

Race Matters: Occupational Therapy as a Career Choice by High School Students of Color

Kirsten Wilbur

A capstone project submitted in partial fulfillment  
of the requirements of the degree of the  
Doctorate of Education  
In Educational Leadership

University of Washington Tacoma

2016

Reading Committee:

Christine A. Stevens, MPH, Ph.D., Chair

Janet Primomo, Ph.D., member

George S. Tomlin, OTR/L, Ph.D., member

Program Authorized to Offer Degree: UWT Education Program

### Abstract

This critical ethnographic study examined occupational therapy as a field that has maintained the historic exclusion of students of color through mainstream professional academic practice. In particular this paper explores systemic barriers that influence secondary to post-secondary pipeline decisions for urban, high school students of color. The tenets of critical race and Freirean critical theory guided analysis of the data collected from field notes, individual interviews and focus group discussions. Three categories representing student experiences with making post-secondary decisions emerged from the study: (a) navigating the system, (b) making choices, and (c) no interest in healthcare. Additional findings including in- and outside-the-classroom relationships have profound influence on student decision-making processes related to higher education access, as does student agency in the use of strategies and technology to help with college and career choice. With minimal reported knowledge of occupational therapy, five of the six students reported having no interest in a healthcare career because of a dislike for science courses. The results of this study have direct implications far beyond occupational therapy, and suggest concrete improvement in allied healthcare pathways from high school to profession. Specific findings suggest that professionals and educators should consider oppressive attitudes, structures, and practices in secondary and post-secondary education that prevent recognition and support of skills and strengths exhibited by high school students of color.

*Keywords:* diversity, higher education, occupational therapy, students of color

### Race Matters: Occupational Therapy as a Career Choice by High School Students of Color

Limited access to equitable healthcare is a prominent issue faced by people of color. Studies have shown that minority and low socioeconomic status populations shoulder the burden of illness-related morbidity and mortality in the U.S. leading to prominent disparities in healthcare (Agency for Healthcare Research and Quality [AHRQ], 2012; Kaiser Family Foundation, 2015a; Richardson, Allen, Xiao & Vallone, 2012). Additionally, twenty-one percent of African Americans and nearly one-third of Hispanics did not have health insurance in 2010 compared with 12% of non-Hispanic Whites (U.S. Census Bureau, 2011). Even when controlling for insurance status, underrepresented groups face significant challenges accessing quality health care and numerous studies have documented significant differences in healthcare access and quality among underrepresented minority groups (AHRQ, 2012; Kaiser Family Foundation, 2015b; Richardson et al., 2012; Smedley, Stith, & Nelson, 2003). *Healthy People 2020* defines health disparities as:

a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage... and adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion” (U.S. Department of Health and Human Services, 2014, para. 5).

Disparities in health care pose very real moral and ethical dilemmas for our society and prevent efforts to improve the nation’s health or manage escalating healthcare costs.

Greater diversity in the health care workforce is seen as an effective strategy for addressing racial and ethnic healthcare disparities by improving access to healthcare for underserved patients (Brown, Muñoz & Powell, 2011; Cohen, Gabriel, & Terrell, 2002; Hinton, et al., 2010; Jackson & Gracia, 2014; Kuo, et al., 2015; Mitchell & Lassiter, 2006; Noone, 2008; Saha & Shipman, 2008; Villarruel, Washington, Lecher & Carver, 2015) and leading to increased racial and ethnic minority patient choice and satisfaction (Hinton et al., 2010; Saha & Shipman, 2008). However, racial and ethnic diversity of the healthcare professions has not kept pace with demographic changes in the general population of the United States, with significant consequences for the health of minority populations and access to health care services (Donini-Lenhoff & Brotherton, 2010). While racial minorities make up 28% of the U.S. population, only 3% of medical school faculty, 16% of public health school faculty and 17% of all city and county health officers are of minority populations (Center for the Advancement of Health, 2014). The underrepresentation of minorities in allied health professions is generally attributed to several major factors, such as (a) lack of access to an accredited program, (b) a lack of exposure to opportunities available within the health fields, (c) an inadequate pool of role models with whom they can identify and who can serve as mentors, (d) the poor performance of minority students on standardized tests, which hinders their admission to health professions programs, and (e) poor preparation of minority students in mathematics, reading and science, which impedes their progress when they enter the health professions educational programs (Barfield, Cobler, Lam, Zhang, & Chitiyo, 2012; Noone, 2008; Sullivan Commission, 2004). Each of these factors could be regarded as part of the institutionalized racism that exists in our educational and healthcare systems.

Eliminating healthcare disparities and increasing the diversity of the workforce is also important to the allied healthcare profession of occupational therapy (Bass-Haugen, 2009). However, the profession of occupational therapy (OT) also exhibits a poor representation of therapists from diverse backgrounds (U.S. Bureau of Labor [USBL], 2012). By the year 2044 people of color are projected to account for almost half of the U.S. population with whites being in the minority majority for the first time (Colby & Ortman, 2015). Today in the U. S. only 12% of the OT workforce are therapists of color. (American Occupational Therapy Association [AOTA], 2015a).

As a way to better understand the reasons for the underrepresentation of minorities in the occupational therapy workforce it is important to understand how students of color make career choices and what influences their choices to decide on occupational therapy as a career. This study examines the interest and healthcare career choices of high school students of color. Critical race theory (Delgado & Stefancic, 2012) and the ideas of Freire (1970/2012, 1974/2014) as they relate to knowledge, identity construction and authority were used to help frame the discussion and provided a lens through which to view the systems of secondary education, occupational therapy as a career choice, and the issues that serve to disadvantage and exclude racial minorities from entering the pipeline into the occupational therapy workforce.

Issues of race will be addressed throughout this study and while there are many different terms used to acknowledge racial minorities, for the purpose of this study the terms *minoritized*, *people*, *communities*, *persons*, and *students of color* are defined as those persons of African American, Latino, Asian American, Alaska Native, Pacific Islander and Native American ancestry.

### **Statement of Problem**

This study sought to understand why the profession of occupational therapy has little diversity within its professional academic programs by examining the issues that influence secondary to post-secondary pipeline decisions for students of color. Currently there are approximately 118,000 occupational therapists working in the United States (U.S.B.L., 2014). Of those therapists 94% are white with 2.5% Black, 4.0% Asian and 5.8% Hispanic or Latino (U.S.B.L., 2014). A disparity exists between the percentage of people of color in the U.S. population and the percentage of post-secondary students of color in occupational therapy programs (AOTA, 2015b). Although the overall number of students of color attending post-secondary educational programs has increased over the past several years (National Center for Education Statistics, 2013), students of color remain underrepresented in occupational therapy programs (AOTA, 2015b). The purpose of this study was to explore the consideration of occupational therapy as a career choice by high school students of color. The study focused on interest in and exposure to the field of occupational therapy by high school students of color, as well as facilitators and barriers to occupational therapy as a career choice.

### **Justification**

Much of the occupational therapy literature focuses on the need for multicultural education as a way to address healthcare disparities (Bass-Haugen, 2009; Black & Wells, 2007) and there are many references found in healthcare literature regarding specific educational programs created to train students of color in various healthcare professions as a way to encourage diversity within the allied healthcare professions (Balogun, Sloan, & Hardney, 2005; Benavides-Vaello et al., 2014; Toney, 2012). Additionally, the field of education has looked at college and career decision making among high school students (Carnevale, Rose, & Cheah,

2011; MacAllum, Glover, Queen, & Riggs, 2007; Williams & Swail, 2005). However, there is little in the literature regarding what high school students of color think about a career in occupational therapy or what their exposure to occupational therapy is. Approaching the study from the perspectives of high school students of color allowed for an increased understanding of the influences experienced when making post-secondary decisions unique to occupational therapy and offered insights as to why students of color decided to choose or not choose occupational therapy as a career path. This inquiry is timely given the growing populations of communities of color and the anticipated shortage of qualified allied healthcare professionals (Sullivan Commission, 2004). Finally, by critically addressing issues of race and power from the perspectives of students of color about to enter the pipeline to post-secondary education and career training, occupational therapy educators and professionals are made more aware of the perceived barriers and supports experience by minoritized students.

### **Theoretical Framework**

As this study sought to explore the question as to why there are so few students of color in occupational therapy educational programs it was important to consider the issues of race and the relationships students of color have to who has control over their learning and how knowledge affects their sense of identity. Critical race theory (CRT) (Delgado & Stefancic, 2012) and Freirean pedagogy were used to help frame the discussion and provide a lens through which to view the experiences of high school students of color when making career decisions. For the purpose of this study, three CRT tenets were used to aid in the analysis of the background literature and research data. The first tenet is that racism is normal, everyday reality for people of color (Delgado & Stefancic, 2012). The notion that racism is embedded in our thought processes and social structures will be helpful when examining how high school students

of color view current high school experiences and access to college and health profession programs. The second tenet is the notion of “race consciousness” (Ford & Airhihenbuwa, 2010; Delgado & Stefancic, 2012). Race consciousness is needed to identify racism and address racism’s potential contributions to educational attainment inequities and to help better understand the racial constructs and mechanisms in place for high school students of color. The third tenet used concerns the unique voice of color. The voice-of-color view believes that the different histories and experiences of oppression by people of color can serve to communicate to their white counterparts matters that whites are unlikely to know (Delgado & Stefancic, 2012). The voices of high school students of color are needed to gain insight into how racism influences current high school experiences and fosters student identity and post-secondary decision-making.

CRT was useful in illuminating Freire’s focus on identity and subjectivity as a means of increasing empowerment and control over educational systems and processes. Additionally, Freire’s (1970/2012, 1974/2014) work provided a foundation for the theory of democratic schooling aimed at liberating those who are forced to exist on the margins of society (Smith-Maddox & Solòrzano, 2002). Freire argued that for schools to become liberating institutions, educators must consider the traditional view of students and begin to acknowledge them as participants who are willing and able to act on their world (Smith-Maddox & Solòrzano, 2002).

CRT and Freirean pedagogy are forms of resistance to oppressive social relationships (Smith-Maddox & Solòrzano, 2002). Both frameworks recognize that the experiential knowledge of people of color is critical to understanding and analyzing issues pertaining to race and racism. Both traditions suggest that the experiences of students of color should be examined for their ability to influence how educators think about learning and interacting with their students (Smith-Maddox & Solòrzano, 2002).

## Literature Review

### Occupational Therapy as a Healthcare Profession

Occupational therapy was founded on the premise that meaningful activity (*occupation*) is not only beneficial but also necessary for maintenance and promotion of health and well-being, and to the prevention of morbidity (Wilcock, 2006). As the profession of occupational therapy grew out of a practice of addressing social injustices it began promoting health and well-being through participation in valued daily activities or *occupations* (Christiansen & Haertl, 2014). In 1993, Elizabeth Townsend challenged the consciousness of the occupational therapy profession by highlighting the dilemmas faced by occupational therapists who serve not only those who enter the “traditional professional doors, but also those who hover outside in the shadows of hospitals, clinics, schools, and communities who quite frequently experience barriers to health-care services” (Scaffa, Reitz, & Pizzi, 2010, p. 143). The idea that occupational therapists served those at the margins of society led to the concept of social justice in occupational therapy and a partnership with Ann Wilcock in which the ideas about justice and occupation evolved into the term *occupational justice* (Townsend & Wilcock, 2004).

Within the practice of occupational therapy, the paradigm of *occupational justice* advocates for the equal distribution of the right of and opportunity for occupation; choice in culturally and personally meaningful occupations; and equal opportunities to work, live and play in safe and supportive environments (Townsend & Wilcock, 2004). These same key concepts are part of the World Health Organization’s (WHO) 2002 International Classification of Function, Disability, and Health (ICF). In its subsection titled “Concepts of Functioning and Disability” *activity* is defined as actions and tasks executed by individuals and *participation* as

involvement in life situations (p. 10). For occupational therapy professionals, occupation not only refers to the things people do, but to the opportunities that can be accessed or denied.

The concept of occupational justice recognizes that what people do is regulated by what opportunities are available to people to be, do, become and belong (Wilcock & Townsend, 2000). For people of color who experience stigmatizing and oppressive conditions such as poverty, access to equitable education, and environmental degradation, there are limited occupational opportunities.

Despite occupational therapy's concern with social and occupational justice, the message of seeking inclusivity within the profession has not resulted in increased numbers of practitioners of color or students of color enrolled in educational programs. The accrediting body for occupational therapy educational programs has made it costly and prolonged for students to receive professional training. Up until 2007 occupational therapy students could complete their professional education by enrolling in a baccalaureate degree program, which meant between four and six years of college depending on whether a student entered their junior year or after graduating with a previous baccalaureate degree (AOTA, 2015c). In the past, there was also the option of choosing to attend a community college or technical college to receive professional education as an occupational therapy assistant which involves two years of post high-school study at an accredited institution. Today, the community and technical college option is still available. However, those who wish to become occupational therapists are required to complete a four-year baccalaureate program and then obtain a masters or clinical doctorate in occupational therapy. This process can involve an additional two and a half to three and a half years for the student who has an undergraduate degree. The profession has created a funnel, which now allows fewer students to enter the pipeline into the programs and in particular has created a

barrier for students of color and first generation students who may not have the privilege of time, money, and social support it now takes to become an occupational therapist. Recently the professional organization, AOTA, requested feedback on a proposed requirement that all occupational therapy assistant programs at community colleges move to a baccalaureate degree and all master's programs move to three-year clinical doctorate degree (AOTA, 2015c). Such a shift could further dissuade students of color from entering the field of occupational therapy.

In its "Centennial Vision" AOTA, (2006) officially stated: "We envision that occupational therapy is a powerful, widely recognized, science-driven, and evidence-based profession with a globally connected and diverse workforce meeting society's occupational needs." In order to realize the notion of a "diverse workforce meeting society's occupational needs" it is imperative that the profession redress the lack of access many students of color experience. Only then can the profession begin to understand how a position of power and privilege has actually resulted in erecting barriers to the social and occupational justices sought for those it serves.

### **Systems of Institutional Racism**

In his book, *Racism Without Racists*, Bonilla-Silva (2014) claims that we live in a society where "racism forms an impregnable yet elastic ideological wall that barricades whites off from America's racial reality" (p. 305). The institutions of healthcare and education have become "symbolic expressions of 'whites' dominance" (Bonilla-Silva, 2014, p.302). Many secondary and post-secondary educational institutions promote a view of themselves as supporting a mission of social justice and equity; however, most of these same educational institutions are not acting to dismantle the legal or educational structures that continue to promote a culture of racism (Ard & Knaus, 2013). Sue (2004) similarly wrote that most institutional systems are

monocultural in nature and therefore represent potential sources of cultural oppression for racial and ethnic minorities. In the realm of healthcare, the policies and practices of healthcare systems and the legal and regulatory climate in which the institutions of medicine operate, function to create health care disparities which are often the result of racial bias, discrimination, and stereotyping (Smedley, 2012). Likewise the profession of occupational therapy also promotes a view of itself as a profession concerned with addressing social injustices (Christiansen & Haertl, 2014), yet at the same time the profession makes many administrative and professional curricular decisions based on white, ethnocentric worldviews.

