Jones, 1971, p.8). Seventy-eight and seventy-six percent of the children believed it would be “bad” if they were described as culturally disadvantaged or culturally deprived (Jones, 1971, p. 8).

*Structural stigma.* Stigma research has proliferated in recent decades, particularly with regard to individual and small group perceptions, in large part due to Goffman's (1963) work on stigma and his focus, as a symbolic interactionist, on intimate levels of social transaction. The focus of stigma on micro-level interactions has been the subject of consistent criticism by those arguing for a more structural-oriented study (Link & Phelan, 2001; Oliver, 1992; Parker & Aggleton, 2003). As Link and Phelan (2001) point out, stigma is not necessarily an overt or self-aware damaging act towards another; the disadvantaging of an individual "can result outside of a model in which one person does something bad to another" (p. 382), such as in structural stigma. Hatzenbuehler (2014) defined structural stigma as "societal-level conditions, cultural norms, and institutional policies that constrain the opportunities, resources, and wellbeing of the stigmatized" (p. 2). Structural stigma can be considered through stigma theory and symbolic interaction; recalling Goffman's (1951) and Bourdieu's (1987) findings, structural stigma affects the sense of one's place, as the individual self-indicates based on perceptions of others' delimitations of that individual. Structurally stigmatized individuals eventually internalize the negative beliefs of society holds of them and begin to self-efface (Link, Castille, & Stuber, 2008; Link, Cullen, Struening, Shrout, & Dohrenwend, 1989).

As Goffman (1963) noted, in an act of self-preservation, stigmatized individuals may cope with their undesirable characteristic either by avoiding situations where they could be discovered, or by hiding those attributes in such situations like, job interviews, or in the case of applying to medical school, passing on the option to self-identify as disadvantaged. Individuals may hide characteristics that cast them as different from societal norms. And when others interact with them (them being those with a particular

negative deviation from societal norms), they will wonder whether the reason for the interaction is in any part due to that negative characteristic (Goffman, 1963). If an individual desires interactions to be based on assumptions of normalcy, then that individual may elect to conceal any characteristics that could be negatively perceived.

Link and Phelan (2014) interviewed 65 inpatients at psychiatric hospitals and asked them their levels of agreement with statements regarding societal treatment of individuals with mental illnesses, such as, “[m]ost people would be reluctant to date someone who had been hospitalized for mental illness,” and, “my having a mental illness does not influence the way people act towards me” (p. 28). The researchers found that the participants were aware of negative stereotypes associated with their mental illnesses, often due to frequent associated humiliation. Because of such shaming many respondents reported a tendency to avoid social situations where the possibility of further humiliation was present (Link & Phelan, 2014). Considered through the topic of medical school admissions, if there are negative perceptions of being disadvantaged or of belonging to a group or possessing a trait that contributes to being disadvantaged, some medical school applicants may choose not to identify as disadvantaged in order to hide or avoid disclosing personal details that were marginalizing in other contexts.

### **Self-Presentation in Computer-Mediated Communication**

In considering how to investigate medical school applicants’ attributed meanings of the Disadvantaged Status and how they act upon it through their response-behaviors in the online application, I have so far detailed the usefulness of SI, SCT, IM, and stigma as a theoretical framework. By additionally considering this topic as a subset of computer-

mediated communication (CMC), extrapolations can be made from the broader research relating to disclosure in computer-mediated and online spaces.

CMC is “a term that refers to the process of using computers and other digital technologies to exchange information” (Birnbaum, 2013, p. 13). Similarly, Campbell and Neer (2001) defined CMC as, any “person-to-person communication over computer networks” (p. 391). Applying to medical school through the AMCAS primary application must therefore be a form of CMC; applicants communicate information about themselves with others across computers and over the Internet. Since applicants’ responses to the AMCAS questions are not in real-time; a back-and-forth dialogic exchange inherent in face-to-face exchange is precluded. And, since communication in the primary application is limited to text-based content, there are no options to share aural or visual data, it can be delineated further as asynchronous text-based CMC. In the remainder of this study, reference to applying to medical school through the AMCAS primary application as CMC denotes that it is asynchronous, limited only to textual content, and exists online and between computers.

Acknowledging AMCAS as a form of CMC led to the identification of specific strengths and limitations. The two primary distinctions between the online application and synchronous face-to-face interactions are 1) the lack of available communication channels, whether spoken or nonverbal, and 2) the lack of real-time interactions. The strengths and weakness of this form of CMC have implications for the presentation of self in the medical school application.

**Limited forms of expression in the American Medical College Application Service.** With regard to the first limiting characteristic of CMC, without verbal and

nonverbal cues, one's ability to give off impressions is limited. According to Kiesler, Siegel, and McGuire (1984), the number of communication channels involved in an interaction impacts the degree of interpersonal connection. For example, deep connection can be fostered through face-to-face interaction where there is many possible communication channels—visual data such as, appearance, physical dress, gestures, and facial expressions; aural data including tone and pitch of voice and rate of speech; and physical touch through greetings and other rituals. On the other hand, text-based communications are inherently less information-rich; and as a result, interactions are depersonalized; audiences must imagine their actors, and actors must also imagine their audiences. Furthermore, as Goffman (1959) detailed, the fewer items of information available to a person with which to form judgment, the more that individual must rely on generalizations.

In the case of a medical school applicant attempting to give off a favorable impression, generalization may be either advantageous or harmful. The outcome of reliance of generalizations in the admissions process depends on a variety of variables, including, context, subject matter, the specific application reviewer, and confounding information about that applicant included in the application—grades and test scores, schools attended, demographic and social data, and to an extent, the content found in letters of evaluation. However, recalling the section on stigma where it was mentioned that individuals may be either discredited or discreditable depending on their ability to conceal stigmatizing characteristics, the CMC nature of the AMCAS means that all medical school applicants may attempt to pass as normal depending on the information they are willing to disclose or conceal (Goffman, 1963).

### **Lack of real-time exchange in the American Medical College Application**

**Service.** A lack of real-time interaction forms the second limitation of asynchronous CMC in the AMCAS primary application process. Similar to sending an email, once an applicant sends information to medical schools, there are few means of altering the application. Furthermore, since the immediacy of real-time feedback is not present (Walther, 1996), there are few ways in which an applicant can affect the impressions reviewers will form about them.

The time-bounded nature of asynchronous CMC is not always disadvantageous. Until the AMCAS application is sent, applicants possess greater control over their impressions than in either synchronous CMC or face-to-face exchanges. Applicants may contemplate their responses over a greater length of time than would be possible in either synchronous CMC or face-to-face interactions. Additionally, applicants may enlist the help of others to provide guidance in managing their impressions.

*Self-promoter's paradox.* Applying through AMCAS means applicants may spend time and enlist assistance in managing the impressions they hope to give off, but this also results in a paradox. Since application readers (audience) are aware of the applicants' (actors) intentions to present themselves in a "light that is favorable" to them (Goffman, 1959, p. 7), they are more skeptical. The self-promoter's paradox represents the weariness that arises when an audience knows the actor's intentions are to earn favor or impress. Application reviewers go into CMC aware that applicants are working to manage their impressions and show their best sides in an effort to gain acceptance. And, whereas in face-to-face communications where non-verbal cues are less malleable and can serve as checks on the veracity of an impression, application reviewers are aware that

applicants have the ability to tailor impressions through planned responses and with the potential for guidance from outside sources; this exacerbates the self-promoter's paradox.

**Relevant research on computer-mediated communication.** The ways in which people express themselves in CMC have been of interest to researchers since the inception of the medium (Hesse, Werner, & Altman, 1988; Hiltz & Turoff, 1978; Kiesler et al., 1984; Siegel, Dubrovsky, Kiesler, & McGuire, 1986).

Marwick and boyd (2014) re-analyzed data from their previous research on teenagers' use of social media; the authors reviewed 166 teenagers' interviews collected across 14 states over a four year period. During their previous research, the authors noticed that the participants mentioned issues of drama and conflict. Marwick and boyd (2014) returned to the interview data, first using qualitative software to search for occurrences of the word drama. They then thematically coded the interviews to look for other language that was used to describe drama and conflict and added those codes to the software.

Marwick and boyd (2014) found that the teenagers in the study used the term *drama* to describe many of the behaviors and experiences adults associate with bullying; however, by using the term, drama, to symbolize their experiences with bullying, they acted to save face, to manage their given off impressions and disassociate themselves with what they perceived to be marginalizing language associated with being a victim. Furthermore, the teens that Marwick and boyd (2014) identified as least likely to identify with the bullying language were "those most likely to lose social status from being labeled as weak" (p. 1,198). Those participants already belonging to marginalized social statuses believed they could not afford to give up any more power, anymore of their

security, even at the expense of their well-being as supported by the following excerpt from one of the participants who experienced prolonged bullying from classmates, both in person and over Facebook:

I have these kids that I don't really know and they come up to me and they're like 'Yeah, I heard about you.' And I'm like 'I don't even know you. How'd you hear about me?' I told her that I don't want drama and I don't want her to talk about me and I'm not going to talk about her. But she continues to say things about me. ... And then she'll stick stuff on Facebook. (Marwick & boyd, 2014, p. 1198)

Even though the participant de-identified with the bullying language, instead using drama to protect her front and save face, Marwick and boyd (2014) found it "clear that this situation was taking a serious psychological toll," so much so that she considered changing schools (p. 1198).

Birnbaum (2013) also studied IM in CMC. In his dissertation on how college students manage their impressions of themselves in the online social network—Facebook, Birnbaum (2008) conducted an ethnographic study consisting of 30 individual interviews with undergraduate college students who used Facebook. Through analysis of 100 photographs from ten additional student participants, found on their Facebook pages, Birnbaum (2013) found that students were not using Facebook to experiment with their identities or to make new friends for face-to-face relationships. Instead, participants in the study used Facebook to assert control of their identities through adding engaging content to their profile pages to ensure peers interested in learning more about them would go there rather than to other websites.

Birnbaum's (2013) findings support dramaturgical and IM tenets that individuals are deeply concerned with the impressions they give off, and even in asynchronous communications, will strive to control how others see them. The higher the stakes related



to the goals of their Facebook pages, the more the performance elements of the content seemed to be controlled. For example, one participant, a senior applying to medical school, stated, “I don’t want people to ever get the idea that alcohol plays a big part in my life. ... That’s the sort of thing that I think when I see people’s pictures and every single one is them holding a red plastic cup” (Birnbaum, 2013, p. 191). Photographic data were important to the participants.

Goffman (1959) referred to the various data an actor uses in communicating impressions as fitting into the categories of props, setting, and gestures. These objects, locations, and behaviors add to and confirm or call into question the authenticity of an actor’s identity. For the participants in Birnbaum’s (2008) research, the red plastic disposable Solo brand cup, commonly found at college parties served as a prop to convey the impression of partier. Participants were not only aware of the symbolic meaning of the red cup, but some expressed concern that the frequency with which it appeared on their Facebook pages would affect the impressions others formed of them.

Content is more controllable in CMC than in face-to-face exchanges. Just as the participants in Birnbaum’s (2013) study demonstrated that, in the absence of real-time verbal and gestural content, reliance on symbolic meanings in message and display content helps to supplement those information deficits. White et al. (2011) found that their participants were similarly concerned with how the content they shared would affect the impressions they gave off. White et al. (2011) conducted qualitative document analysis on 240 randomly selected medical school applicants’ essay responses at a Canadian medical school and suggested that the applicants exhibited response behaviors indicative of a desire to be seen favorably by admissions reviewers. White et al. (2011)

observed that the participants were so focused on managing their impressions, that in the absence of other communication, they used a section of the school-specific application to tell their stories, rather than address the content the school specifically requested.

Building on their previous research, White et al. (2012) analyzed 210 randomly selected applications to the same Canadian medical school program. Additional insight was gleaned from interviews and focus groups with current medical students. White et al. (2012) found that the medical school applicants' response behaviors were heavily impacted by the high-stakes competitiveness of the process. Through the interviews, White et al. (2012) discovered that the applicants operated based on their perceptions of what medical schools wanted in prospective applicants and displayed themselves in ways to maximize their chances of being accepted. Participants thought they should, “sell yourself—make them want you”, ‘exaggerate but don’t get caught,’” and “do whatever you have to do to get in” (White et al., 2012, p. 7). Applicants adapted their written responses to what they perceived as most valued by admissions reviewers, even at the expense of the intent of the particular essay question. For example, in response to a question on volunteerism, one applicant chose to write about how he improved his GPA over his college career (White et al., 2012).

In competitive environments, such as medical school admissions, IM can develop into ‘gaming the system’. Medical school committees, in an effort to limit the success of applicants who would attempt to ‘game the system’ have suggested, “avoid self-reporting ... all observations about the candidate should be made from a more remote position than the applicants themselves” (Siu & Reiter, 2009, p. 771). Siu and Reiter argued that, while the academic community has solved the problem of cognitive assessment in

admissions, non-cognitive evaluation is less adequate. Siu and Reiter (2009) advised against reliance on self-report items in the AMCAS; they cautioned, “Do not trust the applicants. . . . Do not trust the referees [letter of recommendation writers]; they were not chosen by the applicants for their ability to remain neutral and objective” (p. 771). Such attitudes may contribute to applicants’ reluctance to apply as disadvantaged, for fear that such an assertion could be considered a part of ‘gaming the system’.

### **Chapter Summary**

I began this chapter with a history of medical education in the United States, focused on access for women and minorities. Despite landmark court cases that endorsed the need for diversity-conscious admissions practices, enrollment for historically underrepresented and disadvantaged populations remains a problem. I then discussed initiatives that focused on improving access to medical school. I concluded the first half of the literature review with an in-depth examination of the AMCAS Disadvantaged Status. The option to identify as disadvantaged is ambiguous, both in definition and purpose. Even though the Disadvantaged Status is not new to the AMCAS, its presence in the literature is scarce.

I described explored my theoretical framework in the second half of the literature review. Four social theories undergird the framework—symbolic interactionism, social comparison theory, impression management, and stigma. I described the process of applying to medical school through the AMCAS as a form of CMC and considered the resultant implications for self-presentation.

## **CHAPTER III**

### **METHODOLOGY**

I begin this chapter with a description of the research questions. Next, I share my perspective as a researcher. I then detail the philosophical paradigm that frames this study, including ontology, epistemology, axiology, and theory. This is followed by an in-depth presentation of the methodology, data collection techniques, methods of analysis, and the steps I took to make this study trustworthy.

#### **Research Questions**

This study was guided by one broad research question:

- Q     How did medical students make meaning of the option to identify as disadvantaged in the American Medical College Application Service (AMCAS) when they were applicants?

In order to investigate this phenomenon, I devised five sub-questions:

- SQ1   How did medical students define disadvantage when they were applicants?
- SQ2   How did medical students assess their levels of disadvantage when they were applicants?
- SQ3   How did medical students perceive others' interpretations of disadvantage when they were applicants?
- SQ4   How did social comparison affect medical students' interpretations of the Disadvantaged Status when they were applicants?
- SQ5   How were medical students' attributed meanings of disadvantaged used in their decisions whether or not to self-declare in the AMCAS application?

Exploring these questions shed light on the many and varied influences that each applicant must negotiate in order to arrive at, first, the decision whether or not to identify

as disadvantaged, and second, whether or not to apply as such in the AMCAS application.

### **Sub-Questions**

The first sub-question, how do medical students define disadvantage?, was designed to investigate the meanings applicants attributed to the term disadvantage. As individuals act upon their experiences, the first step is to extricate that object of experience and consider its meaning. How that meaning is attributed, the values, experiences, and cultures that contribute to its formation must first be explored in order to make sense of individuals' symbolic attributions to the disadvantaged term. Such definitions were not explored in isolation; they were considered relative to each participant's background.

The second sub-question, how did medical students assess their levels of disadvantagedness when they were applicants?, built on the first sub-question and was designed to explore where participants saw themselves within the context of their own meaning attributions, and the reasons why. This sub-question was meant to investigate how applicants applied their symbolic meanings of disadvantagedness to themselves. Furthermore, this question was designed to aid in understanding the gravity of placing the responsibility of deciding whether to identify with a potentially ambiguous term on a population that has been increasing in heterogeneity. Applicants' understandings of self, of disadvantage, and of self within the concept, are influenced by their individual and unique worldviews. With an applicant pool, currently comprising more than 50,000 individuals, it follows that there are a considerable number of perspectives on the concept of disadvantage.

Each applicant's unique social world must also be considered. Imagine two applicants—A and B. Applicant A experienced significant hardships compared to applicant B. Applicant A's experiences were normalized having been surrounded by peers who were similarly disadvantaged throughout childhood. Alternatively, applicant B grew up around peers with noticeably more privilege and as a result, felt out of place and on the fringe. In this scenario we can understand why applicant A did not apply as a disadvantaged applicant and applicant B did. These and other implications of social comparison are explored in more detail in the fourth sub-question.

The third sub-question, how did medical students perceive others' (faculty, staff, and peers) interpretations of disadvantage when they were applicants?, advances the second sub-question by asking how applicants interpret others' attributed meanings of the disadvantaged term. This question represents an effort to explore the nature of self in relation to others as social in the construction of the shared spaces of reality. This question is designed to explore applicants' perceptions of the meanings others attribute to the idea of disadvantage. This question led to insight on whether stigma was a factor for the participants. If applicants perceive the idea of disadvantaged to carry negative connotations, those applicants might be less inclined to disclose their disadvantage in the application. Similarly, some applicants may fear that differences between their idea of disadvantaged and that of admissions members call into question the credibility of other parts of their application (Goffman, 1963). And, since it is more likely that negative perceptions occur in the presence of others who do not share the stigma, stigmatized individuals are likely to treat unfamiliar social situations with caution (Hannem & Bruckert, 2012).

The fourth sub-question, how did social comparison affect medical students' interpretations of the Disadvantaged Status option when they were applicants?, examined how applicants' social worlds, and the actors in them, affect their attributed meanings of the term. This question was designed to inform the stigma framework of the inquiry. By examining the ways in which applicants' social worlds influence their meanings and actions, we gain insight into why an individual may or may not view themselves as disadvantaged. Just as some people may choose to avoid situations where they are likely to be discredited, seen as in some way less than normal (Goffman, 1963; Hannem & Bruckert, 2012), applicants may choose not to apply as disadvantaged, regardless of whether they see themselves as such, because the circumstances which justify applying as disadvantaged resulted in stigmatization in previous interactions.

The fifth sub-question, how were former applicants' attributed meanings of disadvantaged used in their decisions whether or not to self-declare in the AMCAS application?, connects the previous four sub-questions through Goffman's (1959) IM and dramaturgical frameworks. This question was designed to explore the relationships between how applicants see the world and how they want the world to see them. Without this final layer of the inquiry, one could assume that applicants' definitions of, and actions regarding, the Disadvantaged Status are in response to their social worlds, past experiences, values, and perceptions of authoritative others as affected by those same social influences. This sub-question helps avoid such an assumption and allows for consideration of individuals' intentional involvement in their social stories. It would be incomplete to assume that applicants' treatment of the Disadvantaged Status is only a reaction to past experiences and environmental data. This study question is an

acknowledgement that as individuals, each of person acts with goals in mind, goals for how they want to be understood by others, goals that may vary depending on the audience and the setting. This question represents my interest in the performance element of the AMCAS primary application, and through it, the effect of each applicant's aspirations to gain acceptance in the high stakes and competitive admissions process on self-identification and disclosure behavior.

### **Researcher's Perspective**

In qualitative inquiry, the researcher is the instrument of analysis. Findings are a product of the researcher's interpretations of the participants, their stories, and their social worlds. In order for readers to trust qualitative findings, researchers must share the motivations, biases, and perspectives that influenced the inquiry.

I see the Disadvantaged Status as a mechanism through which any applicant, regardless of background, can explain atypical circumstances that, in their mind, severely and deleteriously affected their academic, social, and/or professional development. Since my interpretation of the disadvantaged indicator is intertwined with the way I see myself, it is essential that I make my identities and biases known.

### **Story**

I am a White heterosexual male in my early thirties. My paternal ancestors immigrated to the U.S. from Ireland and Scotland generations ago. Conversely, my maternal ancestors came to the U.S. in the early 1900s to escape the Russian pogroms. Despite the persecution that befell my Jewish ancestors, I have been afforded all the privileges that come with membership in a dominant social group. But, I have also been exposed to ignorant sentiments from individuals, some who did, and others who did not



know my background. Such positions have included: being Jewish means being stingy; all Jews will go to hell, the Jews have all the money, or, the Jews control the world. In high school, a classmate learned I was Jewish and felt it necessary to inform me that the millions of Jews subjected to unimaginable atrocities during the Holocaust, still went to hell since they did not accept Jesus Christ as the savior.

In such times, I am reminded of the powers of prejudice, stigma, and intolerance. I am not disadvantaged and I have not experienced the tribulations of those who are marginalized, but my story has influenced my identity, and undoubtedly, this research. I approach my work and my research with awareness of who I am and what I believe. There are many individuals in our society with few opportunities in life. I work to help ameliorate those disparities and I try not to take my privilege for granted.

In my professional roles as an admissions analyst, and a holistic reviewer, I evaluated nearly 10,000 AMCAS applications at two disparate medical programs, but it was well before I completed the first 1,000 that I noticed a trend. Oftentimes applicants that exhibited disadvantaging characteristics in their AMCAS data did not self-identify as disadvantaged. Initially, I found this an interesting trend in that I could not come up with a satisfactory explanation as to why some ostensibly disadvantaged applicants identified as such and others did not; however, as the number of applications I reviewed increased, curiosity turned into frustration. The frequency with which I was searching the Internet for information on the Disadvantaged Status increased to the point of obsession. Although for all my efforts, I was unable to acquire any substantive data. I started documenting the instances when I evaluated applications in which extreme hardship was conveyed yet the Disadvantaged Status was not used. This inquiry represents my need to

understand how applicants make sense of the options—how and why they decide either to apply or not to apply as disadvantaged.

### **Stance**

I strove to view all applicants I evaluated as authentic in their claims and deserving consideration of any reasons for identifying as disadvantaged. I found myself with furrowed brow more often in wonderment of why applicants who, through their personal statement and experiences, seemed disadvantaged to me but did not apply as such, than of individuals whose use of the Status seemed unwarranted. I spent many hours researching, postulating, and pestering friends and family with theories and questions regarding the use of the disadvantaged indicator, almost entirely from the perspective that there are many applicants who do not apply as disadvantaged, yet appeared to meet any requirements I could imagine to justify its use.

I remember reading an application from an individual who spent the majority of her childhood living in a high-crime neighborhood, with seven family members in one bedroom. When she was no longer able to stay, she lived from one friend's couch to the next on good nights, and in shelters, cars, and over the warm exhaust of sidewalk grates on not-so-good nights. Despite her decision not to identify as disadvantaged, I presented her application to the admissions committee and we agreed that she brought with her a set of experiences and accolades beyond what could be expected given such atypical adversity. While I will never know why the aforementioned applicant chose not to designate a Disadvantaged Status, there are others with similar stories who apply to medical school.

Not every applicant who uses the Disadvantaged Status falls on such an extreme end of the continuum. It would be disingenuous for me not to acknowledge that there have also been times when I did raise an eyebrow at an application in which a Disadvantaged Status was indicated that, compared to other applicants, seemed to stretch the meaning of the term. Applying to medical school is one of the most competitive admissions processes in higher education; ‘gaming the system’ seems to be a side effect. I would like to think as a holistic evaluator, when I was confronted with such declarations of disadvantage, I did not allow such concerns to unfairly affect my view of other application sections. But, I am human; I am prone to bias. I believe the Disadvantaged Status should be available to all, but that its use should be reserved for applicants whose ability to prepare for medical school was significantly hindered by hardships beyond their control.

I find the disclosure of a Disadvantaged Status to be a complicated process. It involves trust between two people who do not know one another and communicate indirectly over a computer-mediated application. Moreover the disadvantaged option requires that every applicant and evaluator have an understanding of the concept, ideally one that is shared. If medical school applicants will continue to be asked whether they want to apply as disadvantaged, then policy-makers and committee members should understand how the option is being interpreted and acted upon.

### **Paradigm**

The research paradigm comprises the values and beliefs that undergird and influence the study (Guba & Lincoln, 1994). For this study, I identified with elements of multiple research paradigms, most notably interpretivism. Before detailing the

interpretivist paradigm that largely governs this study, I acknowledge the influences and elements that could be viewed as working against the spirit of interpretivist traditions.

Creswell (2007) described postpositivism as a scientific approach to research that recognizes that the social world is comprised of multiple versions of reality.

Postpositivism is often described as a logical approach to research design that employs a rigid sequential approach to data collection and analysis (Creswell, 2007; Crotty, 1998; Denzin & Lincoln, 1994; Patton, 2002).

In this study, I relied on more than just a grand tour research question. I broke the research question into component parts—sub-questions designed to make answering the overall research question more manageable. Sub-questions are traditionally affiliated with postpositivism. I also employed coding strategies throughout the analytic process. Coding is still seen as more often as stemming from a postpositivist tradition. Denzin and Lincoln (1994) described postpositivistic techniques as lingering “shadows” over the whole of qualitative research (p. 5). My goals were not to perpetuate any such impediments to the progress of qualitative research, but rather to acknowledge that, like many inquirers, the paradigm I chose, in this case—interpretivism, is not absolute in its purity. I borrowed from multiple traditions and did my best to assign priority to the phenomenon under inquiry rather than the paradigmatic tradition.

### **Interpretivism**

Interpretivism represents the belief that every individual interprets the world through sensations and interactions, both with others and with objects (Crotty, 1998). Reality is relative to the individuals involved and the contexts in which they find themselves (Lincoln & Guba, 2013). Past experiences and the meanings formed about

and from individuals, affect the meanings that will be attributed to future experiences. Thus, meaning is not static but rather, is interpretive and iterative, connecting what is new with what is already familiar (Jones, Torres, & Arminio, 2006). Interpretivists seek to explore the processes through which meanings are created, maintained, and revised (Schwandt, 1994).

Interpretivism began out of a protestation of naturalistic approaches to sociological matters. Early sociologists such as Dilthey (1833-1911) and Weber (1864-1920) argued that human behavior and thought ought to be investigated out of a need to understand rather than explain (Schwandt, 1994). As Schwandt (1994), pointed out, Dilthey and Weber each “struggled” with the, “paradox of how to develop an objective interpretive science of subjective human experience” (p. 119). In essence, Dilthey and Weber sought to establish a scientific approach to the investigation of how meaning is made.

Interpretivists no longer search for causality in the social world (Blumer, 1969; Schwandt, 1994). Today, interpretivism represents the methodological goals in which researchers seek to get close to and understand individuals and groups (Guba & Lincoln, 1994; Ponterotto, 2005; Schwandt, 1994). Distanced from its original conceptions, interpretivism, often used interchangeably with constructivism (Koivu & Damman, 2015; Ponterotto, 2005; Ponterotto, 2010; Schwandt, 1994), forms a framework for inquiry that acknowledges that the world exists objectively, but that it can only be made meaningful from within the minds of individuals.

**Paradigmatic assumptions.** A researcher’s philosophical assumptions are at the core of qualitative inquiry (Creswell, 2007). As individuals, our assumptions are

grounded in the ways we view and understand the world around us. Those basic assumptions come together to form a paradigm—a worldview (Guba & Lincoln, 1989). The philosophical assumptions that guide this interpretivist research include: epistemology, ontology, and axiology.

**Epistemology.** Epistemology is the set of philosophical assumptions that deal with how knowledge is created (Guba & Lincoln, 1989). A researcher’s epistemology frames the relationship between the researcher and the researched (Creswell, 2007). In general, qualitative inquirers are concerned with the subjective reality, as it is socially created, and as such seek the insider’s perspective (Hodder, 1994). Blumer (1969) described the insider’s perspective as critical in qualitative social inquiry; “getting close to the people involved in it, seeing it in a variety of situations they meet, noting their problems and observing how they handle them, being party to their conversations”...this sort of “flexible pursuit of intimate contact” is paramount (p. 37). Otherwise, if one takes a more generalized approach to inquiry, unavoidably, paradigmatic and theoretical assumptions will overwhelm the data and its shape (Blumer, 1969).

Blumer (1969) wrote about the delicate balance between theoretical positions and adherence only to methodologies in accordance with those traditions. On one hand, I am compelled to make the assumptions and theories that undergird this inquiry clear. On the other hand, I must exercise caution so that theory does not get in the way of participants’ stories before they have the chance to tell them (Blumer, 1969). Strict adherence to epistemological boundaries often takes focus away from the inquiry itself (Schwandt, 1994). Janesick (1994) referred to such a servile focus on method as “methodolatry,” a portmanteau of idolatry and method that expresses the “preoccupation with selecting and

defending methods at the exclusion of the actual substance of the story being told” (p. 215). Similarly, Blumer (1969) believed when “theoretical positions are held tenaciously, the concepts and beliefs in one’s field are gratuitously accepted as inherently true, and the canons of scientific procedure are sacrosanct” (p. 37). Influenced by Janesick and Blumer I approached this inquiry from the perspective that the social world under investigation took precedence over the preservation of paradigmatic traditions.

Data were collected in ways that allowed for detailed accounts of participants’ experiences. Open-ended interviews served as the primary means of data collection. Participants were encouraged to help lead the conversations; this way topics discussed were determined, not just by the researcher through the schedule of questions and prompts, but by those who are most familiar with the subject of inquiry. In introducing participants to this study, I shared my intentions, interest in, and experiences with this topic. I then tried to get out of the way, to let the stories “breathe” (Frank, 2010, p. 88), and ensure space in the dialogue for the participants, as experts in their own lives (Blumer, 1969).

**Ontology.** Ontology deals with the nature of reality (Guba & Lincoln, 1989). In general, qualitative researchers recognize that reality is subjective as each individual sees the world from a unique vantage point (Blumer, 1969; Geertz, 1973; Schwandt, 1994). Reality is socially made (Geertz, 1973), and, in order for the world to be made meaningful, it must be interpreted (Schwandt, 1994). What is real is what can be perceived; Blumer (1969) stated, “This position is incontestable” and went on to declare:

It is impossible to cite a single instance of a characterization of the ‘world of reality’ that is not cast in the form of human imagery. Nothing is known to human beings except in the form of something that they may indicate or refer to.

To indicate anything, human beings must see it from their perspective; they must depict it as it appears to them. (p. 22)

In this way, the empirical world may exist independent of the individual, but only in the sense of its physical property. Since the “real world” can be seen, thought about, and interacted with only on the basis of an individual’s ability to perceive it, make meaning of it, and act within and upon it, qualitative researchers acknowledge the natural world and its objective existence, but are most concerned with the subjective human experience.

Interpretivists see the world as comprised of many varying subjective interpretations (Schwandt, 1994). Meanings are constantly unfolding—of self, other and society, and of one’s and of others’ places in those social orders; and, “we do not simply live out our lives *in* time and *through* language; rather, we *are* our history” (Schwandt, 1994, p. 120). According to Snow (2001), “neither individual or society nor self or other are ontologically prior but exist only in relation to each other; thus one can fully understand them only through their interaction, whether actual, virtual or imagined” (p. 369). Goffman (1959) described interaction as the “reciprocal influence of individuals upon one another’s actions” (p. 15) and since “we do not as a matter of fact lead our lives, make our decisions, and reach our goals in everyday life either statistically or scientifically” but rather by inference (p. 3), by interpretations based on the impressions others give off, we understand and act upon the world based on our interactions and impressions.

Progressing deeper through the ontological tenets of interpretivism, SI, social comparison, and IM, we can view reality as the product of an individual’s interpretations of the impressions others attempt to give off or manage. Reality can be conceived as dramaturgical since it is comprised of the interplay between the different versions of the



self that individuals act out over the course of their everyday lives. Each individual modifies identity, behaviors, and beliefs, in accordance with what is perceived that a particular audience prefers or expects. How one dresses and acts in a job interview is, in most cases, different than how one appears and behaves at home with family or friends.

In this interpretivist case study, multiple realities are represented through thick, rich description in order to create vicarious experiences with the issue under investigation (Lincoln & Guba, 2013). In-depth subjective experiences are often acquired through hermeneutic and dialectic methods, primarily through interviews with multiple participants (Creswell, 2007). Questions that probe how individuals define their situations are necessary to understand why applicants see themselves as disadvantaged and how they approach the option to identify as such in the primary application to medical school. Layering additional data sources, such as documents and artifacts, adds to the context and enlivens the vicariousness of the participants, and informs the dramaturgical lens; this should improve the accessibility of the study and lead to opportunities for practical application (Lincoln & Guba, 2013).

**Axiology.** Axiology is the study of the “nature of ethics” (Mertens, 2010, p. 10). Ethical research has value for its participants, future research, and practical application (Creswell, 2007). Interpretivists recognize that participants are the subject matter experts and it is their voices, rather than the researcher’s, who must be represented in the data (Crotty, 1998; Grbich, 2007). Findings should be influenced by the experiences, emotions, and values of the participants rather than the researcher (Blumer, 1969). Through informed consent, confidentiality, member checks, and nonjudgmental inquiry, I worked ethically alongside the participants.

As Jones et al. (2006) wrote, “the relationship between researcher and participants is one of the hallmarks of qualitative research; however, this relationship can be neither presumed nor taken for granted” (p. 76). Qualitative research is a product of values (Mertens, 2010), the values of the researcher(s), the participant(s), and those belonging to the theories framing the study. Values should not be overlooked, as they shape the inquiry and through it, the data (Creswell, 2007). I make my values transparent, initially through the researcher’s perspective, but as an ongoing effort through a researcher’s journal. Document review, in-depth interviews, an iterative approach to data analysis, and member checks, added assurance that the research findings are representative of the participants.

### **Symbolic Interactionism: Theoretical Frame Behind the Methodology**

Crotty (1998) and Schwandt (1994) described SI as an interpretivist approach. SI sets this interpretivist epistemology apart from other qualitative approaches in which the individual is viewed as social only when interacting with others. In contrast, symbolic interactionists view the individual as reflexively social, taking the objects of interaction and assigning meaning to them and acting on the basis of those meanings. People act in response to the meanings they attribute to others, to themselves, and to the situations in which they find others and themselves.

Furthermore, individuals do not just take objects into their minds and give them meaning; they become objects themselves. Individuals interpret the world by being objects of their own actions; in that way they act towards themselves as they would with others and this, symbolic interactionists believe, is “the central mechanism” with which meaning is made of the world (Blumer, 1969, p. 79). The individual can then be thought

of as an entity that engages with the world through self-indication. Blumer (1969) explained:

To indicate something is to extricate it from its setting, to hold it apart, to give it meaning or, in Mead's language, to make it into an object. An object—that is to say, anything that an individual indicates to himself—is different from a stimulus; instead of having an intrinsic character which acts on the individual and which can be identified apart from the individual, its character or meaning is conferred on it by the individual. (p. 80)

Self-indication, what, why, and how meaning is applied, is of highest importance to symbolic interactionists.

Applying the symbolic interactionist premise that individuals act on the basis of the meanings they attribute to the world around them, in applying to medical school, each applicant is confronted with the question of whether or not they would like to identify as disadvantaged. This question requires each applicant to consider whether they are disadvantaged and to what extent. Viewed through SI, to address the disadvantaged question applicants must act on the basis of the meanings they attribute to the concept of disadvantage by deciding, first—whether or not to identify with the term, and second—how to act upon their attributed meanings, either applying or not applying as disadvantaged. To explore this topic, I went to the empirical world under inquiry, former applicants/current medical students.

### **Methodology**

Methodology is the set of “principles that underlie and guide the full process of studying the obdurate character of the given empirical world” (Blumer, 1969, p. 23).

This is to say, the world cannot be bent to our conceptions, either as individual experiencers or in our roles as inquirers; the world “can ‘talk back’ to our pictures of it or assertions about it” (Blumer, 1969, p. 22). The methodology represents the researcher’s

values and perspectives and those of the particular social world under inquiry.

Methodology is the plan that governs how the research will be conducted, understood, and judged (Jones et al., 2006).

In choosing a methodology for this study I considered the goals, the subject matter, and the individuals within the empirical social world (Blumer, 1969). The subject matter was sensitive in nature and rapport building was essential. As Janesick (1994) indicated, “by establishing trust and rapport at the beginning of a study, the researcher is better able to capture the nuance and meaning of each participant’s life from the participant’s point of view” (p. 211). Jones et al. (2006) provided a list of approaches to build rapport in qualitative research; the chief themes of their recommendations included: honesty, empathy, and patience. To establish rapport, I selected a study site within a reasonable proximity to allow for in-person interviews at the convenience of participants. Given Jones et al.’s (2006) recommendations, I selected a case study methodology.

### **Case Study**

Yin (2013) described the case study as, “an in-depth inquiry into a specific and complex phenomenon (the ‘case’), set within its real-world context” (p. 321). Case study researchers seek to understand a specific problem or issue through the illustration of the case, or an issue within the boundaries of a particular system (Smith, 1978), the “bounded system” (Stake, 1994, p. 236). Whereas some methodological approaches are rooted in specific philosophical or theoretical traditions, case study stems from the issue or problem itself. Case study does not necessitate adherence to a particular school of methods (Merriam, 2009); instead, inquirers select approaches to data collection and analysis that compliment, not only the issue under investigation, but also the individuals

within the specific context (Creswell, 2007). In this way, the qualitative case study researcher is a *bricoleur*, a multi-method tradesperson, who brings together multiple forms of data from as many worldviews and approaches to method (Denzin & Lincoln, 1994).

Stake (1994) divided the case study into three types: intrinsic, instrumental, and collective. The intrinsic case is used when there is interest in a specific context and setting more so than on the “abstract construct or generic phenomenon” (Stake, 1994, p. 237). The instrumental case is undertaken when the setting is subordinate to a broader construct or phenomenon. In the instrumental case, the case is selected for its ability to advance the understanding of the topic of interest beyond the specific case to broader settings (Jones et al., 2006). The collective case study is an extension of the instrumental case, but is extended to multiple cases often for the purposes of comparison, theorizing, or even generalizing (Stake, 1994).

This inquiry aligned best with the instrumental case study. The instrumental case was fitting due to the identification of a particular medical school with characteristics amenable for the exploration of self-presentation in the AMCAS primary application. Since the focus of this inquiry was on medical students’ experiences with the optional disadvantaged essay, and not in any way on their current experiences in medical school, focusing on a specific school did not originally seem necessary. However, I bound this case at a single medical school for participant and gatekeeper access, and the university’s reputation as highly selective.

