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Perceptions of Nursing as a Career by African American College Students Attending Historically Black Colleges and Universities

Brenda Marie Owens
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Walden University

College of Health Sciences

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Brenda Owens

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Walden University
2018

Abstract

Perceptions of Nursing as a Career by African American College Students Attending

Historically Black Colleges or Universities

by

Brenda Owens

MA, American Public University, 2011

BS, University of Arkansas at Little Rock, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Sciences

Walden University

May 2018

Abstract

Previous studies and official organizations have indicated that African Americans are underrepresented in the healthcare workforce and that patients belonging to minority groups feel they are treated slightly differently in healthcare settings. Limited research examines perceptions of the nursing profession among a variety of demographic groups, and exploratory investigations into the perceptions of nursing as a career by African Americans are limited. The purpose of this quantitative descriptive study was to explore perceptions of nursing as a career by African American students who attend an undergraduate program at a historically black college or university (HBCU) in an attempt to further explain the shortage of African American healthcare professionals.

Gottfredson's theory was used as a framework for this study. Gottfredson's theory explains career choices and gives an explanation based on three social determinants, namely gender, interest, and prestige. Two hundred ninety-five African American college students were asked to complete a Career Values scale survey from the tool Measuring Attributes of Success in College Students to collect data from African American college students to assess their attitudes toward the nursing profession. Findings revealed that nursing was perceived favorably regarding job prospects and prestige, but negatively regarding working conditions and status. Independent samples *t* tests indicated a statistically significant mean difference in perceived nursing prestige and status between men and women, $M = -.32$, 95% CI $[-.52, -.12]$, $t(246) = -3.13$, $p = .002$, $d = -0.40$. This study may contribute to positive social change through raising awareness regarding the need for additional African American nurses in the healthcare system.

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Dedication

I must first, give thanks to God for providing me the strength and knowledge to complete this journey, and thank you Lord for granting me the positive attitude throughout this process. I know it came totally from you.

I must thank my angels in heaven who are my rock, my mother, Gloria Dean Jackson and my father James Horace Jackson, who art in heaven. The love that you both bestowed on me throughout my life has made me the person I am today. You are my solidarity of encouragement, and supported me throughout my life. When I defended my proposal on in 2016, I knew you were with me. I know God makes no mistakes. I miss you so very much, but I know that you both are smiling down from Heaven. I love you two more than words can express. Love you dearly!

To my husband, Willie Lee Owens, Jr., thank you for never stop loving me and being my rock throughout this journey. You never complained about the times I had to go write and research, and you understood, when I said, "I am going to my office to do my homework". Your encouragement daily was something I depended on from you through this process. I love you always!

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Friends and family, and I must give special thanks to my Aunt, Lorraine Heath, and my late Uncle Daniel Heath, who were always upbeat, encouraging, and sharing their wisdom and knowledge throughout my education. Dorothy Jackson, my loving aunt who consistently keeps me in prayer throughout this incredible journey. Thank you all for your supportive talks and love while I completed my dissertation! Lastly, my friend Sherhonda Harper, who has provided me sisterhood and friendship throughout this journey, and she has assisted me in being able to stay on task until completion.

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Table of Contents

List of Tables	v
List of Figures.....	vi
Chapter 1: Introduction to the Study	1
Introduction	1
Background	5
Problem Statement	8
Purpose of Study	12
Research Question and Hypotheses	12
Theoretical Foundation.....	13
Definition of Terms	17
Nature of the Study	18
Assumptions	19
Limitations.....	20
Significance of the Study.....	20
Implications for Positive Social Change	21
Summary.....	22
Chapter 2: Literature Review	23
Introduction	23
Literature Search Strategy	25
Inclusion and Exclusion Criteria.....	27
Impact of Minority Underrepresentation in the Health Professions	28

Gottfredson’s Theory of Circumscription and Compromise and Related	
Research Studies.....	31
Perceptions of Nursing	37
Public Perception of Nursing	38
Nurses’ Perception of Nursing.....	39
Gender Perceptions of Nursing.....	40
School Counselors’ Perceptions of Nursing	42
School-Age Students’ Perceptions of Nursing	44
College Students’ Perceptions of Nursing	45
Summary and Conclusions	49
Chapter 3: Research Method	52
Introduction	52
Methodology	54
Methodology: The Target Population	54
Sampling and Sampling Procedures	56
Research Question	57
Procedures for Recruitment, Participation, and Data Analysis Collection	59
Additional Information When Conducting a Pilot Study	60
Instrumentation and Operationalization of Constructs	61
Procedures for Data Analysis.....	64
Ethical Procedures	64
Summary of Design and Methodology and Transition to Chapter 4.....	66

Chapter 4: Results	68
Introduction	68
Data Collection.....	69
Demographic Characteristics	69
Research Question and Hypotheses	73
Perceptions of Nursing Career	73
Perceived Job Prospects	73
Perceived Prestige and Status	75
Perceived Working Conditions	77
Miscellaneous Aspects	79
Assumption Testing	82
Gender Difference in Perceptions of Nursing Career	82
Perceived Job Prospects	82
Perceived Prestige and Status	84
Perceived Working Conditions	85
Miscellaneous Aspects	87
Differences in Perception of Nursing Career between Majoring Groups	88
Perceived Job Prospects	88
Perceived Prestige and Status	90
Perceived Working Conditions	91
Miscellaneous Aspects	93
Reasons for Considering a Nursing Career	94

Contribution to Society and People’s Well-Being.....	94
Job Prospects.....	95
Family Influences	95
Peculiarities of the Profession.....	96
Summary.....	97
Chapter 5: Discussion, Conclusions, and Recommendations	100
Introduction	100
Study Findings and Interpretation.....	102
Descriptive Analyses	102
Inferential Analyses	103
Open-Ended Question	104
Limitations.....	106
Recommendation	107
Implications for Positive Social Change	108
Conclusion.....	109
References.....	112
Appendix A: Instrument	131

List of Tables

Table 1. Search Strategy for Various Databases	27
Table 2. Frequency Analysis on Demographic Characteristics of the Sample.	70
Table 3. Frequency Analysis on Perceived Job Prospects of Nursing Profession.	74
Table 4. Frequency Analysis on Perceived Nursing Prestige and Status.	75
Table 5. Frequency Analysis on Perceived Nursing Working Conditions.	77
Table 6. Frequency Analysis on Miscellaneous Aspects of Nursing Career.	79
Table 7. Descriptive Analysis on Items Assessing Perceptions of Nursing Profession....	81

List of Figures

Figure 1. Frequency analysis on demographic characteristics of the sample (gender)	72
Figure 2. Frequency analysis on demographic characteristics of the sample (declared major).....	72
Figure 3. Frequency analysis on demographic characteristics of the sample (family attended college)	72
Figure 4. Frequency analysis on demographic characteristics of the sample (family worked in healthcare	72
Figure 5. Frequency analysis on demographic characteristics of the sample (household income)	72
Figure 6. Frequency analysis on perceived job prospects of the nursing profession (nursing has a good income potential)	75
Figure 7. Frequency analysis on perceived job prospects of the nursing profession (nursing has good starting income).....	75
Figure 8. Frequency analysis on perceived job prospects of the nursing profession (nursing has good job security)	75
Figure 9. Frequency analysis on perceived job prospects of the nursing profession (nursing has good opportunities for career advancement)	75
Figure 10. Frequency analysis on perceived nursing prestige and status (nurses have prestige and status).....	76
Figure 11. Frequency analysis on perceived nursing prestige and status (nurses work independently).....	76