**Education.** U.S. educational systems have perpetuated whiteness and privilege as they continue practices such as focusing on white, Western viewpoints in school curriculum (Patton, McEwen, Rendón, & Howard-Hamilton, 2007) and in the fact that the overwhelming majority of teachers and educational leaders are white (Patton et al, 2007; Knaus, 2014). Additionally, when educators avoid addressing relationships and power dynamics in the classroom, contributions to marginalization and exclusion occur (Bondi, 2012). Ladson-Billings and Tate (1995) contend that white property (a theoretical construct that describes situations in which white skin color grants certain privileges that people of color are not afforded) is legitimized when students are rewarded for conformity to white norms, such as with dress and behaviors. Additionally, the white right to exclude is exemplified in the creation and maintenance of re-segregation through tracking that places students of color in nonacademic programs of study that do not lead to college (Patton et al., 2007). Predominantly white institutions of higher education serve to reinforce racism even as they propose inclusivity (Iverson, 2007). Exclusion has become the “status quo” in higher education and professional programs as institutions tout being “selective” which is code word for *exclusive* (Bondi, 2012). Furthermore, white power and privilege is

reflected in higher education's lack of student body and faculty diversity and in curricular and admissions policies (Eckel & King, 2004). Graduate admissions policies and the use of GRE scores further serve to create barriers to the professional education needed for many careers in healthcare (Kaufman, 2010).

**Healthcare.** Many of the racialized barriers experienced in educational settings are also experienced in healthcare. Williams and Mohammed (2008) found perceived discrimination by people of color can lead to adverse changes in health. National data indicate that, compared to the general population, racial and ethnic minority populations have poorer health outcomes from preventable and treatable diseases, such as cardiovascular disease, cancer, asthma, human immunodeficiency virus and acquired immunodeficiency syndrome than those in the majority (CDC, 2011). Similarly, Dovidio and Fiske (2012) reported that unexamined biases influenced medical decisions and interactions, systematically producing discrimination in healthcare and leading to disparities in health. A lack of racial diversity among health care providers can be a barrier to communication and access to healthcare services for minority groups (Richardson, Allen, Xiao & Vallone, 2012). Most healthcare professionals are members of a privileged, elite class (Donini-Lenhoff & Brotherton, 2010). This lack of visible racial diversity serves to create a barrier in that clients of color do not see themselves reflected in the professionals serving them. Finally, the impact of racism affects white individuals as well. Racism damages social trust and cohesion, limits the potential societal contributions of marginalized groups and drains social resources, making it clear that racism has imposed economic and health burdens across all U.S. communities (Smedley, 2012).

### **Efforts to Diversify the Workforce**

The Institute of Medicine report "Unequal Treatment: Confronting Racial and Ethnic

Disparities in Health Care” demonstrated that racial and ethnic healthcare disparities exist (Smedely, Stith, & Nelson, 2003). In this landmark study, the authors described the need to increase the proportion of underrepresented minority groups in the health care workforce, integrate cross-cultural education into health care training, and advance research efforts to identify sources of disparities and promising interventions (Smedely, Stith, & Nelson, 2003). In the past ten years, efforts to diversify the allied healthcare professions and occupational therapy in particular have resulted in little success (Barfield et al., 2012; Brown, Muñoz, & Powell, 2011; Donini-Lenhoff & Brotherton, 2010). Cohen, Gabriel & Terrell (2002) provide a historical perspective for the failed efforts to diversify the healthcare professions reporting that there was an increase in the number of medical students of color that occurred in the 1960s with the advent of the civil rights movement as the federal government during this time assisted minority and disadvantaged students by establishing financial aid and loan forgiveness programs. The authors go on to report that the greatest increases in minority applications to medical schools were seen in the early 1990s with higher education’s commitment to federal Title VII programs, but that recently, however, several Supreme Court cases arguing against affirmative action programs and race based admissions policies have resulted in a decline of minority student applicants and matriculates among the nation’s medical programs. As recently as 2011, the nation’s medical schools graduated, from more than 17,364 students initially enrolled in their programs, a total of only 2,600 (15%) African American, Latino, and Native American students (Association of American Medical Colleges, 2011). The graduate proportions were similarly disparate for nursing and dentistry.

Donini-Lenhoff and Brotherton (2010) found that increases in tuition and the need to take on significant amounts of debt were strong deterrents for students of color when considering a

healthcare profession. In addition, the authors pointed out that failure to respond to the issues of costs and attrition will contribute to low numbers of practitioners of color (Donini-Lenhoff & Brotherton, 2010).

Enrollments for occupational therapy and occupational therapy assistant programs have been steadily increasing since 2002 (American Occupational Therapy Association, 2015a). Yet, even with the increase in number of occupational therapy students at the four year and two year college levels there has not been an increase in the number of students of color. The AOTA (2015b) reports that in 2014 there were 18,550 students enrolled in graduate occupational therapy programs and 10,048 students enrolled in occupational therapy assistant programs. Of the students enrolled in all occupational therapy programs over seventy-five percent were white (AOTA, 2015b). Occupational therapy graduate programs report enrollments of 5% Black and 6% Asian with American Indians, Alaska Natives and Pacific Islanders not being represented at all (AOTA, 2015b). Occupational therapy assistant programs report enrollments of 1% American Indian or Alaska Native, 4% Asian, 11% Black and 1% Native Hawaiian or Other Pacific Islander (AOTA, 2015a). While community college occupational therapy assistant programs may boast of having larger enrollments of minority students, little is said about the fact that occupational therapy assistants earn far less than their occupational therapist counterparts (U.S.B.L., 2014) and are viewed as having less responsibility and thereby less status within the profession (AOTA, 2015a). Among all college enrollees nationwide only 57% of four-year enrollees complete college within six years and only 27% of students enrolling at two-year institutions complete a certificate or associate's degree within 150% of the normal time required to do so (Aud, KewalRamani, & Frolich, 2011).

These numbers reflect an over-representation of white students in each of these programs and do not accurately reflect information regarding the number of students of color who actually complete their academic programs. For a profession concerned with social and occupational justice little attempt has been made to abolish the social constructs of racism that influence OT program admission policies and practices.

### **Education as a Pathway to Career Success**

Research has shown that higher education is increasingly important for career success. The Lumina Foundation (2012) estimated that an additional 23 million college graduates are needed by 2025 to meet the United States' workforce demands, however graduation rates have remained largely stagnant for several decades (National Center for Education Statistics, 2011). Entering and completing college can drastically affect an individual's career path and lifetime earnings (Carnevale et al., 2011; Williams & Swail, 2005). In the years 2000 to 2009 a higher percentage of Blacks (31%) than Hispanics (27%), Asians/Pacific Islanders (21%), and whites (14%) between the ages of 15 to 24 were living in poverty (Aud et al., 2011). Yet for those youth who complete high school and move on to post-secondary education the odds of escaping poverty increase significantly with every level of educational attainment (Aud et al., 2011). However, for many high school students of color thoughts of tuition increases and rising levels of educational debt become deterrents to aspirations of a college degree (Donini-Lenhoff & Brotherton, 2010). Additionally, poor performance on standardized admissions tests and a lack of encouragement to take the math and science courses needed for many healthcare educational programs have all resulted in lower numbers of students of color pursuing post-secondary education and careers in the health sciences (Barfield, Folio, Lam, & Zhang, 2011; Sullivan Commission, 2004). For students who are in a position of having to make choices based on

financial ability and familial support, the process of decision-making for high school students of color ends up being a process of elimination (MacAllum, Glover, Queen, & Riggs, 2007; Mettler, 2014). Greater efforts are needed to understand the effects racism has on the pipeline to educational attainment and career choice when considering the allied healthcare professions.

### **Research Questions**

While the field of education has long studied the effects of racism on educational goal attainment and career choice for high school youth (Mettler, 2014; Williams & Swail, 2005) there is little within the OT literature that looks at racism and its effects on the pipeline from secondary education to admission into its professional programs. Little is known about how high school students of color make career and post-secondary education decisions when considering a career in healthcare and occupational therapy in particular. The following questions were investigated in this study:

- How are students of color influenced when making career and educational decisions?
- How are high school students of color exposed to careers in healthcare?
- How are high school students of color provided information about educational requirements and pathways for healthcare careers?
- What supports and barriers influence high school students of color with their decision making processes?

This study will examine descriptions of high school students of color of their experiences in making post-secondary and career choice decisions when considering allied healthcare professions.

### **Design and Methodology**

In order to discover why the profession of occupational therapy has little diversity within its professional academic programs, a qualitative approach using a formal, objective, and systematic process (Denzin & Lincoln, 2011) was utilized. For the purpose of this study, narratives, subjective experiences, constraints and resources (Carspecken, 1996) affecting high school students of color were considered.

Both CRT and Freire offer the field of allied health a new way in which to investigate the causes of health disparities by encouraging the development of solutions that bridge gaps in health, education, housing, and employment (Freire, 1970/2012; Ford & Airhihenbuwa, 2010). Critical race theory and Freire pedagogy complement one another as a way to address issues of socially marginalized and dominated groups. Both theoretical frames were used to examine racial and class discrimination through the personal narratives of the participants as a means of promoting liberating and transformative results with communities experiencing oppression (Delgado & Stefancic, 2012; Freire, 1970/2012, 1974/2014; Smith-Maddox & Solórzano, 2002). Critical qualitative research is concerned with social inequalities and is directed toward positive social change (Carspecken, 1996). A critical ethnographic approach to research was therefore needed to learn about high school students of color and their career and post-secondary decision making from both the participants and the interpretations of the researcher (Creswell, 2013). Critical ethnography helped to expose issues of hegemony and could aid in advocating for students of color interested in pursuing careers in occupational therapy or other allied health professions. Furthermore, ethnographic inquiry offered the researcher a way to gain subjective information from high school students of color while also allowing for the unique voice of the student to be highlighted. This study was conducted to explore the experiences of high school

students of color when making post-secondary decisions and as a means of discovering their needs and promoting socially just career and college opportunities.

In his seminal work, *Pedagogy of the Oppressed*, Paulo Freire (1970/2012) argued that a truly democratic education should engage the student in the process of inquiry and that critical thinking does not separate itself from action or *praxis* (Crotty, 1998). What Freire (1970/2012, 1974/2014) calls for is an active participation in the learning environment and one that supports acquisition of knowledge to be used for the betterment of community. For high school students of color, participation in the research process through narrative and focus group discussion, offered an opportunity to question relationships between knowledge, authority, and power and ultimately result in increasing empowerment and control over their educational infrastructures (Freire, 1970/2012, 1974/2014). Freire's problem-posing approach requires research participants, the researcher, and the reader to emerge from their situation and reflect on it, resulting in critical thinking (Crotty, 1998). Critical inquiry allowed the researcher to highlight power relationships and expose the forces of hegemony and injustice (Crotty, 1998). However, critical inquiry cannot be viewed as a single and separate action. With every action that results from critical thought, the context changes and critique must begin again, resulting in a cyclical process of reflection and action (Crotty, 1998). Of primary concern, critical inquiry helps to illuminate the relationship between power and culture (Crotty, 1998). For the purposes of this study, Carspecken's (1996) five stages for critical qualitative research were adapted to provide a framework for the methodology.

### **Study Setting**

This study was conducted with high school students in the Metropolitan Development Council's (MDC) TRiO College Bound program at one local high school. MDC TRiO College

Bound is a non-profit TRiO Upward Bound program funded by the U.S. Department of Education to assist low income and first generation high school students in breaking a national cycle of low educational achievement by increasing their level of representation and advancement in college (U.S. Department of Education, n.d.). The primary focus is to help all students have access to higher education by preparing them to enroll and succeed in higher education. Program staff in this school district work with students from 9<sup>th</sup>-12<sup>th</sup> grades in a dedicated class to set and achieve these goals (MDC, n.d.). Participants ranged in age from 16 to 18 years and included all genders.

The site of the study was at a local urban high school in a classroom used by the TRiO College Bound program. The high school serves over 1,600 students in a diverse urban setting in Tacoma, Washington (Tacoma Public Schools, n.d.). The Tacoma School district operates five traditional high schools as well as two alternative schools for the arts and sciences and serves 6,752 students (Tacoma School District, 2015). According to the Tacoma School District's 2013 census information, the demographic makeup of the high schools is 21.4 % Black, 1.6% American Indian, 12.7% Asian, 16.4% Hispanic, 2.1% Pacific Islander, 43.2% white, and 2.3% who identify as Multi-ethnic (Tacoma School District, 2013). The Tacoma School district averages 60% for Free and Reduced Lunch program across the high school population (Tacoma School District, 2015). Open enrollment policies within the school district could have skewed the demographic representation of each high school. Locating the study site within one local high school was chosen for convenience and time constraints.

### **Sampling**

**Sample size.** A total of 6 students from the TRiO College Bound classroom and one high school College and Career guidance counselor participated in this study. Sample size was

determined based on student and counselor interest, and the information needed. The researcher was able to reach breadth and depth of information with this number of participants.

Redundancy of the information from students indicated that data saturation had been reached.

**Inclusion criteria.** Using CRT and critical pedagogy as a theoretical framework acknowledges the importance of examining the high school experiences of minoritized students as being critical to understanding how oppressive social relationships influence students' post-secondary decisions (Smith-Maddox & Solórzano, 2002). Therefore, the TRiO College Bound classroom provided a representative group of low-income and minority students making plans for post-secondary education. For the study inclusion criteria, the student participants were required to: (a) self-identify as being interested in post-secondary education or career training; (b) be at least 14 years of age and no more than 18 years of age; (c) be able to read and speak English; and (d) be able to provide verbal and written informed assent to participate in the study.

For the study inclusion criteria, the adult participants were required to (a) have worked at the high school for at least 5 months; and (b) be able to provide verbal and written informed consent to participate in the study. At least 5 months of experience working in the high school was used so that the adult participants had some expertise and familiarity with their role as guidance counselor and/or career coach.

**Exclusion criteria.** Students who were a part of the TRiO College Bound program but did not wish to participate were allowed to opt out of the interviews and focus group discussion. Students who were unable to read or speak English were also excluded. In order to obtain a range of viewpoints, one student who self-identified as white was accepted and then saturation was considered to have been met for that racial group. Additionally, any College Bound student under the age of 18 who provided assent to participate, but did not receive parent or guardian

consent was excluded. Finally, any College Bound student who had moved into the school district within the last 30 days was excluded.

Adult participants who had worked less than 5 months at the high school in the role of guidance or career counseling were also excluded.

### **Sampling and Recruitment**

After obtaining approval from Human Subjects Review Committee of the University of Washington, a purposive convenience sample of TRiO College Bound high school students who met the specific identity, ability, and age variables was recruited for the study. Purposive convenience sampling was chosen because the goal was to recruit high school students of color interested in post-secondary education who could articulate their experiences with college and career decision making. Additionally, recruitment of high school career and guidance counselors was chosen in order to gain knowledge as to the type of advice and information provided to disadvantaged students choosing post-secondary education and career information. Participants were recruited based on the inclusion and exclusion criteria.

Study participants were recruited through the TRiO College Bound program. The TRiO College Bound educational instructor was asked to make an announcement and post and distribute flyers in the classroom (see Appendix A). The flyers were in English. The College Bound instructor used a script (which was approved by the University of Washington's Human Subjects Review Committee) to speak to the College Bound class about the study and instruct those students interested in the study to contact the researcher by phone or text (see Appendix B). The flyers also had the researcher's phone number.

The researcher used a script (approved by the University of Washington's Human Subjects Review Committee) to email the high school's career and guidance counselors (see Appendix C). Interested participants contacted the researcher by phone or email.