**Bounding the case.** The focus in this study was on richly descriptive accounts of experience and meaning related to sensitive topics that coincide with individually and

socially perceived disadvantages. Additionally, I was deeply interested in the IM tactics of medical school applicants embedded within their decisions regarding whether or not to apply as disadvantaged in the AMCAS primary application. There were two criteria for bounding this inquiry: access and competitiveness. Study site access comprised travel distance and gatekeeper support. The study site was a medical school within driving distance from me; this proximity allowed for a level of flexibility planning interviews that, without which, would have resulted in fewer participants. Furthermore, by selecting a medical school within close proximity, I began establishing rapport with gatekeepers through in-person interactions well in advance of the inquiry.

Perceived school competitiveness contributed to the bounding criteria. This bounding criterion followed the supposition that, as medical school admissions competitiveness increases, so too does the importance of managing impressions. Goffman (1959) explained that actors tailor their performances, modulating what they share about themselves, based on what they believe their audience expects. Thus, it is possible that an applicant to medical school approaches the AMCAS primary application, and through it the optional disadvantaged essay, differently if applying to selective programs rather than those where admission is perceived as highly probable. Given that applicants apply to many medical schools, it is likely that each applicant's selected schools will encompass a range of selectivity. However, since applicants complete a single application that is disseminated to all designated schools, it may be that the most selective schools will influence the performance.

*Study site description.* The study site was an elite private college in the Northeast with a reputation as a highly selective medical school. The study site's long history as a

highly selective medical program may influence applicants to consider it a “reach” school. In keeping with confidentiality, I have attempted to strike a balance between providing enough description to be useful while not so much as to reveal the specific medical school. The following data and description have been generalized and altered enough to not be revealing, while still being useful.

At the time of the research, the medical school received around 6,000 applications per admissions cycle for an incoming class of less than 125 matriculants. The total medical school MD enrollments across the four classes were less than 500. Across the four medical school classes, less than 30 students identified as either Black/African American; less than 30 students identified as Hispanic/Latino; and less than 50 students identified as multiracial.

*Participant selection.* Participants were first, second, and third year medical school students, and therefore, had previously completed the AMCAS application. At the time of the study participants had recently transitioned school years; they were new to their first, second, and third years. Prior to recruitment, I received Institutional Review Board approval from both the study site and the university where I was completing my degree (Appendix A). The initial recruitment process yielded eleven participants; after several months working with the data based on those second and third year students, I recruited from the first year cohort. I wanted to wait long enough so as not to disrupt their transition into medical school while they adjusted to their new lives. I sought to include a diverse mixture of both participants who did and did not identify as disadvantaged applicants in the AMCAS application.

To respect all students' personal information, a gatekeeper emailed a general recruitment email to all students via existing medical school class listservs. Recruiting this way meant all students had the opportunity to participate. Students self-selected based on their interest in participating and their availability to meet, either in person or via video and/or telephone.

I originally planned to recruit only from the second and third year classes since many fourth year students would be away on rotation and I did not want to disrupt first year students during their initial transition into medical school either. However, I recruited only eleven participants from the second and third year classes. I began the initial analysis while waiting until the first-year students settled in and then recruited from their class in an effort to reach the initial goal of 12-16 medical students, discussed in more detail in the next section—study size. Furthermore, I hoped to increase the proportion of participants who identified as disadvantaged applicants.

I relied on a gatekeeper within the medical school's office of admissions to send the recruitment emails and field any initial questions potential participants might have had. Relying on a gatekeeper who was familiar to the students helped ensure that participants' first contact was with someone they already shared rapport. Furthermore, by recruiting through a gatekeeper, I eliminated the possibility of knowing which students declined participation, which was especially important given I had recently started evaluating applicants at the study site.

I crafted a recruitment letter that included a general message about the study and the consent form with interview questions (see Appendix B). The gatekeeper sent the recruitment letter three times throughout the study. The first two recruitment emails were



disseminated to second and third year students, while the third was sent only to first year students. Students were advised to either contact the gatekeeper or me directly, depending on whether they had questions or concerns before deciding to participate. Three of the participants came to the study by first contact through the gatekeeper; the rest emailed me directly following their receipt of the gatekeeper's recruitment email.

*Study size.* Fifteen medical students participated in this study; eight applied as disadvantage in the AMCAS application, and seven did not. Patton (2002) wrote that the type of information being sought, which in this study included individuals' experiences and perspectives, should determine the number and composition of participants. Specific to case study, Creswell (2007) suggested selecting a widely varying group of individuals to capture as many perspectives on the issue as possible. Furthermore, Creswell (2007) pointed out that the more cases explored, the more diluted "the overall analysis" will be (p. 76). Increasing study size can result in a decrease in concentration on any one participant. In an effort to strike a balance between the inclusion of many varied perspectives and intimacy of content, I chose a goal of 12 to 16 participants.

**Data collection.** Case study researchers are able to choose from a wide range of data collection methods, but must shoulder the responsibility of selecting those that are most appropriate for their particular inquiry (Merriam, 2009; Stake, 1994). For this study, I chose three sources of data: participants' AMCAS applications, one-on-one interviews, and researcher journaling. The use of multiple or triangulating methods and data served to increase the comprehensiveness of the descriptions, interpretations, and conclusions (Denzin, 1978). Furthermore, triangulation of methods improves the likelihood that the findings will be credible (Denzin, 1989; Lincoln & Guba, 1985).

*American Medical College Application Service applications*. Merriam (2009) wrote that the term document describes the “wide range of written, visual, digital, and physical material relevant to the study at hand” (p. 139). Document analysis in qualitative research relies on techniques similar to what is expected in interviews or observations. According to Glaser and Strauss (1967), documents represent the voices of others in a particular place and time and are subject to similar methods of analysis as voices captured in the field.

Altheide (1987) suggested an ethnographic approach to the analysis of documents (ethnographic content analysis) for its flexible, yet “systematic and analytic” process (p. 68). Ethnographic content analysis (ECA) is a constant comparative method through which the researcher generates findings by cycling between multiple sources of data (Glaser & Strauss, 1967). Gadamer (1990/1960) also emphasized the importance of an iterative, revisionist process in the interpretation of textual data. This iterative approach to document analysis has been described as a hermeneutic circle (Dilthey, 1976/1900; Schwandt, 1994). Schwandt (1994) wrote, that the hermeneutic circle is a “methodological device (in which one considers the whole in relation to its parts and vice versa) that provides a means for inquiry in the human sciences” (p. 121). Altheide (1987) described ECA as the “constant discovery and constant comparison of relevant situations, settings, styles, images, meanings and nuances” in which “data are often coded conceptually so that one item may be relevant for several purposes” (pp. 68-69). Whether thought of as ECA or in terms of a hermeneutic circle, document analysis in this study was iterative, cyclical, and employed a constant comparative examination of the data.

Documents took the form of participants' primary applications to medical school submitted through the American Medical College Application Service (AMCAS). Since the AMCAS application is the only source of interaction, albeit asynchronous, between applicants and medical school admission committees that is common across all schools, its examination offered a different level of insight than the interviews. Through text analysis of the participants' entire AMCAS applications, participants can be thought of in terms of their former applicant identities, informing the IM elements of this study.

I obtained permission from the participants before reviewing their AMCAS files. I then accessed each participant's application through the AMCAS online database. The AAMC provides schools access to former admission cycle data and all applications within those cycles for a period of four years, at which point the oldest year is overwritten by the next oldest. I downloaded each participant's application in portable document file (PDF) format to ensure my ongoing access to the document data as needed throughout the study. Furthermore, downloading participants' applications provided assurance to the study site that I would not interfere with their day-to-day operations within the AMCAS database. The downloaded PDF versions of the applications were read in entirety, just as if I had reviewed them during the application cycle. Analysis was iterative; applications were examined and re-examined throughout the study.

*Interviews.* The interview represents the dominant instrument of qualitative inquiry (Fontana & Frey, 1994). Since interpretivists and symbolic interactionists both attempt to understand a particular world or phenomenon as it is experienced by those most familiar with it, observation and interviews serve as the primary sources of vicarious experience (Blumer, 1969; Denzin, 2002). Interviews are commonly used

when we cannot directly observe what it is we wish to know (Merriam, 2009).

Interviews can include structured questions—predefined and controlled by the researcher, unstructured—open-ended questions, or some variant on the continuum between the two (Fontana & Frey, 1994). Whereas structured interviews are used to minimize error and narrowly focus on an issue, unstructured interviews can elicit in-depth responses and unexpected turns (Fontana & Frey, 1994). Given the focus of this study, I selected an interview variant that combined elements of both structured and unstructured approaches. The variant I selected, as discussed below, made use of an interview schedule, through which a variety of questions and corresponding prompts were listed; however, the goal was to rely on them as a means of maintaining rich conversation, rather than as a rigid checklist.

Denzin (1989) described an approach to conducting interviews through which researchers can work from a list of the topics they wish to explore. Those topics then inform prompts that help move the conversation. The wording of interview questions and order in which they are asked may be changed for each participant, depending on the momentum and direction of the conversation (Denzin, 1989).

*Interview schedule.* Similar to Denzin's (1989) flexible use of prompts, the interview schedule, as described by Smith, Flowers, and Larkin (2009), is an approach to interviewing that relies on an outline of questions and prompts to help move the conversation. By creating a list of questions and topics to cover, the researcher develops "virtual maps" that can be drawn upon if the conversation "gets stuck" (Smith et al., 2009, p. 59). Throughout the interviews, probes may be used to surge deeper: Why?,

How?, Can you tell me more about that?, How did that make you feel? (Smith et al., 2009).

My goal with the interview process was to allow participants to tell their stories in their own words (Smith et al., 2009). For participants to be able to share their stories, researchers must ask questions, yet get out of the way. The questions and prompts that I arrived at were designed to allow me, especially as a novice researcher, to enter the interviews with confidence that I would be able to focus my full attention on the participants, rather than wondering if I missed any compelling topics. Furthermore, I was liberated to engage in open conversation knowing that should the dialogue lose momentum, I could refer to my list of questions. I included the following seven open-ended interview questions in the consent form:

1. Why do you want to pursue a career in medicine?
  - a. Tell me about an experience that helped you know you wanted to go into medicine
2. Thinking back to your application, how did you want to be understood by admissions committees?
  - a. What about yourself were you most eager to share?
  - b. Least eager?
3. What does being disadvantaged mean to you?
  - a. Did you ever think your definition differed from others?
    - i. In what ways?
4. What went through your mind when you saw the option to identify as disadvantaged in the primary application?

- a. If you were expecting this question, how did you hear about it?
  - b. Describe your approach to answering the disadvantaged question.
    - i. How you arrived at your selection of either disadvantaged or not.
5. Had you ever considered yourself disadvantaged prior to the medical school application?
- a. If yes (may be discovered in question 4, if so, skip opening line of question 5 above):
    - i. Tell me about a moment when you felt disadvantaged.
  - b. If no:
    - i. Who do you envision when you think of a disadvantaged person?
6. Speaking about the study site, what are your thoughts on its reputation and level of selectivity?
- a. How would you describe the study site in terms of selectivity compared to other schools to which you applied?
  - b. How did your choice of medical schools affect your decision regarding whether or not to apply as a disadvantaged applicant?
7. What are your thoughts on the AAMC asking applicants whether they are disadvantaged?
- a. How did you imagine this question would be used?

The interview questions were used as a guide to ensure that, at a minimum, each participant had the opportunity to express perspectives across the range of topics.

However, the interviews turned out to be far more organic than rigid adherence to the questions would have allowed. There were times in each of the interviews when conversation waned and I referred to the list of questions; however, overall, the process unfolded casually, as the participants and I traded off asking and responding to one another.

The first interview question was written as an icebreaker. It was not intended to inform specific research question. Instead, rather than rushing into potentially sensitive subject matter, I worked to connect with participants by learning about them as a person.

The second interview question informed the IM and dramaturgical lens. The entirety of the application, not just the disadvantaged essay is a chance for applicants to show admissions committees their best sides. Beginning with interview questions that help understand how former applicants wanted to be perceived helped shed light on how the participants approached and acted upon the option to identify as disadvantaged. Through this information, we gained insight into the quality of the application as an instrument of data collection, that is, whether participants were satisfied with their abilities to manage their impressions in the AMCAS application.

The third interview question allowed participants to explore the meanings they attributed to the concept of disadvantage. This interview question informed the first, third, and fourth research sub-questions, (1) how do medical students define disadvantage?; (3) how did medical students perceive others' (faculty, staff, and peers) interpretations of disadvantage when they were applicants?; and (4) how did social comparison affect participants' interpretations of the disadvantaged option?. Similarly, the fourth interview question was designed to generate vicarious experience of the

participants' encounters with the disadvantaged option at the time of their applications. This interview question informed the final research sub-question, (5) how were participants' attributed meanings of disadvantaged used in the decision whether or not to self-declare in the AMCAS application?. This interview question was designed to reveal how former applicants' prior experiences, definitions, and social influences came together to inform their decisions regarding the Disadvantaged Status.

Through the fifth interview question, participants explored the idea of being disadvantaged and whether the concept was something with which they felt they had experience. This question informed the second and fourth sub-questions, (2) how did medical students assess their levels of disadvantagedness when they were applicants?; and, (4) how did social comparison affect participants' interpretations of the disadvantaged option?. This interview question drew upon SI and SCT. By considering past experiences with, and interpretations of disadvantage, participants were able, not only to examine the conceptions of their definitions, but the effects of their social groups and social positions on those definitions.

The sixth interview question was designed with the study site in mind. I needed to consider the possibility that, even though applicants complete a single application to be sent to all of their chosen medical schools, similarities in perceived program selectivity could affect what they decided to disclose. I asked participants what they thought of their medical school when they were applicants, if their other designated programs were more or less similar, and if those perceptions affected their IM and disclosure decisions.

I created the seventh interview question to learn what participants thought about the Disadvantaged Status, if they thought it was beneficial, understandable, positive or



negative in connotation, and if they had any recommendations for its use in future applications. As the interviews progressed and I was concurrently reading through and performing preliminary analysis of transcripts, I realized that participants seemed enthusiastic to share their criticisms. I began asking the question as, If you were in charge of the medical school application, what would you have to say about it, and would you make any changes?, if so, what would they be?; this rephrase elicited deeper participation.

As Jones et al. (2006) encouraged, research should be useful, and as such, should inform practice. Professionals at the AAMC can learn from participants' responses to this interview question and gain insight into how former applicants felt about, interpreted, and acted towards the Disadvantaged Status.

*Researcher's journal.* The researcher journal was a self-reflexive tool that helped me identify and make my biases clear. By accounting for my biases and considering my identity in relationship to those of the participants, I took steps to ensure the findings represented what was true for them, rather than what made sense within my preconceptions (Jones et al., 2006). The researcher's journal consisted of my reflections on the disadvantaged option throughout the various stages of the study: as I entered the inquiry, interviewed participants, reviewed the AMCAS applications, and engaged in analysis. Additionally, journaling aided in the preservation of my thoughts and observations throughout the study; this formed an audit trail (Mertens, 2010).

**Data analysis.** Analysis in case study research varies with the subject of inquiry (Denzin & Lincoln, 1994; Stake, 1994). Stake (1994) wrote, "the utility of case research to practitioners and policy makers is in its extension of experience" (p. 245). In order to

extend participants' experiences to readers, researchers must not be "straightjacketed by the conventional meanings we have been taught to associate with the object. Instead, such research invites us to approach the object in a radical spirit of openness to its potential for new or richer meaning" (Crotty, 1998, p. 51). In the spirit of openness, I took a modified constant comparative approach, an iterative back and forth between the different forms of data and theory.

I previously described a constant comparative approach to analysis of the AMCAS documents under the heading document analysis; this same iterative and reflexive approach was applied to all forms of the data—interview transcripts, AMCAS application files, and observational notes. I personally transcribed each interview. I conducted a verbatim transcription for each participant, and pored over each section of the audio and its subsequent text to ensure both its accuracy and my understanding of the meanings therein. I made every effort to transcribe each interview within 24 hours of its occurrence; however, there were two interview days when I met with multiple participants. During those busy times, it took me multiple days to complete the transcriptions.

While transcribing, I felt like I was back in each interview. As I listened to the dynamics, inflections, and tempos of each participant's interview, meanings I had already formed were reinforced, but I also discovered new meanings I missed the first time around. At times my mind tried to anticipate what was coming next in the dialogue, unintentional memory jogs, only to find that what I remembered or the way I remembered it, was different than what had actually occurred. And at other times, I listened back only to discover exhibition of emotion that I missed during the interview. I

was particularly grateful in these instances to be conducting the transcriptions myself. Transcribing forced me to listen to the interviews multiple times within a brief period; themes began to emerge during this stage. Emerging themes were noted and explored further during the coding process.

**Coding.** I used Saldaña's (2013) two-stage approach to coding in which codes are first created and assigned, and later condensed and explored alongside theory and literature. Miles, Huberman, and Saldaña (2014) described codes as the assignment of "symbolic meaning to the descriptive or inferential information compiled during the study" (p. 71). Codes took the form of words and abbreviated phrases that summarized passages of the textual data.

Saldaña (2013) divided the analytic steps of coding into first and second cycles. In the first cycle, the researcher employs various techniques to assign codes to the data. During the second cycle, the researcher works with the codes derived in the first cycle in order to condense the data into a smaller number of categories that trigger the analytic thought needed to finalize the analysis and make good sense of the data (Miles et al., 2014).

Miles et al. (2014) described many types of coding that could be useful in the first cycle: descriptive, in vivo, process, emotion, values, evaluation, dramaturgical, holistic, provisional, hypothesis, protocol, causation, attribute, magnitude, subcoding, and simultaneous. I borrowed from many of these code types, although they mostly fell under either descriptive or in vivo categories.

Descriptive coding involved assigning a word or phrase to a section of data for the purpose of inventorying and categorizing. In vivo coding, like descriptive, involved

labeling passages of the data with words and phrases; however, unlike descriptive coding, which is in the researcher's words, in vivo coding uses direct quotes from the participants as the code. For example, if several participants described being, "unsure what they meant by disadvantaged," "unsure" could be an in vivo code, and lacked confidence or ambiguity—descriptive codes.

Miles et al. (2014) explained that coding could either be inductive or deductive. Deductive codes are devised prior to beginning the fieldwork, often from previous research, theory, or the researcher's worldview. I did not use deductive coding in this study. Instead, I relied on inductive strategies. The codes emerged throughout the data collection process. In this way, I worked to see the world under study as it was for the participants (Blumer, 1969).

*First cycle coding.* During the first cycle, analysis was concurrent with data collection. I moved between interviewing and inductive coding; this allowed me to evaluate my interview questions, technique, bring up initial patterns with subsequent participants to gain their perspectives, and account for any "blind spots" or gaps in the inquiry (Miles et al., 2014, p. 70). In an effort to focus my analytic perspective on the empirical world under study, I began first cycle coding by reading through three to four transcripts and AMCAS applications at a time, one after the other to consider and revise themes as they emerged. I searched the data for patterns between participants, passages of emotional significance, and, perhaps most obvious, answers, questions and tangential stories related to the research questions. I conducted word-by-word examination of the transcriptions and AMCAS applications (personal statements, experience narratives, essays of disadvantage—for those who applied as such) to identify and apply codes.

I explored the data via the TAMS Analyzer software (Weinstein, 2006; Weinstein, 2015). TAMS Analyzer presented the data through a two-panel application window; text file and PDF data were presented in the main window and a panel on the left allowed me to create, define, and apply my codes. My first cycle annotations were applied to the following: passages in which participants seemed to address one of the research questions, words and phrases that overlapped with those of other participants, and material that I was not yet able to place within the findings, but that stood out to me as particularly powerful. I used these annotations to inform subsequent coding decisions.

*Jottings and Memos.* I used jottings and memo as reflective techniques throughout the analytic process. Miles et al., (2014) described jottings as brief notes one might make in the margin of a transcription. Jottings include the researcher's inferences on what a participant is really saying, personal reactions, feelings, doubts, mental notes, and points of elaboration or clarification. Memos are the researcher's reflections about the data, study questions, code choices, emerging patterns, possible networks among codes, problems with the study, and future directions. I found that once I began to memo in TAMS, I seldom opened my researcher's journal. I created jottings and memos in separate windows, independent of the transcriptions and AMCAS applications, as standalone files with embedded links between them and the relevant sections in the transcripts and AMCAS documents. Jotting and memoing in this way was cumbersome at first; but as I created more of these thought files, the process became more fluid. The ability to embed links to multiple transcripts and applications, and even multiple passages within those files, amplified the value of the jotting and memoing process. I could

review my thoughts in those standalone files and click on the embedded links to review all relevant data on one screen.

*Second cycle coding.* Throughout the second cycle of coding, I focused on condensing the codes into fewer categories. My goal was to integrate first cycle data into more meaningful units of analysis. These condensed categories are called pattern codes and can be trends, causes or explanations, relationships among people, or theoretical constructs (Miles et al., 2014).

Data during the second cycle were organized around emerging themes and combined with earlier interpretations from document analysis, my research journal, jottings, and memos. During this phase, the reinterpretation of the data began to take the shape of the core story or narrative (Jones et al., 2006). As the narrative unfolded, it was tied back to the theoretical perspectives of SI, SCT, IM, and stigma. By examining the data, first without theory, I worked to avoid shaping the participants' experiences to fit preconceptions (Blumer, 1969).

### **Trustworthiness**

Trustworthiness is established by ensuring “continuity and congruence among all the elements of the qualitative research process” (Jones et al., 2006, p. 99). The elements of the qualitative study include: epistemological and theoretical perspectives; methodology; methods; representation of participants' voices; and analysis and presentation that is credible, plausible and applicable to research and practice (Jones et al., 2006). I strove for trustworthiness in this study through consideration of the following four criteria: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985).

**Credibility.** Credibility refers to the believability of research interpretations (Hammersley, 1990). Patton (2002) stated that credibility addresses the accuracy of the findings as judged by appropriate application of methods and theories. Furthermore, credibility is affected by the researcher's qualifications and experiences, and the degree to which both are made known in the write-up (Patton, 2002).

I provided participants the opportunity to review their biographic narratives for verisimilitude of their voices and intentions (Lincoln & Guba, 1985). I reflected, throughout the study, on my role as the researcher, on my identity and how it compared to those of the participants. By reflecting on my identities and assumptions I considered how I influenced the findings.

**Transferability.** Transferability deals with the extent to which the research findings can be extrapolated to other contexts (Lincoln & Guba, 1985). Transferability is important in both interpretivism and SI. Transferability is achieved when readers can find meaning for their own lives. Thick, rich description is a cornerstone of vicarious experience (Blumer, 1969); it is the means through which readers can connect findings to their own experiences and find value within their own contexts (Geertz, 1973; Merriam, 2009).

**Dependability.** Dependability deals with how the findings relate to the data (Lincoln & Guba, 1985). Researchers should employ methods that complement the social world under inquiry (Blumer, 1969). Through multiple complementary forms of data (individual interviews and AMCAS primary applications) I was able to explore and analyze experiences and perceptions of former medical school applicants in order to make meaning of their experiences.

**Confirmability.** Confirmability is the final trustworthiness criterion (Lincoln & Guba, 1985). Confirmability refers to the degree to which the data and any interpretations are grounded in the participants' stories, not the researcher's imagination (Mertens, 2010). The researcher's journal and the audit trail aided in confirmability. Through use of the researcher's journal, which took the form of memos in TAMS, I was able to check biases and ensure they did not color the findings (van Manen, 1990). The audit trail is the detailed account of steps taken throughout the research process through which future researchers can replicate the study (Huberman & Miles, 1994).

### **Ethical Considerations**

I approached this inquiry with caution and respect. At times, the subject matter was sensitive in nature; more than half of the participants self-identified as disadvantaged when they applied to medical school. Participants belonged to groups of color, lower SES strata, were international and undocumented, and belonged to the LGBTQ communities. As a White, straight male, I recognized the need to work diligently to build trust and establish rapport with the participants in this inquiry, which I accomplished through informed consent and the sharing of my background and interest in this topic.

In getting to know the participants I engaged in conversations about my identity, and acknowledged the differences that existed across our social groups. I shared with each participant that I did not presume to understand what it meant to be anything other than what and who I am, but that in the telling of their stories I would be a non-judgmental voice, eager to learn their experiences and insights. With some participants, it took multiple conversations—in person, over the phone, or via email, before I was trusted to listen to their stories.



## Limitations

While the data provided by the 15 participants in this study are invaluable, this case represents a single medical school. It is likely that the experiences and insights of medical students at other schools would be different than those of the participants in this study. I hoped for diversity across the participant pool and while I believe I was successful to that end; ages ranged from early 20s to early 30s, and across multiple races, ethnicities, orientations, countries of origin, and socioeconomic backgrounds, Black medical students were not represented in the study. It would be faulty to assume that the perspectives of the participants in this study align with other students of color. As researchers have pointed out, there may be marginalization occurring within college admissions processes, and by extension, the AMCAS Disadvantaged Status (Baum, 2012; Espinoza-Shanahan, 2016; Martin, 2010; Oriel et al., 1996; Ramos et al., 1998). I am unsure if the absence of members of this population was due to low numbers at the study site (as described above under *Study site description*), or if something else was the cause, whether related to my identity, the recruitment strategy, or even, the topic.

Since the college, not just the medical school has a long history of, what I can only describe as elitism, and combined with its rural location, it may be seen as a less attractive option for many non-majority applicants. For example, one of the participants shared with me that during commencement, it is not uncommon to hear alumni singing traditional versions of the college's songs and emphasizing the male-only lyrics. The college, overall, was certainly not a leader in terms of opening its doors to women and minorities, a legacy that may still be felt by members of such underrepresented groups today.

Finally, the data for this study was collected and analyzed by me, a single researcher with my own unique worldview. I followed Lincoln & Guba's (1985) guidelines for creating a trustworthy study and I relied on multiple forms of data and social theories, as well as member checks to strengthen credibility. However, it is likely that a different researcher would arrive at different data and different findings. The inclusion of more researchers, collaborating and sharing perspectives would bolster trustworthiness.

### **Chapter Summary**

In this chapter I detailed this study's methodology. I described the research questions and their impetus. Next, I shared my perspective as a researcher. In qualitative research, findings are, in part, a product of the researcher's values and experiences. I presented my story, which described my background and path to this topic, and my stance, in which I made my biases known. I then described the interpretivist underpinnings that guided my worldview—epistemology, ontology, and axiology.

In considering the empirical world under inquiry, that being the admissions experiences of medical school applicants I found fit between case study, SI (Blumer, 1969), SCT (Festinger, 1950; Festinger, 1954), IM (Goffman, 1959), and stigma (Goffman, 1963). Blumer, Festinger, and Goffman were each interested in the deeper meanings behind common, everyday experiences. Pulling from SI, SCT, IM, and stigma theories, I developed an interpretivist case study to explore the meanings applicants attribute to the Disadvantaged Status in the AMCAS primary application.

I interviewed first, second, and third-year medical students through open-ended, conversational techniques described by Denzin (1989) and Smith et al. (2009). I

borrowed from Altheid's (1987) approach to document analysis to review participants' AMCAS applications. Coding was a two-stage process through which I condensed participants' perspectives into themes. I established trustworthiness through consideration of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). I concluded this chapter with a discussion of limitations and ethical considerations.

In Chapter IV, I present the findings in three parts. In Part I, I share biographical narratives for each participant. In Part II, I discuss the nine over-arching themes that emerged through the analysis. And, in Part III, I connect themes, theory, literature, and participants' insights to address the research questions.

## CHAPTER IV

### FINDINGS

The findings are presented in three parts. Part I: Biographical Narratives includes vignettes of the participants' backgrounds and experiences, and highlights from their interviews. In Part II: Themes, I describe each theme that emerged during analysis and how it relates to the theoretical framework. In Part III, I focus the analysis towards addressing the five sub-questions.

#### **Part I: Biographical Narratives**

The 15 participants in this study are the first medical students to have their perspectives on the Disadvantaged Status documented in the literature. The participants were generous and brave to share their insights from their experiences with the application process. It is my hope that in reading the biographical narratives, readers will gain more meaningful conclusions from Part II, and Part III, themes and analyses.

The biographical narratives were written so the reader may experience the participants' stories, in much the same way that I did during the interviews. The participants are presented alphabetically based on their selected pseudonyms and grouped according to whether or not they identified as disadvantaged in their applications. For each participant's narrative, I attempted to include the most salient interview and AMCAS data. I selected data based on their ability to present a rich and authentic depiction of each applicant. To ensure that the stories were authentic, verisimilar

depictions of their interviews and backgrounds, the participants had the opportunity to review their narratives.

### **Participants Who Identified as Disadvantaged**

**Ariadne.** Ariadne was raised primarily in a single-parent household in Pennsylvania. Her father was absent for much of her childhood. Ariadne did not go into great detail in describing her father; suffice it to say, he did not prioritize the family.

Ariadne identified as White and Asian. Ariadne's mother emigrated from China to leave behind an oppressive past. Ariadne's mother came to the U.S. alone, with no family connections or friends on which to rely. Her mother's lack of English proficiency, along with Ariadne's status as the oldest sibling, required her to grow up quickly and take on many household responsibilities.

When asked where her interest in medicine originated, Ariadne recounted stories visiting her grandfather in China, formerly a physician who counted high-ranking government officials among his patients. Ariadne's grandfather worked to improve the health conditions of all people; shedding light on health disparities was a necessary byproduct, though one that went against the Communist Party's agenda. After contradicting the Communist Party's portrayal of living conditions, Ariadne's grandfather was removed from his position and stripped of his medical equipment. Their house was raided and her grandfather, along with the rest of the family, was forced to move to the countryside where he was to be retrained as a farm laborer. Ariadne's grandfather continued to practice whenever he could, using whatever supplies he could find. He did so, she explained, because he felt it was his duty to serve others.

Ariadne was inspired by her grandfather's commitment to others and began to imagine herself in a similar role. Oftentimes, throughout her childhood, Ariadne was relied on to manage the household, looking after her two younger brothers and mother who, as she explained, "endured many hardships over the last decade alone." In her secondary application, Ariadne described the ways in which her mother demonstrated resilience, the "unplanned pregnancy with my half-brother, being laid off from her biochemical engineering job, abuse from my former stepfather, resultant episodes of major depression, a harrowing divorce, and a grueling custody battle." During those times of struggle, Ariadne was caretaker to her mother and two younger siblings. Ariadne's familial obligations, along with her limited financial resources often precluded opportunities for academic and social advancement, such as international medical relief trips and research internships.

I asked Ariadne if there was one detail about herself that she hoped application readers would take away. Ariadne pointed out that if readers simply looked at the application data with a cursory glance, she would not be presented accurately. With respect to the AMCAS section on parent/guardian education levels, Ariadne said:

My father had a master's degree and my mother went back to get her master's degree when my brother and I were very young because my father abandoned the family and she thought we would have a better chance if she was in a position with a masters degree because at the time she was a substitute teacher. So if you are just looking at, you know, "okay both my parents have pretty high educational attainment" but then my mom raised my brother and I on her own, there were periods of time when my father would come around for a couple of months, then fight, then he would leave again. So my childhood was this strange blend of traditional two-parent, but also single parent, predominantly single mother upbringing. But, if you are filling in boxes from a drop-down menu, I just didn't think it would capture the full extent of what kind of opportunities I had access to, what kind of support systems I had, because most of the time it was just my mom. She came to this country without knowing anybody, so there were no family connections or friends that she could draw upon.

Ariadne pointed out that, with respect to her parents' educational attainment and the childhood opportunities that are supposed to be embedded within, "the educational attainment wouldn't capture it." The biographical section in AMCAS would not have provided application readers with enough detail to understand the challenges Ariadne faced; she feared she would have come across as better off than she was.

Ariadne and I continued to discuss challenges during childhood. I asked Ariadne if there was ever a moment when she felt disadvantaged. Ariadne responded quickly, "yes." Ariadne explained that she was fortunate to attend a boarding high school. I asked Ariadne how she found out about boarding schools, how she came to see them as options, and what the application process entailed. Ariadne's mother placed a high value on education and went to great lengths to help her children achieve. Ariadne belonged to a national nonprofit that provides free services and advocacy for children and young adults who the organization describes as, "profoundly intelligent." While attending an annual meeting for this nonprofit, one of the other parents shared with Ariadne's mother that there are full scholarships available at many boarding schools. Ariadne's mother followed up on this news with phone calls to a number of schools and upon verifying that there were, in fact, full scholarship opportunities, she began the application processes. Boarding school applications consisted of the Secondary School Admission Test, letters of recommendation, transcripts, essays; Ariadne even included examples of her artwork and recordings of her playing the piano. Ariadne applied to six schools and received offers from three. She received scholarships to cover the cost of tuition, books, room and board, and even music lessons. Ariadne shared that she was not able to visit the school

ahead of time; “Pulling up in our minivan with my belongings was my introduction to the campus” she said.

While boarding school opened doors to many opportunities, from eclectic course offerings and small class sizes to internships, it also exposed Ariadne to issues of privilege and where she fell on the spectrum. Ariadne recounted one experience that seemed to have left an indelible impression on her. She said:

There is one story actually that I recently have thought about because this weekend will be reunion. There was one boy in particular from a wealthy oil family. There is a dress code at school; nothing major, but you must be clean and well dressed. I was never out of dress code, but my clothes were coming from hand-me-downs, friends of the family, second hand stores, so you know, they were a few years past the style. There was one point when the topic of the dress code came up in class and this guy, while looking straight at me said, “I think it is important that people who attend class dress in a way that shows they belong here.”

“Belong here?” I repeated. For a moment Ariadne’s voice constricted and we broke eye contact. “Yea. It hurt a lot,” she said. Throughout the interview, Ariadne exuded an awareness of her place within the larger social order. Ariadne was aware that her childhood, absent the social and financial resources considered common within the traditional two-parent American household, was atypical. Attending elite high school and undergraduate institutions provided the kind of environment in which Ariadne was forced to confront the disparities between her level of privilege and that of the majority of her peers. In the previous passage, Ariadne shared a time when a peer publicly labeled her an outsider, a point of vulnerability for her given the constant, albeit typically tacit reminders that she was not the typical member of such an exclusive institution. Most participants in this study spent the majority of their childhoods primarily among peers in every sense of the word—socially, financially, and educationally. For Ariadne, the



concept of peer was narrower in definition, for the most part, limited to the shared education aspect. The contrast in financial and social resources between Ariadne and her peers was always tacitly present; however, when her classmate pointed out those differences and used them as reasons why she did not belong, it reinforced any doubts she had regarding her social membership.

Ariadne's awareness of her place within the larger social order served as the primary motivation for declaring a Disadvantaged Status. Ariadne's final line of her disadvantage status essay read, "I've done my best to build up my own network, but I doubt I'm on par with my peers." It was apparent that privilege and place were integral to Ariadne's idea of disadvantage. I asked Ariadne what else comprised her definition. I asked, "what does it mean to you and what do you think it means to the AAMC and to those reviewing the applications?" Ariadne said:

I guess I believe it is any life circumstance or identity characteristic that could have precluded you from obtaining certain opportunities or reaching the same level of achievement as peers, peers as in the people who get into medical school. Based on that definition it could include so many things: race, sex somewhat although for college and med school I think more women than men are being admitted, but still there are experiences that women still go through. Actually, when expressing my admiration and interest in becoming a neurosurgeon, to a neurosurgeon, he very flippantly told me, good luck with that as a girl.

Ariadne went on to add to the scope of her definition of disadvantage: sexual orientation, income of parents/guardians, immigration status, single parent, ESL, parents' education levels, "I can imagine the kinds of neighborhoods and friends your parents have, if you are hoping to land a swanky research position but all your parents' friends work in retail, how are you going to make that connection?" Ariadne explained that she had been awarded competitive research and internship opportunities, but because they were unpaid and without complimentary living accommodations, she could not afford to accept them.

We continued talking about the role of social capital in upward mobility when Ariadne came back to the definition again, “Oh and the other thing I forgot to mention, but definitely if they [the applicant] has some kind of disability or ongoing medical issue.” I asked Ariadne if she thought her definition might have differed from her peers; “I think that most of my peers recognize those, but there are people in every cohort that believe, you know, because people don’t use racial slurs anymore that being Black doesn’t constitute a disadvantage anymore.” Regarding admissions committees, Ariadne said, “You know, if they are from previous generations, they might hold different definitions since medicine is still a conservative profession, they might discount some of these factors and the disadvantages they can cause, but for the most part I have faith in the people making the decisions.”

I asked Ariadne if she knew ahead of time that there would be a question about being disadvantaged in the AMCAS application. She did. Due to her limited financial resources, Ariadne took advantage of the Fee Assistance Program (FAP), which, in addition to waiving some of the costs associated with the application process, provided MCAT study resources and tutorials. Upon learning about the disadvantaged option, Ariadne discussed it with her mother who, as it turned out, did not want her to identify as such. Ariadne said her mother was “worried” that if being admitted as a disadvantaged applicant resulted in any scholarships, she may be held to a higher standard. In the end, Ariadne assuaged her mother’s concerns and applied as a disadvantaged applicant.

As our interview came to an end, Ariadne expressed what she described as one of her “major concerns” during the application process. Ariadne shared that she was anxious during interview days, “where everybody has to go around the table and tell fun

facts about themselves.” She shared that there always seemed to be applicants who had fantastic stories of trips they had taken or remarkable hobbies they had mastered. And as Ariadne expressed, “those hobbies cost money.” Ariadne did not have money to fund what she saw as experiences that make lasting impressions on interviewers. Ariadne’s notable interests included cooking and embroidery; her friends joke and tell her, “you are so young but you have old lady hobbies.” Ariadne and I laughed. She continued:

But compared to the person who builds motorcycles, or plays the bagpipes, I am a half-White, half-Asian good girl who got good grades and majored in science. I worried that I would be forgettable. I mean, I can’t say for sure, but based on how my interview experiences went, I think I was forgettable.