Figure 12. Frequency analysis on perceived nursing prestige and status (nurses supervise others)	76
Figure 13. Frequency analysis on perceived nursing prestige and status (nurses have a lot of say in what happens on the job).....	76
Figure 14. Frequency analysis on perceived nursing prestige and status (nursing makes an important contribution to society).....	76
Figure 15. Frequency analysis on perceived nursing prestige and status (nurses make a difference in other people’s lives).....	76
Figure 16. Frequency analysis on perceived nursing working conditions (nurses have flexible work hours)	78
Figure 17. Frequency analysis on perceived nursing working conditions (nurses are able to take time off for family leave)	78
Figure 18. Frequency analysis on perceived nursing working conditions (nurses do not have a lot of pressure from work)	78
Figure 19. Frequency analysis on perceived nursing working conditions (nursing has minimal physical effort like heavy lifting at work)	78
Figure 20. Frequency analysis on perceived nursing working conditions (nurses have low risk of injury/disease from work).....	78
Figure 21. Frequency analysis on perceived nursing working conditions (nurses interact a better suited for nursing).....	78
Figure 22. Frequency analysis on miscellaneous aspect of a nursing career (women are better suited for nursing).....	81

Figure 23. Frequency analysis on perceived nursing working conditions (nurses work with the people who mostly come from the same background as me).....	81
Figure 24. Frequency analysis on perceived nursing working conditions (I could do a good job in nursing)	81
Figure 25. Mean differences in perceived job prospects of nursing profession between men and women (nursing job prospects).....	83
Figure 26. Mean differences in perceived prestige and status of nursing career between men and women (nursing prestige and status)	84
Figure 27. Mean differences in perceived working conditions of nursing profession between men and women (nursing working conditions).....	86
Figure 28. Mean differences in miscellaneous aspects of nursing profession between men and women (miscellaneous nursing aspects)	87
Figure 29. Mean differences in perceived job prospects of nursing professional between students majoring in nursing and those who do not (nursing job prospects)	89
Figure 30. Mean differences in perceived prestige and status of nursing career between students majoring in nursing and those who do not (nursing prestige and status)	90
Figure 31. Mean differences perceived working conditions of nursing profession between students majoring in nursing and those who do not (nursing working conditions)	92
Figure 32. Mean differences in miscellaneous aspects of nursing profession between students majoring in nursing and those who do not (miscellaneous nursing aspects)	93

Chapter 1: Introduction to the Study

Introduction

The topic of this study was the perception of nursing as a career choice by college students in historically black colleges and universities (HBCUs). The scope of the study dealt with the limited perceptions of college students in HBCUs and other relevant areas about nursing as a career choice. The topic is a sensitive subject considering the various factors that relate to as nursing as a career choice for HBCU students, the significance of the nursing profession, and the state of the American healthcare system. HBCUs have been classified as educational institutions that existed before 1964 and whose primary objective was the skills of training and education of African Americans who experienced segregation and harassment in predominately White institutions. While the HBCUs now admit students and staff regardless of race, the majority still consists of African Americans.

Nursing as a profession is an integral component in the delivery of efficient services to patients. A sufficient number of nurses in the healthcare workforce are needed to ensure a reasonable nurse to patient ratio for the healthcare sector to operate sustainably. The ratio is sustained through the enrollment of college students who have chosen nursing as a career into educational institutions such as HBCUs (Leung, 1993). The nursing profession plays significant role in the American healthcare system, and the success of the system depends on a variety of elements that must work together to avoid adverse effects, such as the shortage of nurses and other medical personnel. The successful combination of these elements, such as favorable enrollment of college

students into nursing programs and a reasonable nurse to patient ratio contribute to positive growth in the American economy at large.

The perception of college students in HBCUs is an important consideration in the evaluation of how the American healthcare system sustains itself. A positive perception among college students in HBCUs about nursing as a career choice can lead to more students enrolling in nursing programs, which can help maintain a favorable ratio between nurses and patients through the training of more nurses. In contrast, an adverse negative perception about nursing as a career choice among college students in HBCUs can have a severe negative effect on the American healthcare system. This may lead to low enrollment of college students into nursing, which could create a shortage of professionals and that could cripple the healthcare system.

The significance of this study is that it speaks to the American healthcare system by focusing on a critical component, the enrollment of HBCU students into the nursing profession. As mentioned, the topic of this study is the perceptions of African American college students in HBCUs about nursing as a career choice. Although it is a narrow topic, it provides information that can be used to identify critical concerns for the American healthcare system.

Chapter 2 of this study is the literature review, and its principal purpose is to review major studies related to the topic of this study. In Chapter 2 I explored existing theories and concepts related to the perceptions of nursing as a career choice among African American college students in HBCUs. In the second chapter I discussed in detail the gap between existing studies and the recent nursing shortage problem. Apart from

this, the literature review provides the conceptual framework of this study, and it consists of primary writings by seminal researchers whose findings relate to the subject. Chapter 2 concludes with a summary of the discussion and explanation of how this study can bridge the gap between existing studies related to the topic of this research and the problem highlighted in this study.

In Chapter 3 I focused on the research methodology in this study. This chapter states the study variables which include the dependent, independent, and covariate variables. I discuss the research design used in this study in detail together with its connection to the research. I identify the constraints experienced because of the selection of research design. In addition to this, I explained in Chapter 3 how the choice of the research design for this study is consistent with required research designs needed to assess the perception of nursing as a career choice among African American college students in HBCUs. Regarding the methodology, I discuss various aspects of the target population, such as its estimated size and composition, considering that this study uses a quantitative research design. In addition, this chapter covers the study's sampling procedures, such as the strategies used in constructing the sample and the sampling frame. In this research methodology chapter I outlined the procedures used in the recruitment of participants, their participation, and data collection.

In Chapter 4 of this study I focused on the analysis of findings based on the research methodology outlined in the third chapter. I analyzed the data collection procedure in detail including the time frame for the actual data collection process and the response and recruitment rates. In this chapter I outline the discrepancies in the data

collected from the plan that was been described in the research methodology chapter. I discussed the descriptive and demographic characteristics in detail together with the representation of the sample regarding the population of interest. A significant aspect of the quantitative research design is the results. The results of the research design, are outlined in Chapter 3, and analyzed and reported in the Chapter 4. I also evaluated the statistical assumptions of this study. I organized the statistical analysis of the findings based on the research question used for this study.