Prior to the start of the first interview, the inclusion and exclusion criteria were reviewed with the participants. The consent and assent forms were reviewed with the participants, and their questions answered. Student consent and assent forms were sent home with the students for signature by a parent or guardian and were then returned to a confidential envelope in the College Bound classroom or mailed to the researcher in a self-addressed envelope provided. The researcher reviewed the consent form with the adult participant and answered questions. The researcher then obtained a consent signature. Twelve students, ages 14 to 18 years, were invited to participate in the study. Nine high school students were interested in the study, however three were excluded because they did not return a signed consent form and were under the age of 18 (see Table 1). One adult guidance counselor out of five at the high school responded to the email recruitment. The adult College and Career counselor identified as a 28 years old, female, Black/Hispanic.

Table 1

*Demographic Profile of Participants*

Characteristics of student participants (N = 6)	n
Age range (years)	
14-15	0
15-16	1
16-17	0
17-18	5
Ethnicity/race as identified by participant	
Black	3
white	1
Black/white/Mexican	1
Asian	1
Gender	
Female	5
Male	1

**Data Collection**

Steps for data collection included recruitment, obtaining verbal and written consent and student assent from each participant, conducting passive classroom observations, conducting the first individual student and guidance counselor interviews, and finally conducting the focus group interviews with student participants. Individual and focus group interviews (Appendices D and E), notes from two passive classroom observations (Appendices F and G), along with notes from the researcher's journal were used to collect data for this study. These four types of

data yielded rich knowledge and a well-rounded understanding (Carspecken, 1996) of minoritized high school students' experiences with post-secondary decision-making and their knowledge of and interest in the profession of occupational therapy.

Data were collected between December 2015 and March 2016. All data were collected for each of the participants as described here and summarized following the steps in the flow chart (Appendix H).

**Passive classroom observation.** Upon receiving approval by the University of Washington's Human Subjects Review Committee and a letter of support from MDC TRiO College Bound program and the verbal support from College Bound educational instructor, student participants were observed in their classroom setting. To build the primary record extensive field notes were taken. Field notes allowed the researcher to record participants' social routines in as natural a setting as possible and by completing the passive observation first the researcher was able to reduce effects of the researcher on those being researched (Carspecken, 1996). Finally, classroom observations of visible symbols, posted information, and announcements provided the researcher with information about static environmental influences.

A second and final classroom observation took place once all student and adult counselor interviews and focus group interviews were completed. This final classroom observation was used to check participant and focus group statements against student actions and social routines observed in the classroom.

**Individual interviews.** Upon establishment of eligibility, the researcher met with each participant individually. Student participant interviews (see Appendix D) were completed during class time with permission of the College Bound instructor in a conference room off of the main office in the high school. Adult participants were able choose the time and location for the

interviews to ensure confidentiality. Prior to conducting the interview, the purpose and study procedure were discussed with each participant. Both verbal and written consent and student assent were obtained from each of the participants to ensure that they understood the study's purpose, agreed to participate in the study, and gave permission for their interviews to be recorded. Interviews were semi-structured, open-ended interviews that explored questions related to the primary purpose of the study and verified observations made by the researcher. Each interview lasted between 20 and 60 minutes. After the interview, each participant received a \$15 gift card. Participants could opt out of answering any questions at any time or discontinue participation in the study and still receive the gift card.

**Focus group interviews.** Focus group interviews were completed with the same six student participants using semi-structured, open-ended questions (see Appendix E) to further explore information gleaned from previous individual student interviews. Two focus group interviews, each with three of the students, took place in order to accommodate the students' class schedules. The focus group interviews allowed participants the opportunity to highlight their unique voice of color (Delgado & Stefancic, 2012) and engage in critical reflection (Freire, 1970/2012) as they heard and responded to their peers' comments (Auerbach & Silverstein, 2003). The focus group interviews were recorded. After the interview, each participant received a \$15 gift card. Participants could opt out of answering any questions at any time or discontinue participation in the study and still receive the gift card.

**Notes from the researcher's journaling.** For this study, the researcher kept a journal to record the thoughts and feelings of the researcher in relationship to observations of events in the College Bound classroom, hallways, and high school campus grounds. This 'field journal' (Carspecken, 1996) was used to help the researcher reflect on the events of the day and record

what was learned and what was observed. Journaling also allowed the researcher to uncover issues that required further clarification before the adult guidance counselor and focus group interviews took place.

### **Data Analysis**

Carspecken's (1996) critical ethnographic method for data analysis was used for a systematic analysis of all the data. In addition, the tenets of critical race (Delgado & Stefancic, 2012) and Freirean critical theory (Freire, 1970/2012, 1974/2014) were used to guide the analysis of the data collected from field notes, individual interviews and focus group discussions. The analysis of the passive classroom observations, and individual and focus group interviews is described in respective order.

### **Reliability and Validity**

Qualitative research addresses the issues of reliability and validity by establishing procedures which are *transparent* (another investigator can know and check what was done), *communicable* (the themes make sense to other investigators who want to use them), and *coherent* (the themes are internally consistent, as well as reflective of individual differences and inconsistencies in the culture) (Auerbach & Silverstein, 2003). In order to address the issue of transparency, the researcher had another member of the research committee review selected participant transcripts and check codes found with those of the researcher (Altheide & Johnson, 2013). This procedure is also known as the use of a peer debriefer (Carspecken, 1996). The researcher's use of field notes, classroom observations and focus group discussions were used to provide *coherence* as the researcher sought to find matches between what participants reported and what the researcher observed (Carspecken, 1996).

**Confidentiality**

The researcher contacted student participants at the phone number they provide to the researcher regarding interest in the study. The researcher responded to the guidance counselor by email. The researcher assigned a code number to each participant to ensure anonymity. Participants were linked only by a code number. No participants' actual name appeared in any of the study results.

Every attempt was made to protect the identities of both the program and the study participants. The participants' names were not used. The participants were given a code number in order to ensure anonymity and later a pseudonym was used for each of the study participants to discuss the findings. Documents related to the study (transcripts of interviews, field notes, class observation notes) had a code number rather than the participants' names. Any identifying information was changed for all written reports. All documents related to the research study, including audio-tapes, were kept in a locked drawer within the researcher's locked office. Any keys containing identifying information that were related to the codes provided to each participant were kept in a separate locked drawer from that containing any data. Access to the information was limited to the researcher and the researcher's committee. Access to the researcher's computer was electronically restricted and password protected.

**Passive classroom observation.** Field notes from two passive observations of the College Bound classroom were analyzed by noting the setting, setting negotiations, student and educator behaviors, and sequences of behavior (Carspecken, 1996). Additionally, field notes were analyzed to look for patterned behaviors that referenced social identity, norms, values, and power claims (Carspecken, 1996). This information was useful for placing student narratives in context and providing an outsider perspective.

**Individual interview analysis.** Data analysis for the individual interviews occurred using three steps (see Table 2). The first step of analysis was preliminary and occurred throughout the data collection process (Carspecken, 1996). The second step of the analysis involved identification of general themes and occurred during the coding process, and after data collection. The third step of data analysis went deeper into the data to examine the context of students' experiences with a critical lens.

*Step 1.* The first level of data analysis began immediately after the first interview. After each interview, the recorded interviews were reviewed. Notes were also taken about statements or words that caught the researcher's attention and that suggested more questions and other adjustments to the following interviews. Critical ethnography requires an iterative process and flexibility in order to determine meaning (Carspecken, 1996). Data was coded iteratively to allow themes to emerge naturally (Corbin & Strauss, 2014). Field notes and the first interviews allowed the researcher to get clarifications and reconsider questions for the next participants and the focus group interviews.

This preliminary analysis for the first individual interviews also helped identify similarities and differences within and across individual interviews. In this first level of data analysis, the researcher was able to listen to the interviews, and make connections between student narratives.

*Step 2.* The second level of data analysis for the individual interviews and focus group interviews involved coding and theme identification. All the recorded interviews were transcribed verbatim. Individual transcribed interviews were analyzed descriptively using open coding, or the process of breaking down, examining, comparing, conceptualizing, and categorizing the data (Auerbach & Silverstein, 2003; Corbin & Strauss, 2014; Saldaña, 2016) to

identify and highlight common themes and unique experiences among participants. The analysis of the individual interviews helped identify similarities and differences within and across individual interviews and was used to frame questions for the focus group discussions and interview of the college and career counselor.

*Step 3.* For this third level of data analysis, the transcripts were read and re-read with the lens of critical ethnography, CRT and Freire. This allowed the researcher to explore more deeply “how” minoritized high school students navigate post-secondary decision-making and knowledge of occupational therapy. Critical ethnography calls attention to the influence of social control on reality and the creation of meaning (Carspecken, 1996). The researcher reflected on participants’ responses during the interviews; both on how they responded and why they responded the way they did. The transcripts were reviewed beyond the participant statements to uncover the factors of social control that influence the way minoritized high school students navigate post-secondary decision-making and knowledge of occupational therapy. These factors of social control included race and class. The researcher considered how these factors might have influenced the students’ perceptions, their experiences, and their responses to the way in which they make post-secondary decisions.

Data analysis revealed the inequitable system underrepresented minority students’ face when making post-secondary decisions. The opportunities and resources available to this student population in particular was also noted. Additionally, data analysis also considered how being a student of color from a low socio-economic status influenced the participants’ decision-making.

**Focus group analysis.** This research used focus groups to check statements made from the initial student interviews and as a source of new information as students listened to the thoughts and responses of their peers. Transcribed notes from the student group discussion were

analyzed using descriptive coding and thematic analysis (Braun & Clark, 2006) converting data into themes and subthemes that either supported or refuted the themes found from the individual student interviews (Auerbach & Silverstein, 2003). This method of analysis sought to identify common themes and unique experiences among participants as well as identify times of critical reflection that occur through dialogue, fellowship, and solidarity (Denzin & Lincoln, 2011). The researcher also considered how race and class influenced the discussion between students.

### **Ethical Considerations and Human Subjects Review**

Prior to beginning the study, University of Washington's Human Subjects Review Committee approval was obtained as well as letters of support and verbal support from the Metropolitan Development Council's TRiO College Bound program director and the College Bound educational instructor at the study site.

As Linda Tuhiwai Smith (2012) wrote in her book: *Decolonizing methodologies: Research and indigenous peoples*, "Representation is important as a concept because it gives the impression of 'the truth'" (p. 37). Such a statement is an active reminder to the researcher to at all times be transparent and authentic in representing the voices of the participants. The use of participant observation and interviews assisted the researcher in representing a more authentic idea of 'the truth,' since the social relationships and their explanations were provided by the study participants and the participants were active in the research process (Carspecken, 1996). At the same time it was important to note the position of the researcher as a "participant observer" and identify my position within the campus community and the community at large as a white female from a fairly affluent background with multiple college degrees (Carlson, Egebretson, & Chamberlain, 2006). My experiences provided an opportunity to view education and educational goal attainment from multiple perspectives and from multiple levels of influence

(Carlson et al., 2006). It was imperative that I was constantly aware of this position of privilege and how the “Western academy” (Smith, 2012) might bias my interpretation or view of participant experiences.

### **Access and feasibility issues**

The TRiO College Bound program was chosen as a matter of convenience. The TRiO College Bound program serves a diverse student population of low income and first generation students (U.S. Department of Education, n.d.). Additionally, literature suggests a group size of at least 3 to 5 participants in order to have beneficial group discussions (Plunkett et al., 2013) and it was anticipated that the College Bound program would yield at least five students interested in participating.

### **Findings and Interpretations**

The purpose of this qualitative study was to explore the consideration of occupational therapy as a career choice by high school students of color. By having a better understanding of how high school students of color make choices about where to attend college; how they make career choices; and what knowledge they have of occupational therapy as a career choice healthcare professionals and occupational therapy educators will have a more informed perspective in terms of recruitment and educational pathway supports for students of color. Following are the key findings obtained from seven in-depth interviews (six individual student interviews and one interview with the College and Career guidance counselor), two focus groups conducted with all six of the original student participants (3 students in each group), and two passive classroom observations.

Three major categories representing student experiences in making post-secondary decisions and knowledge of healthcare careers emerged from this study. These were: (a)

navigating the system, (b) making choices, and (c) no interest in healthcare. Following is a discussion of the findings with details that support and explain each category.

*Categories representing student experiences with making post-secondary decisions*

Category	Navigating the system	Making choices	No interest in healthcare
Subcategories	Going it alone	Influence of relationships	“Science is not my thing”
	Strategies/tools to help with navigation	More money	Relationships with healthcare professionals
	College Bound program	Academic courses	No information

**Navigating the system.** The first category, navigating the system, represented the responses of students regarding efforts to maneuver through and master the multiple expectations of high school students preparing for post-secondary education. Three subcategories to navigating the system were found in the data analysis. These included: (a) going it alone, (b) the College Bound program, and (c) strategies and tools to help with navigation.

*Going it alone.* All six students reported how they had to independently set about seeking information about college and careers. Each student talked about their own decision to attend a four-year college, even when family would have supported a two-year program. Students also reported that most decisions regarding which college to attend and how to finance their education were left to the student. All students reported that family were supportive of their decisions, but in many cases students came from a single parent household where the parent was tired from working or ill and unable to assist the student with help in completing college and financial paperwork. Five of the six students felt that their family was of little help with their efforts to

apply for college. Mariah<sup>1</sup>, a 17 year-old black female commented that, “I didn’t feel like I was getting any type of, like, help for college or my parents didn’t really know about the process.”

Likewise, Sophie, a 16 year-old multi-racial female responded:

I don’t really think anyone has really helped me. It is my decision for what I want to do. It is on your own plate to strive for something that you want. And you have to know what you want. And I want college. So that is my goal.

This same student went on to explain:

So after middle school and when I went into high school, I was like, well, I really need something, because no one else is there for me to push me or to tell me where I need to go for graduating high school, even. So I always look into finding some sort of class or a person to help me like the career center is a very helpful place.

As a result, many of these students independently sought out programs and adults who could help them with their decision-making. For all six of the students the College Bound summer program or College Bound high school class was crucial in providing them with information on college applications, choosing a college, and how to obtain financial aid. In addition, students reported that they would independently seek out the College and Career counselor who was also seen by the students as a resource for obtaining information about scholarships and career information.

*The College Bound program.* All six students reported seeking out admission to either the summer College Bound program or the course offered at the high school as a way to receive assistance with college decisions and applications. Each student reported on the help received from the College Bound instructor and that the class offered them an opportunity to hear from visiting college recruiters, go on fieldtrips to various college campuses in- and out-of-state, and

---

<sup>1</sup> All names have been changed to protect the privacy of the participants

learn study skills to help them succeed in college. In response to the question about ways in which the College Bound class has been helpful, Rashida, a 17 year old Black female reported:

Well, I kind of – I didn't know, like, really what a major was and stuff like that – not the technical stuff. And I didn't know what I wanted to major. Now I know I want to major in film studies. And I didn't even know if it was a major. You know? It broke things down for me to understand what I need to fill in, I guess.

Rashida went on to comment on the help received from the College Bound instructor:

Definitely Ms. Peters, because we have, like, time in class to work on applications. And since, like I honestly don't think I would have like, been interested in Central if they hadn't come to my class. And I went to FAFSA night at school.

Sarah, an 18 year-old first generation, white female commented on the skills she learned in the College Bound classroom that will help her in college:

I realized the lack of prep that I had done, and it scared me. And yeah, I think TRFs and tutorials can be kind of aggravating, and it is annoying to take as much notes as I do and stuff like that. But when I was over at WSU, we had to listen in on the seminar for one of the majors of interest we chose. And I was taking notes, and I felt really fluent in it. I felt like I was taking very good notes that would help me later if I ever had any questions. So I am actually really glad. I just felt like it would teach me the last few things and help me, like, tie the ends and get to college.