I asked Ariadne if she would clarify what she meant. She confided that she applied to 17 schools, received interviews at eight and an acceptance from just one. On interview days the selective nature of the medical school admissions process was readily apparent to Ariadne, “and I was like, I am pretty sure I am not in the top 20% of this crowd,” she said. For Ariadne, interview days were a time when social and financial differences between her and other applicants were readily apparent. She questioned whether she did not, “play up the disadvantage thing” as much as she “could have or should have.” Ariadne believed disadvantage should transcend categorization and, instead, serve as an indicator of personal experience with hardships that without which, empathy with patients facing similar challenges may not come as naturally. So, while Ariadne may not have lobbied on behalf of her Disadvantaged Status to admissions committees as thoroughly as she could have, she said she hoped she expressed that:

You don’t really know what it is to have been through those experiences until you have lived it and knowing some of the data on the kind of people who go into medical school, of course there are underrepresented minorities, but there are still plenty of people from better off families, and there are things like not having

access to transportation that when you are working with patients you just don't know to ask if you didn't yourself experience it.

Ariadne observed that socioeconomic capital often led to opportunities for her peers. The challenges she faced in the absence of such capital precluded her from similar opportunities, the kind of experiences she observed to be compelling to medical school admissions committees. As Ariadne's sense of place developed, at first as a source of vulnerability during her high school years and later, as a way to relate with vulnerable patient populations, the disadvantaged essay was a means to reframe her childhood and leverage an otherwise lack of traditional applicant experiences.

**Charles.** Charles spent the first eight years of his life in a farming village in China. His grandfather was an important figure in his life. Not long after Charles was born, his grandfather had an ablative procedure to treat his Parkinson's disease. The procedure, in which targeted areas of the brain are intentionally destroyed, left his grandfather cognitively impaired. Charles explained that the local hospital at which his grandfather was treated did not have the kind of equipment and physicians to carry out some of the procedures available in the U.S. Growing up with his grandfather affected Charles profoundly. Every time he interacted with or even thought about his grandfather, Charles was reminded not only of the impact medical disparities on patient outcomes, but of how far we still have to go in terms of treating many illnesses.

Charles immigrated to the U.S. after his father, a post-doctoral fellow, received a job offer in California. Charles' parents saw the job offer as an educational opportunity for him. In his village in China, there was not much educational infrastructure, rows of little wooden desks, as many as 70 children to a room; the older students would teach the younger ones using, as Charles described, "these old outdated communist books."

Charles spent two years in America before the family was forced to return to China. He explained, “my dad was on an F1 Visa and the [Chinese] government didn’t really want us to stay because they like to retain their scientists so they put a two year limit on our stay, even though we didn’t want to return to China.” Charles returned to China for part of third and fourth grade and then secured another extension to go back to the U.S. This time his family was granted asylum. Charles made a promise to his friends back in China that he would take advantage of all the education he would now be afforded, “when you tell people you are going to the U.S., they think that you are going to have all these opportunities.” By middle school Charles was visiting the local medical school to assist in cadaver lab.

At home, financial difficulties were mounting. Charles’ father was not receiving many employment offers and the ones he was getting were for considerably less than what he had anticipated. Charles explained that when he first came to America his father had his pick of many offers commensurate with his training and education, but since the recession, opportunities were scant. Charles’ father made the difficult decision to go back to school for nursing and his mother who had a master’s degree but did not speak any English was limited to only the lowest paying jobs. This difficult financial period persisted through the end of Charles’ high school career. He debated whether he should go to college. Charles was working most weeknights and every weekend to help his family. At the insistence of his parents, Charles applied to, and received a full scholarship to a top university. Despite the opportunity, Charles considered declining; he wanted to work full-time to help support the family. Charles’ parents placed a high value on education and convinced him to put his academic career first.

Even though Charles attended a top university on a full scholarship, he explained that his first goal was to secure a job so that he could continue to help his family. By October of his freshman year Charles was working part-time for the police department and applying for additional jobs. Before the end of his freshman year Charles was working more than full-time. Charles explained, “I was working three jobs for most of the time I was in college, like 50-60 hours.” Charles continued working more than full-time hours until his junior year when his father completed his nursing degree, gained employment, and the family’s financial situation began to stabilize. It was at this time that Charles was able to pursue research opportunities and the kinds of experiences needed to build a competitive medical school application.

When asked what he hoped admissions officers would take away from his application, Charles said his willingness to “work hard to become a good doctor” and that he “cares about people and wants to help take care of them.” Charles was unclear on whether there was a definition of disadvantage but he recalls there being examples in the application, “like educationally, financially, or special circumstances,” he told me. Charles did not have to think on whether he was disadvantaged. He told me that not only did his family face financial hardship throughout his childhood, but that education was challenging coming to the U.S. and living in a rural area in California he described as “90 percent Mexican.” Charles said, “I came to the U.S. not knowing a single word of English and there was no ESL program in school and they would instruct us in English, which I didn’t understand, and after school everyone around me spoke Spanish, which I also didn’t understand.” Charles gained fluency in English by middle school.

I asked Charles about the concept of disadvantage, what it meant, what circumstances it encompassed, and if he ever thought his own idea of disadvantage differed from his peers. Charles stated emphatically, “Yea! I know people from my class who applied as disadvantaged and weren’t too honest about their financial status.” While Charles found applicant dishonesty concerning, his attitude was casual, as he did not believe many admissions committees cared about the disadvantage essay. In fact, Charles considered not applying as disadvantaged. He explained, “I thought about whether or not to even fill it [the disadvantaged essay] out because I thought no one would even care or bother to read it.” I followed up, asking if he ever encountered an explanation of the purpose of the disadvantage essay, whether from the AAMC or elsewhere. Charles indicated that he did not remember any explanation of how the disadvantage essay would be used.

Like most of the participants in this study, Charles was impacted by the relativism of social comparison. Charles did not feel disadvantaged as a child. He explained, “when I was growing up in a village in China, I had no idea that anything was amiss because everyone else was in the same situation and when I came to the U.S. in California, in the agricultural town off Route 5, everyone else was super poor as well.” Charles went on to share a critical point, “but because I didn’t realize it because of the environment that I was in, that doesn’t mean that I wasn’t disadvantaged.” In sharing this sentiment, Charles was emphasizing the issue of relativity in one’s understanding of identity. And while for other applicants, as was true for Charles, understanding one’s own level of disadvantage may be affected by comparison with peers; there are other applicants still, who may operate less out of a pursuit of authenticity and more out of a

desire for perceived attractiveness to admissions staff. Charles shared that he knew of people who “weren’t too honest” in reporting their level of disadvantage. Charles also knew of applicants who applied as Hispanic yet have no such ties at all. I asked Charles what he thought should be done about such misreporting, whether done intentionally or otherwise. Charles said:

I think you have to let people write the essay and then have the reviewer decide whether or not it is relevant. There really is no way to screen people out. I guess one other way would be to have some quantitative measurement of people’s disadvantage based on a variety of demonstrable factors and that’s not good because that is a deterrent for people who might actually write the essay but don’t meet those particular measures.

Charles may not have been satisfied with the open and subjective Disadvantaged Status, but he was unsure what changes could be implemented that would not be so prescriptive as to exclude applicants who do not fit within the prescribed criteria.

As the interview came to an end, I asked Charles his thoughts on the disadvantage essay and if there is anything he would change. Charles thought the essay provided an opportunity for people to express special life circumstances and that it could be useful for admissions professionals conducting holistic applicant reviews. Charles did express concern though that some applicants may approach this optional essay pragmatically. He reasoned:

If you think about it in terms of economics, what does it cost to write the essay, an hour of your time? And what is the potential gain from someone reading it, getting more consideration on the basis that you are disadvantaged? ... Why would you not write it?

Charles concluded his thoughts on the disadvantage essay by sharing:

It is completely subjective, based on their own life experiences to determine whether or not they are disadvantaged. So I mean for LCME accredited schools, it would be good to have some objective criteria that schools should have to apply



when evaluating an applicant that applies as disadvantaged so everyone is being evaluated the same way.

Charles viewed the disadvantage essay as a “good thing to have for sure, but at the same time, I don’t know how much I like the complete subjectivity of it, but I think there is no good way to get around it though.” Charles came back to the issue of authenticity. There is the opportunity for applicants to, “not be so honest and write things that are not true and there is no way to get around that, but that is an inherent part of the whole application because people lie about the activities too.” Charles expressed concerns that the disadvantage status option, along with other subjective items in AMCAS, allow for, and may even encourage disingenuous applicant responses. Throughout the interview Charles’ thoughts on the application process seemed to alternate between skepticism and apathy, a stark contrast to his otherwise upbeat and imperturbable demeanor. On one hand Charles shared his appreciation for the opportunity to self-advocate in ways that AMCAS would otherwise not capture, but on the other, his concern that not all applicants behave honestly seemed to diminish his faith in the application process, so much so that he almost did not apply as a disadvantaged applicant.

**Jane.** Born in Korea, Jane and her parents immigrated on valid visas; however, their immigration attorney “failed to file the proper paperwork.” As a result, Jane and her family were considered undocumented and suffered the challenges that come with the Status. Jane’s childhood was marked by sacrifice and hard work; her parents worked menial jobs and often went without medical care. Jane shared that when the family was sick they had, “a really old box of medicine” that they brought with them from Korea; “I had never had a physical or anything.” That old box of medicine was their alternative to healthcare.

Due to a lack of medical care growing up, Jane did not solidify her interest in medicine until later into her college career. Jane explained that it was during cadaver lab, later into her undergraduate studies, that she solidified her decision to pursue medicine. The cadaver lab exposed Jane to the “physical part of learning,” she shared. Jane described the lab experience as, “the culmination of everything I had learned in books; everything was interconnected and tangible.” Jane’s lab professor encouraged her to look into pathology, although having recently finished her second year of medical school Jane was most interested in radiology. But with her Disadvantaged Status, Jane felt torn:

I kind of struggle with it a little bit just because ... there are a lot of people I want to help that can't get healthcare and I think I can't really do that as a radiologist so now I am at this point where there is this split with what matters most my intellectual curiosity and supporting people that way.

Jane made it clear that she believes it is important to advocate for others from disadvantaged circumstances.

Jane’s desire to help others, particularly underprivileged individuals stemmed from her own challenges. Jane’s undocumented status was a significant aspect of her identity; it precluded her from financial aid, work, and research opportunities. Jane recalled:

I think it really opened my eyes, especially in the beginning of college when I really struggled. I worked full-time as a waitress because I couldn't get scholarships or federal loans or anything like that, and so it was really difficult. I always felt like, why do I have this undocumented status that prevents me from doing the things I want. There were a bunch of research things that I could have gotten; my PI [principle investigator] wanted to pay me for my research but couldn't. There were so many jobs and funding opportunities that I couldn't get.

As an undocumented applicant, Jane felt the disadvantage essay was the one area she could write about that aspect of her identity. Jane informed me, “I was really happy that the disadvantage essay was there because I felt like I didn't really have time to write

about this in my personal statement and answer that question adequately.” Not only was Jane not sure how admissions staff would react to her Disadvantaged Status, she was also concerned about how they would treat her undocumented status.

Jane recounted calling and emailing medical schools and asking them if they accepted undocumented applicants. She often received conflicting responses from within the same schools. She said:

One admissions person was like, “oh yes we definitely do” [accept undocumented applicants] and another would be like, “we definitely don’t,” so there was just this miscommunication and I felt like people didn’t really know when I called them and explained my situation.

Jane felt like some of the medical school staff did not understand what it meant to be undocumented. The disadvantage essay was a place she felt she could explain that aspect of her life.

Applying as undocumented continued to be a source of anxiety for Jane until a dean pulled her aside during one of her interview days and explained how such challenging circumstances helped her to become a strong medical school applicant. The dean explained to Jane how being undocumented has resulted in her becoming, “so strong, so compassionate, and with a deeper understanding of underrepresented populations.” Jane was glad the dean gleaned those lessons from her essay because when she was writing it, she was unsure what to talk about. Other than a group of peers who were also applying to medical schools as undocumented, no one else had offered Jane encouragement.

Jane worked full-time throughout college and did her best to gain salient experiences, yet had not been sure if any medical schools would accept her on the grounds of her undocumented status. She said:

My entire life was filled with all these doubts, why am I even doing this, why do I have to work full-time as a waitress? Why do I have to have all these tutoring jobs on top of volunteering at the hospital? I always felt overwhelmed. I had to double up on classes to graduate early because tuition was going up.

The receipt of validation from a medical school admissions member changed everything. In Jane's words, "it was pretty amazing, one of the key moments in my life." Jane went on to explain that receiving this validation was critical for her. She explained that the undergraduate career counselors and advisors she spoke with were not familiar with the disadvantage option. Jane said, "A lot of people actually told me, why don't you go back to Korea. It's obvious the opportunities are lacking here." It seemed as though the sources of support in Jane's life were not only unfamiliar with the disadvantage status option, but also any other resources with which to connect Jane.

Jane explained that she did not know about the Disadvantaged Status question ahead of time, and when she saw it in the application, she was inclined to leave it blank. Jane said that it was her group of peers also applying as undocumented who encouraged her. Jane explained, "my friend told me to write it [the essay on disadvantage] so I did, otherwise I don't think I would have filled it out." Since Jane did not initially see herself as disadvantaged, I asked her to describe a person who might fit with the term. Jane said:

I was thinking, oh there is this girl who is homeless and went to Harvard and went through all these drug issues, whereas my parents worked overtime and multiple jobs to support us. I guess there was this point when we could have been homeless but that never actually happened to me so I kind of felt like when it says disadvantage that would be for things that are really bad, like things you see in documentaries.

Not knowing about the Disadvantaged Status, its purpose, or the types of applicants who typically make use of the option, Jane erred on the side that the essay must be reserved

for applicants from more extreme circumstances than her own. In doing so, she almost precluded herself from the option.

Jane did not see herself as disadvantaged. Jane was able to go to college, to graduate, to conduct research and work in a hospital. She said, “I was never begging in the streets, there were a bunch of students that couldn’t afford housing and would sleep on bus benches, so I guess when I thought of disadvantaged, that was my definition.” Jane created a definition of disadvantage that allowed her to remain outside its delimitations.

Reflecting on Jane’s story reveals she came to the U.S. with a limited support system. Jane lacked healthcare growing up. At the time of our interview, Jane’s mother continued to struggle with obtaining healthcare. Jane’s mother worked multiple jobs, and was in “a lot of pain” and with “multiple health issues.” While Jane did not describe herself as having ever been homeless, there were times when she, as she put it, “pretty much lived in my friend’s living room.” Jane needed to work full-time throughout college since, as an undocumented student, she was ineligible for most forms of financial aid. In Jane’s original definition of disadvantage she had the kind of person in mind who might have “had to take an extreme break from college,” whereas Jane had to take one term off because she could not afford tuition.

Like many of the other participants, Jane’s understanding of disadvantage was relative to her surroundings. Jane described herself as “sheltered” in high school. She said:

I went to a magnet school and we used to have drive-by shootings all the time and school would be locked down. People always called it the ghetto, but I never really thought of it like that just because I grew up around it. I remember there was this one time that the principal found this kid that had been shot in the

cafeteria; he was just lying there. The principal sent out a letter but it was just kind of no big deal for kids in our school just because it was so commonplace.

It was not until Jane shared that story with medical school peers to their agape expressions that she realized how different her childhood experiences were. Jane went on to share:

I never really thought about it because it was just so common and I was never in the crosshairs or outside when it happened. I guess I didn't grow up in the best neighborhoods, but I was never pressured into using drugs or joining gangs, so I didn't really feel like I was disadvantaged. I received free lunch tickets because my parents made very little money, but there were kids who, for them, lunch was their only meal of the day, but when I came home I had a meal to eat. I guess I felt really blessed that my parents always provided food for us to eat everyday.

Jane's reflections illustrate the power of social comparison in terms of how applicants may see themselves. As Jane put it, "I guess growing up in that environment there was always someone else who was much more disadvantaged." For that reason, had it not been for her group of medical school applicant peers encouraging her, Jane may not have identified as disadvantaged. Jane described her definition of disadvantage as, "homeless, surrounded by drugs, not having food everyday, having a really broken home." Jane admitted, "I always thought of the very severe side of disadvantage." Jane and I discussed this possibility, that how we see ourselves depends in part on how we compare to others. Jane told me she viewed her childhood as happy, even though she was surrounded by tragedy. There were people she knew that were worse off than her and therefore the Disadvantaged Status was for those people, and could not then also be for her. Jane's definition was reserved for individuals from circumstances she saw as more severe than her own.

Identifying as disadvantaged did not come naturally to Jane, but she took a moment to consider whether there was a time when she felt she fit within her definition.

Jane recalled a time in college. It was 1:00 am and Jane had just completed her shift at the café where she worked. Her boss had just made an incorrect entry in the new computer system and accidentally generated many new orders. Jane explained that she was yelled at as if the mistake was her doing. Jane had finals early the next morning and without a car, still had an hour bus ride before she would arrive home from work. Jane cried on the bus ride home. The combination of exhaustion, having been yelled at, the impending examination, and the limitations of not owning a vehicle had been too much. That was a breaking point for Jane, a time when she felt vulnerable and disadvantaged.

While the option to designate a Disadvantaged Status was not something Jane initially considered, she appreciated the extra space in the application to explain her circumstances. She said, “I think that it is good that it is open-ended just because you can’t account for everybody’s unique experiences.” And while Jane was able to look back on the disadvantage essay appreciatively, at the time, as an applicant, the decision caused her considerable anxiety. Jane explained:

Even when I was writing it I was unsure if I should be, but now after that experience with the admissions dean, I am glad that I put it in the application, but I think otherwise people don’t really get that kind of feedback.

For Jane, prior to receiving feedback from an admissions member, the disadvantage option led to this, “dark kind of should I have done that and is this something that schools actually consider a disadvantage.” Jane’s experience with the Disadvantaged Status option, like the rest of the AMCAS application, was that of an outsider. With her undocumented status, Jane experienced financial, social, and educational challenges throughout her educational career. Jane’s limited social network made finding assistance with the application difficult. Most people Jane spoke with knew little about the

Disadvantaged Status or the process of applying as an undocumented applicant. Had it not been for an insider, a medical school staff member, speaking privately with her during one of her interview days, Jane may have gone all the way through the admissions process not knowing whether or not she should have applied as a disadvantaged applicant.

**Kenny.** Kenny was a first year medical student at the time of our interview. Kenny waited three years after college before beginning medical school. While he completed all the prerequisite courses, he was not prepared to apply during college. Kenny explained:

I did all of the premedical requirements in college but I wasn't plugged in enough with advising and actually knowing what that meant; I just completed all the courses. So I graduated college and talked to my advisor and was like, "I want to go to medical school."

Kenny's advisor encouraged him to take the necessary time after college to demonstrate the high academic performance that admissions committees tended to expect, and also continue to find compelling experiences. After college, Kenny volunteered for six months with a medical mission in a remote part of Africa. Additionally, Kenny completed a biomedical graduate program with near-perfect grades. When he could, Kenny painted houses to help offset the cost of graduate school.

Kenny grew up in a religious family in rural New England. His parents were advanced degree holders, yet worked in a service-related field, so they had to be fastidious with their budget. Kenny was proud of the opportunities he and his two siblings were afforded, despite a modest family income. In describing his parents Kenny explained:



They don't have very much money, but they are very self-sacrificing and good at managing money; we can live on not much money. So we can live on \$40,000 a year but someone living on \$80,000 who has credit cards and a big screen TV doesn't have as much money as we do.

When it came to school supplies, he always had what he needed, and the extra costs of sports equipment, he paid for through part-time and seasonal employment. Kenny was homeschooled until the 6<sup>th</sup> grade, at which point he attended public school.

Kenny described his childhood interests as diverse. He enjoyed playing the violin until high school, at which point it would have conflicted with athletics. By high school, football had become a dominant part of Kenny's identity. Kenny shared:

I learned a lot from football, but in other ways I think it was constricting. I was part of this big group on campus. I hung out with them all the time. It meant that most of my friends were male. I felt like after I graduated I had a lot of growth to do in other ways just because that was such a big part of my life. And I feel if I hadn't played football I would have had more female friends and more arts friends; I would have nurtured that part of me.

To simply describe Kenny as a football player would be misleading. Reserved in a thoughtful manner, Kenny exuded the kind of self-awareness indicative of someone who has spent considerable time on personal growth; "That is what I have been doing since I graduated. One thing I am personally proud of is that I have worn lots of different hats." And, while Kenny was a four year member of his college football team, in his AMCAS application he described how he did not play in a game until his fourth year, but he worked hard to support his teammates. He wrote:

For three years, in season and out, I strengthened my body, studied the playbook and watched film without being rewarded any playing time. I broke through as a senior, starting every game. ... I played a supporting role. ... I received little recognition for my efforts. ... My final season was validating, but the first three years fostered character and resilience integral to my development as a person and a student.

Kenny's reframe of his football years conveyed the importance he placed on personal growth and self-awareness.

Like many of the participants Kenny found the process of defining disadvantage—deciding one's place within that construct, and the ethical factors of declaring the Status in the application, deeply complex. He said, "it feels awkward to have to say whether you are disadvantaged or not." Kenny viewed his childhood as happy; he had supportive parents and many opportunities. For Kenny, labeling himself as disadvantaged conflicted with how he viewed his childhood.

Kenny would not have labeled himself disadvantaged if not confronted with the question in the application. Kenny asked his pre-med advisor what the criteria were for applying, and, he explained; "based on the criteria, we were on Medicaid, that I qualified." Kenny kept his disadvantage essay brief; he stated the reasons he thought he qualified. He explained, "my essay was short; I just kept to the facts." While Kenny thought he qualified to apply as disadvantaged, he would not normally fit within his definition of disadvantage. He explained:

I don't feel guilty that I applied as disadvantaged, but when I think of someone who is disadvantaged, I think of someone who comes from a broken home, or didn't have an adult who cared about them and was self-sacrificing for them. I think that is much more insurmountable. I think if you have a really supportive family, that is more important than any metric.

But Kenny was aware of the competitiveness of medical school admissions and what was at stake. Kenny applied as disadvantaged because, as he put it, "I thought I fit the metrics and I thought it was going to give me an advantage on my application so it was a no-brainer for me." He thought not using every application feature available to him could harm his prospects.

Kenny vacillated as he reflected back on the complexity of the Disadvantaged Status. Kenny struggled with the process of defining the disadvantage and then determining whether he fit within the criteria. He believed he qualified as disadvantaged and even though he would not have called himself such, he was aware that he experienced more challenges than many applicants who grew up in wealthier families. But he acknowledged, “I imagine there are people who come from way tougher circumstances.” He added, “I think the term itself, disadvantage, sounds more denigrating,” although he was not sure what he would prefer as a replacement.

**Matthew.** Matthew was a first-year student at the time of our interview, although he spoke of his purpose in medicine with a maturity that belied his age. Mathew grew up in a conservative Christian family in the South. The son of Peruvian immigrants, his Hispanic and Christian identities dictated much of his early social experiences. His family was active in a predominantly Hispanic church, a pervasive influence throughout his childhood. Matthew explained, “growing up, my family and friends, I mean we went to a Hispanic Baptist church, so that was most of my relationships.” But by high school, Matthew began to identify less and less with the church, to his parents’ disappointment.

While his Peruvian heritage and Christian upbringing were very much significant aspects of his identity, those elements were not the focus of Matthew’s story in the AMCAS application. Matthew explained that his Hispanic ethnicity is important to him but due to the way others saw him, it slowly atrophied to a latent element. Matthew explained it, “I think because I present so White, so pale, it was just not a thing. People don’t interact with me as a Hispanic; it is difficult to explain.”

Matthew described medicine as something he was always interested in, but he found his calling, his niche within the profession over the course of his sophomore and junior years of college. Matthew shared that in high school there was a boy, Jake—athletic, charismatic, full of confidence. Jake was a few years older, he had a great job; “he was just really cool.” Matthew looked up to Jake. Upon returning home while on break in college, Matthew recalled, “I came back a few summers later” to meet this, “whole new person”—Jackie. Jake had transitioned to Jackie; “It was inspiring to see her change so much and be comfortable with herself because I am gay,” Matthew explained. For Matthew, seeing someone he looked up to so comfortable with her identity, “that was truly inspiring.”

However, Matthew learned, Jackie’s transition was not without adversity, and, too often, those challenges came from physicians. Jackie shared that she was unable to find doctors in the U.S. who would advocate for her; she ended up traveling to Canada for her reassignment surgery. In his personal statement Matthew wrote:

As I explored how an individual going through transition works to maintain a sense of linearity while occupying multiple lives within the singularity of one body, my research also began to uncover the disheartening experiences transgender, and queer people as a whole, have with our modern healthcare system. From stories of spouses being denied the right to visit their loved ones after their marriage was annulled post-transition, to the confusion and discrimination of healthcare workers to non-congruent bodies, the litany of ignorance ran deep.

Having discovered the challenges faced by patients and their loved ones, and for no other reason than their transgender identities, combined with his own experiences, Matthew explained that he wanted to become a physician for this marginalized population. To conclude his personal statement in the AMCAS application Matthew wrote:

I have personally faced similar issues of identity and presentation, having struggled to deal with my queer sexual orientation growing up in a strict conservative household. ... I know I cannot address all the obstacles that these marginalized people face regarding healthcare, but I am certain I can contribute to healing the bodies and souls of a few. Just as building the courage to transition was Jackie's first step in realizing her authentic self, I believe beginning the journey of becoming a physician is mine.

Thus, Matthew's interest in medicine began in much of the same way as it seems to for a majority of applicants—an interest in the sciences and/or a desire to help others through the intimacy of the physician-patient relationship. But for Matthew, that nascent interest soon matured into a desire to affect policy and provide compassionate care without judgment for the LGBTQ community.

Like many of the participants in this study, Matthew did not go straight from college into medical school. Matthew took a year off to prepare; he explained, “In undergrad, I just wasn't able to get everything in on time. I didn't take the MCAT on time, when I would have needed to.” When he did apply, Matthew recalled feeling uncertain when he encountered the disadvantaged essay option. He scoured the Internet for any information and ended up finding articles on the more recently implemented SES indicator and matrix, which also has the word “disadvantage” in its name—Socioeconomic Status Disadvantaged Indicator. Matthew explained that when he discovered that his SES Status Disadvantaged Indicator was EO1, which identifies an applicant as having both parents/guardians, or the single parent/guardian with less than a bachelor's education level, he felt validated regarding his right to self-identify as disadvantaged; “I was like good, then this probably fits,” he recalled. Matthew did not realize that they were two distinct items.

Matthew's idea of disadvantage encompassed, "socioeconomic status, if you are a minority, sex or gender differences, orientation, race or ethnicity, or if you are from a rural area or outside the country." Matthew expressed his confusion with not only the definition and purpose of the Disadvantaged Status, but its relationship and overlap, at least in nomenclature, with the SES Status Disadvantaged Indicator. Although, despite his struggle with the terms, Matthew thought his definition was likely broader than most applicants. To illustrate, Matthew shared:

I have this friend and I asked if she did [apply as disadvantaged] and she did not. And she is a Black woman, and I was like, "oh you should have done it; you are very underrepresented in the medical field." But her parents are professors at universities and she has money and she decided it would not have been fair to do that, but I thought it would have been fine.

Matthew considered amelioration of inequitable physician demographics as part of the purpose of the disadvantage option.

In determining his own disadvantage Matthew compared himself to his peers. He described how his peer group increased with privilege as he advanced in education. Matthew shared, "my self-conception of my place in the world has gotten worse and worse as I progress further and further into more elite institutions." Matthew attended a reputable magnet school where some of his peers were the children of doctors, although he did not consider himself disadvantaged at the time, just "average." In college, a small elite institution in the south, Matthew's peers were, "the children of business people and now, here at [this medical school], I go to school with the grandson of [a multi-national manufacturing company]." Matthew clarified:

That is not the norm obviously; there are only so many companies like that in the world, but I think the further I have gone, the more I see the money, connections, and privilege. And in that sense, I have felt increasingly disadvantaged.

To drive home his point, Matthew shared, “I mean one of my classmate’s family donated the money for a major hospital and has had like 18 members of his family attend here. I mean, he uses summer as a verb.” While Matthew did not grow up with such opulent privilege, he felt he had, “a great life.” Although, his first-hand exposure to the type of individual who traditionally applies to medical school helped him realize that despite an otherwise happy childhood, he was entitled to identify as a disadvantaged applicant.

Matthew shared that being asked in AMCAS to self-determine if he was disadvantaged was not a simple task. Mathew explained that depending on who one references for comparison, “you can compare yourself right out of that space.” Or conversely, Matthew also imagined the possibility to draw comparisons with a group so privileged that many applicants could find themselves disadvantaged. He cautioned, “You don’t want to position yourself as disadvantaged if it means displacing someone else who might be more disadvantaged.” Matthew elaborated on the process he used to determine whether he was disadvantaged:

In my mind I think of the quintessential med school applicant and then I go down from there. So anyone whose parents have a bachelor’s degree or higher is not really disadvantaged, or never really had to work, not really disadvantaged, or anyone who didn’t have to balance work and school, not really disadvantaged. People who don’t really have any conception of how much things cost or like, every time I put in a contact, this is like a dollar.

After Matthew shared his thought process, he challenged himself, “Those were economic.” I asked him why that was; “I think it is the first thing that comes to mind for a lot of people,” he responded.

In Matthew’s AMCAS essay on disadvantage, he wrote about financial hardship, about having to work since the age of 16 and how that impacted his educational and extracurricular opportunities. Matthew also wrote about social capital; as the son of

Peruvian immigrants, neither of whom earned bachelor's degrees, he did not have mentors, no one to talk to about educational plans, or to connect him with opportunities to gain medical or research exposure. Matthew ended his essay mentioning that as a member of an underrepresented group, he learned how to advocate for himself. As Matthew shared, having progressed in education to increasingly prestigious institutions, his idea of privilege evolved. He realized that, at least within the domain of graduate and professional education, his experiences were different than many other applicants. Because of his exposure to peers from more privileged backgrounds, Matthew felt empowered to see himself as disadvantaged.

**Richard.** Richard was born in Qinghai, a province in northwestern China. Qinghai is one of the largest areas in China, although its economy is among the smallest. By the standards of his province, Richard grew up in a middle class family; however, compared to the rest of China, his childhood opportunities were limited.

The son of two physicians, Richard's education was of the utmost importance. In order to further his education, Richard applied for and received a scholarship to attend a boarding school in Eastern China. Middle school would be the last time Richard would live at home.

It was in those early days of high school that Richard first felt disadvantaged. Like Charles, who also grew up in rural China, Richard knew his early education was under-resourced compared to many other parts of China, and certainly the United States. Because it was normalized, it was what he knew, and Richard did not recall ever feeling disadvantaged in his home province. In contrast, when Richard first arrived in Eastern China for high school, he was an outsider. Amidst the financial prosperity of Eastern



China, Richard's accent revealed his background. While to some people in Eastern China, Richard's accent brought with it negative connotations associated with being from one of the poorest parts of China, his new high school peers were welcoming. Richard explained that it did not take long before he and three peers from his home province were accepted. Richard went on to reveal that it was actually the school administration that made him feel disadvantaged. Richard explained:

I would say the sense of feeling different came not from peers but from faculty and administration because they didn't interact with us on a daily basis, but when they did, sometimes I felt that they were looking at us as kids who needed more attention.

Richard believed that the faculty and administration were well intentioned but that, "from time-to-time, they assumed things might be difficult because of the kind of preparation where we were from; they made assumptions, maybe too much about our backgrounds." It was those assumptions, those stigmata associated with being from an underdeveloped province that made him feel as though others perceived him as less than, as somehow deficient. Where others viewed the inequitable circumstances from which he came as limitations, Richard felt pride.

While Richard was aware that he came from a province that was under-resourced, both in terms of its economy and its system of education, he was proud of his background. Richard explained, "For my family in particular, when I talk to people, I don't hide the fact that I am from an underdeveloped region in China." Richard was even more proud of what he accomplished in spite of the lack of childhood privileges. In addition to receiving a scholarship to attend a well-regarded boarding school in Eastern China, Richard was awarded enrollment in an international school in Canada for his final two years of high school.

In Canada, Richard immediately felt a sense of belonging. All of the students were international and they all were on full scholarships, regardless of their socioeconomic backgrounds. He explained, “they did not care about my financial background at all; there were students across the full spectrum.” Richard appreciated that sense of equity; it is what he missed in his previous high school years, and what had made him feel disadvantaged.

The pride Richard felt for his upbringing, his home province, and most importantly, for his journey from childhood through college is what led him to apply as a disadvantaged applicant. Richard was appreciative of the space the disadvantage essay provided; “it helped me paint a fuller picture of myself,” he said. Richard continued:

Compared to the general population, my region was underdeveloped, and compared to American applicants, my family would have been even more disadvantaged, if only from an economic and social standpoint. I wanted to make those things clear in my application.

The essay on disadvantage was a place where Richard felt he could explain that he was not afforded as many childhood opportunities as many other applicants, particularly American applicants.

Richard’s admission process was different than any of the other participants in this study. Richard applied to medical school through an early decision program, an internal application that many medical schools offer. While most applicants apply to medical school during or after their junior years, Richard applied a year earlier, as a sophomore. The early decision program used a condensed version of the AMCAS application, although it included the same question on disadvantage and the same opportunity to write an essay describing such circumstances. However, unlike the other participants in this study, Richard did not apply to any other medical school. According

to the AAMC (2015), an applicant may apply to only one medical school through an early decision program, and if accepted, agrees to attend.

Because Richard applied through the study site's early decision program, he was afforded more access to admissions staff than what is traditionally expected. Richard was attracted to the early decision program for several reasons. First, as an international student he had less access to research and medical experiences, and Richard had so far gained less relevant experience than many other applicants. He explained:

I was relatively new to the concept of pre-med, even after a couple years here for college. Before college I had never done anything medically related. Even here I was not able to take advantage of a lot of research opportunities because many of them required citizenship or green card status. Even if they did not require citizenship or green card status, there would have been additional paperwork that is daunting to many employers.

Being a high achieving undergraduate student, yet lacking some of the types of experiences many competitive applicants present, the early decision program made sense for Richard. Furthermore, Richard was attracted to the increased access to admissions staff. He explained:

Part of the reason I went for an early decision program was because I knew the people who worked in the admissions office; I knew the faculty. It was the element of trust that got me through some of the ambiguous information.

While Richard had an advantage over the general applicant pool in the sense that he knew he could ask questions about the application and trust, not only the veracity of the response, but also the school-specific relevance, he still struggled with deciding whether to apply as disadvantaged.

For Richard, deciding whether to apply as disadvantaged was less to do with ambiguity and more with ethics. While Richard initially wondered what constituted being disadvantaged and whether he fit within the definition, the more complex question

was whether he felt he had the right to apply as such. Richard shared that despite his access to admissions staff, he “struggled with whether he had a right to declare.” Richard felt empowered to operate within his own understanding of disadvantage, though he could not help but consider his circumstances relative to others. Richard spoke of peers from China who had even less educational or financial resources, and friends from school in Canada who, “were from unstable areas in the world; their families went through horrific experiences. Their safety was in danger,” he explained.

Richard dealt with many of the same internal struggle as other participants in this study. He had to define disadvantage, determine whether he could fit within his definition, negotiate any conflicts between pride felt both for his accomplishments and for his upbringing and connotations of the disadvantaged label, and whether or not the AMCAS option should be reserved for applicants from even more severe circumstances. Richard knew there were other individuals from more disadvantaging circumstances, though he was able to apply as disadvantaged due to the assurance he received from admissions staff and faculty that he was free to define and qualify his use of the term without negative judgment or repercussion.

**Sarah.** As a first year medical student at the time of our interview, Sarah had experienced more in life than many of her peers. Sarah worked full-time for four years between college and medical school. She needed the time, both to build experiences and support her family. Sarah was proud to share that she was able to save enough money to help her mother afford her own house. Sarah and her extended family, nine in total, all women, save her youngest cousin—a boy with visual impairment, had previously all lived together in one house. Peace was the exception; the creases of her mouth curved

into the slightest grin as she explained, “no one could ever be heard because there was always someone else shouting over you.” But with that vibrant cacophony came a fierce family bond. The family went to great lengths for one another.

At the age of eight, Sarah, along with her mother, aunts, and cousins, emigrated from Europe, hoping to find educational, financial, and social opportunities that had previously been out of reach. When she arrived, Sarah knew only a few words of English and little of American culture. Sarah reflected on the transition, “You should have seen me crying over the flashcards I received. I didn’t want to learn the word sink, or doorknob. It was so difficult” she recalled.

Sarah’s relatives all worked long hours cleaning houses, walking dogs, and carrying out odd jobs so that the younger members of the family could have educational opportunities. Sarah was grateful to her family; as the oldest, she felt the pressure to succeed in high school and beyond. But paving the way for her younger relatives was not the only source of pressure. Sarah was one of about three per grade in her high school of 700 students bussed in as part of a program for underprivileged children. Being surrounded by the expectations and entitlement that prevail among the upper class, Sarah’s peers frequently spoke with certainty of their college plans and beyond. Initially Sarah was just pleased to have made it into a well-regarded secondary school, but as her social environment was influenced by the expectations of her classmates, more pressure to succeed was added to what she already felt in her home life. While her classmates thought about what colleges they would attend and more immediately, what cars they would be gifted on their 16<sup>th</sup> birthdays and where they would spend holiday vacations, Sarah worried about how she would afford the expected family contribution of her school

tuition, the books she would need to purchase, and what she could do financially to help her family.

In high school, Sarah was supported by a scholarship from a non-profit focused on creating educational opportunities for underprivileged children, although a family contribution was still required, and it was a source of worry every year. As her senior year approached, Sarah was unable to pay her portion of the tuition and she feared she would have to attend her neighborhood public school. A mother of one of Sarah's classmates, for whom her own mother provided house-cleaning services, covered the balance of money owed. Sarah was grateful, but also embarrassed. Even among her closest friends, Sarah described her mother as working in healthcare; she and her family were private about their vocations. Sarah explained that it was not about shame, but rather concern over fitting in with a social group vastly different from her own, in terms of background, income, education, social capital, and culture. While Sarah could pass as White, she knew she still stuck out amidst a cohort of society's affluent. Almost all of her classmates were from upper class, White, and Christian families. On the other hand, Sarah was an immigrant, a member of an all-female non-traditional household, expected to be the first to attend college, and a Muslim, and this was not long after 9-11. Sarah explained that she, "felt pressure" not to talk about her religion. She said, "I felt like I was the only one [Muslim] for years, until college." And in terms of the financial disparity, Sarah described herself and the other underprivileged scholarship recipients as, "outsiders, and it was obvious too." In the already fragile world of high school, where differences in appearance, background, and mannerism are sought out like a Colonial

period witch-hunt depicted on a family channel drama, Sarah tried her best to avoid the scrutiny of her peers.