In Chapter 5 of this study I focused on the interpretation of the results, conclusions, and recommendations. The interpreted results indicate the level of consistency with existing theories and concepts on the topic of this study. The interpretation of the results is done in the context of the appropriate conceptual framework. Apart from the interpretation of findings, this chapter presents the limitations of this study. The results entail an in-depth description of the limitations regarding generalizability, validity, and reliability that were evident during the execution of this study. As part of the conclusion, I presented a discussion about the study's implications on society. The discussion offers a clear description of how the findings of this study can affect society in a positive way at the following levels: individual, family, organizational, and societal. As mentioned, this chapter contains recommendations used by subsequent research studies regarding the perception of nursing as a viable career choice among college students in HBCUs.

Background

As previously stated, the perception of nursing as a career of choice among African American college students attending HBCUs is important to sustaining the performance of the American healthcare system, specifically in regard to the nursing profession. Relatively few studies related to the topic of this particular study exist, yet the findings provide insight into how important the subject matter remains. The nursing shortage in the American healthcare system is not a matter for debate; no doubt the shortage exists to the detriment of the healthcare profession. In fact, studies indicate that the shortage could increase in coming years. Needleman et al., (2011) forecasted the shortage of scientists, especially nurses, in the United States. Various factors such, as retirement of baby boomers and low enrollments indicate an upcoming shortage in the healthcare profession include a high population growth that necessitates a relative growth in healthcare needs, a decrease in enrollment numbers of college students in nursing programs, and aging among nurses in the American healthcare workforce (Honor Society of Nursing, 2015). Thus, it should be noted that improvements in technology have had an impact on the number of nurses needed in the healthcare sector. The need for more specialized nurses in the healthcare sector has risen, further exacerbating the shortage of nurses (Honor Society of Nursing, 2015).

The low enrollment of college students in nursing programs in HBCUs factors heavily into the future nursing shortage (Honor Society of Nursing, 2015). Enrollment levels in this case refer to not only those who begin the program, but the graduation numbers for college students in nursing programs. While HBCUs admit students of all

ethnicities, most of the students are African American (National Center for Education Statistics, 2013). However, HBCUs still represent minority groups such as African Americans in the modern context. Hence, the numbers of nursing graduates from HBCUs are a significant indication that these institutions are not effectively addressing the nursing shortage in the healthcare system. The number of medical degrees awarded by HBCUs in 2000 constituted merely 1.43% of the total medical degrees awarded in the United States (Noonan, Lindong & Jaitley, 2013). Eight years later, the percentage of medical degrees awarded by HBCUs decreased to 1.37% (Noonan et al., 2013). Thus, the percentage of nursing graduates from HBCUs experienced an increase of 46.9% between the years of 2000 and 2008; compared to the 80.1% increase experienced by other institutions of higher learning over the same period. This is a significant gap (Noonan et al., 2013). The declining pattern in percentages further highlights that nursing degrees offered by HBCUs between the years of 2000 and 2008 declined in degrees received from 11.2% to 9.1% despite an increase in the number of graduates (2013). While HBCUs have increased enrollment, attendees are pursuing fields of study other than nursing.

These statistics indicate the perceptions of African American college students who attend HBCUs regarding nursing as a viable career choice. The statistics reveal a worrisome trend for the healthcare sector in regard to nursing. In fact, HBCUs contribute to the problem by underutilizing resources to address the nursing shortage in the American healthcare sector. College students attending HBCUs have minimal options to choose from regarding nursing programs. There are 32 HBCUs that offer nursing

programs compared to hundreds of predominately White institutions that offer nursing programs (Gallardo, 2013). Thus, this potentially has a significant impact on the perception of nursing as a viable career choice among African American college students in HBCUs. The low number of nursing program graduates from HBCUs sends a negative message to potential nursing students as many potential nursing students see the lack of offerings of traditional nursing programs as a lack of confidence that young African Americans can successfully complete the program and procure employment. This lack of trust is unfortunate considering that nursing program graduates from HBCUs perform at an equal rate to graduates from non-HBCUs (Gallardo, 2013).

Secondly, the statistics on the number of graduates of nursing programs from HBCUs have an adverse implication for the society's view on these institutions regarding nursing. As the Gottfredson's theory of circumscription and compromise states, the norms in an environment play a major role in influencing the determination of career choices of children as they grow to be adults (Gottfredson, 1981, 1996, 2002). Considering that the statistical findings previously stated were gathered over the course of a decade, the data suggests that the HBCUs' should perhaps reevaluate their current nursing programs to market to African American students in earlier grades.

These two implications, negative perceptions of nursing programs among college students in HBCUs as a result of the small number of nursing graduates and the creation of a negative view of nursing programs offered by HBCUs in American society indicate the significance of the topic of this study. Although a few studies have analyzed related aspects of this subject such as assessments on the contribution of HBCUs to nursing,

there is a shortage of studies that directly focus on the perceptions of nursing as a viable career among African American college students in HBCUs. Therefore, it is important to research this topic as a means of understanding it in a better way, thereby leading the way to addressing the needs of HBCUs with regards to nursing programs.

Problem Statement

The lack of sufficient numbers of African American nursing professionals is one reason that there are some health disparities in this community. Other possible reasons cited for health disparities shared in the socioeconomic areas include lack of health insurance (Collins, Hall, & Neuhaus, 1999), and barriers to health care such as insufficient transportation, geographical location (not enough African American providers in an area), and cost of services (Collins et al., 1999).

One possible resolution to the problem is encouraging more African American students to enroll in the study of nursing with the aspiration of making nursing an ultimate career decision. The African American community is a minority group, and it is among the least healthy populations in the United States (Centers for Disease Control and Prevention, 2013). For instance, the prevalence of diabetes among adult African Americans is more than twice the prevalence of adult European Americans with diabetes (2013). In addition, studies have indicated that nursing professionals from minority groups such as African Americans seem to be accepted with relative ease and speed among patients in minority groups (National Council of State Boards of Nursing, 2013). It is unfortunate that registered African American nurses constitute a mere 5.2% of the total number of registered nurses in the American healthcare system, in spite of the fact

that African Americans constitute 15.2% of the American population. This does not reflect the importance of the community to the American healthcare system (Centers for Disease Control and Prevention, 2013).

A limited number of studies dedicated to the problem of a shortage of graduates of nursing programs that attend an HBCU have not yielded much regarding how to change to the situation for the better. While there is a nursing shortage right now in the healthcare sector, and that the proportion of nurses from minority groups is low, increases in the numbers of African American nursing students has the potential to help mitigate the shortage of nurses. The number of nurses from minority groups in the American healthcare system can increase through a combination of influential factors, for instance, about nursing as a career could be advertised to the students. Thus, it is imperative that the perception of nursing as a viable career option for college students in HBCUs shifts from a negative point of view to an actively optimistic view. In addition, the statistics discussed before indicate that HBCUs are underutilized, in regard to providing nursing programs when compared to non-HBCUs. Action should be taken by HBCUs to analyze their programs and reevaluate them to effectively make the nursing programs more productive and inclusive. Although these corrective measures may not have an immediate effect, it is evident that they can have an impact on positively influencing the perception of nursing as a viable career option among African American college students in HBCUs. In the long term, a positive shift in the perception of nursing as a viable career for African Americans attending HBCUs could lead to more enrollment and successful matriculation

of students from these institutions, therefore increasing the number of nursing professionals from minority groups in the healthcare system.