Student perceptions of the benefit of being part of the College Bound program is an example of one way in which students acted upon their knowledge of the need to obtain resources to assist with tasks related to preparing for college applications in which they felt ill prepared for. The strategies and tools used to help navigate the college application process and career decision-

making is another example of ways in which students push back against the traditional ways of preparing for college entrance.

*Strategies and tools to help with navigation.* All six students reported various ways in which once they had made the decision to attend college they set about finding resources to help them accomplish the tasks needed in order to gain help and information. These resources included the use of various technologies and strategies, such as taking part in the summer College Bound program or the school year College Bound program and seeking help from the College and Career counselor.

Student participants mentioned several tools they found useful to help them navigate many of the requirements for college applications and career choice. Tools such as the College Bound class “planner”, the *College Board* website, the “remind” app, and the *Career Cruising* website were thought to be the most helpful. As Rashida stated:

Well, on *College Board* they have a thing where you put in everything you want, and then it shows you your top two colleges that match up. It is so easy to use and it’s like – it is user friendly.

In response to a question about ways in which students get information about college and careers, 17 year old Emma, a Black female, reported:

So both Ms. Peters, the College Bound teacher, and the career counselor, Ms. Washington -- they have this ‘remind’ app, and they, like, they literally flood us with information, like, everyday there is something – whether it be a college, or a nursing program, or like scholarships – there is a lot of scholarships on there. So they keep us informed about anything on that app. Yeah.

Three of the six students responded to the question about “How are students of color influenced when making career & educational decisions” with statements that use of the school’s web-based program *Career Cruising*, *YouTube* videos, college websites, the *College Board* website, and *Google*<sup>TM</sup> were all used as sources of information. The use of technology allowed students to gain information independently and on their own time. When asked what was most helpful for making decisions about which college to attend, Emma, responded:

I have been watching a lot *YouTube* videos, actually from like, people, I am going to give you an example. Let’s say this person goes to Central College, they would do a video on *YouTube* and they show us the good and the bad. Because I don’t have time to go there and stay overnight.

At the same time that students agreed technology was helpful with their decision-making it was also seen as a barrier. When asked about using *The Common Application* website to apply to colleges, Rashida stated: “It just seems, like, really annoying.” For Rashida, applying through the college’s website simplified the process as she goes on to explain: “And Central, it was literally, I filled out, like a questionnaire, and then I got a letter two weeks later: you got accepted!”

Students also reported the use of strategies such as registering for the College Bound summer program or school year class as being helpful. As a College Bound student they had travel provided to various college campuses and college fairs. Emma stated:

...then junior year I went on a couple of field trips with them [College Bound], and it was, like, really fun, and they really helped me start understanding what I need to do this year, or the end of junior year to get to college.

Michael, a 17 year old Asian male reported, “Through College Bound it was a lot of information. They throw everything at you. They give you a lot of resources to help you plan for the future.”

Technology was useful in helping with identifying careers of interest and the education needed to pursue certain careers. When asked about her career choice in film production, Rashida responded:

I feel like getting into the industry could be kind of hard, but we have this website that we have to, we are required to fill out. It is called ‘*Career Cruising*,’ and it shows you, like, the steps to becoming what you want to be, so it is pretty cool.

Additionally, Sophie commented that the school based web program, *Career Cruising* was helpful for finding out about careers you were already thinking of, however she went on to state:

But I have *Career Cruising*, and sometimes that will help me. But I feel like it doesn’t give me – it needed to be even more broad. I know there is more out there.

Focus group discussions supported individual student statements regarding the need to be independent in seeking information about college and careers. When the groups were asked which persons have helped them the most with their decision-making, Rashida stated, “Ms. Peters helped me a lot, but other than that, I kind of just did it by my own or by myself.” This same feeling of *going it alone* and using school resources was expressed by another group of students as the following student interaction suggests:

Sophie: But I think the school definitely needs to have more opportunities, more things, for students to go and find more information – the career center and everything is nice, but it is not – I don’t know, you really have to be ...

Sarah: Be more resourceful databases than what we are given.

Ms. Washington, a 28 year-old Black and Hispanic female works as the College and Career counselor at the high school. She reported that she likes to “bombard students with information” hoping that students will see her and her classroom as a resource center. As she stated, “because I am trying to bring to this role what I think would have been helpful for me when I was in high school.”

Additionally, all six students reported on the importance of the College Bound program in helping them prepare for college and navigate the application process. In addition, Ms. Washington reported:

So as you know, Ms. Peters is from MDC. So she has two class periods here on campus for a select group of students who opt to be in her class. So only those students are the ones who are getting that, you know, direct information.

Ms. Washington’s comments suggest her knowledge of the need of disadvantaged students and she understands that not all students have the resource of the college bound program.

Finally, the students who participated in this study all reported using some form of technology to help them with their decision-making. Ms. Washington commented on the importance of being accessible because she knows not all students have access to the Internet and tries to make the most of their time when they are in the career center. Regarding strategies and tools the students use to help them with their decision-making, Ms. Washington supports student use of technology and commented:

So I use the ‘remind app,’ which I think Ms. Peter’s (the College Bound instructor) uses as well, too. So I know that they are attached to their phones and I am not too far removed from their generation as well, so I use my phone all the time too. And there is an app for everything. So I think being able to relate to them in that aspect that they like

apps, and they like social media. So with the ‘remind app,’ it is like a safe way to message me – definitely on the weekends too, and after school... It is real quick and easy and gives them a little sense of reassurance of OK, I have an adult that is willing to support me, and I can access them out of the hours of 7 and 2:05.

In addition to the “remind” app as part of the technological tools available to students in school, is the mandatory use of the *Career Cruising* website. Sarah, while participating in one of the focus groups responded to a question about the use of *Career Cruising* by stating:

... then *Career Cruising* has just been something we are told to do. Nobody takes it seriously because it is something that you just have to do. There is no more, like, dedicated class time and reviews about how you should be answering these questions... So I don’t think that the online sources—some of them might be good, but *Career Cruising* and *College Board* ... I don’t think it helps.

Additionally, Ms. Washington explained the use of the *Career Cruising* program this way:

So we do now what is called a high school and beyond plan. And so students have to go through this program called ‘*Career Cruising*,’ which is actually a really cool program ... And they start it in, like, seventh grade, I think... There is also career opportunities on there as well, too. So they can search for, you know, what is a job that would let me work with my hands?... I really wish students would take it a little bit more seriously. That they could, like, actually use it for something that they would need... But I haven’t had any student who has come by yet who has said, oh, this changed my life kind of thing. And I just wish they would use it more in that aspect.

The students' ability to take part in the College Bound program and their choice of technological strategies appear to support students' views of independence and offer a sense of belonging which leads into the next theme of "making choices."

**Making choices.** The second concept the students expressed around making post-secondary college and career decisions was "making choices." This represented the multiple influences students experienced when making choices about which college to attend and career decisions. Three subcategories to "making choices" were found. These included: (a) influence of relationships, (b) "more money," and (c) academic courses.

*Influence of relationships.* All six students in the study reported that family and relationships with high school instructors and staff, and college admissions staff influenced their decisions about which college to attend and what careers to go into. Five of the six students commented that a parent preferred they attend a college close to home. As Rashida stated, "Because I just don't want to leave my mom." And Emma reported:

And I applied to, like, six or seven schools. And I based that off of, like my mom.

Because she is, like, getting older and she doesn't want me to leave. And plus, since I have cerebral palsy, I can't really go far because if something happens to me, that could possibly affect me not going to school or anything, so I have to stay close to home.

When asked if moving away from home was a concern, Michael responded:

A little bit, because I will probably get homesick. But for my parents a lot, because they want me to stay in the area so I can go home and work on stuff.

Regarding the influences of relationships with school instructors and staff, five of the six students believed that their relationship with the College Bound instructor and Ms. Washington,

the College and Career counselor, helped them in their decision-making about which college to attend. Michael explained it this way:

So Ms. Peters gives me more, like knowledge towards college, and my mom is just like broad information like your FAFSA, you got to get to school, you got to have good grades. And then Ms. Peters kind of breaks it down into smaller bits, as in by this date FAFSA opens, or you can earn scholarships now, and then apply now, and you have got to get your grades up, so in the future you wouldn't be packing your schedule with classes that go to boost your grades.

Sophie, the youngest participant in the study, commented:

And ever since then that is who has been helping me is the College Bound program – all the people in there. Not just singular people. It is really a really big program. So I have, like, family.

Emma commented on her relationship with Ms. Peters stating, “I am really thankful that I am in that program. And I have her number. So if I have a question, I can just call her.”

In addition to having a relationship with the College Bound instructor students commented on the importance of developing a relationship with the admission staff of various colleges. Mariah explained, “...she [Ms. Peters] brought in the counselor from the college I want to go to, and that's how I first found out about Warner Pacific, the college I want to go to.”

Rashida, explained the influence of visiting college staff this way:

And then my mom, like she was like, oh, are you just going to want to go to every college that comes to your class, because that's kind of what I had been, like saying. And so I was like, maybe. Maybe I don't really like this school. Maybe I just like that they came and gave me, like, a pencil.”

Sarah commented on building a relationship with the college admissions staff, stating:

So I have seen him—I saw him at, like, the college fair at UPS, the college fair here. He came into the career center, once, on just a random day. He has been at College Bound on a random day. So I have seen him multiple times, and yeah. But I feel like it is going to be easier to contact just because I have – because I have seen him so many times. I feel like I have a relationship where I could contact him to have a sit down and get what I needed done.

The relationships made with school staff and college admissions staff demonstrate the power and influence student to adult relationships have beyond a student's family and peers. Personal relationships appear to trump what a student knows of an educational institution when making post-secondary decisions.

*“More money.”* All six students reported that the main concern when deciding on a college is the cost to finance the education. When asked how students went about making decisions about which colleges to apply to, Sarah, the only white participant, responded:

And I get their university achievement of \$2,000 and I am going to be studying for the SAT to re-take that to hopefully if I can bump up my SAT score and GPA enough – because I am really close to the \$4,000 university achievement. So that is my goal. And then I just enrolled in work-study, or ‘work side learning,’ or whatever. More money. Free money.

Four of the six students also reported that even though they were interested in private four-year universities they made the decision to go to an in-state public institution because of the cost. As Emma put it:

But a barrier – like the cost of it, definitely, financially. Because I really don't feel like

taking out any loans. I don't want to. I am working my butt off trying to find scholarships.

When Emma was asked if she was working to save for college she reported:

So I worked at Taco Bell since September and I quit in October because I had to do a lot. I had, like, a lot going on. And most of why is because of Honor Society. So I have a lot on my plate. So that was really stressing me out. And I have to do scholarships and applications. That is, like, another job in itself too.

Michael, who hopes to attend a private four-year college, when asked what it would cost to go to school responded, "I want to say around close to 50 grand a year. Yeah. That's a lot. So scholarship is a big part of my life right now."

The concern over financing a college education is significant for each of the students in this study and is evidenced by their concern with obtaining scholarships. However, at the same time the work of completing scholarship applications appears to be time consuming and stressful for these students. In addition to the cost of college, students reported making decisions based on the influence of high school classes as seen with the next theme.

*Academic courses.* Several students reported that high school subjects or the instructors in those subjects helped them with career decisions. As Sarah reported:

And this year I got into AP Government, which is the first AP class I have taken in all four years. And normally it is a teacher that can make you really passionate about a subject. And I love the way my teacher teaches this class. So I just love the class. So when I go to college, politics is what I am looking into.

Emma responded:

And then the reason I want to study business is because junior year – or last year,

basically – I was in DECA and I was in business and marketing and I fell in love with the whole idea of me being an entrepreneur. And I felt like that was the best fit for me.

The youngest participant, Sophie, told me her interest in becoming a surgeon stemmed from her time in her science courses, “My science classes are my favorite academic and the only one I’m really good at. Well, I’m good at other academics, but that’s the high advanced one for me.”

When deciding on which college or career is a “good fit,” all six student participants commented on the importance of the relationships in their lives that helped to influence their decisions. These relationships were reported to be with family members, school staff or teachers, and also college admissions staff or recruiters. During one of the focus groups Michael responded to the importance of relationships this way:

Being able to have a relationship with my teachers or administration and helping me towards college is, I think to me, very necessary because they are able to give you different insights and aspects on what you want to look for in a college or how you want to pursue your career and depending on what your interests are.

Sarah responded to what was being said, stating:

And it has been very helpful to have someone like that [the College and Career counselor] who pushes you to do things, even homework related stuff too. It doesn’t have to be just college related. She is just a great motivation.

Certainly, Ms. Washington has an understanding to the importance of building relationships and the influence teachers have as she reported:

I wish more staff would come in the career center and kind of see what I am doing in here and get that information. Because you get to see your students more than I do, right? You get your five periods a day of students. And I only get who decides to spend their

lunchtime with me. Or who decides to come in here after school. ... I think being rushed to talk to 15 or 20 different students in that 30- or 40-minute lunchtime is not enough interaction with the students. And I want to build those relationships that they feel like they trust me, and they feel like they are comfortable being here after school is really important, I believe.

Ms. Washington is responding to the traditional means schools have of providing career and counseling services and acknowledges the fact that traditional ways of providing knowledge and resources is not working for many students. Classroom observations of Ms. Peter's College Bound class and the personal interview with Ms. Washington, found that both of these women offer students opportunities for help with college and scholarship applications in the evenings and on weekends.

Within the theme of making choices, all six students commented that the cost of college is an important consideration when deciding where to attend. Close ties to family at home along with the cost of college influenced five of the six students to stay in-state and four of the five students staying in-state plan to attend a public university. During the focus group discussions all six students commented on the importance of scholarships and one of the six had plans to take part in a campus work-study program to help pay for tuition. In response to a question about the importance of scholarships during the first focus group Emma responded, "The reason I am doing scholarships is obviously to see if I can get the most money so I don't have to pay it back later." Ms. Washington demonstrated an understanding of the need to support minoritized students by reporting on the many ways in which she provides information about scholarship opportunities and assists students with scholarship applications:

I email out to the staff. So at least to catch those students who are not even walking by

the career center, or not even this hallway...So at least I can—I am hoping that the teachers will also be my advocates as well too...Or when I come across opportunities, like I had some scholarship folks come in, and I bring them up to her class (the College Bound classroom)...because I know there are kids in her class that need to hear this information and try to squeeze in unannounced sometimes.

There appears to be a disconnect between how students of color view what is needed for the process of making a choice about college and career and school policies and curriculum put into place to assist students with decision-making.

**Interest in healthcare.** The third category identified was in response to what students reported knowing about careers in healthcare. Only two of the six students reported knowledge of the profession of occupational therapy and one of those students had experience in receiving occupational therapy as a child. In response to the students' limited knowledge about occupational therapy, questions were posed regarding their knowledge of careers in healthcare and interest in pursuing a career in a healthcare field. Three subcategories were found. These included: (a) "Science is not my thing," (b) relationships with healthcare professionals, and (c) no information.