Much of Sarah's struggle to fit in dissipated in college. While other participants described the college transition as uncomfortable at times, as it required challenging the security of homogeneity, for Sarah, leaving high school attenuated some of her feelings of isolation, difference, and stigma. With increasing maturity of self and diversity of her social group, Sarah became more open about her background. And, in those four years of full-time employment following college, Sarah focused on her world outside of her childhood identity; this is when she confirmed her interest in medicine. Sarah knew she wanted to go on to some sort of graduate school, but to her and her family, it all seemed the same:

For my family college was college. We had no idea what was after college; we had no idea what the process was. Was it for four years or six years? We had no idea that the process would be different for medical school than graduate school or dental school. We had no idea.

After college, Sarah searched for jobs that encompassed some of her emerging interests, science, “small molecules—proteins and DNA.” Sarah joined a large research department comprised of advanced degree holders, nurses, physicians, and recent graduates. It was her research peers that empowered her to pursue medicine. Sarah's co-workers aspired towards graduate and medical programs; “they were driven, looking forward to that next step,” she explained. Surrounded by other young professionals planning for medical careers, Sarah started to believe such a path was possible.

Sarah remembered struggling with the Disadvantaged Status option when she was an applicant. In deciding to apply as disadvantaged, Sarah reflected on her high school experiences, how different her circumstances were compared to those of her classmates

and her colleagues at work, another homogenous population. Sarah described her co-workers as fitting the profile of the typical medical school applicant. She explained, “Where I was working, it was highly biased towards a certain type of person who would be qualified to work in that kind of research and healthcare role. ... from a well-to-do family, went to a good college, White.” Sarah explained that by comparison, “my mom lived paycheck-to-paycheck; that didn’t seem to be the kind of experience other people talked about when we had conversations at work.” She continued, “maybe my high school experience was similar, but my perspective was totally different.” Sarah explained that socioeconomic disparity between herself and her classmates were more poignant than any other source of difference. As Sarah noted:

I couldn’t do a lot of the things that other kids could do. There was always an orientation before school started and I couldn’t afford it so I didn’t go. I had to be like, “yea I went on family vacation.” Or people would go off on trips during the summer; I just stayed at home and didn’t really do much besides babysitting and going to the library. Meanwhile everybody else was going off on beautiful adventures to the Bahamas. That was the norm. This is not like normal middle class; this is upper class, a well-off high school. ... And they would go in the summer to their houses in Maine and Florida.

As a high school student, Sarah struggled with the fairness of her circumstances. She explained:

The difference in money was very clear, and from the very beginning. I had a lot of issues trying to get over it because there was nothing we could do about it. I had a lot of talks with my mom where she explained, “this is it. We live paycheck-to-paycheck. You have scholarships, you will go to school, even though we can’t afford the nice things, maybe when you go to college we will be able to afford it.” ... Not being able to go to people’s houses, I didn’t have a car. No sleepovers, all these very minor things sound so stupid, but as a high school student, I know how much my experiences would have been different if I had an even playing field with my peers.

Sarah’s experiences with being at the low end of the economic spectrum in high school, and again in her postgraduate working years, empowered her to identify as a



disadvantaged applicant. During our interview, in an exercise of hypotheticals, Sarah considered how her outlook might have changed had she attended a public school closer to home, with peers with whom she shared more in common. Sarah concluded that, regarding the kind of applicant to whom she chose to compare herself, “I felt guilty” she said. When Sarah contemplated her idea of a disadvantaged applicant, she again voiced guilt; “I felt a little, no I felt a lot of guilt because there are people who I am thinking of that would definitely be more disadvantaged than me.” But because of the experience of being immersed in a culture of privilege beyond what she otherwise would have known, Sarah was empowered to declare a Disadvantaged Status.

**The Hummingbird.** The Hummingbird, as he chose for his pseudonym, applied to medical school at the age of 31 putting him in the non-traditional age category. In his personal statement, The Hummingbird described himself as, “a Wounded Warrior, a world traveler, a Big Brother, a poet and a passionate community servant.” At the time of our interview, The Hummingbird was 34 years old and had just completed his second year of medical school.

The Hummingbird grew up with his four younger siblings in rural Georgia, raised by his mother. While from an Italian-Jewish family, The Hummingbird’s childhood was anything but traditional. He, along with his mother and four siblings, lived in trailer that was given to them for free. In his personal statement, The Hummingbird wrote about his home, “It was old and abandoned, but it was free, and it was ours.” For five years, The Hummingbird slept on a couch in that old abandoned trailer. It was where he learned to love poetry. In his disadvantage essay, he began by writing, “Describing my background is much like creating a portrait using the colors of poverty and discontent.” They could

not afford doctors or dentists. They had a well for their water and they burned their trash to avoid service fees. The Hummingbird could not remember a time when he went shopping for anything that was not an essential item. The Hummingbird and his siblings received free lunches at school. His mother worked multiple jobs and her income was supplemented by government assistance.

The Hummingbird's path to medicine began later than typical. While conducting humanitarian aid in West Africa, The Hummingbird was moved by the health disparities even in comparison to his own mired childhood. The Hummingbird's next move was to join the military where he hoped he could make an even bigger difference in the lives of others. He served in the military until he was honorably discharged following an injury during a training exercise. It was then, in his late 20s, having undergone multiple surgeries and rehabilitation from his military accident that The Hummingbird gained his first significant exposure to the medical profession.

I asked The Hummingbird what went through his mind when he saw the disadvantage option in the AMCAS primary application. The Hummingbird told me, "I remember reading the option and thinking, this might be my only hope." He went on to say, "At the time I did not have anything good about my academics. ... I had Fs on my transcript. So objectively, seeing that box on that application, I was like help me Obi Wan Kenobi, you are my only hope." We both enjoyed a good laugh. In actuality The Hummingbird did have many strengths to his application. The Hummingbird demonstrated considerable service to others, both in the U.S. and abroad; he had military service, and he was earning top grades in a Postbaccalaureate program, and building on his medical experiences.

As a medical school applicant, The Hummingbird was confident in his decision to apply as disadvantaged. He said, “I grew up in housing projects and on food stamps and got beat up, did drugs, of course I am disadvantaged”; however, The Hummingbird would never have chosen to label himself as such. The last line of The Hummingbird’s disadvantage essay read, “I have never called myself disadvantaged, but if there were advantages to be had, we certainly didn’t incur them.” The Hummingbird’s lack of enthusiasm about labeling himself disadvantaged was exacerbated by ambiguity. He confessed he was uncertain as to exactly what constituted disadvantage. Ultimately the reason The Hummingbird was able to confidently apply as a disadvantaged applicant depended not on any understanding of the specifics of the AMCAS term, but instead, his certainty that if there were those who had experienced advantages in childhood, he was not one of them. He exclaimed, “God, if I don’t fit this category, I’d like to meet the people who do.” The Hummingbird may have lacked assuredness in ascertaining an official or authoritative meaning of disadvantaged, but he was certain that he had experienced significantly greater hardship than most applicants, and that gave him the confidence to apply as disadvantaged.

In that moment, considering the disadvantages and advantages of others, The Hummingbird came to question how his upbringing would compare, not only to other applicants, but also to the definitions of application readers. He said, “If I am going to write this, what is it up against.” In contemplating this question, The Hummingbird had decided that an assertion of disadvantage must not only be justified based on each applicant’s own circumstances, but also on an agreed-upon standard. The Hummingbird went on to say,

I was trying to think of the mind of the reader. Is the reader going to look at me and say, “this looks like you have had some advantages,” so what are they going to think? So I remember thinking, “what the hell is advantaged?”

The Hummingbird’s deep consideration on the topic, even several years after applying to medical school, reflected the complexity of the issue. The Hummingbird concluded that he would never presume to know whether others are advantaged, but that compared to those others, he knew his upbringing was absent many of the opportunities that seemed to be part of the typical American childhood.

Since matriculating, The Hummingbird and a number of his classmates had continued to discuss the topic of disadvantage. The Hummingbird shared openly that, in his words:

Some people identified with the disadvantaged thing because they needed an extra box to check. They said to me, I mean, I didn’t know if I was really disadvantaged but they kind of used whatever they could. I mean they even shared that openly with me.

The Hummingbird went on to say, “I think some people certainly used whatever they could to help their application. I understand that, who wouldn’t understand that. It’s the hardest path in the country to get into.” In talking with his peers, The Hummingbird believed that the disadvantage option was something that was, “a trouble card, it felt like that, even though we don’t know shit about the admissions process, it felt like a strong card,” he said.

Ultimately, The Hummingbird believed that it does not matter what applicants write about for the disadvantage essay so long as it is true for them. The Hummingbird said, “that is why it is great that there are two people in the process, the person who has the experience and the person who weighs it in the cohort of experiences.” The Hummingbird believed that the burden should not be on the applicant to determine the

significance of one's experience, at least not to the extent as to justify or compare disadvantage against the other applicants that cycle. Instead, The Hummingbird hoped that applicants would use the disadvantage status option if they truly believed their childhood was abnormally hindered. Leave it to the admissions professionals to determine if the reported circumstances qualify.

The Hummingbird was happy to share his thoughts throughout the interview. He exuded an air of gratitude. While neither reputation nor ranking influenced The Hummingbird's approach to the application, he confessed, "If you are coming from where I am, its like, 'my God, what would my mom do if I went to a medical school like this one?'" Diversity, not ranking, was the most important factor in The Hummingbird's school selection process. The Hummingbird explained that he grew up in the South, "hating gays and Blacks." Having been transformed through his humanitarian work and military service, diversity in backgrounds, experiences, and perspectives were of paramount importance. The Hummingbird explained that his decision regarding which admission offer to accept came down to two schools. He explained,

I was this close (he raised his hand and positioned his thumb and index finger just far enough apart from one another so as not to touch) to going to a radically different place that wasn't prestigious simply because I liked the vibe that I got from the people that were there.

It was the faculty, staff, and students, and the diversity they brought with them that led The Hummingbird in the other direction. After a second visit to his chosen medical school, the range of student diversity impressed The Hummingbird; "I thought, this is what I want, this is where I want to be." The Hummingbird valued diversity in medical school and the profession, and while he was not fond of the label—disadvantaged, he was

in full support of it as a mechanism that could allow a broad spectrum of applicants to advocate for themselves during the admissions process.

### **Participants Who Did Not Identify as Disadvantaged**

**Alex.** Alex grew up in suburban New England, the eldest of three children. At the time of our interview, Alex had just begun his third year of medical school. Alex's interest in medicine was rooted in his passions for research and social justice; the latter was influenced by his well-traveled childhood. While Alex's father was American, his mother was from the Andean region of South America. Alex spent anywhere from four to six months every year in South America where it was not uncommon, as he described it, to see "malnourished children sell candy on the streets" and "live in rudimentary domiciles." Alex's mother was a physician and father—an engineer, although he tried not to take his privileged upbringing for granted. Alex decided he wanted to dedicate his life to helping populations in need, which he believed was the core mission of a medical career. Alex solidified his passion for medicine while volunteering with the Red Cross the summer he started college. Alex described:

Being able to shadow, but also help with the daily activities around the clinic, the lighter duties, I was really able to see the patients, whether they were anxious or angry, and watching a surgery, the whole process, it just felt right to me.

From that early experience Alex committed himself to the study of medicine. Alex hoped to specialize in neurodegenerative disorders, but also wanted to help with basic care in disadvantaged areas of South America.

Alex did not identify as disadvantaged, although he was excited to share his thoughts on the topic. When he applied to medical school, Alex knew immediately that he was not disadvantaged. Alex explained, "I think being disadvantaged means having

fewer resources, and by that I mean reduced opportunities or reduced support networks, or reduced opportunities for education; there are so many factors.” Alex had a stable family and a strong social network. Despite being highly educated, Alex’s parents could not afford to help fund his undergraduate education, but as he explained it, he “didn’t have to work two jobs either”. While financially, Alex may not have been as well off as some applicants, he believed he had the resources he needed to be successful.

Alex and I discussed the idea of relativism that seemed to be pervasive throughout all of the participants’ interviews, the idea that the ability to assess one’s own level of disadvantage is in some part dependent on comparison with peers. Alex believed that because he had a large frame of reference, as a member of a well-educated Hispanic and Caucasian family splitting his time between two disparate experiences— suburban New England and urban South America, he possessed a mature understanding of privilege. Alex thought it was unrealistic to expect applicants who have not yet been exposed to a “full spectrum of human existence” to understand where they fit in in terms disadvantage. Alex said, “I feel if applicants hadn’t been exposed to different cultures and living styles, they would be at a higher likelihood to think that disadvantage is more applicable to them than they otherwise would.” In that statement, Alex alluded to the significance of social comparison, or human need to define one’s self through comparison with others.

As we neared the end of the interview, Alex shared his criticisms of the Disadvantaged Status. Alex explained, “I believe that the term disadvantage may alienate many who have struggled all their lives in order to not be categorized in a position of perceived weakness, or those who may not consider themselves at a disadvantage from their relative perspectives.” Instead of the term, disadvantage, Alex suggested,

“overcame significant barriers” or, “endured significant resource barriers.” Alex thought such a change of phrase might help reframe a potentially stigmatizing label.

While Alex did not apply as a disadvantaged applicant, he had a favorable view of the option, though he had several caveats. Alex acknowledged that he had been afforded a great many opportunities to travel and interact with different social and cultural groups. Alex thought that applicants who have not seen the world from as many perspectives might have difficulty understanding their relative place on the spectrum of disadvantage, and in turn, whether or not to apply as such. And, as other participants also pointed out, Alex felt the label, disadvantaged, connoted negative imagery that could discourage applicants from using the option.

**Ali.** Ali had recently completed her second year of medical school at the time of our interview. I met with her over Skype as she had just begun her first clinical rotation and was out of state at the time. Ali spent the first 11 years of her childhood in India. Growing up in India, Ali’s view of physicians was divided. In her AMCAS personal statement she wrote:

I had always believed that doctors existed to decide and execute treatment plans, not explain judgments, answer questions, or address concerns. While medicine was seen as a savior for its ability to treat diseases, lack of communication led to mistrust and most patients would rather consult home remedies and Ayurvedic treatments – familiar therapies that came with the guidance of either an Ayurvedic doctor or an older family member. In India, medical doctors provided the treatment, but healing was sought elsewhere.

Arriving in the U.S. without college degrees meant Ali and her parents moved often in search of work. The frequent moves did not afford Ali much in the way of a stable learning environment. Ali recalled, “I went to something like six schools in seven years.” Despite the frequent moves, Ali excelled in school.



Ali wanted to go into medicine since the age of five; it was at this early age that her mother began encouraging her. She explained, “Ever since I was little, my mom wanted me to be independent and medicine is one of the respectable professions in India.” Ali confessed that she did not realize what being a physician would entail, but once she began her undergraduate career, she was instantly filled with excitement. She enrolled in the pre-medical curriculum, and as soon as she began to acquire medical-related volunteer experiences, she knew she had made a good decision. Ali attended the same institution for undergraduate study as she has for medical school; as a result, she has spent a considerable amount of time engaged in the local community. Of all her activities, Ali described her work as an Emergency Medical Technician as among the most profound. It was her experiences as a provider on campus that most significantly validated her passion for medicine. Ali explained:

What really confirmed it for me was being an EMT. I was gaining first-hand experience taking care of patients. It was great; I loved it. I love that sort of thing; I am in a moment of crisis and I have the ability to help.

Ali was three weeks into her first rotation at the time of our interview and, with a beaming expression she shared, “one of my patients just quit drinking, cold turkey.” Ali explained that she only had to educate the patient on the health risks one time. She went on, “I was so happy. I really felt I made a difference and that I made the right choice.”

Ali then reflected on her AMCAS application. She considered what she hoped to convey about herself at the time, what impression she hoped to give off and if there was just one idea she hoped application readers would take away about her. Despite being in the start of her third year of medical school, Ali responded quickly and precisely, “I really wanted them to know that I was a person first, that I wasn’t just a number.” Ali did

not want to only be the sum of her experiences that she listed or her biographical data; her goal was to connect with admissions members. Ali knew that such a task was challenging when limited to words on a page. Ali explained, “I knew the application wasn’t the source to convey what I wanted to and I really thought it would be the interviews where I could show my personality.” At the same time that Ali was worried how she would be perceived in the AMCAS application, she shared with me that she did not try to represent herself based on what she thought application readers wanted. Instead, Ali tried to focus in her personal statement on what she described as, “the softer side of medicine.” Ali said:

I hoped that bringing this side of me to the application or interviews would weed out some of the schools because I just wouldn’t seem attractive because I would come off as a touchy-feely person, so maybe non-touchy-feely schools wouldn’t want me. That was okay, that was what I wanted.

For Ali, being accepted for her authentic self was more important than being accepted at all. As Ali phrased it, “If it is going to be for four years, I needed to know I was going to be happy; there is no sense in being miserable.” I admired Ali, “I like that outlook, very brave of you” I said. Ali countered, “or very stupid, thankfully it worked out.”

Ali seemed to have spent a great deal of time in the application process on impression management. Ali explained that she gave considerable thought to whether or not she would apply as disadvantaged. Ali presumed that she was not as well off as many other applicants; “I maybe didn’t have as many financial resources as some of my classmates. I received fee waivers for the AMCAS application and the supplementals.” Ali also considered the, “non-tangible parts to it, do you have the human resources, the connections, can your parents help you?” Ali explained, “My parents didn’t even go to college.” On the other hand, Ali also expressed admiration for her parents. Ali shared

with me, “My parents never let me feel that we didn’t have the financial resources; they always provided what I needed.” If Ali’s reflection on her decision not to identify as disadvantaged was any indicator of what she went through as an applicant, she must have felt perplexed and unsure of herself. Ali confessed, “I don’t know why I didn’t end up marking disadvantage.”

Now that Ali is in medical school and has seen admissions from the other side in her previous role as a student member on the committee, she stated, “I am first-generation college, medical school, immigrant, and so I just feel like the committee probably would have considered me disadvantaged.” Ali continued, “I just remember many times during those committee meetings thinking, ‘that applicant looks exactly like me but they identified as disadvantaged.’” Ali concluded that her definition of disadvantage must differ from others.

Ali did not have a strong conception of disadvantage, at least not one that she felt she could easily articulate; however, she suggested that in general, the label should encompass financial and social struggles. Ali described what she imagined to be a disadvantaged applicant. She described someone, “a lot like me” she said. Ali continued, “somebody of color, somebody who grew up either outside of the U.S. or in the inner-city. Someone who didn’t have great schools or role models didn’t have much in the way of monetary resources or a social network.” Ali stated that her mind “immediately jumped to the inner-city disadvantaged kid whose public schools aren’t that great.” Ali confessed that she was unsure why that formed her vision of disadvantage, but as she continued, the rationale came into focus. Ali thought of the inherent social disadvantages placed on people of color, combined with limited social and familial

support. For Ali, the quintessential disadvantaged applicant seemed to be somebody who, through no personal fault, society had given up on, someone that “no one expects to do anything.” And even after coming to a definition of the term, Ali admitted, “but I think even family support can only go so far.” In that moment, Ali again questioned her conception of disadvantage. Ali shared that she remembered being nervous when she was filling out the AMCAS application. She was so scared she was going to make a mistake that she considered every question, every prompt, with the utmost scrutiny. And regarding the disadvantage status, Ali remembered wondering, “What do they mean by that? I honestly didn’t know what they meant by that.”

Despite her own struggle to determine whether or not to apply as disadvantaged, Ali thought the essay option allowed applicants to be judged, “against the kinds of opportunities they have had in life, rather than that whole pool of applicants.” Ali hoped that applicants’ use of the disadvantage status could help explain from where they were coming, “where did they start from?” she asked; “maybe they don’t have hundreds of hours of shadowing or research and volunteer work because they were working multiple jobs and trying to help the family make ends meet.” Ali reasoned, “it is so hard to try to set the same finish line for everybody. As we all know, I hope we all know, not everybody starts on equal footing, so I think the disadvantaged option helps with all of that.” Ali was pointing out the inherent variability in childhood opportunities from individual to individual. Ali hoped that the option to declare a Disadvantaged Status helped ameliorate inequities. In fact, if Ali could make any change to the disadvantage option, she would increase the word limit and allow applicants more space to write their essays.

Regarding the AAMC's approach to defining disadvantage, Ali was divided. On one hand she thought that, "leaving it vague helps people figure it out for themselves." However, on the other hand, Ali felt there are already "many mind games" in the application process; the vagueness "adds one more." On the other hand, Ali was worried that too detailed of a definition would be constricting. Ali explained:

Invariably we are going to leave somebody out and they might be really disadvantaged and it might not come through in any other part of the application. We will be left wondering why they didn't reach that finish line and then we will be judging them on a different standard than we should've been.

Ali felt, as an applicant, the disadvantage status essay served an otherwise unmet purpose. Ali seemed to understand the challenges of evaluating an applicant based on a written application and interview. Ali spoke of the importance of judging applicants against the opportunities they have had in life rather than against the entirety of the applicant pool. She hoped the optional essay on disadvantage was useful in understanding applicants' relative starting points, any missed or lacked opportunities and what was done with resources that did exist.

**Ana.** Born in California, the daughter of Vietnamese immigrants, 27 year-old Ana enthusiastically shared her thoughts with me on disadvantage. Ana and I met over Skype while she was conducting a rotation out of state; she had just begun her third year. While she did not apply as disadvantaged, Ana recalled her struggle with this question. Ana first contemplated the disadvantage status with her older sister who applied to medical school not long before she did. Ana recalled that neither she nor her sister were confident that they knew what disadvantage meant, at least not within the context of the AMCAS primary application. For Ana, a disadvantaged applicant was someone whose parents worked multiple jobs and still struggled to provide the essentials: food, shelter,

clothing, and a safe environment. She explained, “yes, their level of work is similar to mine, but they have had to overcome so many more things than me, just because their family was not the most stable.” Ana thought that the disadvantage status should be reserved for such applicants who experience severe burdens but still find a way succeed.

In comparison to her idea of disadvantage, Ana enjoyed a supportive childhood. Ana may not have lived a lifestyle afforded to higher SES families, but when asked about her upbringing, she reflected warmly. Ana explained, “I think we were fortunate in that my parents worked very hard in order to put us through school. We were lucky to have gotten scholarships throughout high school and college.” Ana chose not to identify as disadvantaged because, as she put it, “our family was so supportive and because they put our education above basically everything else.” Although, had the disadvantage status come with more explanation, Ana thought she might have been able to apply as such. She asked, “did they mean financial support, social support, or education-wise?” Ana largely blamed ambiguity in definition as the reason why she did not apply as disadvantaged. Because she was not clear on the delimitations of disadvantage, Ana was left to her own assumptions. Ana believed education and familial support were paramount factors in determining disadvantage, and she did not believe she lacked opportunities or support in either of those domains.

Ana always attended private schools, she explained that they were not always the best in terms of academics, but they were safe. Ana attended an all-girls Catholic high school; she was able to get to know each of her teachers due to a small student to teacher ratio. Ana’s parents were actively involved in her education. She shared, “my middle school was five minutes away and my mom drove us every morning and picked us up

every afternoon. We were not allowed to participate in afterschool sports because she thought, well, she didn't like it." Ana smiled and continued, "Draw whatever conclusions you want about Asian moms." Ana's parents took an active role in her education and social development.

While Ana did not recall feeling disadvantaged during her childhood, at times it was apparent to her that her father did, or at least the associated stigma. Ana recalled a time when her father picked her up from school. Ana's father was, as she explained, "a jack of all trades, your gardener and your plumber, that kind of deal." Ana continued:

He drove this 1980s White Toyota and he would pick us up from school when he was working in the wealthier communities doing their gardening and what not. I went to an all-girls private school. ... I remember one time my dad picked me up and we were waiting for my little sister to come out. My dad wondered why everyone was staring at us and he assumed it was because of his car. I thought it was just because we were waiting there for so long. I understood where my dad was coming from, but in my mind, it didn't register that way.

Ana's account reflects the generational difference in how both she and her father saw themselves. It seemed that Ana's father was very much aware of the social, financial, and educational differences between himself and others within the community. Whereas for Ana, the private school experiences and level of support her parents provided seemed to insulate her, effectively attenuating the degree of disparity with peers.

Ana's path to medicine, like many of the participants, happened slowly. Ana always enjoyed the sciences; she said, "I never had an epiphany; kind of like when we do our differential diagnoses, I ruled things out." While shadowing and volunteering, Ana noticed that the medical providers seemed to be happy, despite, "how tired they always looked." Ana continued, "Yes they are tired and yes they hate all the paper work they have to do at the end of the day, but they feel it is worth it because of the people they get

to help.” Ana’s path to medical school was similarly challenging. Not receiving an offer the first time around and then working to improve her experiences and reapply the next admissions cycle was, as Ana put it, “exhausting, disheartening, and expensive.” Amidst the tumult of applying to medical school, Ana’s father grew ill; the experience left an indelible mark on her.

Through strained voice, Ana shared that her father spent two months in the ICU. In that brief period of time Ana dealt with the rapid deterioration of her father whom she loved and cherished. As Ana and her family did their best to cope, they grew close with a resident physician who Ana described as, “the point person” overseeing her father’s care. Ana explained, “you hear these things like doctors are supposed to be objective, that you can’t help your patients if you can’t see outside of the situation,” but that was not what Ana experienced. Ana and her family formed a bond with the resident; she took into account, not just the inevitability that awaited Ana’s father, but also the decisions the family would face. Ana shared, “at the time, when we realized there wasn’t going to be a happy solution to it all, she cried with us. I had never seen a doctor cry.”

Reflecting on her experience with the AMCAS application and the disadvantage status option, Ana, in her upbeat manner that took the edge off of even the bluntest of viewpoints, shared her criticisms. Ana remarked, “I think it [the Disadvantaged Status] is silly on the onset.” She continued, “I think if they really wanted to use it they would have bullets for the different types of disadvantage and then essays to explain why.” Ana’s criticisms reflected her own struggle with the question as an applicant. Had the Disadvantaged Status option been defined or had more examples been provided, Ana might have been empowered apply as such. However, despite her experiences, Ana



found value in the optional essay. Ana believed that many applicants can use the Disadvantaged Status to explain an aspect about their circumstances that otherwise would not be evident in AMCAS.

**Chris.** Chris grew up in Utah with his two brothers and mother. For much of their childhood, Chris' family lived on less than \$25,000 a year. Chris explained that his father abandoned the family in favor of a drug addiction that left his mother as the sole provider. Chris spoke with reverence about his mother. Chris described his mother as a tireless provider and an inspirational presence; she worked multiple jobs in order to provide for the family. She was, and still remains, his hero. When Chris was 12 years old, his mother enrolled in a nursing degree program; she previously worked as a hairdresser. She worked and went to school full-time, and still managed to take excellent care of Chris and his two brothers. Chris was 16 years old when his mother completed her nursing degree. Chris spoke of his mother's educational journey with admiration; she was the reason he wanted to pursue a career in healthcare.

Just into his third year of medical school, Chris thought back to his experience with the AMCAS application; he considered how he wanted to be understood by admissions committees. Chris explained, "I just wanted my true and genuine self to come through." Chris found the process of expressing himself in the AMCAS primary application to be challenging. He explained, "I just felt like a lot of my experiences and parts of my application were probably pretty average in comparison to other applicants they were seeing." Chris wanted to, "jump off the page" so admissions members could see his best side.

Whether or not to apply as a disadvantaged applicant comprised much of Chris' impression management decisions. Despite the financial and social circumstances of his childhood, Chris did not apply as a disadvantaged applicant. Chris explained his decision, "Thinking back, I just didn't feel as if I was entitled to put that. I don't feel like I have been denied any opportunity based on who I am, in my station in life or anything like that." Chris attributed three primary reasons for his decision not to apply as disadvantaged—social comparison, admiration for his mother, and a self-declared personal pride.

Even though he and his two brothers shared everything from Christmas gifts to staples such as toilet paper, for Chris, the frugality did not feel strange; it was what he knew. Chris explained, rather matter-of-factly, that he simply did not notice a distinct and negative contrast to others. Through social comparison, Chris was unable to conclude any differences between his upbringing and others as significant enough to identify with his concept of disadvantage. Even though he was, as he put it, "fairly destitute" for most of his life, he admitted, "I just don't know if I was aware of how below standard we were. We were well below the poverty line." He said, "I never looked at it like those people have so much more than me or I have so much less than everybody else so I think that is part of what went into me saying no [on the disadvantaged question in AMCAS]." Compared to others, Chris did not feel as though he was missing anything during his childhood. Chris was unable to see himself as disadvantaged, at least in part, due to what he identified as a lack of awareness in his relative level of privilege; this precluded him from arriving at the conclusion that he was disadvantaged through social comparison.

Pride in his upbringing also contributed to Chris' decision not to identify with as disadvantaged. Chris expressed an internal conflict between self-advocacy and a desire to honor his family. He proudly reflected back on the job his mother did in raising the family. Chris shared, "even now my mom struggles to make ends meet, and you know we are all out of the house and it's still hard for her with student loans and things like that." Despite financial hardship and the loss of her husband, Chris' mother made sure he and his two siblings were loved and supported. Chris beamed as he proclaimed, "she is just the most incredible woman I have ever met. I don't know anyone who can do the things that she did and to the extent that she did with us." Chris admired his mother and, in part, saw declaration of a Disadvantaged Status as tarnishing.

A self-declared personal pride accounted for the final reason Chris decided not to identify as disadvantaged in the medical school application. Since matriculating, Chris has had the opportunity to review other students' applications. He shared, "I would read applications where they would indicate that they were disadvantaged and I would think kind of in the back of my mind, I wouldn't have considered them that at all and it was at that point that I would confront my own decision to indicate 'no' for that question." While Chris stands by his decision to not apply as disadvantaged, he admits, "I think part of it is I am kind of a prideful person." As an applicant Chris was worried that had he designated himself disadvantaged and his acceptance could have been attributed to that. Chris said, "I never wanted that to be a footnote in my achievements. I wanted it all to be because of my own qualities, what I have done." For Chris, the label of disadvantage was stigmatizing, not just due to what its detraction from the regard in which he held is

mother, but also because within the context of the application he saw it as an extra point, and one he felt he neither deserved nor wanted explaining his application success.

As a child and young adult, Chris did not seem to realize where he stood on the continuum of privilege. Coming from a state college, Chris was not surrounded by affluence to any appreciable extent; this changed when he arrived at medical school. The medical school environment where legacy students and multi-generational wealth illustrate social and financial disparity, often without subtlety or apology, make differences in one's level of privilege unavoidable. Chris explained that coming to medical school, "of course there are classmates of mine from much worse situations than I am but there is also that cohort that comes from privilege and affluence." Chris shared:

I was on a full-ride scholarship in college and I lived at home and worked. Money was never an issue. Now I come here and they don't offer academic scholarships. Most of my expenses are on student loans. The first two years of [medical] school I struggled to afford food and rent and utilities. I remember going to the financial aid office. I said, "I am struggling so hard to make ends meet. My expenses are very low. I cut down on everything that is not essential and yet I have classmates who order out food all the time or go out to dinner, or skiing, the movies, and I can't afford to even feed myself. How are they doing this?" The person in the financial aid office was like, a lot of these students get a lot of money from their family, and she asked if I could do that. I was like, "absolutely not, there is no way I can do that." Since that conversation I have started to feel, for the first time in my life, disadvantaged.

It was evident that Chris experienced many barriers to medical school and that he continued to feel encumbered financially. While more recent experiences observing the privilege of others may have affected Chris' lens of social comparison, he explained that if he could go back in time, he would still decline the option to identify as disadvantaged.

As an applicant, with respect to the disadvantage option, Chris did not understand "what they were getting at." He recalled, "I just remember there was very little explanation and I didn't really have a lot of contact with pre-med advisors or peers, and

the few people I did talk to didn't really have anything to say about it." Chris told me, "I couldn't really get a picture of whether I should say 'yes' or 'no' and whether or not that would behoove me." To clarify, I asked if there was anyone who worked at his undergraduate institution who could advise him on applying as a disadvantaged applicant. Chris explained that he could not find anyone with experience or knowledge on the subject or how it would affect his application. At the time, the application process for Chris was about, "trying to read the minds of the application reader." As an applicant Chris had it in his mind that there was a "secret code that you had to somehow put in your application and they would see that and think, 'yea this guy knows what he is talking about, we should definitely give him an interview.' But if you said one wrong thing in one little part of your application then you wouldn't get an interview." Chris admitted, "I had no idea." But for him as an applicant, it felt like there was a "secret curriculum behind the application, like there are things people look for but they won't tell you that they are looking for them." Chris wondered, "What do I say here? Is this going to shoot me in the foot if I say 'yes' or 'no'? I really had no idea." Confusion led to trepidation as he faced the decision whether or not to indicate 'yes' or 'no' in response to the disadvantage question.

Despite his own struggles with the disadvantage status option, for the most part Chris maintained a favorable view. Earlier in the interview Chris and I likened the disadvantage status to the chip placed on marathon runners' shoes or bibs. The chip is there to track when runners cross the starting line and again when they cross the finish line. Not everyone is able to start the race immediately near the starting line; some people start farther back, and in life, as it is in foot races, the people with the fewest

resources start in the back. However, unlike in foot races, where starting positions are often improvable through training and diet, in life, circumstances beyond an individual's control can prevent equitable access to the resources needed for success. Like the racing chip, Chris thought the disadvantage essay should help admissions committees to account for differences in applicants' starting positions. Chris said:

It [the Disadvantaged Status essay] perks up the reader's ears to say, "I should give this some extra thought." But at the same time, if the application is truly representative of the person, it should come out that this person is disadvantaged. I am not saying we should get rid of it entirely. I don't know I guess I am not really sure what I am trying to say.

Like other participants, Chris vacillated as he considered the value of the Disadvantaged Status. Chris hoped applicants' disadvantage essays would be, "taken with a grain of salt by the reader, in that it is self-reported." Chris again brought up issues of relativism:

You know, somebody in my position from Salt Lake City will answer it differently than somebody from the Bronx, or somebody that comes from an affluent neighborhood. So, it should remain. Overall I think it is a good tool, but it should not be taken as a, "this person answered 'yes,' therefore they are disadvantaged and this person answered 'no,' therefore they are not disadvantaged."

Chris then brought up more concerns about, what he referred to as, "a hidden curriculum," or a gaming of the system:

I think it tells you more about that applicant that answers "yes" and after meeting them during the interview you don't get a sense that they were disadvantaged. That may say something about the applicant. The converse might also be true too. For those that answer "no" and it really does seem that maybe they are more disadvantaged.

As an applicant, Chris had difficulty deciding whether or not to apply as disadvantaged. Reflecting on his application experience, now as a medical student with insider admissions knowledge, Chris had a better understanding of where he fell on the continuum of disadvantage than he did as an applicant. And while medical school made

Chris more aware of his childhood disadvantages, he explained that if he could go back in time, he still would not apply as disadvantaged. For Chris, it was more important to know that he would be accepted on his merit than because of a Disadvantaged Status. Chris felt that designating a Disadvantaged Status would have tarnished his view of his childhood and the lengths his mother went to in order to provide for the family.

**Kelsey.** At the time of the interview, Kelsey had just begun her second her of medical school. Kelsey grew up in Southern California. Both of Kelsey's parents had master's degrees; one taught at a state college and the other at a community college. Kelsey majored in English during college. She was mildly interested in medicine, so she completed the pre-med courses, but was more interested in athletics at the time. It was as an athlete, witnessing the fragility of the human body that Kelsey's interest in medicine increased. While Kelsey never suffered any major injuries, some of her teammates did, and seeing what they went through led her down the caregiver path, although she had yet to decide on a specific discipline. After college Kelsey enrolled in a health professions masters degree. While her program was not specifically designed to prepare students for medical school, there was a small cadre of students who were all there for that reason; the students motivated each other. It was then that Kelsey solidified her decision to apply to medical school.

As an applicant, Kelsey knew right away that she did not identify as disadvantaged. She explained, "I don't feel that I am. I have no area of my life where I really feel like I have had a disadvantage compared to people I think of that have." When Kelsey saw the term disadvantage in the application, she thought of, "financial disadvantage, generational poverty, that is a huge disadvantage, or physical or cognitive

disadvantages, other circumstances in your life where something happened and you didn't have any control over it." Kelsey believed the disadvantage status should be reserved for applicants who truly need to be lifted up.

While Kelsey did not feel that she fit within her definition of disadvantage, she believed it was important for applicants to demonstrate any adversity they have experienced, and any experiences with populations who are medically underserved or underprivileged. For Kelsey, demonstrating empathy and experience with adversity meant sharing her identity as either, "bisexual or queer." Kelsey went on to explain that she shared her identity in the AMCAS personal statement to say, "hey, as a member of this marginalized population, I am empathetic towards the needs of not only this population, but of medically underserved populations." Kelsey emphasized her LGBTQ identity more than she normally would because she hoped to convey her desire to help people, especially members of vulnerable groups.

I shared with Kelsey that I had read disadvantage essays in which applicants wrote about their LGBTQ identities. Kelsey responded, "For me personally, my identity is not at all a disadvantage. I think maybe sometimes identity can lead to situations in which people are disadvantaged, but in general I think they are two very separate issues." Kelsey emphasized, "I think people would be upset if it came up like, 'oh do you have any diversity and was it hard for you?' It is kind of a loaded question." Kelsey explained that diversity and disadvantage are neither mutually exclusive nor inextricably connected, but to allude to a connection reduces an individual's identity to a disadvantage.