The previous discussion shows that the problem identified in the study is relevant and significant to the American healthcare system. The forecasted shortage of nurses in the American healthcare system indicates that the number of registered nurses needs to increase at a relative pace that can match the increasing healthcare needs of the American population and minority groups in particular (Factors that influence African Americans, n.d.)). Previous studies reveal that it is important for the American nursing workforce to be diverse to ensure that the health needs of minority groups are met since nurses from these groups can be accepted with relative ease by patients from the minority group (Centers for Disease Control and Prevention, 2013). The theory being studied indicates the successful running of the American healthcare system depends upon the success of various c factors. These factors include the equipment of HBCUs with resources to ensure that they offer more nursing programs and increase the number of career choices for college students in healthcare, particularly African American college students pursuing nursing as a career.

The limited number of African American nursing professionals in the American healthcare system is the result of a process rather than by chance. Research findings from previous studies have indicated that the situation is not improving by a large margin (Noonan et al., 2013). For instance, the number of nursing graduates from HBCUs is dramatically lower when compared to the number of nursing graduates of predominantly White institutions (Noonan et al., 2013). In addition, studies indicate a few HBCUs

which offer nursing programs has exhibited to contribute to the small number of African American nursing professionals in the American nursing healthcare sector (Gallardo, 2013).

The low number of college students graduating from nursing programs in HBCUs negatively impacts the perception of nursing as a viable career among African American college students in HBCUs (Noonan et al., 2013). The shortage of research studies exclusively focused on the perception of nursing as a viable career among African American college students in HBCUs is a cause for concern. The idea that a nursing career is both proper and viable as a career for African Americans plays a large role in addressing the shortage of African American nursing professionals in the American healthcare sector. Thus, the gap in the research literature has a far-reaching effect considering that there must be a broad understanding of the research problem before addressing the topic. It is important to address the problem regarding a shortage of African American nursing professionals within the American healthcare system to correct the relative lack of African Americans in the nursing profession. In summary, not only is the limited number of nursing programs provided through HBCUs a problem in encouraging young African Americans to enter the nursing profession, but a lack of literature supporting the idea that nursing is a viable career for African Americans shows that the public has yet to understand the impact of a lack of minority nurses could have on the American healthcare sector.

Purpose of Study

The purpose of this study was to address the nursing shortage of African Americans in the healthcare system. The research seeks to understand the perception of nursing as a career option among African American students who attend HBCUs. However, there is a shortage of research studies on the perception of nursing as a viable career among college students in HBCUs, which makes proving the need for nursing programs in HBCUs rather difficult. I employed a quantitative study to determine the extent, depth, and impact that the lack of African American nursing representation in the profession can have on the American healthcare system. The quantitative research design approach provides the researcher the tools to compile the findings related to the problem and make comparisons using quantitative techniques to make conclusions and recommendations. The study correlated with findings from previous research studies. The dependent variable was African American student participants pursuing a career in nursing at an HBCU. The independent variable was the number of African American student participants pursuing a career in nursing at an HBCU.

Research Question and Hypotheses

Within academic studies, research questions act as a framework by providing vital guidelines to ensure that the processes stay on course. Thus, the research question in this study ensures that the problem regarding the shortage of African American nursing professional is addressed in an applicable manner. The research question is as follows:

RQ1: How do interest and gender play a role in African Americans students at an HBCU pursuing a career in nursing?

H_{01} : There will not be statistically significant differences in perceptions toward the profession of nursing between male and female African American college students attending an HBCU. H_{1n} : $\mu_1 = \mu_2$

H_{a1} : There will be a statistically significant difference in perceptions toward the profession of nursing between male and female African American college students attending an HBCU, with women expressing more positive attitudes toward the profession of nursing. H_{1a} : $\mu_1 \neq \mu_2$

Theoretical Foundation

Gottfredson's theory of circumscription and compromise is important for understanding the factors that are influencing the determination of career choices among people from childhood through to maturity. This theory assisted in explaining the career choices among college students, including those who live in African American communities, and form the majority of HBCUs' student populations. The primary focus of Gottfredson's theory is career choices made by individuals. The theory explains that the career decisions made by people are not spontaneous decisions, but rather a result of a build-up of small processes influenced by various components over the course of growth (Gottfredson, 1981, 1996, 2002).

This theory explains career choices and gives an explanation based on three social determinants, namely gender, interest, and prestige. Gottfredson explained the development of the self-concept as part of the decision-making process for careers (1981; 1996; 2002). Self-concept is the perception that people hold about themselves. The perception of people about themselves includes elements such as, gender, values,

appearance, and the role of an individual in society (Gottfredson, 2002). In addition, self-concept indicates that people make career choices based on a combination of genetic make-up and sociocultural influences. This component of Gottfredson's theory of circumscription and compromise holds that there must be a balance between personal tendencies, cultural influences, and genetic makeup. For this study, such an approach is necessary to be able to accurately speak to the decision-making process of career choices by African American college students attending HBCUs.

Gottfredson's theory holds that the growth of an individual, with regards to career choices, is a four-stage process where all forms of manipulation take place. This process is called circumscription, and it entails a progressive step-by-step analysis of human development with regards to career choices of, in this case, African American college students who attend HBCUs. Based on this theory, the first stage of this process occurs between the ages of three and five. In the past, this stage was referred to as the preschool stage. Children in this stage have vague but basic perceptions of the things that they see around them. For instance, children in this stage perceive things in regard to their power and size; this explains why preschool children often differentiate things around them regarding children-related shortcomings and adult strengths. At this stage, children often want to pursue the careers of their parents and close adults when they grow to maturity (Gottfredson, 2002). If not enough children see their parents working in the nursing profession, there may not be a desire to follow in the footsteps of their parents. A lack of interest may prove to have a negative impact for the nursing profession.

In the second stage, the perception of things held by children aged between six and eight is more developed than in the first stage. Children in this stage perceive roles based on gender and those meant for adults (Sideways Thought, 2013). Nursing has traditionally been perceived as a profession exclusively for women. This could influence young boys to pursue other avenues for a career, even though male nurses are in much demand.

A previous study describes how children view roles based on gender, and Lee (2013) found out that male students tend to pursue careers that are practiced by their father. The Gottfredson's theory holds that during this stage, children start to have firm positions on gender roles; this called a tolerable sex-type boundary (Gottfredson, 1981). Children begin to classify roles and careers in general as either inappropriate or unethical based on their gender, and based on the culture a child is exposed to during their early life (Gottfredson, 2002). In addition, there is a contrasting theory regarding the period when children begin perceiving roles according to their gender. Hesketh, Elmslie and Kaldor (1990) conducted a study to evaluate the perception of preschoolers regarding functions and careers and gender (1990). The study used a sample of 77 students and the findings indicated that children develop the ability to perceive gender roles at an earlier stage than what is claimed by Gottfredson's theory (1990). Despite the existence of a study by Henderson et al., the claim made by Gottfredson's theory is considered to be standard.