*"Science is not my thing."* Four of the six students reported that their career choices were partly influenced by their performance in their high school courses and all four reported not "liking" the science and math classes they were required to take in high school. Sophie, the one student who did report an interest in becoming a neurologist or chiropractor reported liking her science courses and reported that science was her best subject stating, "My science classes are my favorite academic and the only one I'm really good at. Well, I'm good at other academics, but that's the high advanced one for me."

When asked if students had received information about careers in healthcare, Rashida responded, “Yeah. Like the people that came to our class told us about it, but I’m not really interested in it. I don’t like math or blood or anything.” When asked if students knew what any of the requirements for a career in healthcare were Sarah commented, “Science. And science doesn’t appeal to me.” Emma, who reported having considered a career as an occupational therapist responded:

But then I realized that I would have to deal with a lot of doctorish stuff, and I was just like, nah. Science is not my thing. You could say that. I could do math, but science is not one of the things I do.

Mariah, who had actually taken three science courses in high school reported:

I am not good at science. I took biology, chemistry, science and sustainability, which is just freshman science. And that’s it, actually... Chemistry was very challenging. I don’t think I can go beyond that.

When Michael was asked what his favorite classes in high school are he commented, “Chemistry. But math too. But we don’t have good math teachers, so it is kind of like I am on that edge.” When the researcher probed his response by commenting that his career choice of business and accounting was interesting given that he enjoys his science classes, he responded, “Yeah. The thing is, right, I am kind of looking at that, but I want to be able to like, broaden out my choices.”

*Relationships with healthcare professionals.* Although all six students reported knowledge of at least one healthcare professional, few had any relationships with healthcare providers or knew healthcare providers of color that influenced them to consider a career in the field of healthcare. Four of the six students reported learning about careers in nursing and two of

the students had actual knowledge of the profession of occupational therapy due to having received occupational therapy or having a relative who was an occupational therapist. When asked what the students know about careers in healthcare, Rashida commented that visitors came to the College Bound classroom and, “it was – well, it was for, like, an old folks’ home, like if you want to work there, and I don’t like old people.” Sarah responded to the question by stating that, “I mean, like nursing, neuroscience, doctors – STEM, you hear all the time about, like, STEM.” Emma, who had received occupational therapy as a child reported that she came from a “family of nurses and stuff, like my mom was a nurse and my sister is a nurse, and, yeah. My cousins are doctors.” Her interest is to major in business and she went on to explain:

I could be an accountant. It is definitely – I am not going to rule out the whole working in a hospital, but I don’t really feel like being a doctor or a nurse.

Emma’s past experiences with occupational therapy may have influenced her to consider occupations outside the field of healthcare as she recounted a time when she had received occupational therapy from a white, male therapist:

I mean, my mom has been, like, the biggest helper because, like, if it wasn’t—if I was normal she would have like – I mean, I’m not saying that I’m not normal—if I didn’t have cerebral palsy, she would have been working. Because she has been the one helping me, and I am just like my mom has been helping me, why do I need you? I am wasting my time. You know, yeah. I’m not going to get better. So like – and then after a while, I warmed up to him. So I don’t think it was based on race. It was just the fact that you are not my mom, and I want my mom, you know.

When asked if the students know any healthcare workers that look like them, students reported knowing nurses, doctors, and a kidney dialysis technician and Michael responded, “Well, my mom sometimes goes to, like, a Vietnamese doctor, but that is about it.”

*No information about occupational therapy.* Only two of the six students had any knowledge of occupational therapy. Rashida reported she had an aunt in South Carolina that was an OT and Emma had received occupational therapy services throughout school. When asked if students know what the educational requirements are for a degree in occupational therapy Rashida, whose aunt is an OT, responded, “Nope. But I know she went to college, because that’s where she met my uncle.” Emma, who had received OT services reported, “Um, you need, like – what’s it called? You need to know anatomy, and then you need to know some form of psychology.” When Emma was asked how many years of college it takes to become an occupational therapist, she stated:

I would say it doesn’t take that long. Definitely not five years. Maybe like the regular four for like a bachelors. And then if you want to get your masters, you can.

Sophie, the youngest student, reported she thought that occupational therapy was “like a counselor,” and that “you do have to study psychology and things like sociology.”

Sophie reported she has an interest in becoming a neurologist, a “forensic anthropologist” or a surgeon. When asked how she became interested in those careers she responded:

Well, me growing up and everything, I had a lot of health problems myself, and my mom, and just in my family. So I am always at doctor’s appointments, always hearing big terms of all the things that they are saying and I have got to know what this is, you know? So I got interested being there all the time. And I met a neurologist and a chiropractor – I wanted to be a chiropractor for a while. So I just meet them, and I am like, wow, their

job is so interesting. I would love to do. So that is how I got kind of interested.

When Sophie was asked if she knew about other careers in healthcare she commented:

Yeah. I just am not as interested. They didn't pull me into as much. But I wouldn't not, like, not be interested in it. Like nursing – I thought about nursing for a while. But I feel like a lot of people do nursing and I wanted to do something a little bit different.

In summary, this group of six students expressed the challenges of taking science and math courses that seemed to influence their decisions about considering careers in healthcare. Focus group discussions continued to emphasize their dislike for science as evidenced with this student exchange:

Mariah: Science is kind of a struggle for me. Just in high school. I have always liked science, but since I have gotten into high school it has gotten a lot more challenging...

Emma: It is just not my thing...like taking science courses I feel like for the future, like, it would project me to be like a nurse or doctor or something, but I'm not really interested in those fields or subjects...I don't know why I would like science, you know?

Rashida: ...I just really didn't want to take a science again... But I really liked science, like, in middle school too. And I actually went to, like, a science camp in middle school because I just kind of liked it so much. But now it is just so much math.

Mariah: I feel the same. It has just gotten harder. I don't know, it is not fun anymore. I feel like it is a job.

Ms. Washington supported student statements regarding science courses by stating, "...how are you talking about the sciences? Are you making it fun and exciting that you are getting to mix chemicals together, and make things blow up...this is the fun stuff you can do in science."

Ms. Washington expressed a belief that students are not interested in careers that involve science because:

...I feel like if you see the same old people in the white coats and you know, OK, that is—we have done like a project before where they ask like picture what a doctor is and describe to me what a doctor looks like...And they are white, male, wearing glasses, in his fifties or something like that. They [the students of color] don't describe themselves. So until we change that stigma around what people who hold those positions look like, I think it will be hard to attract those students to want to think of that as a career interest.

Compounding the problem of a dislike for science, students expressed the fact that they knew few individuals of color working in a healthcare related occupation and they had no information about careers in occupational therapy. When asked if it was important for students of color to see healthcare workers that look like them, the following exchange occurred in one of the focus group discussions:

Rashida: Yes. Because it is always good to see yourself represented in places...But like I was at the hospital yesterday visiting my grandpa, and it was pretty diverse staff, which I thought was really cool because the patients are diverse. They should have people treat them that are diverse.

Mariah: I went yesterday, actually to move my grandpa into his new assisted living home, and one thing I did notice was there was no people of color there. Like none. And I was just like OK. So I was concerned about how my grandpa was going to be treated just because we are people of color.

Emma: I definitely think it makes you feel at home just to see people of color – because I am a person of color. It just makes you feel like you are taken care of more, if that makes

any sense.

For the six students in this study, the need to experience science as fun and relevant is important if they are to consider college majors and careers that rely on courses based in science. Likewise, a lack of exposure to information about careers in healthcare or healthcare professionals visiting the College Bound classroom appears to be a missed opportunity to develop relationships with the students and spark interest in the many allied healthcare professions.

### **Discussion**

Both CRT and Freire recognize the importance of examining systems of power and authority (Delgado & Stephancic, 2012; Freire, 1970/2012). Mandatory career planning programs and deciding who has access to high school classrooms by college recruiters and professional programs are opportunities for exposing hegemony. Both the College Bound instructor and College and Career counselor are examples of educators who use non-traditional methods of supporting students of color with information and help.

The seven participants in this study (the six students and one Career and College counselor) described the many ways they found of moving through a system that is in opposition to their needs. The six students described their experiences of making post-secondary decisions by revealing three categories that described how their decision-making was influenced by social context. The first category was navigating the system and incorporated experiences of having to be independent in finding resources and information, the importance of the College Bound classroom, and the strategies and tools used to gain information. The experiences of “going it alone” and seeking assistance from technology and the College Bound program can be seen through the lens of CRT as examples of racism as an everyday reality (Delgado & Stephancic, 2012) and race consciousness (Ford & Airhihenbuwa, 2010; Delgado & Stephancic, 2012) as the

students' adapted to navigating a system that favors traditional middle-class, white students. The students in this study also expressed experiences of having to work hard and find non-traditional means as a way to negotiate a system that requires them to spend extra time taking part in summer programs, seeking financial aid, and getting help with college applications. As Emma explained, "So I have a lot on my plate. So that is really stressing me out." Student experiences of marginalization are heard as they recount the great efforts they go to, to experience all the same experiences of their high school peers. These six students had to commit to taking part in the College Bound summer or school year program at the expense of other courses or summer work opportunities. Additionally, five of the six students were from single-parent households where parents had difficulty taking part in their teens' decision-making and the students believed they were obligated to choose a college in-state and close to home.

Freire (1970/2012, 1974/2014) would support these students' efforts to gain control over their oppressive environment through their use of strategies and tools to help with decision-making. The six students in this study shared how willing and able they are to act on their world, and they do that by using the tools of technology and strategies to gain information for college and career decisions. As Freire (1970/2012) wrote:

...as they locate the seat of their decisions in themselves and in their relations with the world and others, people overcome the situations which limit them. (p. 99)

Looking at student navigation from a Freirean perspective (Freire, 1970/2012, 1974/2014) forces one to consider the educational institution in which these students find themselves. They reported having to be independent in seeking information and resources, yet they are dependent on the school instructors and counselors who choose which information to provide. These same teachers and counselors also decide who will be invited into the school or classroom to talk about

their college or career. Responding to the thoughts of Freire, Darder (2015) comments, “Wherever oppression exists, there also exist side-by-side the seeds for resistance” (p. 14). The students’ use of *YouTube*, and Google™ are examples of how students gain the information they believe important to make decisions independently. Non-traditional sources of Internet information empower students in their information seeking and allow them access to information outside of the traditional pathways.

The second category of “making choices” spoke to student experiences of making choices about college and career based on influences from relationships with family and teachers; having to decide on a college that one can afford to go to; and how high school teachers and classes can influence student decisions. When looking at the influences students of color experience as part of their preparation for life after high school it isn’t too surprising to learn of the power relationships have in their lives. Additionally, the relationships built with the College Bound instructor and the College and Career counselor at the high school demonstrate the importance of seeking assistance from someone who looks like them. CRT helps to illuminate the fact that both of these very influential adults are also individuals of color. Both of these women offer the students an example of how to make decisions in ways which challenge the traditional ways students prepare for life after graduation. During classroom observations the College Bound instructor was often heard offering to meet with students on weekends to complete a FAFSA or college application. Similarly, Ms. Washington mentioned giving students her cell phone number so they or a parent could reach her at night or on the weekends. When asked how she attempts to make information available to minority students, Ms. Washington responded:

So if I can learn other ways to do that, and other ways to get the information out—like I

thought by having the app or being online or having the career center open after school. I was thinking of ways like that , that were different than what has been this culture here on this campus.

Both of these women of color understand the need to use radical means in assisting students of color in their decision-making.

Another influence students experienced when making choices was the costs associated with going to college. An issue of concern is how access to schools of first choice are limited by finances. Additionally, the students reported the time and energy it takes to seek out scholarship opportunities and complete the applications, and the stress that the experience brings. Another issue of concern is the nature of the influence experienced in the classroom. For a few of the students, they were inspired by the passion of an instructor for a particular subject and that influenced their career decisions. For many of the students, they lost interest in science and math due to the way in which the subjects were taught.

The last category was “no interest in healthcare,” and included the subthemes of not liking science; lacking relationships with healthcare providers; and not having information about careers in healthcare. It seemed somewhat surprising to find out that of the five female students of color interviewed only one student reported liking science and was considering a career as a neurologist or chiropractor. Four of the students interviewed reported liking their science classes at one time, however when taking science in high school the subject became difficult and uninteresting. This finding is supported by other studies that found barriers to enrollment in allied health programs included perceptions by minoritized students regarding their performance in high school math and science courses (Barfield et al., 2012; Sullivan Commission, 2004) Knowledge of these student experiences with science and math should encourage educators to

consider whether students of color are being encouraged and supported in their efforts to take needed science and math courses. Additionally, how schools and school curriculum frame science and math courses determines who is seen as having power, voice, and representation and who does not (Delgado & Stefancic, 2012). It is important, as Ms. Washington pointed out, to expose students of color to professionals who look like them and to offer opportunities for minoritized students to hear the narratives of those same professionals and know that they too can accomplish what is needed to succeed in that profession.

Finally, the fact that the six students reported a lack of relationships with healthcare providers and received little information about careers in healthcare demonstrates a structural barrier. Other than the one student who wanted to be a neurologist or chiropractor, the College Bound students reported being exposed only to careers in nursing. It is important to recognize the effects of race and racism within educational and healthcare institutions. When students of color do not see themselves reflected in the healthcare professions and the high schools are in the place of deciding who is invited to talk about their career, it is not too surprising that minoritized students have little interest in entering the field of healthcare. Just as relationships were viewed to be powerful influencers in deciding on a college or career, students of color are missing opportunities to build relationships with allied healthcare professionals.

### **Generalizability**

Although the sample size for this study was small and the study location was limited to one College Bound classroom, the information found could be used to apply to occupational therapy programs seeking to diversify their student cohorts. The narratives of the six study participants are thought to be representative of other minoritized students, and therefore provide

a significant insight into the supports and barriers students of color experience when making post-secondary decisions.

### **Limitations**

Perhaps the greatest limitation of this study is that only students in the College Bound classroom were recruited for this study. This was done as a matter of pragmatism and convenience since the researcher understood that all of the students would be planning for a post-secondary education and there would be a greater number of students of color in the class. Additionally, this particular high school did not represent the most diverse student body in the school district.

Data collection and interviews were limited in that they took place in the College Bound class during 5<sup>th</sup> and 6<sup>th</sup> period. The researcher was faced with keeping interviews to 30 – 40 minutes to stay within the class session. Additionally, students would forget to return signed consent forms; there were student absences from school; and a semester change occurred in which half of the students that had been interviewed during first semester were no longer in the College Bound class.

### **Conclusion**

The profession of occupational therapy is predominately a white female workforce. It is therefore important to consider what students of color tell us about their knowledge of, and interest in, our professional educational programs and profession. As Knaus (2016) emphasized when writing about K-12 education and race, “the voices most excluded must directly inform the ways in which educational organizations are structured” (p. 20). While a few students admitted to knowledge of occupational therapy they also spoke about not liking the science and math classes that were perceived as a pathway to earning a degree in a healthcare related field. These

findings would support similar findings by Barfield et al., (2012) and the Sullivan Commission (2004) in which poor performance on standardized admissions tests and lack of encouragement to take math and science courses has resulted in lower numbers of students of color pursuing careers in health care. Additionally, students seemed to indicate that much of their career and college influence comes from the personal relationships in their life. So whether a student develops close ties with a high school instructor or a college admissions staff member, the relationship is a driving factor in considering career and college choice. Occupational therapy educators and programs can benefit from this knowledge and work toward increasing a personal presence with secondary school programs and community based programs where students of color are likely to reside. By building relationships with students of color in this way they will gain a greater understanding of the profession and the educational requirements. Other healthcare professions can benefit from this same knowledge as a way to increase diversity within their educational programs as well.