Kelsey felt that, while disadvantages that manifest as barriers to preparation for medical school are important to bring to the attention of application readers, diversity that



is neither tied to such disadvantages nor relevant to one's path to medicine should not be solicited in AMCAS. Kelsey clarified, "in the case of sexual identity or gender identity, unless that aspect comes out in their experiences, I don't think it is really relevant to their application." She went on to say that such forms of one's identity should not be represented merely as a box check; "We need a physician workforce that is more representative of the population at large." And for Kelsey, in the case of sexual identity and gender identity, "it is not limited to somebody who identifies with that group but could be somebody who has had rich experiences learning from or advocating for those groups and there are plenty of opportunities to do that on the application" she explained.

Overall, Kelsey appreciated the option to designate a Disadvantaged Status.

Kelsey liked the essay option and that the concept of disadvantage was left open to each applicant's interpretation. She said:

Even just talking with you now and learning that you do use that section to inform your view of the applicant, it is clearly an important piece and as someone who didn't fill it out, I don't feel like I was at a disadvantage because I didn't fill it out. I think there are a lot of parts of the application that are so objective in that you fill in these aspects of your life but this is something that gives you an opportunity if you have an experience or circumstance that doesn't fit into those boxes. I don't know, I think that it is good because you can't assume that the rest of the application captured everything.

Kelsey was not in favor of AMCAS including a definition and was undecided regarding the value of examples in the application of what may constitute disadvantage. Kelsey shared:

I don't think they should define what disadvantage means. I don't know how I feel about them giving examples, whether that is helpful or not, whether people view that as a definition and if you are thinking of writing something that does not fit in the examples, if it inhibits them. People might view that as the scope of the definition; I probably would if I was an undergrad student applying for the first time.

While Kelsey did not identify as a disadvantaged applicant, she supported the inclusion of any instrument in the application designed to create space for personal advocacy. However, Kelsey felt that such advocacy should not be about leveraging diversity for the purpose of gaining an advantage in the admissions process. Instead, Kelsey hoped that use of the disadvantage essay would be limited to the sharing of any circumstances that directly affected an applicant's path to medicine.

**Meghan.** While Meghan did not identify as disadvantaged in her application, she was excited to share her insight. In her AMCAS application Meghan described herself as White and Hispanic; she was just beginning her third year of medical school at the time of our interview. Meghan was attracted to medicine from an early age; although, she grew up in a family with no ties to medicine. Her mother, a researcher in the sciences, instilled in her an academic curiosity. Meghan was also inspired by the stories of the mother of a childhood friend who worked as a nurse. Due to these early influences, Meghan pursued research opportunities as early as her teenage years, and received her first internship in high school. Through that research experience, Meghan was exposed to an interdisciplinary team of physicians and scientists. By the time Meghan entered college, she was already passionate about the medical sciences. Meghan described her path to medicine as “utilitarian;” she knew she enjoyed the experiences she had with being part of a research team, but she also wanted to be involved in patient care. Meghan explained, “Basically everything I want to do, I can do with an MD. If I want to research, it will let me do that. If I want to practice clinically, I have to get the MD.” Meghan came across as strategic, like a chess player who considered a sequence of moves well in advance of their execution.

Despite attending the same college for her undergraduate studies, Meghan did not apply to medical school in what may be considered the traditional fashion—at the end of the junior year. Meghan explained in her secondary application, “after graduating ... I started working in order to save money and learn something in a field I had not explored as an undergraduate.” With no financial support, Meghan ended up working in several roles, some in pharmaceutical research, and some not having anything to do with healthcare, but that simply served to prepare her financially for the cost of applying to medical school. Meghan explained, “I was financially independent; I paid for everything. But, after taxes and living expenses, and then the AMCAS and the supplementals, the money I was able to save did not go far.” Her preparation worked, and several years after graduating, she returned as a medical student.

When she applied to medical school, Meghan contemplated identifying as disadvantaged. While overall Meghan felt her childhood was full of opportunities and support, her high school years were not easy. Meghan’s father suffered from several mental health conditions, including schizophrenia; he also had a history of drug abuse. Meghan described her high school years as, “a destabilizing time.” Amidst her father’s struggles, Meghan’s parents decided to divorce. As she redirected her anger into her studies, Meghan excelled academically, but she was still left in a single-parent home in the aftermath of painful events.

Despite the emotional trials at home, Meghan’s parents did everything they could to support her development; they made whatever sacrifices were necessary to ensure she was supported. Meghan’s parents instilled in her the value of education from an early age, and due to her parents’ support, Meghan did not apply as disadvantaged. Meghan

explained; “I mean I am a White girl who went to private school her whole life and then a [top tier] college. It kind of felt like it would have been ridiculous for me to have checked that box.” Furthermore, Meghan truly felt privileged.

In addition to feeling privileged regarding her educational opportunities, Meghan was not interested in revisiting the circumstances of her home life during high school, especially not with strangers. She said, “I really debated whether to check it or not. It was just going into depth on the same story over and over again. It happened; it is over with.” While Meghan could have applied as disadvantaged, she reflected on her decision not to apply as disadvantaged with confidence. Meghan was appreciative of her educational opportunities and of her parents’ support, no matter what was going on at home. And, not wanting to broach the subject of a time in her life from which she had already healed, Meghan felt she made the correct decision.

While Meghan did not identify as a disadvantaged applicant, she did choose to share that part of herself in the study site’s secondary application. In the secondary application, Meghan wrote, “Perhaps my most intimate exposure to health and disease has come by way of my father. Since my early childhood he has struggled with drug use and has been diagnosed with several mental health disorders.” Meghan described her experiences with her father as preparation for, “the challenges faced by patients and their families. ... I can sympathize with the shame that can accompany a diagnosis and the difficulty of persuading someone to get treatment.” Meghan wrote about her experiences not to revise her stance on whether or not she saw herself as disadvantaged, but rather to demonstrate resilience and empathy.

Meghan thought that if she identified as disadvantaged, it would come up in an interview; “people love to talk about it, your sob stories and that is a callous way to put it, I get why it is interesting and helpful. It provides a really good picture, but I wasn’t psyched to talk about it.” Meghan sighed. Despite her decision not to apply as a disadvantaged applicant, the topic still came up during the interviews. During one of Meghan’s medical school interviews she was asked why she did not identify as disadvantaged, and while the question was unexpected, the interviewer, a student, quickly followed up, “most people will check the box for a paper cut.” The interviewer thought Meghan was entitled to apply as disadvantaged, but Meghan explained that by not applying as disadvantaged, she hoped to avoid the topic. Furthermore, “not knowing how it would be used and what they were asking,” as well as, if her idea of what constitutes disadvantage would be different than her audience—admissions staff and faculty, she preferred not to bring it up at all.

Meghan’s decision not to apply as disadvantaged went beyond her discomfort with discussing her circumstances. It seemed her idea of what constituted disadvantage, and in turn, for whom the optional essay should be reserved were too different than how she saw her own circumstances, thus precluding her from its use. Meghan described her idea of a disadvantaged applicant as someone who did not receive much support from parents or guardians, did not have financial and social resources, or have access to educational opportunities. Meghan elaborated, “parents who don’t speak the language or speak it poorly, or don’t seek out advice, or don’t know how the system works, that would be disadvantaging.” Meghan shared that because she attended a prestigious college, she was surrounded by support from peers, staff, and faculty; “I was surrounded

by pre-meds, they had a pre-med office. I was surrounded by people who fully expected me to go to med school and knew how to support me.” Meghan posited that, had she attended a college that did not have such resources, “maybe there was no pre-med advisor, or they were not encouraging and you had no role models; that would be a disadvantage.” Meghan shared that she thought the disadvantage option was too loosely defined and resulted in too great a burden placed on applicants. Meghan spoke of the breadth in what could constitute disadvantage in terms of “flavors.” She vacillated as she thought about the complexity of the application question and the many sub-elements.

Meghan contemplated in earnest:

What flavor of disadvantage are they asking about? Are they asking about my flavor or are they going to laugh at my flavor. There are many ways you can be disadvantaged, I am guessing that is why they left it so vague.

While Meghan decided not to apply as disadvantaged based, largely, on her feelings that she did not qualify, she was quick to share that ambiguity also affected her decision.

Meghan explained, “but there is definite ambiguity and it added fuel to my decision not to pursue it.” Due to that uncertainty, whether admissions members would hold a similar view or “flavor” of the idea of disadvantage, and not wanting to be in conflict with admissions faculty and staff, Meghan made her decision.

Reflecting on the frustration she felt towards the disadvantage essay option, Meghan vented, “It’s not that it doesn’t get at something important, but it’s just that it is one of those stupid vague prompts that they make up. It’s like, oh, you are providing me no structure; it is incredibly ambiguous, yet I have no power in this relationship.” While Meghan saw the value in providing space for applicants to share their stories, she thought the wording of the disadvantaged option was, “not a thoughtful way to ask the question.”

Meghan's point about thoughtfulness seemed a central tenet during the interview.

Meghan described how, to her, the disadvantaged essay would have required her to be vulnerable with unknown individuals and for unknown reasons. If potentially sensitive events in an applicant's life are solicited, Meghan thought it not unreasonable for the application writers to take the first step by providing more explanation as to the purpose, goals, and use of the essay option.

**Roger.** Nearly 30 years of age at the time of our interview, Roger was one of the oldest participants in the study. Roger took six years between graduating college and entering medical school. He used that time to strengthen his application and to explore other career possibilities. Roger wanted to ensure that if he did apply to medical school, he would be confident in his decision. Roger recalled visits from medical students to his undergraduate campus in which he was encouraged not to go straight through to medical school. Current medical students at the time spoke of "missed opportunities" as a source of regret. Roger described medical school as, "a water slide with not a lot of opportunities to get off the path once you start." Roger also noticed that many medical students delayed a year or more before applying, and that those gap years were used to gain the kinds of quality experiences that often require time beyond the traditional four years of college to acquire.

Roger identified as both Asian American and Hispanic. He grew up in a rural farming community in California where his godparents worked as the only two physicians in town. Many members of the community were migrant workers. At his godparents' home, patients were constantly coming and going; the concept of "business hours" and "the distinctions between friends and patients [were] nonexistent." Compared

to many of his peers, Roger felt well off, so despite his childhood surroundings, Roger elected not to identify as disadvantaged in the AMCAS primary application. Roger explained:

A lot of my friends were much more financially disadvantaged than me. Even just buying things like school supplies was a challenge for a lot of them. I remember sometime in middle school the school district implemented a dress code and I remember it being pretty basic, dark or khaki pants with a green or White polo. I remember that put a lot of financial stress on other families. It wasn't something I experienced though.

Roger elaborated on why he did not elect to identify as disadvantaged:

I think the people who probably wrote the [disadvantage] question, by their definition, I would've fit into that because I am from a very rural area that is medically underserved that has a pretty bad school system. But by my own definition that is just not really fair because I didn't really feel negative effects from it.

Roger and I played devil's advocate and posed hypotheticals to get at scenarios in which he would have identified as disadvantaged. He shared:

I very easily could have said "yes" and wrote an essay about growing up around migrant farm workers and my underfunded public school system but I don't know, even though I would have been telling the truth, I don't know, it just felt like I would have been dishonest and excessively embellishing the sense of struggle that I felt at the time.

Because Roger accumulated significant meaningful exposure to the struggles of disadvantaged and underprivileged populations, by not identifying as such himself, it was as if he was honoring the hardships of others; he was, to his mind, reserving the optional essay on disadvantage for those who he saw as more deserving. Roger said:

Because a lot of my friends were at much more of a financial disadvantage ... I realized that I was in a privileged position where other people weren't, so I think that started seeding in my head for when I thought about whether or not I was disadvantaged.



It was through such social comparison that Roger was able to determine his level of disadvantage.

Like many participants in this study, Roger seemed to reserve the disadvantage status for extreme forms of hardship, and ones that had yet to be ameliorated by more recently acquired privilege. Roger explained:

It is hard for me to see people who, like myself, come from fancy colleges and then write an essay about how they feel disadvantaged. It's almost like, at some point, regardless of how you grew up you ultimately experienced some sort of advantages that kind of negate prior disadvantages and maybe that is not fair and extremely judgmental but at some point I feel you can't say you're disadvantaged when you have a Harvard degree.

Roger expressed dissatisfaction with the presentation of the disadvantage option in the application. He explained:

For me, I took it as a poorly written question. Are you in a disadvantaged position now, or did you come from one? In a way I felt it would almost be a little bit irrelevant. Even if I did grow up in the worst circumstances, the fact that I had already experienced all this privilege, in a way, I think, doesn't allow me to double down. I can see getting into college or maybe a first grad school program but I had already done two graduate degrees, so just sort of still leaning on a place that I grew up to inform a narrative for the past 15 years, that didn't feel right.

Roger's concern was not limited to ambiguity in definition. Roger was concerned, even upset, with the likelihood that some applicants may use the disadvantage status essay as strategic move at the expense of authenticity. Roger explained, "it's almost like people use essays like this as an opportunity to make themselves seem a little better, another way to try to manipulate empathy." The possibility that applicants may game the system went further than simply a concern for fair competition; Roger's sentiments were as much about advocacy.

Roger's definition of disadvantage was broad and inclusive. He said, "The sense of struggle, either objectively or subjectively, people felt when going through those

circumstances.” As an example of what could constitute disadvantage, Roger reasoned, “perhaps a single-parent, single income household where you had to take care of your siblings and had to work, that sort of thing, regardless of where you lived.”

Roger valued an open and inclusive approach to the disadvantage status, yet a disdain for disingenuous uses of the option. Roger shared that he knew of people who used the disadvantage essay more as a tool for embellishment than a place to describe barriers to preparation for medical school. Roger shared that he had a roommate in college who came from a financially stable family who applied as disadvantage. Roger explained that he understands why his roommate chose to write the essay, but that on the other hand, it was difficult to know that people, as he put it, “come from very fancy colleges and then write an essay on how they feel disadvantaged.” Roger admits that his stance was, “not fair and extremely judgmental,” but questioned at what point an individual is no longer disadvantaged.

Roger explained that he was particularly sensitive the needs of underprivileged populations, not just because of his upbringing, but also due to experiences he gained during his gap years. In addition to earning a masters degree in public health, Roger worked for more than a year at a comprehensive addiction facility in one of the nation’s most urban areas. Roger supported people struggling with addictions to painkillers, opioids, and heroin. It was the type of experience where, “you kind of can’t leave as the same person,” Roger shared.

Roger applied to medical school three times before gaining an acceptance, each time, changing his narrative and the impression he hoped to give off. The first time he applied, Roger hoped to convey his background as a member of an underserved

community and that he would be able to relate to and serve similar populations. The second year, Roger hoped to demonstrate that he understood what he was getting into, what the life of a physician entailed. Roger laughed as he explained, “In retrospect, I would characterize my mindset at the time as, ‘I understand what I am getting into. I am an interesting person. Let me in.’” The third time Roger applied, and the one in which he was successful, he described as being about, “the narrative of experiences that I have been through and what I have learned from other people’s experiences with illness and suffering and that I want to help people through those experiences.” Roger’s narrative was about who he was becoming rather than from where he had been.

Each application cycle Roger amended his approach to how he managed his given off impressions; however, it would be inaccurate to assume causality with his eventual success. Roger was unsure what it was that made him successful. Roger only applied to the study site school, where he matriculated, the final year. He shared, “Maybe part of it was my application. Maybe part of it was people making phone calls for me.” Roger explained that at his undergraduate college, he had access to a pre-med advisor who went to great lengths to advise and support students through medical school matriculation. Roger met with his pre-med advisor on many occasions; “I can’t guess how many times we met and talked” he added. Roger shared, “if you even mention you are on a waitlist at some school, without even telling you, he will write a letter to that school as an update.” Roger’s pre-med advisor not only counseled him on the kinds of experiences to acquire but how to describe them in the application; Roger shared, “He would say the stuff you are working on is great and this is how you can frame that in the application.” Roger recalled after the first unsuccessful application cycle, his advisor met with him and

proceeded to critique the entirety of his application, the experiences, the personal statement, and the overall tone. Roger said, “He tore into me, but in a good way. It was one of those meetings where it felt like shit, but was obviously really good for me.”

Roger attributed much of his success to the lengths a pre-med advisor was willing to go.

As we neared the end of our interview, an engaging discussion that lasted several hours over two days, Roger shared his criticisms of the disadvantage status option. Roger questioned the value of the optional essay. He clarified, “I don’t think it is a bad thing to include,” but described himself as, “an outcomes person,” and wondered what kind of applicants are using the option and why. Roger liked the concept of an inclusive and open-ended option, but was concerned for what he saw as an opportunity for “feigned narrative” in which strategy took precedence over earnest self-advocacy. Roger wondered at what point more recent advantages make up for prior disadvantages. Like many of the participants in this study, Roger felt that greater transparency and a more thoughtful description of the Disadvantaged Status would help applicants understand whether they should make the designation and write the essay.

### **Summary of Part I**

The vignettes include a tremendous amount of data. When deciding how to craft the descriptions, I considered only including a brief paragraph, enough detail to distinguish each participant, but not so much as to make referencing while in Parts II and III overly unwieldy. All of the participants had the opportunity to review their narratives, and some underwent multiple drafts of revisions. The narratives represent a version of the participants’ experiences that is true for them (for brief, more-readily consumable participant data, see Table 1 below).

Table 1

*Summary Profiles Of Participants*

	Pseudonym Year in school	Identity	Citizenship	Gender	Alum	SES	Family income	Work before age 18	Contribute to family income	FAP	Pell grant
Identified as Disadvantaged	Ariadne <sup>a</sup> 2 <sup>nd</sup> year	White Asian Single parent household	US	F	N	Unk	< 25	Y	Y	Y	Y
	Charles <sup>a</sup> 2 <sup>nd</sup> year	Asian	China	M	N	EO2	25- 49,999	Y	Y	Y	Y
	Jane <sup>a</sup> 3 <sup>rd</sup> year	Asian Undocumented Single parent household	Republic of Korea	F	N	N/A	Do not know	Y	Y	N	N
	Kenny <sup>b</sup> 1 <sup>st</sup> year	White	US	M	N	EO2	25- 49,999	Y	N	Y	Y
	Matthew <sup>a</sup> 1 <sup>st</sup> year	Hispanic White Queer	US	M	N	EO1	50- 74,999	Y	N	Y	N
	Richard <sup>a</sup> 1 <sup>st</sup> year	Asian	China	M	Y	N/A	<25	N	–	N	N
	Sarah <sup>b</sup> 1 <sup>st</sup> year	White Single parent household	US	F	N	EO1	25- 49,999	N	–	N	Y
	The Hummingbird <sup>b</sup> 3 <sup>rd</sup> year	Jewish-Italian Single parent household	US	M	N	EO2	<25	Y	Y	Y	Y

Table 1, continued

	Pseudonym Year in school	Identity	Citizenship	Gender	Alum	SES	Family income	Work before age 18	Contribute to family income	FAP	Pell grant
Did Not Identify as Disadvantaged	Alex <sup>a</sup> 3 <sup>rd</sup> year	White Hispanic	US	M	N	No	175- 199,999	N	–	N	N
	Ali <sup>a</sup> 3 <sup>rd</sup> year	Asian	US	F	Y	EO1	25- 49,999	Y	N	Y	Y
	Ana <sup>b</sup> 3 <sup>rd</sup> year	Asian	US	F	N	EO1	50- 74,999	Y	N	Y	Y
	Chris <sup>a</sup> 3 <sup>rd</sup> year	White Single parent household	US	M	N	No	<25	Y	N	N	Y
	Kelsey <sup>b</sup> 2 <sup>nd</sup> year	Declined in AMCAS White Queer LGBTQIA	US	F	N	No	Do not know	Y	Y	Y	N
	Meghan <sup>b</sup> 3 <sup>rd</sup> year	White Single parent household	US	F	Y	EO2	50- 74,999	Y	N	Y	N
	Roger <sup>b</sup> 2 <sup>nd</sup> year	Asian Chinese Hispanic	US	M	N	No	Do not know	Y	N	N	N

Note: All data derived from AMCAS application files. Cells containing Unk, N/A, “Do not know” mirror phrases found in application and reflect insufficient data from applicant.

Table 1, continued

–Information not reported in application.

<sup>a</sup>Traditional medical student (matriculates within 2 academic years of undergraduate degree).

<sup>b</sup>Non-traditional medical student (gap of > 2 years between undergraduate degree and medical school matriculation).

Alum = alumnus of study site.

SES derived from the AMCAS Socioeconomic Status Disadvantaged Indicator, based on combination of parents'/guardians' education and occupation. EO1 and EO2 are considered SES disadvantaged (EO1 – neither parent college degree and either professional or service/labor occupation; EO2-  $\geq$  one parent bachelors degree and no parent/guardian in professional occupation).

“No” under SES indicates that the participant was not SES disadvantaged/had an SES EO >2.

Family income in thousands of USD.

Contribute to family = contributing to family finances before age 18.

FAP = Fee Assistance Program. Provides fee assistance for MCAT and AMCAS submissions for up to 15 medical schools.

Pell Grant = Federal aid for college tuition.

## Part II: Themes

The themes are based on 166,539 words shared by the participants and captured in the interview transcripts and AMCAS application files. AMCAS application data included: biographical information, personal statements, experiences and the corresponding descriptive narratives, and, where relevant, Disadvantaged Status essays. While the interview transcripts captured the participants' voices, and the AMCAS applications, their given off impressions, my notes included observations from the interviews, reactions to the data, connections between participants, and hunches about possible themes; these notes provided another layer to the data. To add to the analysis, I returned to the literature and theory detailed in Chapter II, and where necessary, sought additional information.

The analysis followed a constant comparative approach (Altheide, 1987; Gadamer, 1990/1960; Glaser & Strauss, 1967). In this iterative process, I moved between the transcripts, jottings and memos, personal statements and other narrative passages found in the participants' AMCAS applications, and sought connections to the theoretical framework. In each move I identified new codes, and revised and removed previous ones. The codes that persisted were condensed into the themes discussed below.

### Overview of Themes

After condensing the data into what I believed to be a useful and verisimilar representation of the participants' experiences and perspectives, I arrived at the following nine themes: *experience with disadvantage*; *resources*, which included social comparison, social capital, and sources of support; *ambiguity*, both related to the definition of disadvantage and its purpose, *audience*; *stigma*; *pride*—personal, as well as



pride associated with upbringing, *right to identify*; *ethics* (social justice versus gaming the system), and *impression management*. In Part II: Themes, I examine the interconnectedness of the themes and use them to illustrate the general process through which participants negotiated the option to apply as disadvantaged.

The process tree (see Figure 1 below) contains the nine major themes that emerged throughout the coding process. This diagram represents my conceptualization of the process through which applicants make meaning of the Disadvantaged Status in AMCAS. As the sole inquirer and instrument of analysis, and with my own unique worldview, it is quite possible that another researcher would arrive at a different set of themes and a different way of viewing them within the context of the participants' paths through the application process. What follows is my account of the themes at which I arrived and their ordering represents one way to understand the process that applicants followed when deciding whether to see themselves as disadvantaged, and whether to identify as such in the application.

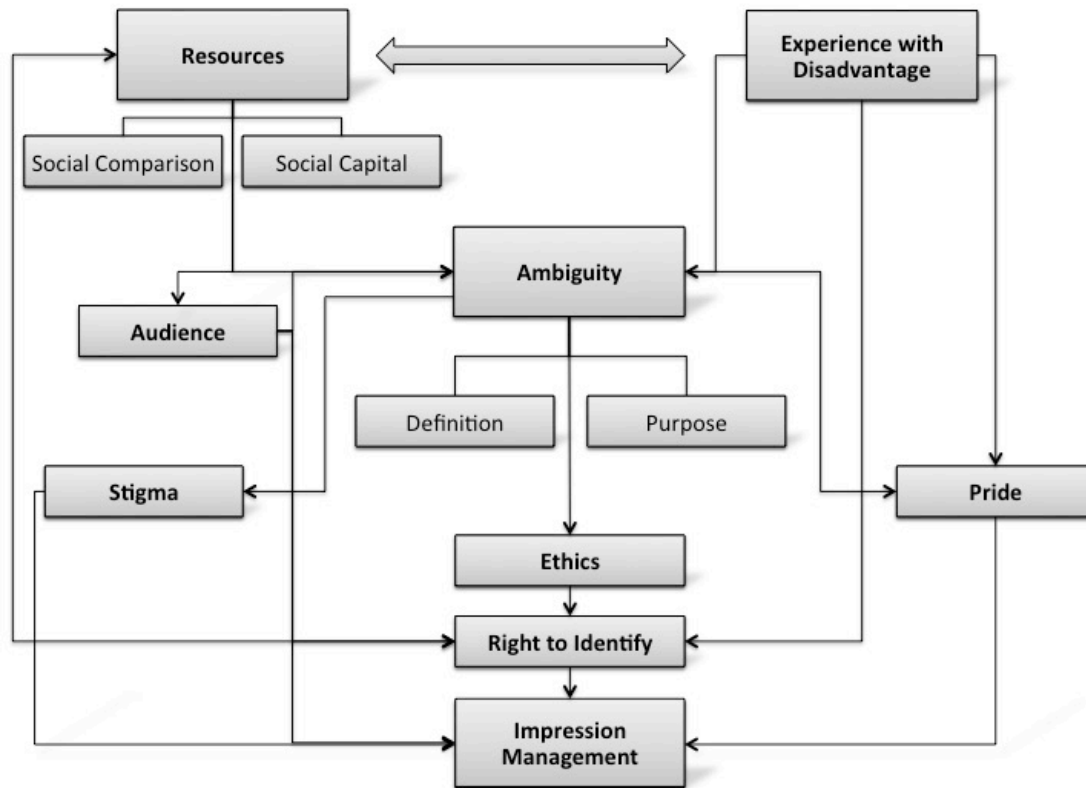


Figure 1. The relationship of prominent themes.

At one point during the first cycle of coding I had more than 60 codes; I found many areas of the data compelling. As I added more transcripts and more application files to the analysis, connections and in turn, more salient findings emerged. Codes associated with weaker data were removed and codes that continued to apply to more recent participants were reinforced, often revised as additional perspectives enriched my own interpretations. Through the analysis I began to observe a pattern that undergirded the participants' approaches to the Disadvantaged Status. The participants relied on certain inputs (ex: experience with disadvantage and resources) and outputs (ex: right to identify and impression management) to decide whether they should apply as disadvantaged. As the participants considered whether they could and should apply as disadvantaged applicants, they relied on their schemas, their personal experiences with,

and what they knew about, or perceived to be true about the concept of disadvantage. It also appeared that participants, in considering whether they were disadvantaged, factored in whether there were others who would be more deserving, and how applying as such would impact their admissions outcomes. This most basic set of tenets extrapolated from the data became the beginning of my conceptualization of the Process Tree.

Experience with disadvantage and resources are located at the top of the Tree to represent the pervasiveness of these themes throughout the participants' processes and their relevance in addressing all five of the research sub-questions. In defining disadvantage, and determining whether they were and to what degree, participants relied on their own experiences with disadvantage, as well as resources, such as any available materials, workshops, and videos that covered medical school admissions topics. Other resources included trusted or knowledgeable individuals on the subject matter, such as, friends, family, and advisers. To confirm their definitions and relative levels of disadvantage, participants relied on social comparison. Audience and ambiguity both affected how participants thought about the definition and purpose of the Disadvantaged Status, which in turn affected how they viewed issues of stigma, pride, ethics and right to identify. Impression management was influenced by all themes in the process.

**Experience with disadvantage.** Disadvantage is often italicized in this dissertation; as detailed in Chapter I, I chose to italicize the term to acknowledge that the AAMC's label of disadvantage and the embedded connotations may not be congruous with all applicants' conceptions. As a theme—experience with disadvantage, does not refer to the AMCAS application, but rather any form of disadvantage the participants experienced during childhood. Experience with disadvantage formed the first theme in

the process tree; I applied it to 130 pieces of data. While seven of the 15 participants chose not to apply as disadvantaged applicants, all but two shared experiences with disadvantage. Alex and Kelsey did not discuss personal experiences with disadvantage. The son of parents who were both physicians, Alex spent his childhood between homes in South America and New England; he had a self-awareness that was supplemented by his worldly perspective and experience with others who were disadvantaged, but acknowledged that he personally had so far led a privileged life. Kelsey came from a stable home; both of her parents had master's degrees and worked as lecturers. Kelsey explained that she did not have any disadvantages growing up, at least not to the point that she would qualify within her personal definition (see below: Part III, Section I).

Participants' personal experience with disadvantage affected how they acted toward the Disadvantaged Status. Most participants' definitions of disadvantage were informed by the way they had so far experienced the world. And for all participants, the degree to which they were able to relate to the concept of disadvantage was influenced by past hardships, both in terms of frequency and severity.

Participants' relative levels of disadvantage or conversely, privilege, affected which groups with whom they had access or drew on for comparison. For example, Chris, who grew up with his two brothers in a single-parent home living on a family income of around \$20,000 per year, shared that, in childhood, he was not around the type of affluence that he observed among many of his medical school peers. Having only recently been exposed to such "privilege and affluence," Chris said, "this is new for me," and, congruent with SCT, because he did not have enough affluent peers with whom to compare his circumstances, he did not apply as disadvantaged.

A participant who experienced considerable disadvantages as a child and grew up around similarly, or even more disadvantaged peers was more likely to construct more severe definitions, and in turn, was less likely to relate to the term disadvantaged. For example, Jane, an undocumented immigrant, was ineligible for many forms of financial aid; she worked multiple jobs since the age of 16, was homeless for a time during college, and had to take a semester off in order to increase her work hours to self-fund her education. Yet Jane would not have applied as disadvantaged had she not been encouraged to do so by peers because she did not think she qualified. Jane defined disadvantaged as, “homeless, surrounded by drugs, not having food everyday, having a really broken home.” She explained that she, “always thought of the very severe side of disadvantage.” To provide another example, Sarah, who immigrated to the U.S. with her single parent mother and extended family, all of whom worked as housecleaners, dog walkers, or in other service roles, for whom purchasing school books was not always possible, or attending annual high school orientations due to student fees, she too envisioned disadvantaged as starting at a place more severe than her own, and had it not been for her two faculty advisers and mentors, she would not have designated the Status either. She explained, “I felt a little, no not a little, I felt a lot of guilt because there are people who I was thinking of that would definitely be more disadvantaged.” Jane and Sarah were not alone; their stories and those of the other participants are weaved throughout Part III of this chapter where I address the research questions.

Any perceived negative connotations, or stigma, that participants attributed to the disadvantaged label affected the degree to which they were willing to relate to the term. Impression management links the previous theories to the experience with disadvantage

theme in that some participants, regardless of their perceived levels of disadvantage, recognized the importance of showing their best sides in the application and were willing to overlook some stigma and SCT concerns in order to leverage any advantage that the Status afforded. When associating with the Disadvantaged Status was perceived as helpful in improving admissions success, participants were more likely to identify with the term, even if they shared similar criticisms, hesitations, and preconceptions as those who did not designate the Status in AMCAS. For example, Matthew thought that the term disadvantaged sounded “disenfranchising.” Charles explained that the label is not a term he would normally choose to apply to himself. Alex, who did not apply as disadvantaged, suggested that the term connotes weakness. In line with Alex’s theory, Chris, who vacillated on whether to apply as disadvantaged, decided not to, in part because he thought doing so would be a mark against his accomplishments, a “footnote” in his record. Several of the participants who applied as disadvantaged shared that the negative connotations associated with the term contributed to their hesitation. But, as Matthew, who did apply as disadvantaged, explained, even though he described the term as “seemingly disenfranchising,” he recognized that the application designation could improve his chance of success.

**Resources.** The resources theme encapsulated areas in the data where participants described how they educated themselves on the option to apply as a disadvantaged applicant. Participants listed sources such as the official AMCAS instruction manual—available as a downloadable PDF, Internet searches, guest speakers and seminars on their undergraduate campuses, family, friends, mentors, advisors, and the use of comparison with other individuals and groups. Resources was a frequent

theme as it also included ancillary themes social capital, sources of support, and, social comparison. I coded 169 pieces of data pertaining to resources.

*Social capital.* As resources, social capital and its ancillary theme—sources of support formed a pervasive component of how the participants understood the definition and purpose of disadvantage, their relative levels of disadvantage, whether they felt they had the right to identify and apply the term to themselves in the application, and ultimately, in terms of their impression management tactics, whether they wanted to be seen as disadvantaged applicants. As a code, social capital was ascribed to places in the data where participants referenced the impact of socially dependent resources on the admissions process. For example, Sarah shared that, “For my family, college was college, but we had no idea what was after college. We had no idea what the process was...”. Matthew explained how social capital affects preparation for the admissions process when he said, “I grew up with classmates whose parents could get them fellowships anywhere in the world while my parents couldn’t do that...”. While social capital focused on applicants’ resources throughout childhood and the effect these resources had on admissions preparation, sources of support was applied to areas in the data where participants spoke specifically about any access they had to individuals who could provide assistance with completing the application. For example, Jane shared, “I didn't really know if I would fill it out, but some of my friends in my situation were just like, you should fill it out, this is something you should talk about.” In contrast to Jane, Richard explained that he “bypassed” much of the “struggle” in deciding whether to apply as a disadvantaged applicant because he had access to staff in the medical school admissions office who could address any of his questions.

*Social comparison.* Participants drew on social comparisons in order to verify their self-concepts, and their understandings of disadvantage—the definition, as well as the purpose (how applicants believe the disadvantage status option was used or should be used in the admissions process). Furthermore, social comparison was among the primary means through which the participants decided the degree to which they were disadvantaged. Much like Clarke and Bennett (2013) found in their research on aging and self-perceptions of age-related illnesses, and Finkley (2016) in studying Black women’s views of body image within an all-female historically Black university, many of the participants in this study reported that their self-conceptions were influenced by the individuals with whom they compared themselves. Clarke and Bennett (2013) found that the elderly participants in their study experienced a reduction in negative feelings about their conditions the more they compared themselves to others in their peer groups suffering similar conditions, and where Finkley (2016) observed that traditional-aged college women’s views on body image were influenced by their immediate social environment. Similarly, in my research, I found that the social groups available or selected for comparison weighed heavily on whether the participants saw themselves as disadvantaged.

As discussed in greater detail later in this analysis, participants were less apt to view themselves as disadvantaged if the people to whom they compared were of similar or greater disadvantage. For example, Charles shared that as a young child in China, he, along with all his classmates, were packed into crowded classrooms, with minimal supplies, and even had to erase and reuse notebook paper. But as Charles explained, because everyone he had to compare himself with was in the same situation, the



experience was normalized. Charles did not have a frame of reference that would have allowed him to see himself as underprivileged until he came to the U.S. and experienced a new, more affluent peer group. Many of the participants emphasized the impact of social comparison on their self-conceptions, specifically on whether or not they viewed themselves as disadvantaged.

**Ambiguity.** Ambiguity was a prevalent theme. Participants were unsure about many parts of the admission process. I coded 86 references to ambiguity in participants' interview transcripts and AMCAS files. I grouped ambiguity into two categories, ambiguity related to the definition of disadvantage, and ambiguity related to the purpose.

Participants who felt unclear on the meaning and purpose of the Disadvantaged Status expressed anxiety. In line with SCT, in the absence of resources to aid applicants in understanding the meaning and intent of the disadvantaged option, applicants relied on social interactions and comparisons. Depending on the social groups to which participants belonged, they were more or less affected by any perceived ambiguity. As humans—thinking beings that make sense of the world through social interaction, the way we feel about ourselves is, in part, a product of with whom we compare ourselves. Participants, who compared themselves to individuals less privileged than they were, tended not to see themselves as disadvantaged. According to SCT, similarity normalizes. If individuals compare themselves to others who share similar experiences, characteristics, or beliefs, those circumstances become normalized.

*Definition.* Many participants shared that they were unclear as to the meaning of the term—disadvantaged. I coded 68 of the 86 references to ambiguity as relevant to the definition of disadvantaged. For example, Sarah explained that she “did a lot of

research” and was unable to find any materials by the AAMC to help her decide. Sarah was “disappointed...[that] it wasn’t clear cut.” Several of the participants thought that the disadvantaged option dealt with socioeconomic disadvantages due to its proximity to the SES Disadvantaged Indicator. Six participants believed that the similarity in name and/or proximity of the SES Disadvantaged Indicator added to the confusion and influenced their definitions towards more financial leanings. Ana wondered whether the question was specific to “financial, social, or educational” disadvantages. Kenny explained that because he had just been asked about, “those qualifiers ... leading up to ‘do you want to apply as disadvantaged,’ I guess I interpreted as falling on those questions.”

*Purpose.* Ambiguity related to the purpose of the disadvantage question did not appear as often; it accounted for the remaining 18 out of 86 codes. It seemed that for the participants, their decision processes were affected first by understanding the meaning of disadvantaged, and then by considering its purpose. Because ambiguity related to the definition of disadvantaged was so prevalent, it seemed to overshadow participants’ consideration of how the essay would be used. Sarah did not know how the information from the disadvantaged question would be used and who would see it, and as a result, she did not disclose any information that dealt with her religion or culture. And for Meghan, “not knowing how it would be used, or what they were asking, it seemed like the safer option was not to check the box.”

**Audience.** Goffman (1959) offered a dramaturgical metaphor for exploring social order, and I selected it as a component of the theoretical framework in this study. Audiences, as part of Goffman’s (1959) metaphor, fit as a thematic code for categorizing

participants' references to the admissions staff and faculty, who are endowed with the authority to make judgments about applicants, and whether or not to grant preliminary membership in the medical profession—as student doctors. I coded 27 references to audience.

Participants were interested to know how their audience defined disadvantaged so they could adjust their interpretations accordingly. For example, Chris shared that he was, “trying to read the minds of the application readers.” In considering if she “qualified” as disadvantaged, Sarah asked, “Will the school think I am stupid? Will they not think I am disadvantaged? I might just fit the mold of another White female.” Kelsey explained that, “So many of my advisers emphasized that ... somebody is going to read and sum you up just like that.” Participants mentioned issues related to audience when discussing ambiguity, both in terms of definition and purpose, impression management, and right to identify.