The third stage of Gottfredson's theory entails children whose age ranges from nine to thirteen years. Orientation for children in this stage begins toward social valuation of roles and careers. For instance, children in this stage can grasp the idea of foul play

while interacting with their peers; school requirements, estimates of what their parents earn, and the type of clothes that is worn for different occasions (Gottfredson, 1981; 2002). It is interesting to note, children in this stage consider careers with little prestige to be a tolerable level boundary while demanding jobs that classify as an acceptable effort boundary (Gottfredson, 1981; 1996; 2002). In addition, activities falling between these two levels are acceptable for children in this stage (Gottfredson, 1981; 1996; 2002). Leung found during a study on college students that Gottfredson's theory appears to be correct on the point that children eliminate career choices over the course of their growth (Leung, 1993).

The fourth and final stage of Gottfredson's theory consists of children aged 14 years through to adulthood. This stage represents a time in which individuals start to seek within themselves answers regarding their preferences concerning strengths, weaknesses, unique abilities, interests, and values. The people in this stage are indecisive in career choices as they prefer jobs that are acceptable to them in both social and personal terms. Thus, this final stage entails prestige and gender as a factor in making career choices based on realistic reasons rather than idealistic reasons.

Apart from self-concept, the other component of Gottfredson's theory is compromise. Gottfredson defined compromise as the ability by people to relent on what they deem to be excellent choices and settle on choices that are less appealing, but more accessible to them than their ideal choices (Gottfredson, 1981; 1996; 2002). Most individuals strongly hold prestige and gender to be the two fundamental bases upon which career choices are made. According to the compromise component of

Gottfredson's theory, prestige plays a major role in determining the career choice as compared to gender when excellent choices are not available (Gottfredson, 1981; 1996; 2002). Another study indicates that the elements that play a role in making career choices are in cases where there has to be a compromise. The study indicated that although prestige played an important role in the choice of a career, personal interest is the most influential factor (Hesketh, Elmslie & Kaldor, 1990).

Definition of Terms

Historically Black colleges and universities (HBCU): A college or university that has developed to facilitate education parameters to those individuals who are African Americans. Within this study, the only HBCUs identified are those with nursing or medical programs.

African Americans or Black Americans: Citizens or residents of the United States (Checkland, 1999). The terms *Black* and *African Americans* appear interchangeably throughout the literature. According to Checkland (1999), "Most African Americans or Black Americans have descendants of captive Africans who survived slavery within the boundaries of the present United States, although some are-or are descended from voluntary immigrants from Africa, the Caribbean, South America, or elsewhere" (p. 29).

Students: Study participants who are undergraduate students are pursuing at least a bachelor's degree.

Nursing profession: A career that is found within the healthcare sector with a focus on clinical assistance to patients in applicable facilities. The profession is utilized to help patients maintain a strong quality of life.

Independent variable: The independent variable was the number of African American student participants pursuing a career in nursing at an HBCU. This was analyzed based on the data received through the applicable platforms.

Dependent variable: The dependent variable was African American student participants pursuing a career in nursing at an HBCU. Again, this data was collected and analyzed based on the data received through applicable platforms.

Covariate variable: The covariate variable included the number of people who were interested in nursing regardless of gender.

Nature of the Study

The focus of this study is in regards to how African American male and female students attending HBCUs perceive nursing as viable career. The study uses college student's participation in this study to compare the quantitative data gained from other research studies. Thus, the choice of the quantitative research design is essential to the success of this study. The research design makes it possible for a researcher to make quantitative comparisons regarding the shortage of African American nursing professionals in the American healthcare system. In addition, the quantitative research design approach enables this research to have an appropriate quantitative approach with regards to the perception of nursing as a viable career option for college students in HBCUs.

The research used a questionnaire as the primary data collection instrument. The questionnaire is comprised of both closed questions and open-ended questions. The combination of these two types of questions ensures this research can maximize the

benefits of these kinds of questions. The target population of this research is African American college students attending HBCUs. Two main factors were the basis for the choice of the target population for this study. First, the topic of this study is the perceptions of nursing as a career by African American college students attending HBCUs. Thus, this makes college students from HBCUs the primary subjects of this study. Second, the study addresses the following problem: the shortage of African American nursing professionals in the American healthcare system. The perception of nursing is a viable career among college students impacts the number of nursing graduates from HBCUs, which influences the shortage or abundance of African American nursing professionals.

Assumptions

There are many assumptions that hold throughout this study. These assumptions attribute to the possibility that they could be possible, but they cannot be demonstrated to be true in their entirety. While it is important to note, these assumptions are significant in regard to helping this research attain its set aims and objectives. These assumptions include:

1. Since African Americans account for a majority of the student population at HBCUs, this study assumes that these institutions represent the majority of African American graduates, in the nursing profession.
2. The perception of nursing as a viable career among college students in HBCUs reflects the minority African Americans who make up the majority of the populations in these institutions.

3. The findings of this study should consist of other audiences and not just set limits to the African American community.

Based on the literature, a few reasons display these assumptions. For instance, it is said that African Americans represent the majority of students in HBCUs. Although there are African American college students in predominately White institutions, this study assumes that HBCUs represent African Americans as a whole. Although, it is important to realize that given the challenges faced by HBCUs regarding resources and utilization, it is the role of every stakeholder to make these institutions better regardless of their racial background.

Limitations

This study is faced with limitations. For instance, the topic is the perceptions of nursing as a career by African American college students attending HBCUs. The limitations mean that the study does not primarily focus on students from other racial backgrounds other than African Americans in HBCUs. However, the current population of African American students in HBCUs presents a form of bias to the findings of this study; specifically, against non-African American students. Such preferences address the generalization of the findings and the discussion of results to the entire American healthcare system.

Significance of the Study

The major importance of this study is the consideration of quantitative studies to determine the extent, depth, and impact of lack of African American nursing professionals in the American healthcare sector. This research seeks to add value to the

existing literature on the perception of nursing as a viable career option for African American college students in HBCUs. The findings of this study highlight the shortage of nurses in the American healthcare sector and provide suggestions for addressing this problem through the increment growth of nursing graduates from HBCUs. By highlighting the problem at a college level, relevant stakeholders have the opportunity to take action at the point where improvements can be made by continuing to graduate more nurses. In conclusion, the perception of nursing as a career among male and female students is an indicator of deeply-rooted problems which are causing this gender imbalance. All stakeholders have a responsibility to establish and ensure the remediation of the situation.

Implications for Positive Social Change

The development of more marketing strategies to showcase the nursing profession should continue to be the primary focus for improving nursing diversity, highlighting how the nursing profession makes a positive contribution to society, and enhancing public knowledge of the career paths that are available in nursing.

Relevant stakeholders, such as nurse educators, middle, and high school counselors, and hospital marketers should take the necessary steps to act on the perception of nursing as a career choice among African American college students. Parents and other stakeholders, such as educational institutions, should be given the opportunity to assess whether their roles in influencing the careers of children have a positive effect on jobs.

With the understanding of the values and self-concept that African Americans use to make their career choices, the results can influence social change by adding or changing some processes and policies that would meet the unique needs of this specific community. The implications of having a greater number of African American healthcare practitioners is that it could lead to positive social change by making available improved access to care and better clinical outcomes in African American communities.