The students in this study were influenced in their college and career decisions primarily by the relationships established during their high school years. Family ties often influenced how far a student was willing to move away to attend college, their ability to navigate the college application process, and also determined financial considerations for financing college. These findings are also supported by research that finds students of color are often faced with having to make choices based on a process of elimination (MacAllum et al., 2007; Mettler, 2014) and for many high school students of color, thoughts of tuition and educational debt become deterrents to aspirations of going to college (Donini-Lenhoff & Brotherton, 2010).

It is also important to consider that the relationships established with the College Bound instructor, the College and Career counselor, and college admissions counselors appeared to

influence students' decisions regarding which colleges to attend. Classroom experiences also had an effect in either igniting a student's interest in a particular career or creating disinterest in going into healthcare as in the case of math and science courses. This information would support efforts to create hands-on experiences in occupational therapy for students of color in middle school and high school. Such experiences would help establish relationships while exposing students of color to information about the educational requirements to obtain a degree in occupational therapy. Similar programs promoted by nursing professionals have been found to result in small increases of minoritized students entering nursing programs (Kuo et al, 2015; Villarruel, Washington, Lecher, & Carver, 2015; Williams et al., 2014). Additionally, Kuo et al. (2015) recommend pipeline programs attempt to reach students as early as possible in order to influence their academic trajectories, and the authors go on to suggest that intensive academic advising and one-on-one faculty mentoring take place in the students' undergraduate years.

That there was little knowledge of the profession of occupational therapy was not surprising. Experience from reading graduate school application essays has shown that most students form an interest in the field of occupational therapy through some sort of personal experience, such as having had OT themselves or know of a family member who has had OT. Again, what this study seems to suggest is that high school students make career decisions based on personal relationships, either through direct exposure to the profession or a hands-on experience. This has great implication for the field of occupational therapy and suggests that as professionals and educators we should consider establishing relationships with appropriate high school career counselors in schools with diverse student populations. It is also important to keep in mind the difficulty many minoritized students face when planning for college and follow the

example of the two adult females in this study by listening to the students, supporting them beyond the hours of 7am and 2pm, and build relationships.

### **Recommendations/Suggestions for Future Research**

Further research is needed to understand the pipeline issues students of color face when transitioning from high school into post-secondary education and what influences their career decisions in college. Since the required credential for a registered occupational therapists now is a master's degree after a four year undergraduate degree it is important to determine what influences career decisions at the undergraduate level for students of color. Likewise, having a better understanding of how students of color decide to attend 2-year community and technical schools to earn a degree as occupational therapy assistants would be beneficial.

The results of this study provide some important actions to consider in the attempt to diversify the occupational therapy workforce. The importance of establishing relationships with students while in high school appears to be a determining factor in their interest in a particular college and career. Occupational therapy professionals could benefit from reaching out and offering to speak at local high school career events and connect with local high school college and career counselors. The provision of after-school or summer programs to expose students to the allied healthcare professions would likewise be beneficial. When students can take part in hands-on experiences in our profession and make connections to high school curriculums it is possible that they will gain a greater interest in the field of occupational therapy.

**Acknowledgements**

The author wishes to thank the capstone committee, Dr. Christine Stevens, Dr. Janet Primomo, and Dr. George Tomlin, for all their time, efforts, and encouragement in seeing this research project to a conclusion. I also wish to thank Dr. Stevens and Dr. Christopher B. Knaus for introducing me to the world of CRT, Freire and activist scholarship! Finally, I am most indebted to the College Bound instructor for allowing me into her classroom and the six high school students who took a risk and shared a part of their high school experience with me. I wish them the very best as they make their way in this world.

### References

- Adelman, C., Ewell, P., Gaston, P., & Schneider, C. G. (2011). *The degree qualifications profile*. Indianapolis, IN: Lumina Foundation for Education. Retrieved from [http://www.luminafoundation.org/publications/The\\_Degree\\_Qualifications\\_Profile.pdf](http://www.luminafoundation.org/publications/The_Degree_Qualifications_Profile.pdf)
- Agency for Healthcare Research and Quality. (2012). *2012 national health care disparities report*. Retrieved from <http://nhqrnet.ahrq.gov/inhqrdr/reports/nhdr>
- Altheide, D. L., & Johnson, J. M. (2013). Reflections on interpretive adequacy in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 381-411). Thousand Oaks, CA: SAGE Publications.
- American Occupational Therapy Association. (2006). *Centennial vision*. Retrieved from [http://www.aota.org/About\\_AOTA/Centennial-Vision/Background/Retreat.aspx](http://www.aota.org/About_AOTA/Centennial-Vision/Background/Retreat.aspx)
- American Occupational Therapy Association. (2015a). *2015 AOTA salary & workforce survey*. Bethesda, MD: AOTA Press.
- American Occupational Therapy Association. (2015b). *Academic programs annual data report: Academic year 2014-2015*. Retrieved from <http://www.aota.org/-/media/corporate/files/educationcareers/educators/2014-2015-annual-data-report.pdf>
- American Occupational Therapy Association. (2015c). *Home page*. Retrieved from <http://www.aota.org/About-Occupational-Therapy.aspx>
- Ard, R. L., & Knaus, C.B. (2013). From colonization to R.E.S.P.E.C.T.: How federal education policy fails children and educators of color. *ECI Interdisciplinary Journal for Legal and Social Policy*, 3(1). Retrieved from <http://ecipublications.org/ijlsp/vol3/iss1/2>

- Association of American Medical Colleges. (2011). *Enrollment, graduates, and MD/PhD data. Table 30: Total graduates by U.S. medical school and race and ethnicity*. Retrieved from <https://www.aamc.org/data/facts/enrollmentgraduate/>
- Aud, S., KewalRamani, A., and Frohlich, L. (2011). *America's youth: Transitions to adulthood* (NCES 2012-026). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Auebach, C. F., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. New York, NY: New York University Press.
- Bass-Haugen, J. D. (2009). Health disparities: Examination of evidence relevant for occupational therapy. *American Journal of Occupational Therapy, 63*, 24-34.
- Balogun, J. A., Sloan, P. E., & Hardney, K. (2005). Health professions career awareness program for seventh-and eighth-grade African-American students: A pilot study. *Journal of Allied Health, 34*(4), 236-243.
- Barfield, J. P., Cobler, D. C., Lam, E.T.C., Zhang, J., & Chitiyo, G. (2012). Differences between African-American and Caucasian students on enrollment influences and barriers in kinesiology-based allied health education programs. *Advances in Physiology Education, 36*, 164-169. doi: 10.1152/advan.00129.2011
- Benavides-Vaello, S., Katz, J. R., Peterson, J. C., Allen, C. B., Paul, R., Charette-Bluff, A., & Morris, P. (2014). Nursing and health sciences workforce diversity research using PhotoVoice: A college and high school student participatory project. *Journal of Nursing Education, 53*(4), 217-22. doi:<http://dx.doi.org/10.3928/01484834-20130326-02>
- Black, R. M. & Wells, S. A. (2007). *Culture & occupation: A model of empowerment in occupational therapy*. Bethesda, MD: AOTA Press.

- Bondi, S. (2012). Students and institutions protecting whiteness as property: A critical race theory analysis of student affairs preparation. *Journal of Student Affairs Research and Practice, 49*(4), 397-414. doi: 10.1515/jsarp-2012-6381
- Bonilla-Silva, E. (2014). *Racism without racists: Color-blind racism and the persistence of racial inequality in America*. (4<sup>th</sup> ed.). Lanham, MD: Rowman & Littlefield Publishers.
- Boulware, L. E., Cooper, L. A., Ratner, L. E., LaVeist, T. A., & Powe, N. R. (2003). Race and trust in the health care system. *Public Health Reports, 118*, 358-365.
- Braun, V., & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.
- Brown, E. V., Muñoz, J. P., & Powell, J. M. (2011). Multicultural training in the United States: A survey of occupational therapy programs. *Occupational Therapy in Health Care, 25*. 2-3, 178-193, doi: 10.3109/07380577.2011.560240
- Carlson, E., Engebretson, J., & Chamberlain, R. M. (2006). Photo Voice as a social process of critical consciousness. *Qualitative Health Research, 16*(6), 836-852.
- Carnevale, P. A., Rose, S. J. & Cheah, B. (2011). *The college payoff: Education, occupations, and lifetime earning*. Washington, D.C.: Georgetown University Center on Education and the Workforce.
- Carspecken, P. F. (1996). *Critical ethnography in educational research: A theoretical and practical guide*. New York, NY: Routledge.
- Center for the Advancement of Health. (2014). Facts of life: Issue briefings for health reporters. *CFAH, 8*(3). Retrieved from [www.cfah.org/factsoflife/vol8no3.cfm](http://www.cfah.org/factsoflife/vol8no3.cfm)
- Center for Disease Control. (2011). *Health disparities and inequalities report. 60*, 1-114. United States, MMWR Surveill.

- Christiansen, C. H., & Haertl, K. (2014). A contextual history of occupational therapy. In B.A. B. Schell, G. Gillen, & M. E. Scaffa (Eds). *Willard and Spackman's occupational therapy* (12<sup>th</sup> ed., pp. 9-34). Philadelphia, PA: Lippincott Williams & Wilkins.
- Cohen, J. J., Gabriel, B. A., & Terrell, C. (2002). The case for diversity in the health care workforce. *Health Affairs*, *21*(5), 90-102.
- Colby, S. L., & Ortman, J. M. (2014). Projections of the size and composition of the U.S. population: 2014 to 2060. *Current Population Reports*, 25-1143. Washington, D.C.: U.S. Census Bureau.
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W. (2013). *Qualitative inquiry & research design*. Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W., & Plano Clark, V. L. (2010). *Understanding research: A consumer's guide*. Upper Saddle River, NJ: Pearson Education.
- Crotty, M. (2015). *The foundations of social research: Meaning and perspective in the research process*. London: Sage.
- Darder, A. (2015). *Freire and Education*. New York, NY: Routledge.
- Delgado, R. & Stefancic, J. (2012). *Critical race theory: An introduction*. (2<sup>nd</sup> ed.). New York, NY: New York University Press.
- Denzin, N. K., & Lincoln, Y. S. (2011). *Qualitative research*. Thousand Oaks, CA: SAGE Publications.

- Donini-Lenhoff, F. G., & Brotherton, S. E. (2010). Racial-ethnic diversity in allied health: The continuing challenge. *Journal of Allied Health, 39*(2), 104-109.
- Dovidio, J. F., & Fiske, S. T. (2012). Under the radar: How unexamined biases in decision-making processes in clinical interactions can contribute to health care disparities. *American Journal of Public Health, 102*(5), 945-952. doi: 10.2105/AJPH.2011.300601
- Eckel, P.D., & King, J. E. (2004). *An overview of higher education in the United States: Diversity, access, and the role of the marketplace*. Washington, DC: American Council on Education.
- Flores, G. (2012). Technical report --- Racial and ethnic disparities in the health and health care of children. *Pediatrics, 125*, e979-e1020.
- Ford, C. L., & Airhihenbuwa, C. O. (2010). Critical race theory, race equity, and public health: Toward antiracism praxis. *American Journal of Public Health, 100* (S1), S30-S35.
- Freire, P. (2012). *Pedagogy of the oppressed*. New York, NY: Bloomsbury Academic.
- Freire, P. (2014). *Education for critical consciousness*. New York, NY: Bloomsbury Academic.
- Hinton, I., Howell, J., Merwin, E., Stern, S. N., Turner, S., Williams, I., & Wilson, M. (2010). The educational pipeline for health care professionals: Understanding the source of racial differences. *Journal of Human Resources, 45*(1), 116-156.
- Iverson, S. V. (2007). Camouflaging power and privilege: A critical race analysis of university diversity policies. *Educational Administration Quarterly, 43*, 586-661. doi:10.1177/0013161X07307794
- Jackson, C. S., & Gracia, J. N. (2014). Addressing health and health-care disparities: The role of a diverse workforce and the social determinants of health. *Public Health Reports, 129*(2), 57-61.

Kaiser Family Foundation. (2015a). Racial and ethnic disparities in access to and utilization of care among insured adults. Retrieved from <http://kff.org/disparities-policy/issue-brief/racial-and-ethnic-disparities-in-access-to-and-utilization-of-care-among-insured-adults/>

Kaiser Family Foundation. (2015b). The impact of the coverage gap in states not expanding Medicaid by race and ethnicity. Retrieved from <http://kff.org/disparities-policy/issue-brief/the-impact-of-the-coverage-gap-in-states-not-expanding-medicaid-by-race-and-ethnicity/>

Kaufman, J. D. (2010). Using creativity to reduce ethnic bias in college admissions. *Review of General Psychology, 14*(3), 189-203. doi:10.1037/a0020133

Knaus, C. B. (2014). Seeing what they want to see: Racism and leadership development in urban schools. *Urban Review, 46*, 420-444. doi: 10.1..7/s11256-014-0299-0

Knaus, C. B. (2016). We talk but we don't say shit: Education and the silencing of voice. In *Envisioning a critical race praxis in K-12 leadership through counter-storytelling* (pp. 3-23). Unpublished manuscript. Charlotte, NC: Information Age Publishing.

Kronenberg, F. & Pollard, N. (2005). Overcoming occupational apartheid: A preliminary exploration of the political nature of occupational therapy. *Occupational therapy without borders*, ed. Kronenberg, F., Simò-Algado, S. & Pollard, N. 58-86. Oxford: Sage.

Kuo, A. A., Verdugo, B., Holmes, F. J., Henry, K. A., Vo, J. H., Perez, V. H., ...