**Stigma.** Goffman's (1963) work on stigma and social identity lent perspective to applicant behavior when potentially stigmatizing labels are applied to people's identities. I coded 16 salient references to the stigmatizing language of the label, disadvantaged. Eight of the 15 participants mentioned stigma, or more often, concerns with the label that I recoded as stigma. For example, in his Disadvantaged Status essay in AMCAS, The Hummingbird wrote, “This term ‘disadvantaged’ carries with it a host of assumptions, not all of them accurate, and many of them quite erroneous.” The Hummingbird went on to explain to the application readers that he had never considered calling himself disadvantaged. Ana felt that the indicating a Disadvantaged Status “was trying to say, ‘oh poor me...’”. Jack cautioned that the Disadvantaged Status “may alienate many who

have struggled all their lives in order to not be categorized in a position of perceived weakness.”

**Pride.** I separated pride into two categories, pride related to upbringing, and pride in self; this included instances in the transcripts and applications where participants discussed admiration for family or personal accomplishments and a desire not to minimize either by associating with the Disadvantaged Status. Ten participants spoke about pride and its impact on how they felt about the disadvantaged option. I coded 32 references in the data, both from the transcripts as well as the AMCAS application files. Meghan, who did not self-identify as disadvantaged in the application, explained that, “despite the emotional stressors at home...the things that gave me trouble, that made me disadvantaged (she gestured with hands to place the label in quotations) also made me resilient.” Meghan was proud of what she had accomplished despite disadvantaging circumstances, and decided that resilience, not disadvantaged, was the framing with which she identified. Ariadne, The Hummingbird, Jane, and Chris were proud of their mothers for raising them as single parents. While Ariadne, Jane, and The Hummingbird each spoke of their single mothers with admiration, they still were able to apply as disadvantaged applicants; however, Chris admitted that pride was a major component of his decision not to apply as disadvantaged. It was evident that pride was important in many of the participants’ stories, and even in their processes for determining whether or not to apply as disadvantaged applicants.

**Right to identify.** I defined the right to identify as participants’ beliefs regarding whether or not they qualified as disadvantaged within their, or some other individual’s definition of the term, and, if the degree of qualification was enough to justify declaring

the Status in the AMCAS application. Right to identify depended, to varying degrees, on all of the aforementioned themes. I coded 74 instances of right to identify between participants' transcripts and AMCAS applications.

Jane mentioned the right to identify when discussing social comparison and definition. Jane shared, "when I think about disadvantage I was thinking, oh there is this girl who was homeless and went to Harvard and went through all these drug issues." By comparison, Jane was not as disadvantaged as her definition and as a result, did not initially think she had the right to identify. Roger admitted that he "very easily could have said yes and wrote an essay about growing up around migrant farm workers and my underfunded public school system," but felt that he no longer had the right to identify given his recent opportunities, such as graduate school, as well as his experiences working in a drug addiction facility.

**Ethics.** I defined ethics as participants' concerns regarding social justice and gaming the system. I coded 35 passages of data as relevant to ethics, although, there were arguably many more instances given the overlap with right to identify, as depicted in the process chart. Some participants explained they believed the Disadvantaged Status should be reserved for only the most deserving applicants, individuals from dire circumstances and/or from marginalized groups that are underrepresented in medicine. And, some participants were concerned that applicants who did not personally experience the types of challenges that would give them the right to identify still designated Disadvantaged Statuses.

As I mentioned in the previous section, there was considerable overlap between ethics and the right to identify. Many of the right to identify concerns revolved around a

social justice component—“I imagine there are people who came from way tougher circumstances,” Kenny believed. Or as Matthew cautioned, “you don’t want to position yourself as disadvantaged if it means displacing someone else who might be more disadvantaged.” While these examples fall within concerns over what, or even who, gives someone the right to identify, they also support a theme of ethics. Participants were concerned that privileged individuals were designating Disadvantaged Statuses to improve their competitiveness and that such actions could take away from those who the option was designed to help. Participants discussed concerns over peers who “weren’t too honest,” and that “people lie in the activities section too.” Ethics and the right to identify seemed to relate to the theoretical frame in that the performative element affected participants’ views of the Disadvantaged Status. In deciding that the option should be reserved for more “deserving” applicants than themselves, participants aligned with the audience—the gatekeepers of the profession, by sharing the responsibility to protect the sanctity of the Disadvantaged Status.

**Impression management.** Impression management, as described by Goffman (1959) accounts for how and why individuals operate as social beings, the goal-driven nature of interactions, and the tactics embedded in communication. I applied the impression management code to 138 passages of data, which overlapped the most with experience with disadvantage and audience. Congruent with IM tenets, participants worked to uncover the motivations of admissions officers, as they represent their audience and have the power to grant or withhold entry into the medical profession. The participants sought to present themselves in ways their audience would find appealing. For example, Ariadne hoped to demonstrate that because of the disadvantages she

experienced, she had gained qualities that would make her a more compassionate caregiver. She explained that you “don’t really know what it is to have been through those experiences until you have lived it.” The Hummingbird also framed the adversities he had overcome as why he would be a caring and relatable physician. The Hummingbird wrote, “I feel I have presented an appropriate personal collage, with an emphasis on serving those in need, as this correlated to my own experiences growing up.” Participants explained that while they were not confident that they knew or understood the meaning of disadvantaged, or if they qualified, they hoped to demonstrate the kinds of experiences associated with physician preparation. The participants also sought to give off the impression that they embodied compassion, as demonstrated through experiences with adversity. For example, Kelsey, who did not apply as disadvantaged, shared in her application that she identified as “either bisexual or queer,” and that she did so to express, “hey as a member of this marginalized population I am empathetic to the needs of not only this population but of medically underserved populations.” All of the participants, regardless of whether they applied as disadvantaged, felt it was important to give off impressions in the application that they were prepared to serve an increasingly diverse patient population.

## **Summary of Part II**

In Part II, I described each of the nine themes and the relationship with the theoretical framework. As with Part I, where I described each of the participants, Part II served, not only as a repository where readers may refer back, should they want to review a particular theme, but also as an analysis in and of itself. Themes were defined, described, and connected to the four social theories—SI, SCT, IM, and Stigma.

### **Part III: Addressing the Research Questions**

Part III of Chapter IV is separated into five sections, one for each of the research sub-questions. I describe participants' perspectives and make connections between themes and the theoretical framework in order to address the overall research question: How did medical students make meaning of the option to identify as disadvantaged in the American Medical College Application Service (AMCAS) when they were applicants?

#### **Section I: What is Disadvantage?**

In this section, I address the sub-question: How do former applicants define disadvantage? Salient themes include: experience with disadvantage, resources, and ambiguity. I present data from participants' experiences, attitudes, and beliefs corresponding to each of the salient themes. I provide a description of each participant's definition of disadvantaged, explore how participants came to their definition and connect their insights to themes and theories.

Most participants expressed a lack of confidence in their understanding of exactly what the AAMC meant by disadvantaged. While The Hummingbird applied as a disadvantaged applicant, it was evident in his interview that the ambiguity surrounding the Disadvantaged Status was frustrating. The Hummingbird shared, "I think my first sentence about this (referring to his disadvantaged essay) was that I don't know what the hell disadvantage means." The Hummingbird drew upon his personal experience with disadvantage and ran through a checklist of his experiences and attributes that he saw as congruous with the examples provided in the AMCAS application—financially, educationally, and socially. The Hummingbird explained that he spent five years living in a trailer in rural Georgia with his mother and three younger siblings and sleeping on



the couch; “I immediately thought, ‘of course I am disadvantaged.’ I mean, I grew up in housing projects and on food stamps and getting beaten up and doing drugs, of course I am disadvantaged.” Roger also operated off of the examples that were provided in the application prompt. Roger tried to recall the examples that AMCAS provided; “there was some subtext like, you might be disadvantaged if you come from,” though he was unsure as to what came after. I pulled up the prompt and read it aloud. Roger’s expression confirmed that those were the examples he had tried to recall. Roger explained, “I remember that became my working definition.”

In terms of resources, Roger had an advisor as well as a physician mentor although he did not ask either of them about the definition of disadvantaged; he explained that they both kept “insane schedules.” Roger took the Disadvantaged Status prompt in AMCAS as the literal and complete scope of the definition; although, he admitted that the description brought more questions than answers. Roger did not lean on the examples by choice; he was unable to come to a conception of disadvantage in which he could be confident.

Like Roger and The Hummingbird, Charles took the examples provided in AMCAS as the delimitations of disadvantage. And like The Hummingbird, Charles applied as a disadvantaged applicant. Charles was unsure how he came up with his definition he said, “I don’t know, I think there was a prompt for that, like educationally, financially, or otherwise disadvantaged, like special circumstances.” Charles shared that he was neither surprised to see something like the disadvantage status nor did he give it much thought; he encountered similar questions in applications for research internships.

Charles remembered a question that pertained to financial disadvantage on the Common App when he applied to undergraduate schools.

While The Hummingbird, Roger, and Charles all limited the definition of disadvantaged to the examples provided in AMCAS, Jane, Ana, and Ali based their meanings on what they imagined the quintessential disadvantaged applicant might look like. Jane, who applied as disadvantaged, shared, “when I thought of disadvantage, I was thinking, ‘oh there was this girl who was homeless and went to Harvard and went through all these drug issues.’” I asked Jane if she could say more; she explained, “I kind of felt like when it said disadvantaged, that would be for things that are really bad, like things you see in documentaries.” Jane initially considered disadvantage to encapsulate only the most severe of circumstances.

Ana came from a modest background, her parents were active in her educational development and she remembered struggling, not only with the question in AMCAS, whether or not to apply as disadvantaged, but also with coming to a definition. While Ana did not apply as a disadvantaged applicant, her characterization of disadvantage was similar to Jane’s. Ana recalled a scene from a movie,

There was this family, a Black family, single mother, their father had been in prison and afterwards abandoned them. The mom was working two jobs to provide basic necessities. On the kitchen table there was macaroni and cheese, hot dogs, that kind of stuff, not the best nutrition but at the same time you could tell the mom didn’t really have any time to raise the children. One child was older, maybe 17 and his younger brother was maybe 13. They lived in a rundown neighborhood in an apartment with a backyard completely overgrown. Throughout the course of the film you could tell the older brother was involved in gangs.

Ana explained that this scene stuck with her because it was representative of the, “anti-American dream where no matter how hard you work, sometimes the cards are just

stacked against you.” Ana thought that the disadvantage status should be reserved for similar circumstances. Ana expressed frustration with the ambiguity in AMCAS; “did they mean financial support, social support, education?” she asked. Ana’s experiences growing up “financially disadvantaged,” as she put it, but with supportive parents who place a high priority on her education, led her to see disadvantages related to social support and educational opportunities as paramount; this may explain why she drew upon the aforementioned movie scene in visualizing her definition.

Ali did not apply as a disadvantaged applicant. Like Jane and Ana, Ali thought of disadvantage in terms of a persona. Ali shared, “I have this picture of somebody out there alone in the world, without any kind of resources, whether financial or human, or whatever.” Jane, Ana, and Ali all viewed disadvantaged as reserved for the most severe circumstances; their interpretations seemed to take into consideration their own levels of privilege and then start at a place more severe. Jane, Ana, and Ali all described growing up in intact households, with happily married parents who provided support. Jane and Ali both imagined a disadvantaged person to be someone with no social support, homeless, and as Ali described, “out there alone in the world.” Similarly, Ana described someone supported by a busy single parent, barely able to meet basic needs despite working multiple jobs.

Jane, Ana, and Ali’s approaches to defining disadvantage were based on considerations of their social circumstances. As symbolic interactionists posit, individuals behave towards situations based on the meanings they have for them, and those meanings are socially derived. Because the concept of disadvantage is socially constructed and has been left ambiguous in definition, it fell to the participants to devise a

meaning, and those meanings had to come from somewhere. Jane, Ali, and Ana relied on their own experiences to give meaning to the Disadvantaged Status. As a premise of SCT, it can be said that those attributed meanings were the product of comparison with others, either with whom they shared similarities or with whom they sought to gain favor. Since Jane, Ali, and Ana all reported having limited social resources when it came to the AMCAS application, they were left to formulate their meanings based on comparison with their social worlds. All three participants talked about how their circumstances were normalized within their environments; since they, as well as all their peers experienced similar disadvantages, their definitions of a disadvantaged applicant needed to encapsulate someone from more challenging circumstances.

Chris also talked about his experiences being normalized. He had experience with disadvantage but he did not view his circumstances through such a lens, at least not during childhood. Chris grew up as one of three children to a single mother in extreme poverty, but did not apply as disadvantaged. Chris admitted that, at the time when he was applying, he did not put much thought into defining disadvantage. Chris' described disadvantage as, "something about you and your circumstances that have denied you an opportunity." Chris continued, "if something about you or who you are make it so that others will actively, whether consciously or subconsciously, try to prevent you from progressing in life." And, as Chris shared during our interview, he always felt fortunate for the opportunities he had growing up. It was not until Chris entered medical school and he shared his background with classmates that he realized he might have been more disadvantaged in childhood than he had previously believed.

In contrast to The Hummingbird, Roger, and Charles who described disadvantaged only within the delimitations of the three examples provided in the AMCAS application, and Jane, Ali, and Ana, who relied on comparison with their social circumstances to create fictional embodiments of disadvantage, all from more extreme circumstances than their own, Sarah drew upon social comparisons with what she perceived as the typical medical school applicant. Sarah applied as a disadvantaged applicant, although she was “disappointed” with the application question. She shared, “I was like, ‘what the heck does this mean?’ It wasn’t clear; it was another thing I had to research.” Sarah solicited the advice of her mother, her mentor, and her advisor. She explained that none of the three of them seemed confident in their interpretations either. Sarah searched on the Internet, “I found a couple of articles, but nothing from the AAMC,” she explained. In searching for an explanation of the Disadvantaged Status option, Sarah’s Internet searches mainly yielded information on the similarly named “SES Disadvantaged Indicator,” an instrument added to the AMCAS application in 2014 to designate applicants as disadvantaged in terms of their SES as determined by a combination of parents’/guardians’ education and occupation.

Despite not being able to find any official definition of disadvantaged, Sarah seemed to have a thorough understanding of the term. Sarah described disadvantaged as a question of, “What were the obstacles in your life?” Sarah listed what she believed were the categories of those obstacles, “social, monetary...where you live, rural versus urban...anything out of your control in childhood that limited you.” Sarah spent a great deal of time researching the Disadvantaged Status, and came away frustrated by the lack of any official definition or explanation. As Festinger (1950; 1954) explained in his

theory of social comparison, in the absence of empirical information, individuals must rely on comparisons with others. Absent satisfactory information on the Disadvantaged Status, Sarah determined her definition through social comparison. While Jane, Ana, and Ali also relied on social comparison, Sarah's comparisons were with who she perceived as normal and typical of individuals who traditionally applied to medical school. Sarah explained that she thought of the applicants who, "grow up in a two-parent household and they grow up and are able to go to college and don't have to worry as much about money." Sarah's strategy of comparison with whom she perceived as a typical medical school applicant seemed to be shared by other participants.

Like Sarah, Ariadne considered the definition of disadvantaged through determining the typical characteristics of a traditional medical school applicant. Ariadne identified as disadvantaged in AMCAS; she came from a household in which her father did not prioritize the family and was seldom around, which left her mother, an ESL immigrant, to raise the family alone and on a limited income. Despite her hardships, Ariadne's mother provided an unparalleled support, making sure Ariadne had access to the highest quality educational opportunities. Ariadne attended a highly regarded private boarding high school, though she was never oblivious to her social or financial contrast with her peers. Ariadne defined disadvantage as, "any life circumstance or identity characteristic that could have precluded you from obtaining certain opportunities or reaching the same level of achievement as peers...who get into medical school." She acknowledged, "There are so many factors." By the time I was done reviewing her transcript, I noted that Ariadne's definition of disadvantage encompassed race, ethnicity, sex, sexual orientation, parents'/guardians' education and income levels, physical or

cognitive disabilities, ongoing medical issues, immigration status, single parent, and ESL status of applicant or parents/guardians.

Alex also seemed confident in his understanding of what is meant by disadvantage. Alex's definition focused on deficits in resources and opportunities. Alex shared, "I think being disadvantaged means having fewer resources." Alex went on to describe what he meant by fewer resources: limited financial opportunities, support systems, and educational opportunities. Alex's understanding of disadvantage was informed by his bifurcated childhood; half of the time he lived in rural New England and the other half in a large and financially diverse city in South America. Alex witnessed tremendous disparity growing up, though was never victim to such hardships himself and he did not identify as a disadvantaged applicant.

Like Alex, Kelsey did not identify as disadvantaged, and she too seemed confident in her definition; she provided an almost prescriptive list of categories. Kelsey listed, "financial disadvantage," as well as, "generational poverty," and "physical or cognitive disadvantages." Kelsey followed her list up with any, "other circumstances in your life where something happened and you don't have control over it." Kelsey also pointed out what she believed disadvantage was not. She shared that she would not like to see identity ever related to disadvantage. Kelsey explained, "My identity is not at all a disadvantage." She went on, "I think maybe sometimes the diversity aspect, people are disadvantaged for various reasons and the identity brought up situations in which they may be disadvantaged, but in general, I think they are two very separate issues." To emphasize her point, Kelsey stated, "I think people would be upset if it came up like, 'oh do you have any diversity and, oh, was it hard for you?'" However, Matthew, who

applied as a disadvantaged applicant, and like Kelsey, also identified as a member of the LGBTQ community, did view identity as potentially disadvantaging.

Matthew shared a lengthy list of variables that could lead someone to be disadvantaged, although he confessed that he was unsure what the AAMC considered as a disadvantage. Matthew explained, “I was very unsure. I didn’t know if it had to do only with economic status, or minority status, or other underrepresented individuals.” Matthew believed that being underrepresented in medicine was, “a disadvantage in and of itself.” This belief entered into his definition of disadvantaged. He listed, “minority, sex or gender differences, orientation, race or ethnicity...”. Like Sarah, Matthew spent considerable time searching for an explanation of the Disadvantaged Status and its definition. And like Sarah, Matthew’s efforts yielded more on the SES Disadvantaged Indicator than the Disadvantaged Status. The similarity in nomenclature between these two application items added to the ambiguity. Matthew explained that SES is, “the first thing that comes to mind for most people,” and seeing the remarkably similar names, and articles on the SES indicator populate in response to his query for information on the Disadvantaged Status, only reinforced that assumption.

Matthew shared that it was difficult not to think of disadvantaged in terms of socioeconomic factors, that it was the first thing that came to mind for him, and he believed that to be true for most people. Matthew was not alone in this assumption. Roger also talked about how he thought of disadvantaged in terms of socioeconomics. While Roger used the three examples provided in the AMCAS question prompt to guide his definition, he saw disadvantaged as primarily about SES. Roger posited that the position of the question, right after multiple items requesting financial and educational



information, influenced his perspective; “It’s like the priming principle,” he said. It is one of the “big things in the public health degree, you know questionnaires for health policy.” The psychological principle of priming involves the theory that recent content in a survey influences the way respondents filter immediate subsequent questions (Schwarz, Strack, & Mai, 1991; Strack, Martin, & Schwarz, 1988). Matthew, Roger, Kenny, Richard, Sarah, and Charles all mentioned the proximity of the Disadvantaged Status to all of the socioeconomic questions as influencing their perspectives on the definition.

Richard applied through the study site’s early admission program and identified as disadvantaged. Like most of the participants, Richard was unsure what the AAMC meant by disadvantaged; however, unlike the other applicants, he was able to speak directly with a staff member in the medical school’s office of admissions and ask about this particular question. This access meant that Richard was able to bypass some of the process of self-determination through which others struggled.

Richard shared that he reached out to the admissions office specifically because of the Disadvantaged Status question because he wanted to know if there was a specific definition. The admissions office explained to Richard that they would support his use of the disadvantaged option given his circumstances; that endorsement gave him the validation he desired. Considering Richard’s approach through the theoretical framework, he was confronted with a circumstance for which his viewpoints needed validation. Richard sought a group of people with whom to compare his understanding, a necessary tactic in the absence of authoritative or objective data, according to social comparison theory. Rather than seeking out individuals with whom he shared beliefs, opinions, and attitudes, as social comparison theorists would suggest as typical, Richard

sought the counsel of his audience, who, as explained through IM, he wanted to present with his best side.

**Summary of Section I.** In this section, I addressed, how do former applicants define disadvantage?. I presented data on how the participants came to their definitions of disadvantaged, and connected participants' perceptions with the four social theories comprising my theoretical framework. Overall, participants felt that the option to apply as a disadvantaged applicant was complicated by a lack of definition. As a result of the ambiguity, participants had to draw upon their own experience with disadvantage. To validate their perspectives, participants relied on social comparison, either within their immediate peer groups, or through imaginings of quintessential disadvantaged applicants, or traditional medical school applicants. A majority of the participants viewed the Disadvantaged Status as pertaining to challenges related to SES. Espinoza-Shanahan's (2016) dissertation research provides support for this finding. Through analysis of 644 disadvantaged essays submitted between 2002 and 2008, Espinoza-Shanahan found that the majority (529/644, 82.1 percent), focused on financial issues and/or education (427/644, 66 percent).

Espinoza-Shanahan's (2016) findings indicate that the participants in my study were likely not unique in viewing the Disadvantaged Status as dealing largely with hardships associated with SES. The location of the Disadvantaged Status within the AMCAS may help explain any propensity to associate the essay question with SES. Six of the participants believed that the placement of the Disadvantaged Status adjacent to financial and education questions, such as the SES Disadvantaged Indicator, influenced them towards definitions based around educational and financial challenges. Additional

details regarding participant definition of disadvantage and phrases from AMCAS applications and interviews regarding the themes mentioned above can be found in Appendix C, Tables C1-C4.

## **Section II: Am I Disadvantaged?**

In this section I address the sub-question: How did medical students assess their levels of disadvantage when they were applicants?. Salient themes include: experience with disadvantage, resources, most notably social comparison, audience, stigma, and pride. In this section, I present extracted data of participants' experiences, attitudes and beliefs corresponding to each of the salient themes, discuss how participants came to see themselves relative to their definitions and connect the participants' insights to themes and theories. There are corresponding tables in Appendix D (Tables D1-D6) with supporting material from the participants' AMCAS application and interview to provide an additional glimpse into their experiences, attitudes and beliefs.

For some participants, their personal experience with disadvantage was sufficient to see themselves as disadvantaged. Still, other participants sought to consider the type of applicant admissions staff and faculty might consider disadvantaged. Resources, particularly social comparison, were central to where participants placed themselves on the continuum of disadvantage. Participants' socioeconomic environments affected perceptions of their levels of disadvantage and being surrounded by peers from more affluent backgrounds made it easier to see themselves as disadvantaged and visa versa. Due to stigma and pride, some participants did not want to identify as disadvantaged, despite their own experience with disadvantage. Some participants mentioned that they found the term disadvantaged to connote negative associations and sought distance from

the language. Similarly, some of the participants indicated that gratitude for their parents or pride in their upbringing affected their ability to see themselves as disadvantaged, in part, due to perceived negative associations with the term.

**Experience with disadvantage.** Charles, Ariadne, Alex, Chris, and Kelsey approached the Disadvantaged Status option with relatively high degrees of confidence. For example, Charles acknowledged that the description in AMCAS was vague, but because he encountered similar questions in undergraduate and research internship applications, he felt confident in approaching the question based on past experience. Like Charles, Ariadne's confidence stemmed, in part, from her experiences with similar applications. Ariadne shared that her mother had "long wanted better educational opportunities" for her, which meant applying to well-regarded secondary schools. Ariadne became familiar with self-advocacy through those applications, so when it came time to decide whether she was disadvantaged, she was able to draw on those experiences from earlier stages in her educational preparation. Alex, Chris, and Kelsey were confident in both their constructions of a disadvantage definition, and their placement within those definitions.

Conversely, Roger struggled with whether the question focused on someone currently disadvantaged, or from a disadvantaged childhood. While Roger grew up in a farming community in rural California, surrounded by underprivileged peers, he felt he was too far removed to feel comfortable "leaning on the place [where he grew up]." And while Roger grew up around many who were medically underserved, being from a migrant community, he was never without care. Roger completed college five years prior to applying to medical school and felt it would have been disingenuous to leverage his

childhood given the opportunities he had since experienced. So, while Roger would have appreciated more explanation from the AAMC, he was able to determine that he did not fit within his personal idea of disadvantaged.

As an applicant, Chris was confident that he did not meet the terms of his definition, although during the interview he admitted that since entering medical school, there had been times when he questioned his decision. Chris' inability to see himself as disadvantaged was influenced by social comparison, pride, and stigma. Chris knew he had experience with disadvantage throughout childhood. He spoke of his single mother supporting the family on "scarcely more than \$20,000 a year;" they conserved essential products like toilet paper. Luxuries like Christmas gifts were shared, one for all three siblings. But still, Chris did not see himself as disadvantaged. The answer to why he was unable to see himself within his definition of disadvantaged was found in the kind of social comparisons he made, the pride he felt for his mother and for himself, and the stigma he associated with the word—disadvantaged.

Chris explained that despite his mother's low income, she provided for the family in such a way that he never felt different than peers, at least not different in a negative sense of the term; "I never felt like I was missing anything," he said. Chris explained, "I never looked at it like, 'those people have so much more than me'...I think that is part of what went into me saying no [to the option to apply as a disadvantaged applicant]." As an applicant, Chris never questioned whether he was disadvantaged.

**Pride.** While Charles applied as disadvantaged he was reluctant to see himself as such. Disadvantaged was not a label Charles would have chosen to apply to himself. Charles explained:

I mean, it is not really how I think about it. I don't think about ever being disadvantaged. I guess knowing the accommodations that others are born with does in comparison make me feel that I haven't had as many opportunities...but it doesn't bother me.

Charles understood that he was afforded fewer opportunities than other applicants, but seeing himself as disadvantaged conflicted with his outlook. Charles came across as optimistic; he was thankful for what he had and wanted to focus on future successes rather than past hardships. When Charles reflected on a time in high school when he felt disadvantaged, he remembered there being many opportunities he missed out on, such as school trips that would have encumbered his family with too high a monetary cost. But when I asked how such missed opportunities made him feel, he was quick to rebound, “accept your condition and move past it. The only thing you can do is work harder and try to change your circumstances ... there is no point in getting upset about it,” Charles explained.

Like Charles, Roger viewed the Disadvantaged Status as threatening to his positive outlook. Roger described himself as, “a non-complainer.” While there were other circumstances that affected his decision to identify as disadvantage or not, the label itself seemed to take away from Roger's persona as optimistic and future-oriented.

Ali felt that, despite not having many financial resources, her parents never let her experience that burden. A pride associated with her upbringing skewed her ability to see herself as disadvantaged. It seemed that for some applicants, the support they received from their families made up for circumstances that may have otherwise been interpreted as disadvantage. Jane also shared that her parents “made very little money,” but she always came home from school to a cooked meal. Jane felt she could always count on her parents for support; “I had a really happy childhood,” she said. Even though she was

entrenched in a neighborhood where violence, drug use, and gang activity were commonplace, her parents insulated her from it and made her feel safe. Ana also believed that because her parents provided such complete support to her sister and her, she did not feel entitled to identify as disadvantaged. Ana shared, “I think we were fortunate in that my parents worked very hard in order to put us through school.” Ana concluded, “I think for us because our family was so supportive and because they put our education above basically everything else” she was unable to see herself as disadvantaged.

**Stigma.** While Kelsey neither applied as disadvantaged nor saw herself as such, she empathized with those who did have to struggle with the decision. Kelsey shared, “I can totally see the hesitation [to be seen as disadvantaged] because then that becomes how they [admissions committees] sum you up.” Whether out of appreciation for their upbringing or personal pride, many of the applicants sought to avoid being summed up as disadvantaged, less often because they were uncomfortable sharing their stories, and more so because they viewed the label as stigmatizing.

Alex offered insight into why some applicants may be turned off by the disadvantaged label. Alex posited, “I believe that the term, disadvantaged, may alienate many who have struggled all their lives in order to not be categorized in a position of perceived weakness.” Kenny echoed Alex’s concern; he thought the question seemed “weird.” For Kenny, it felt “awkward to say whether you are disadvantaged or not.” Kenny contemplated the alternatives, “I think it would be more neutral to say, ‘if you experienced disadvantages in your life that you would like to bring up, here is the space

to do that', as opposed to labeling yourself a disadvantaged person." Matthew thought the label—disadvantaged, was "problematic and seemingly disenfranchising."

Consistent with the participants in my study, in her dissertation, Martin (2010) also found labels associated with negative connotations to result in a reluctance to affiliate with those terms. The U.S. Department of Health, Education & Welfare commissioned a study on the use of the labels, culturally disadvantaged and culturally deprived and reported that school children, regardless of any objective quantification of disadvantage, were unwilling to associate with the labels (Jones, 1971). In her dissertation, Price-Johnson (2013) stated that the Disadvantaged Status "seems to capture a particular conception of diversity framed by the AAMC as more of a deficit ...". In line with previous research, Chris, Kelsey, Alex, Kenny, Matthew, and Roger all seemed affected by stigma associated with the term—disadvantaged.

The idea that labels affect identity was foundational in the design of this study. The choice to include symbolic interactionism in the theoretical framework was, in part, in anticipation that the disadvantaged label would impact applicants' decisions, both to see themselves through that language, and to apply it to themselves for the purpose of the application. Symbolic interactionists assert that meaning is made through the creation, application, and value assigned to labels (Blumer, 1969; Mead, 1934). Individuals establish identities by applying labels to themselves and then assigning meaning to those labels (Blumer, 1969; Denzin, 1969; Lauer & Handel, 1977; Schwandt, 1994). Self-labeling, or self-indication involves perceiving what others think about us—what labels others apply to us, and in deciding whether to take on any of those labels, what value we assign to them, and how much we allow our identities to be affected.



In contrast to the other participants, The Hummingbird and Ariadne each viewed more positive, rather than negative connotations. While The Hummingbird shared that he would not have chosen to label himself as disadvantaged, he viewed the option as an opportunity; he described it as, “my only hope” and, “an opportunity for me ... in presenting a picture that they [application readers] could look at and step back from.” Similarly, Ariadne saw the option as an opportunity to explain the lack of childhood opportunities that she thought would otherwise not have been apparent in AMCAS. Like The Hummingbird, Ariadne saw the option as an equalizer; “What it came down to for me was that in med school, I am being matched up against other applicants and ... I am probably going to be compared with people who went to private high schools and Ivy League universities,” she said. Ariadne continued, “You don’t want to shoot yourself in the foot by claiming that, oh yea, I had it just as good as these people.” Neither The Hummingbird nor Ariadne exhibited much difficulty in assigning the label of disadvantaged to themselves, in no small part due to their framing that the term was meant to be uplifting. The Hummingbird even called the Disadvantaged Status a, “trouble card,” that it felt like a; “strong card;” he remembered reading through the question in the AMCAS application and thinking, “this might be my only hope.” For Ariadne and The Hummingbird, the Disadvantaged Status and accompanying essay was a chance to show a side of themselves that they thought would otherwise not be captured in the application.

Pride and stigma both contributed to Chris’ issue with the Disadvantaged Status. Chris was worried that identifying as disadvantaged would be a “footnote” in his achievements, a concern that contributed to his decision not to see himself as

disadvantaged. He did not want his “success to be because [he] marked ‘yes’ on the disadvantaged question.” That “footnote” was a stigma, a mark against what he and his mother had been able to achieve. I shared with Chris that I had the opportunity to speak with Dr. Nivet, the former chief diversity officer at the AAMC, and that Dr. Nivet explained that had he ever been an applicant to medical school, he too would have been concerned with whether the Disadvantaged Status would have been a mark against his upbringing. “[T]hat is where the pride thing comes in,” Chris said.

While Matthew saw the term—disadvantaged as “problematic and seemingly disenfranchising,” he thought the option to apply as such was potentially uplifting, although he understood why other applicants might disagree. Matthew shared that a friend of his, a Black medical student, viewed the Disadvantaged Status as stigmatizing. Matthew explained:

It is not the most positive connotative word. It feels inherently like you are trying to explain why you weren’t able to ... I think disadvantaged sounds problematic. It’s like, ‘why weren’t you able to achieve what we expected you to achieve.

The Disadvantaged Status may have been created with the best of intentions, but the choice of language was marginalizing, and thus, not a term with which some applicants preferred to identify.

**Audience.** In determining whether to identify as disadvantaged, some applicants attempted to determine what admissions committees considered as disadvantaged. As the audience with whom they hoped to impress, participants sought to understand whether those authoritative others would consider them disadvantaged. Ariadne, Jane, Kenny, Matthew, Sarah, The Hummingbird, Chris, Kelsey, and Meghan all spoke of audience concerns during their interviews. The Hummingbird was worried that application readers

would think, “this looks like you have had some advantages.” Jane wondered if admissions staff would agree with the way she saw herself; “do I really count as disadvantaged,” she asked. Sarah worried that, “you never know who is going to be reading your application,” and Matthew hoped that his audience was aware that there are many ways an applicant can be disadvantaged. Meghan thought that her circumstances might not count among the ways that her audience defined the term. Meghan posited, “There are many flavors” of disadvantage.” Referring to her audience Meghan wondered, “Are they asking about my flavor, or are they going to laugh at my flavor?”. Chris felt like there was a “secret code,” that if he wrote the right content, the audience would think, “this guy knows what he is talking about, we should definitely give him an interview, and if you said one wrong thing,” that could mean the end of the admissions process.

Festinger (1950) hypothesized that the greater the desire to gain entry, remain in, or move up in status within a group, the more willing that individual is to conform. A group is likely to exclude a person whose beliefs, attitudes, and opinions conflict with their own. This may help explain why participants hoped for an official or authoritative definition of disadvantage—to conform their definitions, and in turn, their place within them.

**Resources.** As much as some participants desired to rely on an authoritative stance, in the absence of an objective or definitive perspective, self-perceptions were informed through social comparison. Since disadvantage is a social conception, only through the social world can applicants evaluate their understandings of the term

(Festinger, 1950; Festinger, 1954). It is through comparison with one's own perspectives and those of others that validation or revision can occur.

Roger shared that while he grew up in an impoverished area, he saw himself as more privileged than many of his peers and this was a large part of the reason he did not see himself as disadvantaged. Festinger's (1950; 1954) theory helps to understand why some of the applicants who, from an outsider's perspective seemed disadvantaged, had difficulty identifying with such a label. Festinger (1950; 1954) indicated that individuals select with whom to make comparisons based on the degree of concordance of other characteristics, and the more applicants feel similar to others in their social worlds, the less likely they are to feel disadvantaged. As Jane explained, even though she grew up where there were "drive-bys all the time, and the school would be locked down," she never thought of it as "that bad," because she "grew up around it," it was what she knew and it was normal.

Chris cautioned that applicants would feel differently about whether or not they are disadvantaged depending on to whom they make comparisons. All the participants explained that their decisions to see themselves as disadvantaged or not depended on their social environments. For Roger, social comparison was integral in his decision because as he shared, "I remember seeing other families have financial strain that I didn't experience." Roger explained that, "taking it even further," having attended a prestigious university and having answered the disadvantage question, "like five years after I graduated college," and also having completed a master's degree as well, Roger felt like he was in an, "incredibly privileged position." For Roger more recent advantages, such as attending a well-regarded undergraduate school, attaining multiple degrees, and

gaining strong professional experiences were cause for not declaring a Disadvantaged Status, despite childhood hardships.

Where a younger version of Roger would have seemed less privileged relative to his peers, the accumulation of degrees, experiences, and various accolades, not only bolstered his perspective on disadvantage by coinciding with a broadening of his awareness of diverse others, but also elevated his status relative to those who he considered disadvantaged. Alex seemed to share Roger's sentiment. Alex believed that the more exposure an individual experiences, the broader their frame of reference and in turn, the more likely that individual is to understand whether disadvantage is personally applicable.

Ali did not describe social comparison to be as prominent as a factor as other applicants; however, she observed:

If people [application readers] don't see something that resonates with their idea of disadvantage then they might think, then I guess they [applicants] don't fall within it, versus, it is so open-ended people [applicants] might get caught up in, "I don't know if I really am disadvantaged relative to other applicants and I don't want to get dinged for thinking I am."

Others shared Ali's concern. Participants did not want to be seen as dishonest in their assertions, and comparison with peers was one way they went about deciding whether where they saw themselves relative to their definitions of disadvantage was defensible.

In trying to determine if she should identify as disadvantaged, Ariadne recalled, "There was some hesitation on my part where it was like, am I worse off enough, is my life shitty enough to be able to claim that." For Ariadne deciding whether to see herself as disadvantaged came down to deciding with whom to compare herself. Ariadne tried to imagine who the average applicants to medical school were and what they looked like.

Ariadne knew from her own research that the average medical school applicant was better off, at least in terms of SES and the associated childhood opportunities, than she was. Like The Hummingbird, Ariadne felt justified that her childhood circumstances, when compared to the average applicant, were sufficient to see herself as disadvantaged. In contrast, Ana's interpretation of disadvantage was far more tailored; she limited the term to educational disadvantage and in that regard, compared to her peers, she felt her parents provided much more support.

Kelsey did not identify as disadvantaged; however, she was similarly affected by social comparison in her decision process. Kelsey explained that, "I have no area of my life where I really feel like I have had a disadvantage compared to people I think of that have." Kelsey, Ariadne, and The Hummingbird were each able to rely on social comparison to inform their decision whether or not to see themselves as disadvantaged.

While Jane applied as a disadvantaged applicant, she explained that she would not have done so had it not been for her friends, also undocumented immigrants applying to medical schools, encouraging her to do so. Jane remembered reading the prompt and assuming it was reserved for someone from more severe circumstances. Even though Jane withdrew for one academic term during college in order to work full-time because as an undocumented student, she had few financial aid options, and even though she was not living on the streets, she, as she put it, had difficulty seeing herself as disadvantaged because she envisioned the applicant from even more disadvantaging circumstances.

Jane initially chose to compare herself, not to her immediate peers, but with individuals that she knew of from the most extreme circumstances. Jane referenced students who were homeless and slept on bus benches. Jane too was, at times, homeless,

but because she had access to friends' couches, and described herself as "low maintenance," she was not planning on identifying as disadvantage. It was her immediate peers, fellow undocumented students who encouraged her to use the disadvantage status. Jane seemed to have a history of minimizing her hardships. In high school she was surrounded by neighborhood and school shootings, drug use, and gang activity, but because she managed to remain safe from it all, she did not feel comfortable seeing those circumstances as cause to check the disadvantage box. Jane admitted that such events were, "just so common" that she "didn't really feel ... disadvantaged." Jane shared that she felt there were always others in her community that seemed to be worse off.