Although, the results of this study provide information that may be used to develop ways to attract a greater number of African American women and men into the nursing profession which could result in an indication of positive societal change to the African Americans communities.

Summary

The chapter details the topic, research problem, and has provides a preview of the major sections of this research problem. In addition, this chapter provides an extensive breakdown of the entire research. A review of Gottfredson's theory of circumscription and compromise examines how career choices are influenced at four-years-old, and continues throughout the life of an individual. In the following chapter, I reviewed more in detail the understanding of this theory and other related concepts from other major studies.

Chapter 2: Literature Review

Introduction

In the year 2012, the U.S. Census Bureau reported that the United States will be more ethnically and racially diverse by 2060 (U.S. Census Bureau, 2012). The Bureau went on to note that while the non-Hispanic White population will constitute a plurality in the United States and continue to be the largest single group, there will not be one group that is in the majority (U.S. Census Bureau, 2012). Compared to the Bureau's 2008 and 2009 projections of the same population, this population is not expected to grow as rapidly over the next several decades as it has in the past. In 2024, the non-Hispanic White population is projected to peak to 198.5 million, which is up from 196.7 million in 2012 (U.S. Census Bureau, 2012).

Alongside this demographic change, ethnic and racial discrimination has increased among the general population, leading to a variety of coinciding health disparities (U.S. Census Bureau, 2012). Ethical and racial discrimination may play a role in the shortage of ethnically diverse healthcare professionals in the nursing field and other health-related professions. Some studies present the argument that health professionals belonging to racial minority groups can provide better healthcare services to those groups (Betancourt, Green, Carrillo & Ananeh 2003; Nelson, Smedley & Stith, 2009; Rabinowitz, Diamond, Veloski & Gayle, 2000). Unfortunately, the African American community in the United States is underserved in this regard. The Health Resources Services Administration confirmed that the number of African Americans working as registered nurses is not proportional to the number of African Americans

living in the U.S. (Saha & Shipman, 2006). The African American population constitutes of 15.2% of the total population, but only 5.2% of the individuals registered as nurse practitioners are black (U.S. Census Bureau, 2010). As a result, some health disparities among minorities may be attributed to the fact that such a small number of healthcare practitioners belong to these minority groups (Carpenter-Song, Whitley, Lawson, Quimby & Drake, 2011; Gilliss, Powell & Carter, 2010; and Institute of Medicine [IOM], 2004). According to the IOM, African Americans face higher morbidity and mortality rates because of their underrepresentation in the field of nursing (IOM, 2004). Conversely, if the number of African American nurses in the healthcare system increases, then the healthcare services to this particular minority group could possibly be enhanced through being more culturally competent (Gilliss et al., 2010; ; IOM, 2004; Saha & Shipman, 2006;).

The lack of African Americans working in the nursing field and the corresponding damaging effects that this void appears to have on the health of the African American community is a problem. With the present study I aimed to expand the understanding of why African Americans do not choose to study nursing while attending HBCUs. Therefore, the purpose of this study was to explore student perceptions of nursing as a career choice. This focus could help shed light on the obstacles preventing this population from choosing this course of study and profession. In turn, this study should provide valuable evidence to help support recruitment efforts to increase the number of African Americans working in the field.

To present the context of the problem in further depth, a review of the literature surrounding this issue was required. Accordingly, Chapter 2 is divided into four sections. The first part of this chapter is focused on the literature review strategy including its inclusion and exclusion criteria. The second section delves into the research associated with the impact of the underrepresentation of minorities in the healthcare profession. This section presents some health disparities among the African American community. The third section reveals the theoretical framework for this research. In this section, Gottfredson's theory of circumscription and compromise (Gottfredson, 1981; 1996; 2002) is used to inform the discussion about how students may decide to choose nursing as a career. Finally, the fourth section of the chapter consolidates the research on how groups of college students perceive nursing as a career choice.

Literature Search Strategy

The literature search was conducted based on five integrative review steps defined by Whitemore & Knafl (2005). The authors indicated that applying an integrative review structure eliminates individuals' errors or biases. These measures include problem identification, literature search, data evaluation, data analysis, and presentation of data. Literature focusing on the perceptions of nursing as a career by African American students attending HBCUs is limited, but there were a few studies of students attending other colleges that are not ethnicity-based. There is a good amount of data presented in the literature regarding the underrepresentation of African American students in the field of nursing. However, Olichwier (2014) recommends that further studies should be

conducted to understand the nursing perceptions of African Americans studying at HBCUs.

To enhance the scope of the literature search to include Gottfredson's theories, the search included identifying full-text articles dating back to 1981. I obtained some literature from various online databases including CINHALL, Pro Quest Central, PSYCH Info, SocINDEX, EBSCO, Educational Resources Information Center (ERIC), and Pub Med. The search key terms for the collection of data were *gender, African American, HBCU, concepts of Gottfredson's theory, elementary school students, minority groups, underrepresentation, high school students, college students, nursing education, perception, and barriers*. These key terms were used in combination with main keywords, such as *perception of nursing* and *career choice*. The literature search involved collecting data regarding health disparities among African Americans and the impact of this community's underrepresentation in nursing on the public health of African American individuals.

Table 1

Search Strategy for Various Databases

Category of Terms	CINHAL	EBSCO	ERIC	ProQuest	PSYCH Info	PubMed	SocINDEX
African American	1	0	0	1	0	2	0
HBCU	1	0	0	0	0	0	0
Gottfredson	1	0	0	1	21	0	0
Minority Groups	1	1	0	4	0	0	0
Underrepresentation	0	1	0	0	0	0	0
High School students	17	1	0	20	0	0	0
Nursing education	5	0	2	62	17	106	1
Perceptions	7	0	5	20	0	0	1
Barriers	1	0	3	4	0	1	1

Analyzing books and abstracts during the literature search was one part of the process. In addition, the reference lists of selected papers were scanned for associated literature, and any relevant articles on those lists were then extracted and reviewed.

Inclusion and Exclusion Criteria

I performed an in-depth screening of the selected articles, reference lists, and abstracts to extract more relevant data and exclude irrelevant papers. Specifically, studies indicating minority students' perception of nursing were selected. Studies from countries other than the United States are included in the literature section of the study. However, non-English articles are excluded from the study. Finally, I excluded studies violating any ethical norms regarding ethnic minorities from the literature review.

Impact of Minority Underrepresentation in the Health Professions

Saha and Shipman (2006), Shaw (2010), Vogt (2009), and Vogt and Taningco (2008) argued that diversity in the healthcare has increased access to healthcare for the underrepresented populations. Thus, underrepresented students decide to choose healthcare as a profession so they can give back to their communities and increase the number of health services for those members of their ethnic group (Mitchell & Lassiter, 2006). The treatment of minorities as healthcare professionals is an influential factor in this disparity. The research shows that minorities are often treated poorly, ridiculed, and disrespected which, in turn, impacts the patient-provider relationship (IOM, 2004). This kind of behavior can influence retention and determine whether the patient returns for treatment. A valuable point for healthcare workers is to be culturally competent so that they can then treat patients who belong to different ethnic groups with respect and care.