Guerrero, A. D. (2015). Creating an MCH pipeline for disadvantaged undergraduate students. *Maternity & Child Health Journal, (19)*, 2111-2118. doi: 10.1007/s10995-015-1749-3

- Ladson-Billings, G., & Tate, W. F. (1995). Toward a critical race theory of education. *Teachers College Record*, 97(1), 47-68.a
- Lynn, M. & Parker, L. (2006). Critical race studies in education: Examining a decade of research on U.S. schools. *The Urban Review*, 38 (4), 257-290. doi: 10.1007/s11256-006-0035-5
- MacAllum, K., Glover, D. M., Queen, B., & Riggs, A. (2007). Deciding on postsecondary education: Final report (NPEC 2008–850). Washington, D.C.: National Postsecondary Education Cooperative.
- McHugh Pendleton, H., & Schultz-Krohn, W. (Eds). (2013). *Occupational therapy practice skills for physical dysfunction* (7<sup>th</sup> ed.). St. Louis: Elsevier Mosby.
- Metropolitan Development Council. (n.d.). Retrieved from <http://mdc-hope.org/education/mdc-trio-college-bound>
- Mettler, S. (2014). *Degrees of inequality*. New York, NY: Basic Books.
- Mitchell, D. A., & Lassiter, S. L. (2006). Addressing health care disparities and increasing workforce diversity: The next step for the dental, medical and public health professions. *American Journal of Public Health*, 96(12). 2093-2097.
- National Center for Educational Statistics. (2011). Beginning postsecondary students. Retrieved from <http://nces.ed.gov/surveys/bps/>
- National Center for Educational Statistics. (2013). Fall enrollment of U.S. residents in degree-granting postsecondary institutions, by race/ethnicity: Selected years, 1976 through 2024. Retrieved from [http://nces.ed.gov/programs/digest/d14/tables/dt14\\_306.30.asp?current=yes](http://nces.ed.gov/programs/digest/d14/tables/dt14_306.30.asp?current=yes)
- National Center for Educational Statistics. (2015). The condition of education. Retrieved from [https://nces.ed.gov/progrms/coe/indicator\\_cva.asp](https://nces.ed.gov/progrms/coe/indicator_cva.asp)

- Noone, J. (2008). The diversity imperative: Strategies to address a diverse nursing workforce. *Nursing Forum*, 43(3). 133-143.
- Patton, L. D., McEwen, M., Rendón, L., & Howard-Hamilton, M. E. (2007). Critical race perspectives on theory in student affairs. *New Directions for Student Services*, 120, 39-53. doi: 10.1002/ss.256
- Plundett, R., Leipert, B. D., & Ray, S. L. (2013). Unspoken phenomena: Using the photovoice method to enrich phenomenological inquiry. *Nursing Inquiry*, 20(2), 156-164. doi: 10.1111/j.1440-1800.201200594.x
- Radomski, M. V., & Trombly Latham, C.A. (Eds). (2008). *Occupational therapy for physical dysfunction* (6<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Richardson, A., Allen, A. J., Xiao, H., & Vallone, D. (2012). Effects of race/ethnicity and socioeconomic status on health information-seeking, confidence, and trust. *Journal of Health Care for the Poor and Underserved*, 23(4). 477-1493. doi: 10.1353/hpu.2012.0181
- Saha, S., & Shipman, S. A. (2008). Race-neutral versus race-conscious workforce policy to improve access to care. *Health Affairs*, 27, 234-245. doi: 10.1377/hlthaff.27.1.234
- Saldaña, J. (2016). *The coding manual for qualitative researchers*. Los Angeles, CA: Sage Publishers.
- Scaffa, M. E., Reitz, M. S., & Pizzi, M. A. (2010). *Occupational therapy in the promotion of health and wellness*. Philadelphia, PA: F.A. Davis Company.
- Schell, B.A.B., Gillen, G., Scaffa, M.(Eds). (2014). *Willard and Spackman's occupational therapy* (12th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Smedley, B. D. (2012). The lived experience of race and its health consequences. *American Journal of Public Health*, 102(5). 933-935.

- Smedley, B.D., Stith, A.Y., & Nelson, A.R. (Eds). (2003). Unequal treatment: confronting racial and ethnic disparities in health care. *Institute of Medicine of the National Academies*, Washington, D.C: The National Academies Press.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples*. London, UK: Zed Books.
- Smith-Maddox, R., & Solórzano, D. G. (2002). Using critical race theory, Paulo Freire's problem-posing method, and case study research to confront race and racism in education. *Qualitative Inquiry*, 8(1), 66-84.
- Sue, D. W. (2004). Whiteness and ethnocentric monoculturalism: Making the "invisible" visible. *American Psychologist*, 59(8), 761-769.
- Sullivan Commission on Diversity in the Healthcare Workforce. (2004). Missing persons: minorities in the health professions. Retrieved from [http:// health-equity.pitt.edu/40/1/Sullivan\\_Final\\_Report\\_000.pdf](http://health-equity.pitt.edu/40/1/Sullivan_Final_Report_000.pdf).
- Tacoma Public Schools. (n.d.). *Stadium High School*. Retrieved from <http://www.tacoma.k12.wa.us/stadium/pages/school-info.aspx>
- Tacoma School District. (2013). *October 2013 - Enrollment by Ethnicity for PreK-12*. Retrieved from [http://www.tacoma.k12.wa.us/information/departments/assess/Documents/Enrollment\\_Statistics/Enrollment\\_Counts/Enrollment%20Counts%20Ethnic%20Distribution%202013-2014.pdf](http://www.tacoma.k12.wa.us/information/departments/assess/Documents/Enrollment_Statistics/Enrollment_Counts/Enrollment%20Counts%20Ethnic%20Distribution%202013-2014.pdf)

- Tacoma School District. (2015). *October 1, 2014 - Enrollment by Grade for PreK-12*. Retrieved from [http://www.tacoma.k12.wa.us/information/departments/assess/Documents/Enrollment\\_Statistics/Enrollment\\_Counts/Enrollment%20Counts%202014-2015.pdf](http://www.tacoma.k12.wa.us/information/departments/assess/Documents/Enrollment_Statistics/Enrollment_Counts/Enrollment%20Counts%202014-2015.pdf)
- Toney, M. (2012). The long, winding road: One university's quest for minority health care professionals and services. *Academic Medicine*, 87(11), 1–6. doi:10.1097/ACM.0b013e31826c97bd
- Townsend, E. & Wilcock, A. (2004). Occupational justice. In Christiansen, C. & Townsend, E. (Eds.), *Introduction to occupation*, 243-73. Upper Saddle River, NJ: Prentice Hall.
- U.S. Bureau of Labor. (2014). *Occupational outlook handbook: U.S. Bureau of Labor Statistics*. Retrieved from <http://www.bls.gov/ooh/healthcare/print/occupational-therapists.htm>
- U.S. Census Bureau. (2010). *Quick facts*. Retrieved from <http://quickfacts.census.gov/qfd/states/53/5370000.html>
- U.S. Census Bureau. (2011). *Income, poverty and health insurance coverage in the United States: 2010*. Washington, DC: U.S. Government Printing Office.
- U.S. Census Bureau. (2012). *Fact finder*. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>
- U.S. Department of Education. (n.d.). *Federal TRIO programs*. Retrieved from <http://www2.ed.gov/about/offices/list/ope/trio/index.html>
- U.S. Department of Health and Human Services. (2014). *Healthy people 2020: Disparities*. Washington DC: U.S. Government Printing Office. Retrieved from <https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities>

Villarruel, A., Washington, D., Lecher, W. T. & Carver, N. A. (2015). A more diverse nursing workforce. *American Journal of Nursing, 115*(5), 57-62.

Wilcock, A. (2006). *An occupational perspective of health*. Thorofare, NJ: Slack.

Wilcock, A. & Townsend, E. (2000). Occupational terminology interactive dialogue: Occupational justice. *Journal of Occupational Science, 7*(2). 84-86.

Williams, A. & Swail, W. S. (2005). *Is more better? The impact of postsecondary education on the economic and social well-being of American society*. Washington, D.C.: Educational Policy Institute.

Williams, D. R. & Mohammed, S. A. (2009). Discrimination and racial disparities in health: evidence and needed research. *Journal of Behavioral Medicine, 32*, 20-47.  
doi: 10.1007/s10865-008-9185-0

Williams, S. D., Hansen, K., Smithey, M., Burnley, J., Koplitz, M., Koyama, K., ...

Bakos, A. (2014). Using social determinants of health to link health workforce diversity, care quality and access, and health disparities to achieve health equity in nursing. *Public Health Reports, 129*(2), 32-36.

World Health Organization. (2002). *Towards a common language for functioning, disability, and health: International classification of functioning, disability and health*. Geneva, Switzerland: World Health Organization.

Table 1

*Demographic Profile of Participants*

---

Characteristics of student participants (N = 6)	n
Age range (years)	
14-15	0
15-16	1
16-17	0
17-18	5
Ethnicity/race as identified by participant	
Black	3
white	1
Black/white/Mexican	1
Asian	1
Gender	
Female	5
Male	1

---

Table 2

*Steps of Analysis of Individual Interviews*

---

Steps	Description
1	<ul style="list-style-type: none"><li>- Listened to audio-recorded interviews</li><li>- Reviewed field notes</li><li>- Made notations about unclear questions and any remarks made by participants to clarify for focus group interviews and guidance counselor interviews</li></ul>
2	<ul style="list-style-type: none"><li>- Transcribed individual and focus group recorded interviews</li><li>- Read individual and focus group transcripts</li><li>- Noted key words and sentences</li><li>- Compared interviews for repeating ideas to determine themes</li></ul>
3	<ul style="list-style-type: none"><li>- Re-read each transcript for deeper understanding as influenced by CRT, Freire and critical ethnography</li></ul>

---

## Appendix A

Student Recruitment Flyer

**WOULD YOU LIKE TO PARTICIPATE IN RESEARCH?**

**A study on how high school students make choices regarding careers and college.**

**A University of Washington Tacoma researcher is conducting a study exploring how high school students make choices about careers and college. I am inviting teens between the ages of 14 to 18 years of age and who are considering college or technical training to participate in a research study about how career and college decisions are made.**

**In this study you will be asked to participate in one 30 to 45 minute individual interview and then you will be invited to attend a group discussion with other participants. Eligible participants will receive up to \$30 in gift cards for participating in the study.**

**For more information, call or text the study investigator Kirsten Wilbur, at 253-571-8529.**

## Appendix B

## Student Recruitment Script

Kirsten Wilbur is a student at the University of Washington Tacoma. She is conducting a study to explore how high school students make decisions about college and careers. She is inviting high school students in the TRiO College Bound program who are thinking about college and careers to participate in this study.

In this study you will be asked to take part in one face-to-face interview with Kirsten and then take part in a group discussion with other students who have completed individual interviews. Eligible participants will receive up to \$30 in gift cards for participating in the study. You can decide if you want to be in the study or not. If you are interested in participating in the study then you need to call or text Kirsten at the following number: 253-571-8529. She will call you back and tell you about the study and ask you a few questions to determine your eligibility for the study. She will then mail a consent form to you so you can have your parent or guardian read about the study and both of you sign the form and mail it back to Kirsten using the self-addressed and stamped envelope provided or bring it to class and place it in the privacy envelope provided. Kirsten's phone number is on the consent form so your parent/guardian or you can contact Kirsten at any time if you have any questions. She will give you a copy of the form for your records. Kirsten would like to thank you for allowing me time to tell you about the study.

## Adult Email Script

Dear \_\_\_\_\_,

My name is Kirsten Wilbur and I am currently studying to earn my doctorate in Educational Leadership at the University of Washington Tacoma. I am writing to invite guidance and career counselors at Stadium High School to participate in a study where I am exploring how high school students of color make career and college choices. I am asking for one to four guidance and career counselors to participate in the study by agreeing to take part in one 30 to 50 minute interview. Eligible participants will receive a \$15 gift card for participating in the study.

If you would be interested in participating in the study please contact me at this email address: [kwilbur@pugetsound.edu](mailto:kwilbur@pugetsound.edu) and leave a phone number and time that would work for me to call you and tell you more about this study.

Thank you for your time,

Kirsten Wilbur  
[kwilbur@pugetsound.edu](mailto:kwilbur@pugetsound.edu)  
253-879-3545

**UNIVERSITY OF WASHINGTON**  
**Interview Script for Students**

**Title of Research:** Occupational Therapy as a Career Choice by High School Students of Color

**Participant Number:** \_\_\_\_\_

**Date of Interview:** \_\_\_\_\_

**Interviewer:** Kirsten Wilbur, primary researcher

**Location of interview:** \_\_\_\_\_

**Time Interview started:** \_\_\_\_\_

**Time Interview ended:** \_\_\_\_\_

**Purpose of the study:** Currently there are approximately 118,000 occupational therapists working in the United States (U.S. Bureau of Labor [U.S.B.L.], 2014). Of those therapists 94% are White with 2.5% Black, 4.0% Asian and 5.8% Hispanic or Latino U.S.B.L., 2014). A disparity exists between the percentage of people of color in the United States population and the percentage of post-secondary students of color in occupational therapy programs (American Occupational Therapy Association, 2012). To better understand the reasons for underrepresentation of minorities in the occupational therapy workforce it is important to understand how students of color make career choices and what influences their choices to decide on occupational therapy as a career. This study will examine the interests and healthcare career choices of high school students of color.

The purpose of this study is to examine the descriptions of high school students of color of their experiences in making post-secondary and career choice decisions when considering allied healthcare professions and occupational therapy in particular.

**Objective of interview:** To obtain an in-depth understanding of the experiences of high school students of color, when making post-secondary decisions. I will be asking participants a variety of questions including: information about themselves; how they make decisions about college and career; what factors influence their decision making; how do they obtain information about college and career opportunities; and finally how are students provided information about educational requirements and pathways for healthcare careers?

**Confidentiality:** Interviews will be audio-recorded then transcribed. You will have an opportunity to review the transcription of the interview and provide comment. The interview should take approximately 30 to 45 minutes. You may, at any time, refuse to answer any question, or ask to stop your participation in this research study without any penalty. Every attempt will be made to protect your identity. Your name will not be used. Instead, you will be given a code number in order to ensure your anonymity. Any identifying information will be changed for all written reports.

**Questions:**

Thank-you for being willing to participate in this research study. The first group of questions I want to ask are about you and your role as a student in the College Bound program.

<b>Aims</b>	<b>Questions</b>
Aim #1: Demographic information	<p>Begin with conversation: Hi, how are doing today? Thank you for meeting with me.</p> <p>This study is seeking to understand how high school students of color make college and career decisions. How would you identify your race or ethnicity?</p> <p>Are there any other ways you identify?</p> <p>What year in school are you?</p> <p>What is your age?</p> <p>Is there anything else you would like me to know about you? Such as do you have any special talents or skills?</p>
Aim #2: How are students of color influenced and by what factors, when making educational decisions?	<p>How do/did you go about making decisions about which colleges to apply to?</p> <p>What kind of information have you received about planning for college?</p> <p>Has anyone helped you plan for college?</p> <p>What do you need to know when making your decision about college?</p> <p>Do you know other students like you who have chosen to go to college?</p> <p>What influenced you to join the College Bound program?</p> <p>In what ways has the College Bound program been helpful with your educational goals?</p>
Aim #3: How are students of color influenced and by what factors, when making career decisions?	<p>Have you made a decision about a career? Tell me about your choice of career.</p> <p>Do your career goals influence your decisions about college?</p> <p>How do you/did you go about making career decisions?</p> <p>Are you being told about different careers? Which careers? What are you hearing?</p>

	<p>What kind of information have you received? How have you received this information?</p> <p>Do you know what kind of career or job you would like to have in the future?</p> <p>So if you wanted to be a _____ what would you do?</p> <p>Where would you get information about becoming a _____?</p> <p>Do you know any _____ that look like you?</p>
<p>Aim #4: How are high school students of color exposed to careers in healthcare?</p>	<p>Are you told about careers in healthcare?</p> <p>Tell me what you know about careers in healthcare.</p> <p>Do you have any interest in working in the field of healthcare?</p> <p>Do you know any healthcare workers?</p> <p>Do you know any _____ that look like you?</p>
<p>Aim #5: How are high school students of color provided information about educational requirements and pathways for healthcare careers?</p>	<p>So if you wanted to be a _____ what would you need to know?</p> <p>Do you know what kind of education is required to become a _____?</p> <p>Do you know how to get the training needed to become a _____?</p> <p>Where could you find information about becoming a _____?</p> <p>Have you ever heard of the career of occupational therapy?</p> <p>Can you tell me what you know about the educational requirements for a career in occupational therapy?</p> <p>Do you know any occupational therapists? Any occupational therapists that look like you?</p>
<p>Aim #6: What supports and barriers influence high school students of color in their decision making process?</p>	<p>Do you think there are barriers to your going to college?</p> <p>What are they?</p> <p>Have you decided which college/trade school to go to? Where did you/will you apply?</p>

	<p>Have you made a decision as to where to go?</p> <p>Where else would you go?</p> <p>Why didn't you choose the other schools/programs?</p> <p>Who has been helpful in making decisions about college?</p> <p>What has been helpful to you in making decisions about college?</p> <p>Do you know anyone else like you who have gone to college?</p> <p>Do you think there are any barriers to your becoming a _____?</p> <p>What are they?</p> <p>Who has been helpful in making decisions about your choice of career?</p> <p>What has been helpful to you in making decisions about careers?</p> <p>Do you know anyone else like you who are a _____?</p>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Ending statement:**

*Thank-you so much for participating in this interview and research study. I will be contacting you to review the interview transcript. Do you have any questions?*

## Appendix E

**UNIVERSITY OF WASHINGTON**  
**Administrator Interview Protocol for Focus Group Discussion**

**Title of Research:** Occupational Therapy as a Career Choice by High School Students of Color

**Date of Focus Group Interview:** \_\_\_\_\_

**Interviewer:** Kirsten Wilbur, primary researcher

**Location of interview:** \_\_\_\_\_

**Time Interview started:** \_\_\_\_\_

**Time Interview ended:** \_\_\_\_\_

**Purpose of the study:** Currently there are approximately 118,000 occupational therapists working in the United States (U.S. Bureau of Labor [U.S.B.L.], 2014). Of those therapists 94% are White with 2.5% Black, 4.0% Asian and 5.8% Hispanic or Latino U.S.B.L., 2014). A disparity exists between the percentage of people of color in the United States population and the percentage of post-secondary students of color in occupational therapy programs (American Occupational Therapy Association, 2012). To better understand the reasons for underrepresentation of minorities in the occupational therapy workforce it is important to understand how students of color make career choices and what influences their choices to decide on occupational therapy as a career. This study will examine the interests and healthcare career choices of high school students of color.