Similar to Jane's circumstances, Charles also shared that throughout much of his childhood, his circumstances, while seemingly disadvantaged from more privileged perspectives, were perfectly normal to him at the time. Growing up in rural China, surrounded by others in the exact same circumstances, and again when he immigrated to the U.S. and lived in a farming community with a large population of migrant Hispanic workers, Charles did not feel as though his circumstances were out of place. It wasn't that Charles was oblivious to the conditions in which he found himself, but his disadvantages were normalized. As Charles explained it, "Growing up in rural China I had no idea I was disadvantaged and then growing up in the U.S. with all the Hispanic and agricultural workers, again didn't really feel disadvantaged because it was the norm." As with Jane, Charles' experiences depict the confounding effect of relativism on social comparison. Charles shared:

I think the level of impact that life events have on people are completely individual so like maybe someone who went to a high school where everyone had

a Maserati but didn't have a Maserati might feel as someone would from a different sort of high school who didn't have a car at all.

Richard, who also grew up in an underdeveloped region of China, explained that in his home province, he was average, even middle class. It was not until he received a scholarship to attend high school in a wealthier province that he was seen as underprivileged. Feeling normal depends on comparison with others. Since to be disadvantaged is to be, in some way, less than others, it is, to some extent, dependent on feeling different than peers. It is therefore possible for two applicants, identical in every way except location, to arrive at different conclusions regarding whether they are disadvantaged.

**Summary of Section II.** In this section, I addressed how do former applicants assess their levels of disadvantage? I presented how the participants decided whether or not to see themselves as disadvantaged and made connections between the participants' feelings, attitudes, and beliefs, and the social theories that undergird this study. Some participants seemed to easily know that they were disadvantaged. Still, many participants considered whether or not their audience, the faculty and staff involved in admissions decisions, would consider them to be disadvantaged. Social comparison seemed to help some of the participants decide whether their experience with disadvantaged was enough to appropriate the label, and, It turned out that through social comparison, not only were participants able to decide whether or not to see themselves as disadvantaged, but that depending on with whom comparisons were made, some participants, who seemed disadvantaged from an outsider's perspective, were unable to see themselves that way. It turned out that for some participants, the ability to identify with the idea of being disadvantaged was confounded by a desire not to be associated with a stigmatizing label.



And, for those participants, stigma and pride related to not wanting to tarnish their families' support or even their own accomplishments, perhaps in the face of great challenges, also affected their abilities to see themselves as disadvantaged.

### **Section III: How Do Others View Disadvantage?**

This sub-question was designed to explore participants' perceptions of the meanings others attributed to the idea of disadvantage. I hoped that I would gain insight into whether stigma was a factor for the participants. If applicants perceived admissions members, peers, or family associating negative connotations with the disadvantaged term, they might be less likely to identify as such in the application. I also speculated that some applicants may fear that if their ideas of disadvantaged and those of admissions members differed, it would call into question the credibility of other parts of their application. And, since it is more likely that negative perceptions occur in the presence of others who do not share the stigma, stigmatized individuals are likely to treat unfamiliar social situations with caution (Hannem & Bruckert, 2012).

In exploring this sub-question, I drew upon participants' insights and experiences and considered them through the theoretical framework of SI, SCT, stigma, and IM. All the participants assessed, or at least wanted to assess, what admissions staff and faculty thought of the Disadvantaged Status. Participants wondered what decision-makers thought of the application question, how it would be used, and what sort of circumstances qualified. The participants were concerned with not only, what constituted disadvantage as a definition and whether or not they qualified, but how decision-makers would judge them as disadvantaged applicants.

Many participants expressed concern over what their audience would think about their actual or possible declarations of disadvantage. Goffman (1959) explained that, as a part of IM, when interacting with others (audiences), individuals modify their behavior, language, and attire in ways they perceive as either pleasing or expected to their audience. Such strategies of self-presentation are amplified when individuals perceive the audience as having power of their advancement, such as gaining admission to medical school. The participants, as actors, tried to make sense of what admissions committees, as audiences, would find pleasing in terms of the ideal applicant. Participants did not want their decision to apply as disadvantaged to conflict with their audiences' assumptions of how such an applicant should look.

After listing the circumstances that she thought could justify applying as a disadvantaged applicant, Ariadne cautioned, "if the decision makers are from previous generations they might, since medicine is still a conservative profession, discount some of these factors and the disadvantages they can cause." While Ariadne applied as disadvantaged, she empathized with applicants who were uncertain. Not knowing who may read and evaluate an application and what will be thought of one's reasons for claiming to be disadvantaged could lead some applicants to err on the side of caution. Ariadne qualified her concerns though, she said, "for the most part, I have faith in the people making the decisions." Jane was not confident in her choice to apply as disadvantaged. She described her anxiety as, "just this dark kind of should I have done that, is that something that the school actually considers a disadvantage." Sarah said she was, "really nervous," she did not know how application readers would use the information or even what they would think of her designation. Sarah shared that when

she asked both her faculty mentor and her advisor, both were unsure how important the Disadvantaged Status was, or, “if it is even read at all.” Sarah said she hesitated for a “long time” before she completed her application, specifically because of the Disadvantaged Status. And like Sarah’s mentor and advisor, Charles doubted whether the decision-makers even read Disadvantaged Status essays. Charles shared that he, “didn’t think anyone was going to care.” Charles assumed that since there was not much official information on the Disadvantaged Status question, that it must not be important.

Matthew was not as worried about the Disadvantaged Status as he was about his Hispanic identity. He explained that, “I look like a Boy Scout. ... like a politician’s son. I hope people are aware enough that Hispanic people come in all shades.” Matthew was concerned about what his audience would think when they saw him in an interview and were expecting an underrepresented applicant, a Hispanic applicant. Meghan shared Matthew’s concern as she considered what would happen if her audience did not see her as disadvantaged, “I mean I am a White girl who went to Catholic school her whole life and then an Ivy League college. It kind of felt like it would have been ridiculous for me to have checked that box,” she said. Like Meghan, Chris was concerned about whether it was going to, “shoot me in the foot if I say ‘yes’ or ‘no.’” He did not know what others would think and thought it best to stick with his original position—that he was not disadvantaged.

Alex spoke of the “generational divide” between faculty and students that Ariadne also identified. Alex shared, “I think it can be very difficult to broaden perspective later in life, just because you might be less open to change.” Alex explained that diversity of medical school committee faculty is, in part, influenced by the need to

recognize an expanding set of diversity criteria, including how disadvantages are thought about.

In addition to faculty and staff concerns, some participants commented on their peers' perceptions of the Disadvantaged Status. Participants were concerned about ethics, particularly "gaming the system." Charles was quick to share that he knew of people from his own medical school class who, "weren't too honest about their financial status." Charles even mentioned knowing students who "applied as Hispanic and have no ties to being Hispanic at all." Charles was not the only participant to share such concerns. From his perspective as a medical student, Chris shared, "I think it tells you more about the applicant who answers 'yes,' and after meeting them during the interview, you don't get the sense that they were disadvantaged." Roger spoke of what Chris was driving at in terms of "feigned narratives ... where it's like a true story but they are almost trying to embellish details like, 'they had to run across campus,' trying to heighten the drama." Roger, Chris, and Charles were concerned with authenticity in applicants' IM efforts.

Roger believed that many applicants use the essays as, "an opportunity to make themselves seem a little better, another way to manipulate empathy," he added. Ana also knew of students who deviated from authentic impressions when they applied to medical school; they "put down Black or Native American ... even though they had never identified as such." Ana clarified that she was not implying that these applicants mistakenly marked such designations, but rather, "they would be like, if I put down that I am Black, I will have a better shot of getting in." Meghan confirmed Charles and Ana's concerns; she shared that during one of her interviews she was asked why she did not

apply as disadvantaged; “Most people will check it for a paper cut,” her interviewer shared. Participants’ concerns related to ethics centered on not wanting to be perceived by admissions committees as dishonest.

Based on 210 randomly selected applications to a Canadian medical school program, White et al. (2012) found that applicants altered their responses based on what they perceived committee members were looking for in a candidate. Participants thought they should, “sell yourself—make them want you,”...“exaggerate but don’t get caught,”...and “do whatever you have to do to get in” (White et al., 2012, p. 771). White et al.’s (2012) findings support participants’ concerns that not all applicants have similar ideas of what the Disadvantaged Status represents, or if they do have similar ideas, are willing to suspend them in order to increase their competitiveness. Over the course of my research, it became clear that participants were not only worried about what their audience would think of their Disadvantaged Status designations but that for some, those concerns were enough to seek input from mentors and advisors, delay completion of their applications, or even refrain from applying as disadvantaged altogether.

**Summary of Section III.** In this section, I explored how do former applicants perceive others’ interpretations of disadvantage? In general, the participants considered the perceptions of medical school staff and faculty (their audience) to be of great importance. Participants raised ethical concerns; they thought that other applicants were willing to behave dishonestly in order to improve their chances of gaining acceptances. Charles in particular, displayed a degree of apathy towards the Disadvantaged Status. Charles knew of medical students who admitted to embellishing their applications to pander to what they perceived as desirable to admissions committees—identifying as

members of underrepresented groups, and claiming Disadvantaged Statuses. Several other participants also shared that they knew of individuals who represented themselves dishonestly in order to improve their chances of acceptance. Participants were concerned that, due to dishonesty and embellishment, some admissions members may be cautious of self-reported items such as the Disadvantaged Status.

#### **Section IV: How Did Social Comparison Affect the Participants' Interpretations of Disadvantage?**

I originally wrote this question using the phrase “relational knowing” rather than social comparison. I imagined that where an applicant was located, geographically and socially, would impact how the Disadvantaged Status was negotiated; however, I quickly discovered I had underestimated their significance and updated the fourth research question to reflect the significance of my finding. Every participant had a lot to say about the interplay between their social worlds and their ideas about the Disadvantaged Status. While collecting data, I returned to the literature and searched for a means to make sense of what the participants were sharing with me. I came across Festinger’s (1950; 1954) theory on social comparison, and updated this research sub-question to reflect the connection. While I examined social comparison as a theme under resources throughout Chapter IV, in this section I focus on the relativistic aspect of self-identification. Through conversations with the participants, I learned that social group hierarchy and geographic location, affected how and with whom they made social comparisons. In this section, I present excerpts of participants’ experiences, attitudes and beliefs regarding social comparison.

As children in rural China, Charles and Richard's ideas of what it meant to be disadvantaged were different than they were once they moved to the U.S. Charles was one of many grade school students crammed into a single classroom that housed several grades simultaneously. Older students helped teach the lower grades. Textbooks were scarce and those they shared were tattered and outdated. Charles could not afford to purchase notebooks, so instead he frequently erased his work to make room for new instruction. At the time, Charles did not consider himself disadvantaged; he was no different than his peers, so by comparison, nothing was atypical that would have led him to believe he was a disadvantaged applicant.

Richard also brought up the issue of relativism. While Richard did not have the same experiences with overcrowded classrooms and inadequate school supplies, he still lived in one of the poorest regions in China. But like Charles, at the time, nothing felt amiss. Richard explained that he grew up in a stable, two-parent home. Both his parents were physicians and he never had to worry about food. But by U.S. standards Richard's family lived on less than \$25,000 USD per year. It was not until Richard moved away from home to attend high school in a more prosperous region in China that he felt disadvantaged; how he felt about himself and his circumstances depended on to whom he compared himself.

Ariadne and Sarah also presented experiences with social comparison that demonstrated the effects of being at an extreme end of the socioeconomic spectrum. Both Sarah and Ariadne came from low-income single parent homes. Their mothers were both immigrants to the U.S. and English was not their first language. Ariadne shared that while, "friends spent breaks volunteering in Nicaragua or researching surgical

outcomes, I was delivering a statement to police for a child abuse inquiry, or sopping up the contents of our burst water heater.” Similarly, Sarah explained that in high school:

There was always an orientation before school started and I couldn’t afford it, so I didn’t go. I had to be like, “yea I went on family vacation.” Or people would go off on trips during the summer; I just stayed at home and didn’t really do much besides babysitting and going to the library.

Sarah and Ariadne each earned places at prestigious private high schools, typically attended by children from wealthy families. Both Ariadne and Sarah spent much of their adolescent lives in social environments vastly different than the norms within their socioeconomic circumstances; this had a profound impact on their social comparisons.

Whereas Jane talked about how she grew up around similarly underprivileged peers, and had a difficult time deciding whether or not to see herself as disadvantaged, to Sarah and Ariadne, the differences with peers were stark enough that they could not avoid feeling different. During the interviews, Sarah and Ariadne both discussed issues of belonging. Sarah shared, “I looked very similar to other people, but underneath...I guess you could tell monetarily, I wasn’t able to afford the same things.” I asked Sarah what she said to schoolmates whenever they asked about her family and she explained, “Whenever anyone would ask what my mom did, I would just say he was a medical assistant or a caretaker. ... It mattered a lot; there was that socioeconomic bridge I could never cross.” Ariadne shared similar experiences. She talked about the student who looked right at her during class and shared that he felt students should dress like they belong. Neither Sarah nor Ariadne could escape the weight of the socioeconomic differences they experienced with their peers. For Sarah and Ariadne, the differences with peers that were unavoidably apparent became a part of their identities. Because



those differences dealt with their relative lack of privilege, it was easier for them to see themselves as disadvantaged.

Charles provided an analogy to illustrate this phenomenon of social comparison and the complications of one's social or geographic location on identity. He reasoned, "maybe someone who went to a high school where everyone had a Maserati but didn't have a Maserati might feel as someone would who didn't have a car at all." While Charles' example was taken to an extreme, his point was clear—individuals only know what they know. To Charles's point, Chris explained, "somebody from [where I am from] will answer it [the Disadvantaged Status] differently ... than somebody who comes from a very affluent neighborhood." Like Alex warned, if applicants weren't "exposed to different cultures and living styles, they are at a higher likelihood to think that disadvantage is more applicable to them." Reflecting on Jane's story, growing up in an impoverished community where she was thankful to have food at home because for some of her classmates free lunches provided at school were there only reliable meal of the day, and where a murder in the cafeteria seemed unremarkable, she was not able to see herself as disadvantaged, not by comparison.

The distinction between the two extremes, between applicants like Sarah and Ariadne who, as children, were immersed in social worlds so disparate from their home lives, and Jane or Chris, who both grew up around peers who were not so different as to create uncomfortable and inescapable distinctions, contributed to profound consequences in the way they negotiated the Disadvantaged Status. Sarah and Ariadne were more prepared to see themselves as disadvantaged than were Jane and Chris. While there were certainly other themes at play, as discussed in the preceding sections, Chris was unable to

see himself as disadvantaged, and Jane only applied as such after the urging of her medical school applicant support group.

According to social comparison theory, with whom individuals choose to compare themselves has profound implications on their beliefs, values, and opinions (Festinger, 1954). Change the composition of the social group, and you change the outcomes of any comparisons. As symbolic interactionist Herbert Blumer (1969) theorized, individuals act based on how others in their social worlds see them. Each individual is capable of, not only seeing the world from the unique perspective of the self, but also from the perspectives of others. It is that outside perspective that each individual reacts to and compromises with in order to form identities. In that way, SI and SCT can be used to understand the implications of an applicant's physical and social space on the ability to identify with the Disadvantaged Status.

**Summary of Section IV.** In this section, I explored how did social comparison affect former applicants' interpretations of disadvantage?. Participants described their social and physical circumstances as integral in the formation of their abilities to see themselves as disadvantaged or not. Participants who grew up in environments with peers who had similar or fewer resources had greater difficulty seeing themselves as disadvantaged. Conversely, participants who felt under-resourced compared to the majority of peers in their social environments were more apt to see themselves as disadvantaged.

#### **Section V: Should I Apply as Disadvantaged?**

In this section, I address the sub-question, how were participants' attributed meanings of disadvantaged used in the decision whether or not to self-declare in the

AMCAS application? While all nine themes were involved in the participants' processes of deciding how to apply, the interplay between their experience with disadvantage, social comparison, ethics, right to identify, and impression management were the most prominent. Charles, Ariadne, Kelsey, Alex, Ana, Ali, Kenny, and The Hummingbird each decided whether or not to apply as disadvantaged based largely on the interplay between their experience with disadvantage, social comparison, and impression management. Sarah, Matthew, Richard, Chris, Roger, Alex and Meghan focused more on the interplay between their experience with disadvantage, ethics, and right to identify. This is not to say that these were the only variables the participants considered, but they represent the themes most frequently discussed among the participants.

Recalling the process tree presented in Part II, in deciding whether or not to apply as disadvantaged, the participants first considered their personal experiences with disadvantage. The participants then sought out resources, first official or authoritative explanations of the definition and purpose through published materials and audience perspectives, then social comparison, and then depending on the level of ambiguity that remained, formed their personal definitions and purposes. In line with symbolic interactionism, the participants acted on the basis of the meanings that they attributed to the idea of disadvantage. Then, complicated by concerns with stigma, pride, and ethics, participants came to their decisions whether or not they had a right to identify. After determining whether they felt they had a right to identify as disadvantaged applicants, the participants considered if it was in their best interest to do so—impression management.

In deciding whether or not to apply as disadvantaged applicants, Jane, Chris, Matthew, and Sarah were heavily affected by the quantity and quality of their resources.

Jane asked advisors and other undergraduate staff and no one seemed to know anything about the Disadvantaged Status. Chris expressed a similar frustration, none of his undergraduate staff seemed to know either; “it just seemed like nobody knew what this [the Disadvantage Status] was or how it would affect your application,” he said. Sarah “did a lot of research,” but found “nothing from the AAMC.” Matthew shared that, “in all the pre-health seminars and talks at my undergrad, no one ever talked about it.” Sarah asked her mentor and her advisor; “there was a lot of humming and hawing,” she explained. Conversely, Richard shared that he was appreciative for the direct access to medical school admissions staff he was afforded through his early acceptance program. Richard explained that he was able to bypass a lot of the uncertainty he would have otherwise experienced.

In the absence of satisfactory resources to explain the meaning of the Disadvantaged Status, participants relied on social comparison. Ariadne, Kenny, and The Hummingbird each acknowledged the competitiveness of the medical school application process and considered what the typical medical school applicant looked like in terms of opportunities. Light heartedly, Ariadne reasoned, “am I worse off enough; is my life shitty enough,” she considered, “who am I going to be compared to,” and she thought of applicants who attended “private high schools and Ivy League universities.” The Hummingbird also thought about to whom he would be compared; “what am I up against,” he wondered. When Kenny first arrived at college, he was overwhelmed by how much wealthier and socially connected many of his peers were compared to him. When it came time for Kenny to apply to medical school, he reasoned that the typical applicant would likely look more like his college peers rather than those from his blue-

collar hometown. As postulated in social comparison theory, to whom an applicant chooses to make comparisons affects the opinions, beliefs, and attitudes that are formed or revised. Ariadne, Sarah, Kenny, and The Hummingbird were more equipped to see themselves as comparatively disadvantaged because they made comparisons with more affluent social groups they considered to be typical applicants. Comparison between their own experiences with disadvantage and the perceived affluence of typical medical school applicants made it easier to see themselves as having the right to identify as disadvantaged applicants.

Right to identify involved the participants considering their personal levels of disadvantage and deciding whether it was sufficient enough to justify designation in the application. This decision process involved concerns related to ethics and impression management. In terms of ethics, some participants believed the Disadvantaged Status represented a social justice tool, a way to lift up applicants who faced considerable and atypical challenges. And in terms of impression management, applicants considered the audience and how their status might affect their admissions prospects. Depending on the potential benefits and risks, participants viewed the disadvantage status as more or less worthwhile.

Consider Sarah, she presented similar experiences as Ariadne. Both Sarah and Ariadne were from single parent homes, the daughters of immigrants; neither applicant's mother was fluent in English. Ariadne and Sarah both grew up with household incomes well below the poverty line. And while Ariadne compared herself to the quintessential medical school applicant, and exuded a confidence in her decision to apply as disadvantaged, Sarah was nervous. Sarah shared, "I felt a little, no a lot of guilt because

there are people I am thinking of who would definitely be more disadvantaged. Jane seemed to experience a similar struggle with the right to identify. Jane, who shouldered the financial and social challenges of an undocumented student, worked full-time all through college, even had to take a semester off to earn money for tuition, and slept on friends' couches during periods of homelessness, still found it difficult to apply as a disadvantaged applicant. Jane had an idea of the quintessential disadvantaged applicant that was so underprivileged, that she had an emotional time trying to justify her own right to identify.

And for Richard, even though medical school admissions staff allayed most of his concerns regarding his right to identify, he still described an ethical component to his decision. He explained that he thought about those scenarios, such as: "Chinese children who did not have good access to education or employment opportunities, and my high school friends whose families were from unstable areas in the world. Their families went through horrific experiences; their safety was in danger." As Matthew cautioned, "you don't want to position yourself as disadvantaged if it means displacing someone else who might be more disadvantaged." Matthew's decision came down to whether or not he was "diluting someone else's story." And while Chris had multiple considerations in his decision not to apply as disadvantaged—not realizing how different his childhood was in comparison to the type of individuals who typically apply to medical school, feeling loved and supported by his single mother whom he revered, and not having the resources to feel like he understood the definition or purpose of the AMCAS designation, he still worried about the ethics, and if he had the right to identify. Chris explained that one of

the reasons he did not apply as a disadvantaged applicant was that he just didn't feel "entitled" to do so.

Ethics and the right to identify were among Roger's reasons for not applying as disadvantaged as well. Roger knew that he could have crafted an essay about how he grew up among migrant workers, a product of under-resourced schools and communities, but because he personally didn't feel disadvantaged, even though he would have been telling the truth, it would have felt "dishonest, and excessively embellishing the sense of struggle at the time." Roger felt that because he had gone on to complete two graduate degrees, "still leaning on the place" where he grew up would have taken advantage of and detracted from applicants still experiencing hardship.

All participants alluded to concerns related to impression management and expressed a desire to be viewed a certain way by application readers. Goffman (1959) explained that the way people wish to be seen by others could be thought of as a front, and the mannerisms actors display are based on their perceptions of what a given audience expects. According to IM theory, the more an actor's front is congruent with the audience's expectations, the greater the likelihood of coming across as relatable, believable, and desirable.

As his front, Charles chose to come across as hard working. He said, "I don't know, I was just trying to convince people that I would be a decent doctor and was willing to work hard...that I actually cared about people and wanted to help take care of them." I asked Charles what aspects of his application he thought demonstrated his work ethic and compassion. Charles hoped the whole application represented him well, but he specifically tailored his experience section for this purpose.

While Charles was not too keen on seeing himself as disadvantaged despite his hardships, he did identify as such in the application. Charles was aware that he had been afforded fewer privileges throughout his childhood compared to many medical school applicants. Charles was comfortable advocating for himself in the application, but he expressed that he would not otherwise choose to label himself as disadvantaged. Charles acknowledged the competitive nature of the application process and took a pragmatic approach to the disadvantage status. He reasoned:

If you think about it in terms of economics, what does it cost to write the essay, like an hour of your time? And what is your potential gain from someone reading it, getting more consideration due to the fact that you are disadvantaged? Charles concluded, “Why would you not write it?”

Charles kept his disadvantaged essay short, just the facts; he did not want to come across as a complainer.

Ariadne also hoped to convey her accomplishments in the face of adversity.

Ariadne was worried that the AMCAS application would show an inaccurate picture. Due to her parents both having advanced degrees, she thought readers might see her as more privileged than she considered herself. Recalling her narrative, Ariadne shared that her father did not prioritize the family and was seldom around. Ariadne’s mother did not speak English proficiently, which limited her employment prospects and social capital. Had Ariadne not elected to identify as disadvantaged, she was concerned her application would not be equitably evaluated. Having examined her application, I agree. It would have been all too easy to see Ariadne as privileged, and in many ways she was; she attended one of the nation’s premier private preparatory high schools, a top university for undergraduate study, and in the application, it looked as though she grew up with two parents, each of whom had advanced degrees.



Ariadne understood that applying to medical school was a competitive endeavor and she wanted to be seen as favorably as possible by admissions officers. She understood this meant leveraging whatever competitive advantages she had at her disposal. As Ariadne explained it, “What it came down to for me was...I am going to be compared to people who went to private high schools and Ivy League universities.” Ariadne imagined that her competition would have pedigrees commensurate with that level of preparation and implied social and financial support and did not want to position herself as having had as many opportunities.

The Hummingbird also spoke of the high stakes nature of applying to medical school; “it’s the hardest path in the country to get into,” he explained. And similar to both Ariadne and Charles, The Hummingbird took a pragmatic approach. He knew he had to leverage every aspect of the application to his advantage. The Hummingbird believed that he did not have “anything good” about his academics; he was a “recreational leisure studies major with Fs on his transcripts.” But The Hummingbird had been out of college for many years, he contributed to humanitarian efforts in multiple countries, and served in the military. The Hummingbird wanted to “present a picture” of his growth, from underprivileged youth to worldly leader and poet. He saw the Disadvantaged Status as a “strong card,” his “only hope,” and since he knew he qualified as disadvantaged; he saw identification as a way to improve his odds of gaining acceptance by admissions members.

Like the Hummingbird, Kenny also viewed the Disadvantaged Status as uplifting. Kenny described the designation as, “an advantage,” it was a “no brainer;” he “knew there was no way it was going to hurt.” Like Charles, Kenny said he was, “very matter of

fact about it.” He “just stated the facts.” Kenny believed he had a right to identify and believed doing so would improve his given off impression, but in terms of ethics, he realized that there were people from more challenging circumstances and thought someone else could craft a more compelling narrative. Kenny stated:

I felt like I fit the criteria...I asked my undergrad advisor...I gave him a synopsis of my circumstances and he was like, “yea you can qualify as disadvantaged”...I don’t feel guilty...but when I think of someone who is disadvantaged, I think of someone who comes from a broken home or didn’t have an adult who cared for them.

Kenny talked about the importance of presenting a “narrative;” he mentioned this several times throughout the interview. Demonstrating his accomplishments in spite of hardship was part of that narrative.

Jane was not planning to apply as disadvantaged as her idea of disadvantage begins at a place more severe than her own circumstances, as if she used herself as the line between what is and is not disadvantaged. At the insistence of her peers, fellow undocumented applicants, Jane applied as disadvantaged. After Jane applied as disadvantaged, she questioned her decision, and wondered if schools even took the designation into consideration. Jane’s concern got at the application strategy that Charles spoke of; she wondered whether the upside of applying as disadvantaged outweighed any downsides. Meghan had similar concerns; she hoped to avoid talking about the circumstances that she thought could qualify her as disadvantaged, but wondered had she done so, if she would have received an “extra look” from her first choice school, where she was not accepted. Jane called medical school admissions offices to ask if they accepted undocumented applicants. When enough admissions staff conveyed they “had

no idea” about undocumented students, Jane decided that she needed the Disadvantaged Status essay as a place in the application to present that side of herself.

While the participants who did not identify as disadvantaged felt that they did not have the right to identify, they still hoped to convey resilience and compassion. Even though Kelsey did not see herself as disadvantaged, she thought it was important to demonstrate that she had experience with adversity. For that reason, Kelsey chose to reveal her sexual orientation in the primary application. Kelsey explained, “I sort of use that to relay, ‘hey as a member of a marginalized population I am empathetic to the needs of not only this population but also medically underserved populations.’” Kelsey felt like she emphasized her identity more than she normally would because she wanted to give off the impression that she can relate to, and in turn help many different patient populations.

Alex also expressed a desire to convey a front of resilience. He hoped to demonstrate that he could adapt to any challenge. In his personal statement Alex wrote about his experiences dealing with and then overcoming obesity. Alex hoped that the impression he gave admissions committees was that he could be successful no matter what.

Ali and Chris managed their impressions differently than some of the participants. Ali explained that she was more concerned with coming across as her authentic self than with being accepted, which she reflects back on as, naïve. Ali hoped to, “weed out some of the schools” by showing the “touch-feely” side of herself that she perceived as unattractive to some admissions committees. Similar to Ali, Chris wanted his, “true and genuine self” to come through in the application. Chris considered himself to be, “pretty

average in comparison to other applicants” and struggled to find a way to, as he put it, “bring myself out and jump off the page so they can see who I am and see my own unique attributes.” In managing his impressions, Chris focused on how to stand out without being disingenuous.

As a re-applicant, Ana wanted to show that she was passionate about medicine for the ‘right’ reasons, that she was not a “gunner.” she was not after “accolades,” that she simply wanted to take care of people and that the intimacy of the physician-patient relationship was her main draw. Roger was also a re-applicant; he hoped to give off an impression of maturity and compassion. Roger showed himself to be mature and compassionate through the ways in which he had changed through his service to individuals who suffered from mental illness and addiction.

**Summary of Section V.** In this fifth section of Chapter IV, Part III, I addressed the final study question, how were former applicants’ attributed meanings of disadvantaged used in their decisions whether or not to self-declare in the AMCAS application? I thought of this research question as a means to acknowledge the possibility that the decision regarding whether or not to apply as a disadvantaged applicant may not be as straight forward as negotiating a definition and then applying on the basis of that definition. Instead, I wanted to consider the possibility that applicants could behave contrary to their definitions. As it turned out, through a framework of symbolic interactionism (Blumer, 1969), social comparison theory (Festinger, 1950; Festinger, 1954), impression management (Goffman, 1959), and stigma (1963), it was plausible to imagine that applicants could act in contradiction to their personal definitions of disadvantage and of self within those definitions. Through social comparison theory,

we can imagine scenarios in which applicants may revise their definitions of disadvantage, perhaps to align with peers or authoritative others—admissions faculty and staff. Depending on the peer groups to which applicants make comparisons, they may see themselves as more or less disadvantaged. As several participants pointed out, the ability to see one's self as disadvantaged depends on where one lives and in what sort of social circles one is embedded.

Participants imagined that it was possible for two identical version of an applicant to identify and not identify as disadvantaged. Charles described this relativistic complication of social comparison through a hypothetical. To paraphrase, Charles shared that an applicant with an old car surrounded by peers who all drive expensive sport cars might feel comparatively disadvantaged. The same applicant could be placed in a setting where no one else even owns a car, and feel advantaged. Through Charles' analogy, it can be imagined that the juxtaposition of participants' physical and social locations, ambiguity of the concept of disadvantaged, and need to validate opinions and beliefs through social comparison may lead two similarly disadvantaged applicants to reach different decisions regarding the Disadvantaged Status. Stigma also aligned well with the social comparison and impression management elements. While it did not present as a major theme with this group of participants, they did suggest that a negative connotation associated with the disadvantaged may be affecting other applicants' perspectives of the label, and in turn, decisions whether or not to apply as such.

### **Chapter Summary**

In Chapter IV, I presented the findings in three parts. Part I contained biographical narratives on each of the 15 participants. The narratives included

background information on participants and condensed accounts of their interviews. Part I concluded with tables, one for participants who applied as disadvantaged and the other for those who did not. The tables provided snapshots of the participants across demographic data that they disclosed during the interviews or in their AMCAS applications.

During data analysis I condensed the interview and AMCAS application data into nine themes helpful in understanding how applicants negotiate the Disadvantaged Status. Those themes included: experience with disadvantage, resources, ambiguity, audience, pride, stigma, ethics, right to identify, and impression management. In Part II I described each of those nine themes and how they connected to the theoretical framework. In Part III, I addressed the five study questions. I used the nine themes, along with the theories of symbolic interactionism, social comparison, stigma, and impression management to explore the participants' experiences with, and perspectives on, the option to apply as a disadvantaged applicant in the AMCAS application.

In Chapter V, I reveal what I determined to be the most significant implication from this inquiry. I provide recommendations for stakeholders based on participants' criticisms and suggestions, as well as some of my own. I conclude Chapter V with my closing thoughts on this research endeavor.

## **CHAPTER V**

### **IMPLICATIONS AND RECOMMENDATIONS**

I conclude this study with a discussion of what I have determined to be the most significant implication based on the analysis of the participants' experiences with the Disadvantaged Status in AMCAS. I make recommendations for stakeholders based on participants' criticisms and suggestions, as well as some of my own. Stakeholders include leaders at the AAMC, medical school committees, undergraduate faculty and staff who support students who may someday apply to medical school, and finally, future applicants. I conclude this chapter by reflecting on my experience with this inquiry.

#### **The Process of Negotiating the Disadvantaged Status**

The Disadvantaged Status is not being used consistently, at least not by all applicants, and if it is meant to be a tool for diversity and student advocacy, then this is problematic. Either applicants embellish their circumstances in an effort to manage their impressions and present themselves as favorably as possible, or are hesitant to use the Status, even if they experienced considerable hardship throughout childhood—and this, I argue, is the more serious of these two issues brought to light through this inquiry. Between the potential for misuse by individuals allured by perceived benefits to their application regardless of their actual circumstances, and underuse by people for whom it was likely designed to benefit, evaluation of the Disadvantaged Status is prudent.

It falls to each applicant to decide whether or not to apply as disadvantaged. Many of the participants in this study appreciated the freedom to self-determine; however, the process of deciding whether or not to apply as disadvantaged is complex

and fragile. Simply having experienced disadvantages in the past was not sufficient to ensure that participants would know, or feel empowered, to apply as disadvantaged. The process of self-determination is complex; it depends on a number of factors, and a change in the value of any one could determine whether an applicant applies as disadvantaged.

As the participants in this study indicated, the process of deciding whether or not to apply as disadvantaged was complicated. First, participants had to define disadvantage. Next, they had to determine, based on their definitions, how disadvantaged they were. And finally, the participants had to decide whether or not to indicate the Status in their application. During each step in this process, participants depended on a variety of factors, of which I account for through a summary of the nine themes.

### **Determining the Meaning of Disadvantage**

As applicants who confronted the Disadvantaged Status in AMCAS, the participants reflected on their lives and considered their own experience with disadvantage. And, because there is no official or comprehensive definition, participants had to rely on other resources. Participants searched for unofficial explanations on the Internet and asked friends, family, and individuals they perceived as authorities on the topic; this introduced considerable variability depending on with whom participants spoke. Participants who were the most confident in their definitions tended to come from circumstances in which they were surrounded by supportive and knowledgeable resources, such as, advisors at universities with strong pre-medical programs, family and friends who had gone through medical school or were able to leverage social capital to make connections with other knowledgeable people. As a form of social comparison, participants also considered the circumstances of their peers as they worked to establish



their definitions. All of these resources were more accessible to individuals already in more socioeconomically privileged positions.

### **How Disadvantaged Am I?**

In determining whether they saw themselves as disadvantaged within their definitions, participants relied on their personal experience with disadvantage; resources—most notably social comparison; pride; stigma; ambiguity; and audience. Some participants knew they were disadvantaged based on the extreme nature of their own experience with disadvantage; however, others needed to compare themselves with peers to validate or revise their self-conceptions. Through social comparison, participants tested their assumptions about themselves. Several of the participants went to high schools with peers from significantly different socioeconomic backgrounds, where disparities in privilege were readily apparent, and were therefore more likely to see themselves as disadvantaged. Conversely, the participants who were similarly disadvantaged to their peers felt their circumstances were normalized as a result of being surrounded by individuals from comparable backgrounds. This second group of participants found it more difficult to see themselves as disadvantaged. The participants were influenced by their access to quality resources. For example, knowledgeable advisors or medical school admissions officers willing to offer their guidance empowered participants who were otherwise unsure or even planning not to apply as disadvantaged.

The ways in which individuals see the world are colored by their biases, and this held true for the participants in this study. Participants who viewed their upbringing with pride found it difficult to see themselves as disadvantaged. They felt identifying as disadvantaged took away from their hard work, dedication and accomplishments, or those

of their parent(s)' or guardian(s)'. Participants also had to come to terms with what some perceived to be a stigmatizing label. As participants weighed the risks and benefits of being labeled, some found it challenging. The ambiguity surrounding both the meaning and the use of the Status engendered anxiety. Participants were concerned that there could be repercussions if the reasons they saw themselves as disadvantaged were not congruent with admissions committees.

### **The Decision to Apply as Disadvantaged**

Finally, in deciding whether or not to apply as disadvantaged, the participants considered what they learned about the Status, whether or not they believed they qualified, and factored in any perceived benefits or risks. In this final stage, participants factored in social comparison as well as concerns related to ethics and whether they had a right to identify. Social comparisons were made to determine if there were other applicants who would be more deserving of the designation, which led participants to consider ethics concerns. As with *How Disadvantaged Am I?*, stigma and pride factored in, as the possibility of any benefit of applying as disadvantaged could be negated by concerns over whether identifying with the label would detract from their identity or from their perceptions of their upbringing—the love and support they were provided, perhaps in spite of experiences with disadvantage that would otherwise empower them to apply as such.

All of the themes in the process were negotiated as part of impression management. Participants considered their definitions and whether or not they saw themselves as disadvantaged, or at least disadvantaged enough, but all of the themes were weighed in the context of the impressions they hoped to give off. If participants believed

the Disadvantaged Status offered a competitive advantage, they were more willing to designate the Status than if they did not see any such benefit.

Some participants were concerned as to whether they were disadvantaged enough compared to people they either knew or imagined. For those participants, ethics and the right to identify influenced their decision. Several participants who were either sure they did not qualify, or were not confident one way or the other, thought the Disadvantaged Status should be reserved for individuals who could benefit the most. Participants who were unsure could be swayed by encouragement from peers or authoritative others, such as faculty and staff. However, participants who were unsure and did not have access to resources, were more likely to err on the side of not applying as disadvantaged, in part because they did not want their given off impressions to conflict with the preconceptions of their audience, but also because they did not want to dilute any benefits of the Status for individuals they thought were more deserving.

### **A Convoluted Process**

The process of deciding whether or not to apply as a disadvantaged applicant is a convolution involving many factors. Any deviation in one of the nine themes during any of the three steps negotiated in the process could be sufficient to alter an applicant's outlook on the Disadvantaged Status. Furthermore, many of the factors are beyond an applicant's control.

An applicant's resources and social capital are, in part, products of family background. The socioeconomic conditions an individual is born into determine, to a great extent, educational and social opportunities, the very factors that affect preparation for medical school and competitiveness in the admissions process. This means that many

of the individuals for whom the Disadvantaged Status could benefit the most, are among the least likely feel empowered to make use of the option.