According to a report by Blanchard and Lurie (2004), many ethnic minorities are treated slightly differently in healthcare settings. Blanchard and Lurie cited that 19.4% of Hispanics, 14.1% of African Americans, and 20.2 % of Asians expressed that they felt they were looked down upon and treated with disrespect by care providers. By contrast, only 9.4% of European Americans in this group expressed similar feelings. The high level of disrespect and condescension toward individuals belonging to ethnic minority groups makes them less likely to visit any healthcare worker in the future (Blanchard & Lurie, 2004).

In addition, another study indicated that African Americans, along with Native Americans and Hispanics, are the most underrepresented minorities in health-related

professions (Coffman, Rosenoff & Grumbach, 2001). Meanwhile, these underrepresented groups report feeling disrespected because of their race or ethnicity. This trend represents one of the biggest barriers to gaining greater minority representation in the health-associated professions such as nursing. This problem becomes compounded by a percentage of minorities preferring to receive healthcare services from professionals belonging to their ethnic group, and, if none are available, may actually prefer to not receive any service at all (Grumbach & Mendoza, 2008). For example, African American men suffering from cancer prefer communicating with individuals who belong to their minority group during their care (Dodd, Watson, Choi, Tomar & Logan, 2008).

Additionally, researchers reported that access to healthcare improves for African American patients when healthcare practitioners belong to the same race as the patients (Cooper & Powe, 2004; Gabard, 2007; Institute of Medicine, 2004). A few research studies showed that access to healthcare services and communication improves when patients feel that their cultural values and ideas are respected (Blanchard & Lurie, 2004; Coleman, 2009; Cooper & Powe, 2004; Gabard, 2007; Institute of Medicine, 2004; Malat & Hamilton, 2006).

Cooper and Powe (2004) conducted a literature review on minority patients' perception of their care. The results showed that those patients who received care from healthcare practitioners of the same race experienced higher levels of patient satisfaction when compared to those who received care from healthcare practitioners of a different racial background. Patients who felt disrespected indicated that they were less likely to return for another visit with the health professional. Patients who were disrespected by

healthcare providers expressed that they would not follow the advice and treatment plan provided (Blanchard & Lurie, 2004; Cooper and Powe, 2004; Greer, 2010).

A group of researchers conducted a telephone survey to assess the perceptions associated with racial and ethnic barriers among individuals in the Rural South region of the United States (Fowler-Brown, Ashkin, Corbie-Smith, Thaker & Pathman, 2006). The study recorded satisfaction levels with healthcare services and respondent utilization of those services. The researchers concluded that African Americans experienced racial barriers most often (54%). On the other hand, only 23% of European Americans identified race as an obstacle to the care of their community (Fowler-Brown, Ashkin, Corbie-Smith, Thaker & Pathman, 2006).

Despite the low number of research studies exploring African Americans' perceptions of the ethnic and racial barriers to healthcare, researchers commonly found that patients who received care from healthcare practitioners of the same racial background experienced increased levels of satisfaction and better health outcomes. Also, there was a consensus that the care received by race-concordant healthcare practitioners would improve the chances of patients returning to receive attention and following the proper treatment plan (Blanchard & Lurie, 2004; Coleman, 2009; Cooper & Powe, 2004; Gabard, 2007; Institute of Medicine, 2004).

Race-concordance plays an important role in the African American community. If there was an increase in the total number of African American health practitioners would improve the care experience for African American patients. In all, African American healthcare practitioners are sensitive to the racial and cultural beliefs of African

American patients and, therefore, can provide more adequate care (Blanchard & Lurie, 2004; Coleman, 2009; Cooper & Powe, 2004; Gabard, 2007; Institute of Medicine, 2004).

Gottfredson's Theory of Circumscription and Compromise and Related Research Studies

The career selection process of the African American community and its perceptions of the nursing profession is to understand why there is such a low number of African Americans in nursing. To understand this gap, this study relied on the concepts of circumscription and compromise described by Gottfredson (1981; 1996; 2002).

Circumscription and compromise can shed light on African American student perception of nursing and their career decision-making process.

Gottfredson's theory of circumscription and compromise focuses on explaining the level and type of occupation that different individuals choose to explore. According to this theory, the three common social determinants for career choice are interest, gender, and prestige. Gottfredson's theory explains how the formation of self-concepts affects individuals' career choices. Gottfredson's theory refers to self-concept as what one thinks of him or herself. Self-concept is either private or public and encompasses many elements, including gender, appearance, personality, values, and how one feels about oneself in society (Gottfredson, 1981; 1996; 2002). According to this theory, there are four stages of cognitive development that may influence career selection. The theory states that children circumscribe or eliminate jobs as they pass through these

developmental stages. Circumscription is a perception of the occupation or job regarding prestige, interest, and gender.

The circumscription and compromise theory identifies that Stage 1 occurs between 3 and 5 years of age (during preschool). During this stage, children start to identify with the ideas of size and power, thus differentiating their child-like weakness from adult power. Care, Dean, and Brown (2007) conducted an investigative study focused on preschoolers. The study focused on measuring the preschoolers' perception of career choices. The results indicated that children strongly preferred careers practiced or preferred by their parents, thus showing their desire to grow into a responsible adult.

Then, in Stage 2, occurs between 6 to 8 years of age, children start to understand basic adult and gender-based roles. In a study of kindergarten students, Lee (2012) explored how children can identify patterns between gender and career choice. The results depicted that some male students would choose roles that were practiced by their fathers. Girls selected careers preferred and practiced by their mothers (Lee, 2012). According to Gottfredson's theory, children start to develop inflexibility with regards to gender roles; Gottfredson's theory referred to this development as a tolerable sex-type boundary. In support of Gottfredson's theory, children appear to eliminate roles that are considered unethical, wrong or erroneous for their gender. In addition, as children grow and develop, their cognitive abilities advance and they develop intellectual aspirations regarding different occupations (Gottfredson, 1981; 1996; 2002).

Another study by Henderson, Hesketh, and Tuffin (1998) were descriptions of the perceptions of preschoolers regarding careers and gender roles. The researchers examined

the perceptions of 77 preschool children and found that gender-based role identification develops even earlier than between the ages of six and eight. The results agreed with Gottfredson's theory, which claims that gender-based role identification occurs at the level II stage (Gottfredson, 1981; 1996; 2002). Although there might be some dispute over the onset of these abilities, but the body of research still supports Gottfredson's sequential order of the stages.

Stage 3 addresses children between 9 and 13 years old. During this stage, children can understand social assessment. The evaluation begins when children start to recognize the concrete symbols of social class, including the items brought to school, the rough play, and the clothing of those considered to belong in a certain social class. Children in this stage can understand that an individual's success is a basis of their educational preparation and determines their income (Gottfredson, 1981; 1996; 2002). Gottfredson learned that occupations with little prestige are designated as the tolerable level boundary while professions that are too challenging or hard comprise an acceptable effort boundary. Occupations that fall between these two limits make up the zone of alternatives that is acceptable by children (Gottfredson, 1981; 1996; 2002).