The purpose of this study is to examine the descriptions of high school students of color of their experiences in making post-secondary and career choice decisions when considering allied healthcare professions and occupational therapy in particular.

**Objective of the focus group interview:** To obtain an in-depth understanding of the experiences of high school students of color, when making post-secondary decisions and to allow students to hear from each other about their college and career decision making experiences. I will be asking participants a variety of questions including: how they make decisions about college and career; what factors influence their decision making; how do they use to obtain information about college and career opportunities; and finally how are they provided information about educational requirements and pathways for healthcare careers?

**Confidentiality:** Interviews will be audio-recorded then transcribed. You will have an opportunity to review the transcription of the interview and provide comment. The interview should take approximately 45 to 60 minutes. You may, at any time, refuse to answer any question, or ask to stop your participation in this research study without any penalty. Every attempt will be made to protect your identity. Your name will not be used. Instead, you will be given a code number in order to ensure your anonymity. Any identifying information will be changed for all written reports.

**Questions:**

Thank-you for participating in this research study. The questions I want to ask are about how you make decisions about career and college.

Aims	Questions
<p>Aim #1: How are students of color influenced and by what factors, when making career and educational decisions?</p>	<ol style="list-style-type: none"> <li>1. Describe for me the importance of relationships (teachers, admissions counselors, high school staff) and how those relationships have influenced your decisions about college and careers.</li> <li>2. What does it mean for you to go to college close to home?</li> <li>3. Tell me about what science classes you have taken and your thoughts about science.</li> </ol>
<p>Aim #2: How are high school students of color exposed to careers in healthcare?</p>	<ol style="list-style-type: none"> <li>1. If a person came to your school to talk about careers in healthcare, what would you want to know?</li> <li>2. Would it make a difference if the person was a person of color?</li> <li>3. What careers in healthcare would you like more information on?</li> <li>4. Is it important to you to see healthcare workers that look like you? Why?</li> </ol>
<p>Aim #3: How are high school students of color provided information about educational requirements and pathways for healthcare careers?</p>	<ol style="list-style-type: none"> <li>1. Tell me what you know about the college requirements for careers in healthcare.</li> <li>2. What types of science do you think are required for careers in healthcare?</li> <li>3. Did you know that some healthcare fields do not require a great amount of science courses?</li> <li>4. Is the amount of college to earn a professional degree in healthcare a concern for you and why?</li> <li>5. If you could go to a community college for 2 years and become an occupational therapy assistant OR go to college for 4 years and then apply to a graduate program to become an occupational therapist which would you choose?</li> </ol>

<p>Aim #4: What supports and barriers influence high school students of color in their decision making process?</p>	<ol style="list-style-type: none"><li>1. Describe for me how technology - websites/apps – help you with your decision making.</li><li>2. How many of you are applying for scholarships? Are scholarships important in determining where you will go to college?</li><li>3. Which persons have helped you the most with your decision making?</li><li>4. What has been the most helpful to you in making decision about college and career?</li></ol>
---------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Ending statement:**

*Thank-you so much for participating in this group discussion and research study. I will be contacting all of you to review the interview transcript. Do you have any questions?*

## Appendix F

**Meaning Reconstruction and First Passive Observation Notes (December 11, 2015)**

12:13 Class

Met College Bound instructor (Black female) [OC: Dressed in jeans and Seahawks jersey].

7 students in class: 2 Black Males (seniors); 2 White Females (juniors); 1 Black Female (junior); 1 Asian Male (junior); 1 Pacific Islander Female (junior)

**Conversations**

[1] Instructor starts class by providing donuts. Banter back and forth with students. Talking about Santa photos, upcoming school dance. Laughter. [OC: I'm standing by instructor's desk. Instructor introduces me. I'm feeling conspicuous. I'm the only white adult in the room.]

[2] Instructor: *Are you clowning on me?*

[MF: *I get you. I'm one of you. Talking before class using the language of the students helps me establish relationships with the students. These students need strong relationships in their lives.*]

[3] Instructor goes over the plan for the day. Snack-attendance-instructions to organize time.

[4] Instructor and WF – FAFSA discussion/scholarships

[5] Instructor to class-reminding students to keep on track with work.

[MF: *Seems to be reprimanding when students appear to not be working on class assignments.*]

[6] Instructor to PIF- *What are you doing? You need to do your work.* [OC: Instructor says this in somewhat harsh way.]

[7] PIF: *I'm helping him with Spanish. I speak Spanish. I'm going to be a nurse and work in Mexico.* [OC: PIF is sitting next to BM student and sharing earbuds to a cell phone/ipod. PIF student appears belligerent/hostile-she ignores the instructor.]

[MF: *Lay off. We're just having fun.*]

[8] Instructor: *No you're not.* [OC: The instructor and PIF appear to have had this conversation before. The instructor's response surprised me.]

[MF: *We both know you're just wasting time. You aren't using class time wisely.*]

[9] Instructor praises WF for how she is using her time.

[MF: *I like how you're using your time unlike your classmate.*]

[10] BF has a question for instructor. [OC: Prior to this the student has been off to the side at a classroom computer.]

[11] WF discussing forms with instructor. [OC: Instructor appears to be the most helpful with the female (White and Black) students the most. Those students are also the ones working on class assignments.]

[12] 30 minutes into class: Students get quiet.  
[MF: Students appear to understand the instructor approves of time spent on class assignments and not “playing around.” Having the lights off supports a quiet work environment.]

[13] PIF: *I want to tell you something really good.*  
[MF: *I can't sit still and work on class assignments. (AND/OR) I have to be the center of attention and disrupt class.*]

[14] Instructor: *NO! Zip it!*  
[MF: *I'm tired of your antics. Get back to work. Stop disrupting class.*]

[12] AM: *Where can I get a corsage?*

[13] Instructor: *Grassis? Thriftway?*

[14] Instructor to PIF: *I'm checking your self-awareness.*  
[MF: *I have my eye on you. I want you to get back to work. (AND/OR) I'm checking to see if you can get yourself back on track and attend to your work.*]

[15] PIF: *I'm bad at it.*

[16] Instructor: *Wait, what are you bad at.*  
[MF: *I wasn't paying attention just now. What did you say? (OR) I didn't expect you to respond to what I said. Your response took me off guard.*]

[17] PIF: *Nothing. You never listen.* [OC: Student says this while getting up from the table. Stands - sits back down.]  
[MF: *You say you care, but you really don't care about us/me. (AND/OR) I can't do anything to please you. (AND/OR) I really want your attention-I need your attention-Why aren't you giving me attention/praise like the other girls?*]

[17] Student conversations about Drake (musician) and his 2007 hit song. Also, conversation about work; AP classes; laughter.  
[MF: *Now everyone is distracted/off topic*]

[18] Instructor to class- reminders to organize their planners; continue work on scholarships; mention of Palmer Scholars.

[19] Instructor to class- *We have to plan where we want to visit. Oregon? D.C.? California? Where do you plan to apply? Where do you want to visit?"* [OC: AM and BF attending to the instructor. No one expresses an interest/answers.]

[20] WF: *I'm staying here for bachelor's then go away for grad school.*

[21] Instructor calls for planner check.

[22] Female students first to hand in planners.

[23] BM: *You're going to yell at me.* While handing in planner. [OC: Student's head is bowed and he slowly walks up to the instructor's desk.]

[24] Instructor: *Why would I yell at you?*  
[MF: *I'm here to help you. I want you to do well.*]

[25] School bell rings. Students exit the classroom.

### **Physical Characteristics of the Classroom**

Lights are off- room is in low light (window light only)

Various college pendants: in-state and out of state

Instructor's contact information on the whiteboard

One wall with bookcase and student notebooks, school supplies, pamphlets/brochures, SAT texts, counter top with microwave & sink.

College related signs. Community events. Volunteer opportunities/internships

Instructor has her diplomas and certificates on the wall along with photos of family/friends.

College Word Wall (cut pieces of different colored paper stuck on the wall): Words such as: Major, FAFSA, G.P.A., Doctorate, grants, minor, personal statement, community, successful, admission essay, SAT, volunteering, scholarship, graduation, responsibility, initiative, tuition, graduation, ACT, interview, academic resume, community service, dorms, bachelor's degree, SAR(student aid report), college, deadline, long & short term goals, EFC (expected family contribution), merit.

Calendars for each month.

3 computers in the room along two walls (see diagram).

Fresh flowers on instructor's desk.

### **What it Feels Like to be Part of the Class**

Feel like an intruder.

I'm the only White adult in the room.

Students are friendly with each other-joking with each other. There is a lightheartedness in the room. Upbeat atmosphere.

**Observations**

3 students with cell phones out

WF students working at table

BF student off to the side on computer working.

PIF and BM sharing earbuds and listening to music- sitting close to each other.

AM studying at desk

BM leaves room and comes back 10 minutes later.

Instructor checks student work.

**Diagram of Classroom and Placement of Students/Instructor**

## Appendix G

**Meaning Reconstruction Notes for Second Passive Observation (March 31, 2016)**

12:15 Class

7 students in class: 2 Black Males (juniors); 2 Asian Males ( 1 senior; 1 junior), 1 White Male (junior); 2 White Females (1 senior, 1 junior); 1 Black/Hispanic female absent (sophomore).

**Conversations**

- [1] Instructor begins class by chatting with students. Students are handing in posters for a poster presentation tomorrow. Lots of back and forth with students. Laughter.  
[OC: I've said my hellos and am seated at one of the desks in front of the class. This time the instructor does not introduce me. I am familiar to several of the students present today.]
- [2] Instructor announces that she will be "teaching" today and starts by reminding students of skills needed for college and asks why some students did not turn in their posters. She then goes on to review information she collected at a recent college and career fair.
- [3] Instructor passes out free haircut coupons to Jean Juarez that she picked up at the fair. Jean Juarez has a cosmetology and hair cut school. She goes on to tell the students her preference for going to Jean Juarez.
- [4] Instructor: *Jay is who I go to and they have other stylists but Jay knows how to cut my hair. I could go to Black salons, but they take longer. They do my daughter's hair and she's there like for 4 hours. I don't have that kind of time. Don't get me wrong they do a good job, but Jay knows my hair. Jay is Asian (she points to an Asian male in the room). I'm not pointing at you because you're Asian.*  
[MF: *I'm one of you. I have similar issues to deal with.*]
- [5] Instructor: *If you're planning for college – 2 to 3 years from now – if you set it as your goal, BOOM!, you'll be there.* She passes out pamphlets from the fair. She gives K\_\_\_\_\_ a brochure from WSU because she knows the student will be going to that college. She hands out brochures from some community and technical colleges and discusses different professional careers (cosmetology, heavy equipment rentals, state patrol academy). Tells the class there is financial aid available for some of the professional training programs.  
[OC: The instructor knows how to personalize information and knows her students' interests.]
- [6] BM to instructor: *I thought technical colleges were all about technology.*
- [7] Instructor to BM: *No, it's all those subjects listed there (pointing to the brochure).*

[8] Second BM to group: (Regarding a flyer from MVP Physical Therapy), *Oh, I go there for physical therapy.*

[9] Instructor to second BM: *Well see, on-the job training is available.*

[10] Instructor to the class: *Peter from Bates is coming the week after spring break. Bates has a technical high school and credit retrieval programs. Also, if for some reason you leave high school, there is Job Corps. She goes on to tell the class about her brother dropping out of high school, getting involved with a gang & drugs and going to prison. Her brother was involved with Job Corps but then dropped out.*

[MF: *The instructor is able to personalize experiences for the students and uses her brother's story as a way to demonstrate her knowledge that the students in her College Bound classroom may find non-traditional pathways to higher education or job training.*]

[11] Instructor to class: *I have a funny story to tell about Snap Chat. She tells the story. I bet all of you I will get one celebrity follow on Snap Chat by the end of the school year.*

[MF: *Again, the instructor's story allows her to connect with the students.*]

[12] Class all chime in to place bets. Lots of laughter and joking back and forth.

[OC: *The instructor and students appear to support one another.*]

[13] Second BM interrupts to show instructor a picture of him with his Varsity letter for football on his smart phone.

[MF: *Look at me, I'm important too!*]

[14] Instructor to the second BM: *That's really cool.*

[15] Instructor to the class: *"Okay, you all. I like to have fun too. But right now only one person has an 8. Presentations that were turned in today, you get 100 points. Those who turned it in early, you get 110 points. The instructor is looking at the second BM and begins to comment on how "someone" hasn't turned anything in and if she gives everyone the same opportunity to turn homework in and get "free points" for turning it in why wouldn't they do that.*

[MF: *Instructor is holding the student accountable after praising him as an athlete.*]

[16] Second BM to the instructor: *I'll make a deal with you. If I get all my binder in order and put together and bring it to class tomorrow are we good?*

[MF: *Can't you make an exception for me?*]

[17] Instructor to the class: *Okay, the EQ for today. Can I construct a list of my top 10 colleges? While your all writing I'm going to tell you a story. Only three minutes left of class while she tells a story about her daughter.*

[MF: *Again, the instructor is relating to the students through story.*]

[18] School bell rings. Students exit the classroom. A student enters from the hallway to speak to the instructor.

**Physical Characteristics of the Classroom**

Lights are off-only light is from the windows  
Same college pennants on the wall  
All walls the same as before  
Chairs/desks in same configuration

**What it Feels Like to be Part of the Class**

Feel separate, however a couple of the students now recognize me and say "hi."  
As the class goes on the students seem to be comfortable with my presence, as does the instructor.  
The instructor and students say things that make me smile and laugh  
Again there is lightheartedness to the class

**Observations**

BM at the computer  
Second BM sitting by himself at a desk-not joining the group of students at the table  
Students paying attention to instructor when she talks about the college and career fair.  
Students joke with each other and the instructor

**Diagram of Classroom and Placement of Students/Instructor**

Appendix H

Flow Chart

*Steps for Data Collection*