### **Recommendations for the Association of American Medical Colleges**

Based on my analysis, I recommend the AAMC include more description of the purpose of the Disadvantaged Status and how it factors into the application. To ensure a common understanding of the Disadvantaged Status across medical schools, I recommend that the LCME provide oversight of application reviewer training as part of the medical school accreditation process and through it, guidance regarding the purpose of the Disadvantaged Status. Additionally, to reduce confusion with the SES Disadvantaged Indicator, the Disadvantaged Status should be repositioned farther from socioeconomic items within the application. Lastly, the label—disadvantaged, should be updated to a less deficit-oriented and less stigmatizing term.

### **Improve the Description of the Disadvantaged Status**

Applicants would benefit from a more thorough explanation of the purpose of the Disadvantaged Status. The explanation should include why the question is being asked, and how medical schools will use it. Because many of the participants shared that they were concerned, fearful and hesitant as applicants to disclose potentially sensitive information, I recommend the AAMC provide an assurance that the designation will not be used against them or stay in their records and follow them as students.

All of the participants voiced concerns with the consistency of published materials. Through researching the extant literature, repeatedly searching the Internet, and talking with the participants, I noticed inconsistencies between published materials

on the Disadvantaged Status. For example, there are differences in how the AMCAS instruction manual, a PDF available from the AAMC, and the actual question prompt in the application each describes the Disadvantaged Status. While the questions read the same, the examples provided are different. In the AAMC's (2017) instruction manual, applicants are informed:

You will then be asked if you wish to be considered a disadvantaged applicant by your designated medical schools. You might consider yourself disadvantaged if you grew up in an area that was medically underserved or had insufficient access to State and Federal Assistance programs. (p. 31)

However, in the live application, the prompt reads, "Do you wish to be considered a disadvantaged applicant by any of your designated medical schools that may consider such factors (social, economic or educational)?" A website link is embedded within the application in which it is explained, "To help determine if you are disadvantaged, click the 'How do I know if I should be considered disadvantaged?' link, which opens a webpage with definitions for immediate family and state and federal assistance programs; there is no mention of the Disadvantaged Status. The information that is detailed on the website appears to not only be unhelpful in addressing the Disadvantaged Status, but focuses specifically on SES-oriented terminology. This emphasis on SES factors of disadvantage contributed to many of the participants being confused about the distinctions between the SES Disadvantaged Indicator and the Disadvantaged Status.

While the AAMC could clarify what they mean by disadvantaged, and in turn, reduce anxiety among applicants, the more the Status is defined, the more the scope of eligible circumstance is limited. Rather than detailing a plenary definition that will inevitably deter some applicants from applying as disadvantaged due to their unique circumstances, the AAMC should focus on expanding their explanation of the intent of

the Status. By leaving the scope of the definition broad, but providing a comprehensive explanation of the purpose and use of the Disadvantaged Status, the AAMC would help reduce applicants' anxiety associated with concerns related to stigma, pride, ambiguity, right to identify, and impression management.

### **Liaison Committee on Medical Education Mandated Training**

Due to the variability in experience, training, and biases among admissions faculty and staff involved in the selection process, I recommend that the LCME provide oversight to all medical schools regarding application review. As a component of the accreditation process, the LCME should require all application readers to undergo formal holistic review training. Medical schools should be held accountable to ensure that their application reviewers are educated and understand the purpose of the Disadvantaged Status. A standardized explanation of the Disadvantaged Status should be disseminated as part of the holistic review training. The LCME mandated holistic review training could lead to a universal understanding of the Disadvantaged Status, while still allowing each medical school to decide how the essay factors into their institution-specific selection goals.

### **Reposition the Disadvantaged Status Further from Socioeconomic Status Questions**

Participants were influenced by the proximity of the Status to financial and social questions in the Childhood Information section of the application. I recommend moving the Disadvantaged Status within the application, perhaps to the end. Such a move may reduce any tendencies to think of disadvantage in terms of SES. Additionally, many

participants indicated that they were influenced by the similarity between the two application items—the SES Disadvantaged Indicator and the Disadvantaged Status. In addition to a change of location, a change of label may allow more applicants to think of the Disadvantaged Status beyond social and financial limiters.

### **Create a Less Disenfranchising Label**

Finally, if confusion caused by similarities with the SES Disadvantaged Indicator, is not compelling enough on its own to warrant revision of the Disadvantaged Status label, a change in nomenclature may also engender more positive connotations. Almost universally, the participants alluded to the Disadvantaged Status as deficit language. And, as several participants pointed out, such negative language is likely to be even more marginalizing for especially vulnerable populations. Participants thought the question should reflect the AAMC's desire to learn about challenges or hardships faced during childhood that may have impacted an otherwise normal path to medicine. I recommend reframing the question to be about hardships or challenges faced or overcoming adversity; this will lead to less stigmatizing interpretations.

### **Recommendations for Faculty and Staff**

Medical school admissions committees should be mindful that the Disadvantaged Status is not a panacea. There will be applicants who make appropriate use of the Status and those who do not. And those who do not are not necessarily doing so to game the system; some may have skewed self-perceptions due their statuses within their social groups. There will continue to be applicants who could use the Disadvantaged Status but choose not to, perhaps due to who they compare themselves with, the social worlds they

have access to, and their positions within them, or perhaps due to stigma or pride concerns. Because some applicants will have experienced humiliation or even exacerbation of the very circumstances that are stigmatized, they may attempt to hide those parts of their identity. And if those parts of their identity would otherwise be the cause for applying as disadvantaged, as a part of hiding those parts of themselves, they may choose not to apply as such.

In line with stigma, if applicants perceive the Disadvantaged Status as a weakness or a mark against them, they may choose to avoid it. And, some applicants may be affected by ethical considerations and take the stance that there are others more deserving to use the Disadvantaged Status than themselves.

To the faculty and staff at undergraduate universities, and medical schools, I recommend that students be contacted as early as possible in their college careers to educate them about the options for applicants who face significant childhood barriers. Not all of the participants had access to pre-medical advisors or basic services to learn how to prepare for medical school, and very few participants received guidance on the Disadvantaged Status. For medical school admissions officers, this means being prepared to educate prospective applicants on how the Disadvantaged Status factors in to their specific evaluation process.

In general, undergraduate faculty and staff need to become more familiar with the components of the AMCAS application so they can speak about the Disadvantaged Status. I recommend that student affairs practitioners and any faculty who frequently work with pre-medical students contact the AAMC to request the latest information on medical school preparation. Faculty and staff should either be able to speak to the



process, or refer prospective applicants to quality resources; this is especially true with vulnerable or marginalized populations. Faculty and staff need to be prepared to bring the Disadvantaged Status option to the attention of students and help them determine whether its use is appropriate. Career center professionals and undergraduate advisers should consider regularly scheduled seminars to provide guidance on preparation for medical school and how to complete the AMCAS application and integrate discussion of the Disadvantaged Status within those sessions; this will serve, not only to educate, but also to empower. As one of the participants observed, knowing about the Disadvantaged Status, and in general, about the principles of holistic evaluation, like knowing about financial aid options, helps ensure that the most vulnerable populations are shown that postsecondary education is a real possibility. Oftentimes, the students for whom the Disadvantaged Status could benefit the most are the least empowered to take advantage.

### **Recommendations for Future Applicants**

Future applicants should feel empowered to manage their impressions in ways that show their best and most authentic selves. It is important for students to realize that the Disadvantaged Status, as part of the widely adopted holistic review process, is simply another dimension with which to get to know an applicant. It should not be seen as diminishing, marginalizing, or deleterious to students' admissions prospects. The questions on an applicant's mind should not be what if my disadvantages are not significant enough?. However, applicants should also not approach the Disadvantaged Status from the perspective that it is an extra essay to enhance their competitiveness regardless of whether they actually see themselves as befitting the status.

I encourage future applicants to reflect, not only on their own experiences, but also on those of others from groups who traditionally make up the majority of the medical school population, to keep in mind what the traditional medical school applicant looks like. Even in early 2017, at the conclusion of this study, there are proportionally fewer students from minority demographics, lower income households, under-resourced schools, LGBTQ groups, first generation, ESL or international, or with a myriad of other possible circumstances that not only distinguish them from the traditional medical student, but may also contribute to challenges throughout childhood or barriers to medical school preparation. I encourage applicants to make comparisons not only from within their own peer groups, but also to traditional medical students. Future applicants are encouraged to not only solicit input from knowledgeable resources (if available), but also to review the data available on the AAMC website, specifically the webpages on applicant and matriculant data; this will help put their circumstances into perspective. Furthermore, if applicants have limited resources to assist with understanding the Disadvantaged Status and whether they should apply as such, I encourage them to contact the AAMC directly and locate a staff member able and willing to assist them further.

### **Recommendations for Future Research**

Future qualitative studies should consider the perspectives of students from populations to whom I was unsuccessful in providing voice. In particular, future researchers should strive to include perspectives of Black medical students. Members of marginalized populations, including Black medical students, may offer additional perspectives on the potentially stigmatizing language or nature of experiences that would give cause to use the Status. Furthermore, insight from underrepresented populations

may shed light on any differences in navigation of the AMCAS application, particularly, the negotiation of the Disadvantaged Status. It is possible that the same factors (e.g. distance from family/need to support family, ability to finance cost of attendance, accessibility) that impact where students decide to apply and matriculate may also affect their views and attitudes towards the Disadvantaged Status. Students who either are only accepted or choose to attend what are perceived to be “less selective” programs may interpret the Disadvantaged Status differently. For example a student may only be accepted to “less selective” programs due to a lack of SES and educational resources throughout childhood that could have limited their preparation. Or, a student may have chosen to attend a “less selective” program to remain close to and support family. Depending on the type of medical schools applicants apply to, it is possible that their impression management tactics will change.

Participants shared deeply personal stories and at times exchanges were emotional. In addition, building rapport, enough to yield rich dialogue, took time; this was part of the reason some of the interviews lasted multiple hours over more than one session. I recommend that future research on this subject continue to be paradigmatically and methodologically complimentary to such an inquiry. Survey studies could be beneficial to test different locations of the Disadvantaged Status within the AMCAS application, and attitudes regarding alternative labels to the disadvantaged term. In addition to extending this inquiry to a variety of medical schools and student populations, I recommend future studies be designed to solicit the perspectives of medical school admissions members—faculty and staff.

I considered school selectivity as a compelling characteristic of the study site. Because the site was a highly selective medical school affiliated with a prestigious undergraduate institution, I theorized that it could be possible that applicants would manage their impressions in the AMCAS application differently than if they were applying to schools where they believed their acceptance was more likely. However, several practicalities rendered this notion uneventful. Most applicants explained that they either did not hold the medical school in the same esteem as I had. Many of the participants attended top-tier undergraduate institutions with high expectations, where their peers were all hoping to attend medical programs in the top 10 of the U.S. News and World Report rankings for that year. Perhaps the main reason ranking did not affect the participants' IM strategies was due to how some of the participants described their admissions timeline. Many participants reported that they completed their written materials in advance of AMCAS opening for the admissions cycle, particularly if premedical committees wrote letters of evaluation, as they often required students to submit their materials early in the process. Additionally, since many of the participants attended similarly prestigious undergraduate institutions, they were desensitized to school reputation. Since the average applicant applies to more than 16 schools, and because they can prepare their applications in advance of their school selections, neither selectivity nor reputation impacted impression management in the application. With this in mind, future research should be conducted at additional medical schools across a range of characteristics (e.g. public/private, rural/urban, selectivity, ranking, tuition cost, demographics etc.).

During the analysis, I noticed that participants approached defining disadvantage through three distinct processes (as discussed in Chapter Four, Part III, Section I). Those processes included considering variables that could be associated with disadvantage, imagining an archetypical disadvantaged person, or taking the examples provided in the application and corresponding student instruction manual at face value. Future research could explore relationships between applicant characteristics and definition formation. In general, more research is needed on the factors that affect applicants' decisions regarding how to define and act toward the Disadvantaged Status.

Finally, non-admitted students were not included in this study due to my role in medical school admissions. I considered including non-admitted students as they could lend additional insight; however, I was concerned that some individuals would construe their inclusion in the study as implying that their decisions regarding the Disadvantaged Status affected their admissions outcomes. Future research could include non-admitted students; however researchers should consider their relationship to the study.

### **Closing Thoughts**

Just as with participants in this study, it may be that other medical school applicants experienced anxiety due to the Disadvantaged Status. Such issues may lead applicants to avoid disclosure of legitimate hardships out of fear for how doing so will affect their applications. Ambiguity entitles some applicants to use the Disadvantaged Status, regardless of the appropriateness or authenticity, while discouraging others, perhaps those who could benefit the most, due to a lack of understanding of the definition, purpose, or empowerment. Furthermore, applying as disadvantaged requires

applicants to disclose the very characteristics that may have already marginalized them within other contexts.

As a data analyst and holistic screener of medical students at multiple universities, I entered this study primarily out of a vocational interest. Through getting to know the participants and sharing in their experiences with the AMCAS Disadvantaged Status, I leave this study a humbler version of myself. I had the privilege to explore this topic, and at the outset, more than one year ago, that seemed a sufficient impetus; however, after many months and thousands of hours of interviews, transcriptions, analyses, and drafting, the issue of deciding whether to apply as a disadvantaged applicant became more than an interesting topic to satisfy my dissertation requirements.

The medical students in this study confirmed for me that this topic, whether as an area of research or practice, deserves greater attention. For many applicants, deciding whether or not to apply as disadvantaged is complex, a source of confusion and anxiety. The findings of this inquiry compel me to continue investigating approaches to diversity, disclosure, and self-advocacy in medical school admissions. Furthermore, I am compelled to work on behalf of future applicants, to empower those who feel they should apply as disadvantaged to do so, and to help reduce ambiguity that leads to anxiety surrounding the Disadvantaged Status. With more than 50,000 prospective medical students applying through AMCAS each year, it is my hope we can take steps to improve the conditions for future applicants.

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**APPENDIX A**  
**INSTITUTIONAL REVIEW BOARD APPROVAL**



*Institutional Review Board*

DATE: February 5, 2016

TO: Adam Lowrance  
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [840352-2] Exploring how medical school applicants make meaning of the option to identify as disadvantaged in the AMCAS primary application

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS

DECISION DATE: February 4, 2016

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or [Sherry.May@unco.edu](mailto:Sherry.May@unco.edu). Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

**APPENDIX B**  
**CONSENT FORM**

UNIVERSITY of  
NORTHERN COLORADO



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH  
UNIVERSITY OF NORTHERN COLORADO

Project Title: The Disadvantaged Status in AMCAS: Medical students reflect on their application experiences

Researcher: Adam M. Lowrance

Phone: (970) 222-9977

Email: [adamlowrance@me.com](mailto:adamlowrance@me.com)

Research Advisor: Matthew Birnbaum, Ph.D.

As a former applicant, you were provided the opportunity to self-identify as disadvantaged in the American Medical College Application Service (AMCAS) primary application. Like its origins, the purpose of the option to identify as disadvantaged is not readily documented. Furthermore, the AAMC does not provide a comprehensive definition of the concept of disadvantage, yet as a former applicant, you had to determine whether or not you were disadvantaged and whether or not you wanted to identify as such. The purpose of this case study is to explore how former applicants made sense of the option to self-identify as disadvantaged in the AMCAS primary application.

In order to investigate this phenomenon, I would like to learn about your experiences with the disadvantaged option in the AMCAS application. This research will be conducted through informal conversation-style interviews. I have provided a list of the potential interview questions below:

- 1) Why do you want to pursue a career in medicine?
  - a) Tell me a story about a time when you knew medicine was right for you.
- 2) Thinking back to your application, how did you want to be understood by admissions committees?
- 3) What does being disadvantaged mean to you?
  - a) Did you ever think your definition differed from others?
    - i) In what ways?

- 4) What went through your mind when you saw the option to identify as disadvantaged in the primary application?
  - a) If you were expecting this question, how did you hear about it?
  - b) Describe your approach to answering the disadvantaged question.
- 5) Had you ever considered yourself disadvantaged prior to the medical school application?
  - a) Tell me about a moment when you felt disadvantaged.
    - i) Or if not applicable:
    - b) What comes to mind when you envision an applicant who might be disadvantaged?
- 6) How would you describe your medical school in terms of selectivity as compared to other schools to which you applied?
  - a) Was school reputation/selectivity a factor in how you approached the application process?
- 7) What do you think about the AAMC asking applicants whether they are disadvantaged?

Interviews are anticipated to last about one hour. While participating in this research is not planned to result in any immediate benefits to you beyond a \$10 gift card as a small token of my appreciation for your participation, your involvement will likely be of benefit to stakeholders at the AAMC, medical schools, and future applicants. By participating in this study, you will be providing rich qualitative data on the complexities associated with asking medical school applicants to disclose sensitive information.

Please note there is no risk outside of normal daily feelings one might experience when talking about these issues. Since I am hoping to learn your experiences and your perspectives, this research is a cooperative effort. Interviews should be conducted in a quiet location, somewhere you can be comfortable. If meeting in-person will not work, we can conduct the interview over Skype or telephone. The pace and depth of the interview questions will be at your discretion. I will record and transcribe all interviews

and my research advisor will be the only other individual who will ever have access to the audio recordings.

You may choose a pseudonym to go by in the dissertation and any subsequent publications. And, any identifying information in the stories you share will be changed. In compliance with the University of Northern Colorado's Data Security Policy for Research Projects, all materials related to this study will be stored only on my private computer secured by a unique password consisting of more than eight characters with a mixture of upper case and lower case letters, numbers, and special characters. Neither the password nor access to my personal computer will be shared with any other person.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Participant's Signature / Date

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Researcher's Signature / Date

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**APPENDIX C**  
**ADDITIONAL PARTICIPANT PERSPECTIVES**

Table C1

*Comments Regarding Definition of Disadvantaged*

Participant	Comments
Ariadne <sup>a</sup>	any life circumstance or identity characteristic that could have precluded you from obtaining certain opportunities or reaching the same level of achievement that peers, as in people who get into medical school
Charles <sup>a</sup>	I think everybody's definition of disadvantage is a little bit personalized
Jane <sup>a</sup>	homeless, surrounded by drugs, not having food everyday, having a really broken home; I always thought of the very severe side of disadvantage
Kenny <sup>a</sup>	someone who comes from a broken home or didn't have an adult who cared about them; there are a million scenarios; I always thought about it from a purely socioeconomic perspective
Matthew <sup>a</sup>	socioeconomic status; if you are a minority, sex or gender differences, orientation, race or ethnicity, if you were born in a rural area or outside the country; really broad view; I thought it was about socioeconomics
Richard <sup>a</sup>	a combination of so many variables; social determinants, neighborhood, parents' education, childhood opportunities, in the context of the US, race, ethnicity, gender; if a person's identity is not acknowledged
Sarah <sup>a</sup>	the obstacles in your life. They could be social, monetary...where you live, rural versus urban; anything out of your control in childhood that limited you
The Hummingbird <sup>a</sup>	didn't have health insurance; family/socioeconomic stability; I think the crux of what all of us think the disadvantaged essay is different
Alex	having fewer resources...reduced opportunities or reduced support networks or reduced opportunities for education; there are so many factors
Ali	picture of somebody out there alone in the world without...resources; somebody of color, maybe someone who grew up outside the US or inner city kids; didn't have that great of schooling...support network
Ana	someone whose parents were working three jobs; had to take jobs after school in order to help...pay the bills

Figure C1, continued

Participant	Comments
Chris	if something about you and your circumstances in life have denied you an opportunity
Kelsey	financial disadvantage, do you come from generational poverty?; physical or cognitive disadvantages, other circumstances in your life where something happened and you didn't have any control
Meghan	parents that are not able to...go to any steps to ensure those educational opportunities; parents that don't speak the language...or didn't know how the system worked or weren't empowered to seek things out for you
Roger	the sense of struggle, either objectively or subjectively people felt when going through those circumstances; single-parent, single-income household, had to help take care of your siblings and had to work, that sort of thing

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.

Table C2

*Comments Regarding Experience With Disadvantage - Definition*

Participant	Comments
Ariadne <sup>a</sup>	Medicaid, food stamps, CHIP, SS and disability survivor benefits, food pantry; forgone many opportunities; hand-me-downs; single immigrant mother
Charles <sup>a</sup>	educational disparity in rural China; arrived in US... no ESL program; debated dropping out of [high] school to work full time...stayed in school while working at local Chinese buffet...tips only...too young to be hired; working three jobs for most of the time in college
Jane <sup>a</sup>	first generation immigrant...not easy; no health insurance; 16 when father passed away; had to work to supplement family's income; lived in fear of becoming homeless; no financial aid due to immigration status; worked full time during college; many opportunities not available to me; never had a physical
Kenny <sup>a</sup>	Medicaid; parents not able to pay for college; during college, financial considerations prevented me from unpaid internships; borrowed full cost of tuition and living expenses; qualified for the FAP; mow lawns throughout middle and high school to meet some of my expenses; from blue collared town...didn't feel disadvantaged there
Matthew <sup>a</sup>	never faced dire economic hardship where my... wellbeing was threatened; economics have always played a factor; had to have job since I was 16
Richard <sup>a</sup>	parents income 20k; [China] I grew up was one of the poorest; went to high school...because of a scholarship program to help students from underdeveloped regions...where the idea of disadvantaged started for me; I felt disadvantaged because we were labeled because of how the scholarship was set up
Sarah <sup>a</sup>	eight years old when I moved to the US...first challenges...learning English; mother's employer funded my senior year so I could graduate high school; first college graduate in my family; teacher nominated me for...free academic program for underserved; I had no money; I never talked about it, because I couldn't afford the same things others could; one of the few financial aid kids in my high school...it was obvious who we were

Figure C2, continued

Participant	Comments
The Hummingbird <sup>a</sup>	raised with four siblings in a trailer in rural [setting]; slept on a couch for five years; single mother worked numerous jobs and relied on government subsistence; food banks and local churches; the words primary care or family physician were unknown to me; I have had a lot of things removed, taken away; hadn't been to a doctor...in 10 years
Alex	
Ali	financially; I have to work; parents... minimal understanding of English
Ana	didn't have a lot of money growing up; I recognized the difference...we were financially disadvantaged
Chris	physically and financially absent...father; family of 4...income scarcely more than 20k per year; don't ever remember considering myself disadvantaged; first two years [medical school]...struggling so hard to make ends meet
Kelsey	
Meghan	parents are divorced; dad...suffers from mental illness and has history of drug use – it has been destabilizing for our family; after divorce my dad stopped contributing financially; had to work...just to save enough money to apply [medical school]
Roger	[college], really that first year when I experienced the product of where I came from

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.  
 Blank cells indicate researcher did not code data relevant to experience with disadvantage.

Table C3

*Comments Regarding Resources - Definition<sup>a</sup>*

Participant	Comments
Ariadne <sup>b</sup>	just listening to peers...about the kinds of opportunities they were able to have; am I worse off enough, is my life shitty enough to be able to claim that
Charles <sup>b</sup>	I think there was a prompt for that; don't remember ever encountering any sort of explanation
Jane <sup>b</sup>	career counselors
Kenny <sup>b</sup>	AMCAS instruction manual, but I don't remember it being particularly helpful; a few AMCAS sessions...everyone can live stream it
Matthew <sup>b</sup>	pre-health seminars...but I don't recall anyone ever talking about disadvantage
Richard <sup>b</sup>	tried to compare myself with others; had a couple different scenarios but they came from my background; I asked the admissions staff what it meant
Sarah <sup>b</sup>	maybe I should check with my mom, look at the manual, do internet searches...even after reading more about it, I had to go to my mentor and advisor and ask them; we [advisor and mentor] spent probably 45 minute to an hour...specifically about this question
The Hummingbird <sup>b</sup>	
Alex	if peers hadn't been exposed, they might be at a higher likelihood to not understand
Ali	I think AMCAS gives some kind of definition [of disadvantage]...but I don't think it is enough; I think each applicant is left to their own devices to figure out if they are disadvantaged or not
Ana	we looked it up online; it would be nice if you had a definition

Figure C3, continued

Participant	Comments
Chris	I think there was a link you could click that took you to a short paragraph describing what was behind it; I just remember there was very little explanation; I didn't really have a lot of contact with pre-med advisors or pre-med peers and the few people I did talk to didn't really have anything to say about it
Kelsey	I went to a small liberal arts school and we had a really good pre-med advisor. He gave me lots of good advice; I had two mentors as I was shaping my application, one at undergrad and one at my graduate school
Meghan	going to the type of college where I was surrounded by the kinds of people who knew how to support me and tell me how to get into medical school
Roger	mentor and an advisor but both kept "insane schedules" and did not ask them about the definition

Note: <sup>a</sup>Resources includes social capital, social comparison and sources of support. <sup>b</sup>Participant self-identified as disadvantaged in the AMCAS application.

Blank cells indicate researcher did not code data relevant to experience with disadvantage.

Table C4

*Comments Regarding Ambiguity*

Participant	Comments
Ariadne <sup>a</sup>	it would be helpful to applications to have more perspective similar to how there is an increasing effort...students from poorer backgrounds who do not think to apply to competitive schools because they don't think they can afford it
Charles <sup>a</sup>	I don't know. I think there was a prompt for that
Jane <sup>a</sup>	I was unsure if I should be writing it
Kenny <sup>a</sup>	in my head, I was like, I don't know what you mean by this question
Matthew <sup>a</sup>	I was very unsure; I didn't know if it had to do only with economic status or minority status or other underrepresented individuals but I really didn't know; the framing is vague
Richard <sup>a</sup>	remember feeling uneasy and confusion regarding that question, that is why I reached out to the admissions office, specifically about that question
Sarah <sup>a</sup>	I wish there was a definition or table or something like there was for the socioeconomic indicator; I was disappointed, I was like, what the heck does this mean, it wasn't clear cut
The Hummingbird <sup>a</sup>	I remember asking myself, what the hell is advantaged; I think what the crux of what all of us think the disadvantaged essay is getting at is different
Alex	all referencing to a mean, I wonder what this mean is
Ali	honestly, didn't know what they meant by it
Ana	did they mean financial support, social support, educational-wise?
Chris	I remember not really knowing what they were getting at; seemed like nobody knew what this was
Kelsey	I don't think they should define what disadvantage means. I don't know how I feel about them giving examples...people might view that as the scope of the definition. I probably would



Figure C4, continued

Participant	Comments
Meghan	not knowing how it would be used or what they were asking; what flavor of disadvantage are they asking about, are they asking about my flavor or are they going to laugh at my flavor; you are providing me no structure, it is incredibly ambiguous; one of those stupid, vague prompts that they make up
Roger	I was surprised they included so little definition

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.

**APPENDIX D**

**SUPPORTING MATERIAL FROM PARTICIPANTS'  
AMERICAN MEDICAL COLLEGE APPLICATION  
SERVICE APPLICATION AND INTERVIEW**

Table D1

*Comments Regarding Experience With Disadvantage*

Participant	Comments
Ariadne <sup>a</sup>	there is one boy in particular...the topic of the dress code came up and this guy...looking straight at me...said, 'I think it is important that people...dress in a way that shows they belong here'...it hurt a lot
Charles <sup>a</sup>	reduced lunch prices at school...didn't go on senior trip and there were things I just didn't buy that others did...I felt badly at the time
Jane <sup>a</sup>	I had never had a physical
Kenny <sup>a</sup>	I didn't feel like I fit in when all the cars you see on campus are basically luxury SUVs; it was the first time I felt like I had tougher circumstances than my peers
Matthew <sup>a</sup>	my parents were immigrants, they couldn't really help me with my homework past 6 <sup>th</sup> grade; my parents don't know any doctors...engineers...lawyers; I have friends who can just call their uncle or their parents just called someone up and they got an internship
Richard <sup>a</sup>	I went to a high school in a different city in China because of a scholarship program to help students from underdeveloped regions; that is where the idea of disadvantaged started for me
Sarah <sup>a</sup>	I had no money; I wasn't able to afford the same things; I was hardcore ESL – you should have seen me crying over the flashcards
The Hummingbird <sup>a</sup>	I immediately thought, of course I am disadvantaged, I mean I grew up in housing projects and on food stamps and getting beaten up and doing drugs; I remember thinking I've had a lot of things removed or taken away; everything that they would slightly suggest was like 100% for me, so that was sort of easy for me
Alex	
Ali	I think in undergrad maybe...financially I did but I think that other part of being disadvantaged in terms of that support network, in my mind I wasn't
Ana	I recognized the difference...we were financially disadvantaged, but we like each other, we are functional and in that sense we are better off than many other families

Table D1, continued

Participant	Comments
Chris	I was raised by just my mom, my dad left my brothers and me in favor of his cocaine addiction
Kelsey	
Meghan	my parents are divorced, my dad unfortunately suffers from mental illness...and has a history of drug use; it has been destabilizing; so it was kind of like being in a single-parent household...that was where I felt like I was disadvantaged; but, I went to private, parochial school...and I got a full ride to [college]
Roger	it was really the first year [of college] where I experienced the product of where I came from; just the contrast of the preparation before college was very different than most of my peers...opportunities I would have never considered

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.

Blank cells indicate researcher did not code data relevant to experience with disadvantage.

Table D2

*Comments Regarding Pride*

Participant	Comments
Ariadne <sup>a</sup>	
Charles <sup>a</sup>	not really how I think about it; accept your condition and move past it
Jane <sup>a</sup>	I felt really blessed in that my parents always provided food for us to eat everyday
Kenny <sup>a</sup>	my parents invested an enormous amount of their human capital into us, it is not something I can measure
Matthew <sup>a</sup>	
Richard <sup>a</sup>	I don't hide...that I am from an underdeveloped region in China...it demonstrated that despite where I came from, I have been given opportunities that I have been grateful for
Sarah <sup>a</sup>	
The Hummingbird <sup>a</sup>	my mother was as heroic and stalwart as only movies can depict
Alex	
Ali	my parents never let me feel that we didn't have the financial resources, they always provided; their support was just enough that I didn't feel disadvantaged
Ana	we didn't put ourselves as disadvantaged...I think for us, because our family was so supportive; felt like if I put it down, that would have been a lie, kind of a disservice to what we actually had growing up...my family worked very hard
Chris	my high school educated mom, who worked as a hair stylist, was able to overcome the thousands of dollars of debt left to her by my dad, raised my brothers and me in a stable home...while providing for our family of four with an income of scarcely 20 thousand a year; my mother is the strongest and most capable woman I know...I seldom felt I was missing anything; I will never cease being so overwhelmingly proud of my mom and her incredible achievements; I think part of it is I am kind of a prideful person...just don't know if I ever wanted my success to be because I marked yes; never wanted that to be a footnote in my achievements; wanted it all to be because of my own qualities

Table D2, continued

Participant	Comments
Kelsey	
Meghan	one of my greatest advantages is that my parents cared so much about my education
Roger	I am very much what I would call a non-complainer

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.  
 Blank cells indicate researcher did not code data relevant to pride.

Table D3

*Comments Regarding Stigma*

Participant	Comments
Ariadne <sup>a</sup>	I was able to convince her [mother] to come around, you know, thinking that they are not setting a higher bar because you are poor
Charles <sup>a</sup>	
Jane <sup>a</sup>	
Kenny <sup>a</sup>	it feels awkward to say whether you are disadvantaged or not; sounds more denigrating
Matthew <sup>a</sup>	not the most positive connotative word; sounds problematic; seemingly disenfranchising
Richard <sup>a</sup>	
Sarah <sup>a</sup>	
The Hummingbird <sup>a</sup>	the term disadvantaged carries with it a host of assumptions, not all of them accurate and many of them quite erroneous; I have never called myself disadvantaged
Alex	may alienate many who have struggled all their lives in order not to be categorized in a position of perceived weakness
Ali	
Ana	felt that putting it down was trying to say, oh poor me
Chris	
Kelsey	you might view it as a weakness; connotes that it is something to be ashamed of, but it is not something to be ashamed of
Meghan	I think it works against people who have tried really hard to move on
Roger	

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.

Blank cells indicate researcher did not code data relevant to stigma.

Table D4

*Comments Regarding Audience*

Participant	Comments
Ariadne <sup>a</sup>	who am I going to be compared to; if the decision makers are from previous generations,...since medicine is still a conservative profession, they might discount some of these factors and the disadvantages they can cause
Charles <sup>a</sup>	I didn't really think anyone was going to care
Jane <sup>a</sup>	do I really count as disadvantaged; is that something the school actually considers a disadvantage
Kenny <sup>a</sup>	I could see people reading the application and wondering if there is more to this
Matthew <sup>a</sup>	I hope people are aware enough...I definitely don't present the way I identify
Richard <sup>a</sup>	
Sarah <sup>a</sup>	AAMC doesn't make it really clear how the question is read by the people in admissions; I don't know who was going to be using it or what they were looking for; you never know who is going to be reading your application
The Hummingbird <sup>a</sup>	trying to think of the mind of the reader; is he going to look at me and say, "this looks like you have had some advantages" so what are they going to think
Alex	
Ali	
Ana	
Chris	I was just trying to read the minds of the application reader; I somehow had the idea that it was just this big, almost, like secret code...and they would see certain things like, yea, this guy knows what he is talking about, we should definitely give him an interview and if you said one wrong thing...then you wouldn't get an interview
Kelsey	What flavor of disadvantage are they asking about? Are they asking about my flavor or are they going to laugh at my flavor



Table D4, continued

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Participant	Comments
Meghan	I thought if someone else does not see me as being disadvantaged, I mean, I am a White girl who went to Catholic school her whole life and then an Ivy league college; I tried to imagine myself as a reader
Roger	

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Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.  
Blank cells indicate researcher did not code data relevant to audience.

Table D5

*Comments Regarding Resources*

Participant	Comments
Ariadne <sup>a</sup>	it was tough being surrounded by people who had way more access to things than I did
Charles <sup>a</sup>	I guess knowing the accommodations that others are born with does in comparison make me feel that I haven't had as many opportunities
Jane <sup>a</sup>	talking to friends in very similar situations to me, they just kind of told me to think about the other people that usually apply to medical school, they are generally of the more affluent nature
Kenny <sup>a</sup>	I guess I looked over the AMCAS instruction manual but I don't remember it being particularly helpful; I felt like based on the criteria, we were on Medicaid, that I qualified; I asked my undergrad advisor, he was like, "yeah, you can qualify"
Matthew <sup>a</sup>	pretty much on my own
Richard <sup>a</sup>	
Sarah <sup>a</sup>	I did a lot of research to try and figure out if I even qualify; they [advisor and mentor] said, if I wanted to consider myself disadvantaged, it is up to me
The Hummingbird <sup>a</sup>	
Alex	I knew right away that it didn't apply to me, but the pre-med committee was open to discussing it
Ali	I think each applicant is left to their own devices to figure out if they are disadvantaged or not...do I fit this or not
Ana	
Chris	the few people I did talk to didn't really have anything to say about it
Kelsey	What flavor of disadvantage are they asking about? Are they asking about my flavor or are they going to laugh at my flavor
Meghan	
Roger	I went to a private high school...about a 45 minute drive...there was a social relativism going from my hometown where I was probably quantitatively more at the top to high school where I was more quantitatively at the bottom

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.

Blank cells indicate researcher did not code data relevant to resources.

Table D6

*Comments Regarding Social Comparison*

Participant	Comments
Ariadne <sup>a</sup>	just listening to peers...about the kinds of opportunities they were able to have; am I worse off enough, is my life shitty enough to be able to claim that
Charles <sup>a</sup>	people talk about how being White and middle class is the hardest thing; knowing the accommodations that others are born with does, in comparison, make me feel that I haven't had as many opportunities; in China, I had no idea that anything was amiss because everyone else was in the same situation and when I came to the US...everybody, like all the Mexicans, were super poor as well
Jane <sup>a</sup>	there were a bunch of students who couldn't afford housing and would sleep on bus benches; I didn't really feel like I was disadvantaged, I guess I was amongst a lot of people who were really disadvantaged, like I had free lunch tickets because my parents made very little money, but there were kids who that was their only meal of the day
Kenny <sup>a</sup>	college...it definitely was the first time I felt like I had tougher circumstances than my peers; I am from a blue-collared town – I didn't feel disadvantaged there; there are a lot of other people who came from tougher circumstances; I needed to figure out who was saying yes to this question
Matthew <sup>a</sup>	I went to a magnet school...with the children of doctors; at [college] I went to school with the children of business people; and now at [medical school] I go to school with the grandson of the person who founded [major corporation] – the further I have gone, the more I see money, connections and privilege and in that sense, I have felt increasingly disadvantaged
Richard <sup>a</sup>	tried to compare myself with others; when I try to compare myself with others...I can think of examples of Chinese children who did not have good access to education...and my high school friends whose families were from unstable areas in the world – their families went through horrific experiences, their safety was in danger
Sarah <sup>a</sup>	I was surrounded by people who were very different from me, socioeconomically...it was an elite private high school...I couldn't afford the same things they could; I definitely compared myself to the type of person who is from a well-to-do family, went to a good college, White – my mom lived paycheck to paycheck; there is a lot of comparison I did

Table D6, continued

Participant	Comments
The Hummingbird <sup>a</sup>	if I don't fit in this category, I'd like to meet the people who do; I knew there would be people who had experienced some terrible, but I knew that I could relate to them
Alex	if peers hadn't been exposed, they might be at a higher likelihood to not understand; having a larger reference frame through which to compare myself...that kind of exposure definitely helps
Ali	especially at a place like [college] its easier to notice the financial differences and I knew that I didn't come from as much money as other people
Ana	I understood there were some girls that were more wealthy than others...I recognized the difference and...that yes we were financially disadvantaged
Chris	I just don't know if I was aware of how below standard we were; we were well below the poverty line; I was never really surrounded by privilege and affluence to the extent that I was when I got here [medical school]; I don't think I ever realized that my circumstances were different
Kelsey	I have no area of my life where I really feel like I have had a disadvantage compared to people I think of that have
Meghan	just knowing that there were people worse of than me
Roger	I grew up around a lot of migrant families; a lot of my friends were at a much more financial disadvantage; I remember...the school district implemented a dress code...pretty basic...khaki pants...green or White polo, but I remember a lot of families were stressing over that, but that really wasn't an issue for us

Note: <sup>a</sup>Participant self-identified as disadvantaged in the AMCAS application.