Search results yielded two studies that tested the efficacy of Stage 3 of Gottfredson's theory by testing circumscription within the zone of acceptable alternatives. The first study focused on college students as study participants. In this study, Leung and Harmon (1990) assessed the area of acceptable alternatives to determine whether or not this area of acceptable alternatives gets narrower over time. They theorized that the narrowness of that acceptable zone related to interest and gender role orientation. They

learned that one's interest in career development increases over time, but not until that person reaches the final age group. The findings of the study agreed with Gottfredson's claim that the zone of acceptable alternatives shrinks over time.

Leung (1993) performed another study in the zone of acceptable alternatives. He replicated the previous study with 149 Asian American college students. Based on Gottfredson's theory, the results indicated that students eliminate occupations with the passage of time. The difference between the results of these studies could stem from cultural differences. Leung and Harmon (1990) studied European American students, whereas Leung (1993) focused only on Asian American students. As a result, Leung (1993) suggested that future studies should concentrate on different racial and ethnic groups in order to develop more personalized career counseling strategies for the different ethnic groups that are more aligned with their values and customs.

Stage 4 of Gottfredson's theory begins at 14 and continues into adulthood. During Stage 4 people experience uncertainty and attempt to comprehend their unique interests, traits, abilities, and values. According to the theory, students' perceptions of self-concepts, skills, social expectations and interests ultimately limit their occupational exploration. Also students focus on identifying occupations which are personally and socially acceptable for them.

Several studies on Stage 4 emerged in the literature search results. For instance, a study conducted on 146 third-year high school students was performed to determine whether prestige is a prominent factor in career choice and elimination. The results revealed the association between occupation and prestige level (with a significance level

of ($p < 0.01$). These results coincide with Gottfredson's theory, which states that prestige is an important factor that leads people to eliminate unattractive and unappealing careers (Lapan & Jingeleski, 1992).

Lapan and Jingeleski (1992) performed a study to assess the factors that influence people's decision to eliminate occupations. This study found that prestige and gender are two commonly occurring factors that lead to the elimination of undesirable career and occupational choices. The findings of this study supported Gottfredson's theory.

One criticism of the research on Gottfredson's theory is that it relied too heavily on cross sectional data. As a result, Helwig (2004) performed a longitudinal study over a period of 10 years. Helwig assessed all four stages of Gottfredson's theory and examined the changes that occurred during these steps. Results confirmed that individuals' expectations and occupational aspirations do change over time and that the changes presented in Gottfredson's theory occur during the four developmental stages. Helwig found that students become pragmatic and realistic during the last two years of high school with regards to their career (Helwig, 2004). This study asserts that students, parents, teachers and student counselors should be provided with necessary education so that students can select a valuable career.

The second major construct in the Gottfredson's theory, compromise, has been the focus of several studies. According to Gottfredson, compromise is the phenomenon or process of eliminating those career choices that an individual cannot achieve or finds hard to reach. Individuals may choose to remove certain jobs for different reasons, but the

principal motive is the result of a lack of proper or required resources (Gottfredson, 1981; 1996; 2002).

The compromise component of Gottfredson's theory has received mixed results at best. Many studies, including those by Hesketh et al., (1990), Holt, (1989), Leung, (1993), Leung and Harmon, (1990), and Leung and Plake (1990), and Taylor and Pryor, (1985), failed to provide support for this construct. These studies produced mixed results with compromise as it applied to different cultural groups. For example, Leung and Plake (1990) found that prestige was the most favored factor over gender. The female participants in the study expressed they preferred prestige in compromising condition with gender being a secondary factor. Leung's 1993 study of 149 Asian American students concluded that participants were likely to compromise their gender preference, but they were not ready to compromise prestige in their career choice. When compromising their career option, both male and female students established prestige as their first choice, and gender as their second preference (Leung, 1993).

In contrast, Taylor and Pryor (1985) concluded that they could support the compromise part of the theory, based on a sample of college students. Taylor and Pryor conducted personality matching with individuals' preference score. The outcomes of the study supported Gottfredson's assumptions that gender was a strong contender for resistant of choice for individuals during career selection. Meanwhile, Holt (1989) determined the first factor relinquished by individuals during the process of choosing a career. The results revealed interest as a compromised factor. After interest, the second feature to be compromised is prestige, and then gender. These results showed that

prestige was important for engineers than it was for social workers as social workers identified gender as the important factor (Holt, 1989). These findings confirmed those of Taylor and Pryor (1985), validating this hierarchy.

Hesketh, Elmslie, and Kaldor (1989; 1990) conducted two studies to assess the compromise zone of acceptable occupational alternatives. Their collective findings revealed that people's interest was an important factor, followed by prestige. Both were equally as important as gender. In conclusion, the personal values and ideals of any individual were the most predictive factors for determining career compromise.

Some of these studies show conflicting results about the validity of compromise as part of Gottfredson's theory of circumscription and compromise. These mixed results contributed to a revision of this theory. The revised theory proposes that gender compromises occur as a function of the level and total magnitude of the threat to the self-concept. That is, if the degree of the threat to the self-concept is high, then the individual may prefer gender-concordant occupations. In cases where the compromise is related to prestige, the person may not compromise and could reject the presented career choice.

Perceptions of Nursing

The following section is an overview how individuals perceive the nursing profession. Gottfredson's theory of circumscription and compromise (1981; 1996; 2002) states that profession perceptions are among some of the pertinent factors in making career choices. Gottfredson asserts that gender has an important impact on the occupation people choose to work in, as well as their post. As a result, it is important to understand how such factors may present themselves across differing minority groups.

Public Perception of Nursing

Influences are important because the public's perception of a career and the amount of contact that people have with a particular occupation. An important factor is the public's perception of nursing is the media, including internet, newspapers, and television. Television is considered to be an imperative medium that has some power to influence people's perceptions (Donelan et al., 2008). The impact of television has the capability to reach a large number of people all at once.

Donelan et al. (2008) conducted a national survey regarding the public perception of nursing. This study highlighted the importance of the portrayal of nurses on television. That is, images and storylines shape the opinions and attitudes of the general public. This study determined that the public views nurses as people who have a significant amount of work, are qualified, and possess skills related to their work. The participants of the study reported that their main reasons for not selecting this profession were perceptions of heavy workloads and low pay (Donelan et al., 2008).

The media has portrayed nurses as acceptable sex objects, and there are many examples which display this regard. For instance, a famous TV personality, Dr. Mehmet Oz, presented a woman wearing a nurse uniform in a segment on weight loss entitled, "Have Mercy: Moves to Lose" (The Truth about Nursing, 2008-2010). Thus, another personality within the media, actress Helen Mirren, used the nursing profession for the promotion of her film, highlighting that women in brothels often come from a previous profession of nursing because they are used to being exposed to naked bodies (The Truth

about Nursing, 2008-2010). These perceptions have nothing to do with nurses as working professionals and may make girls think twice before entering this field for their career.

Other studies excavated some positive public perceptions about nursing. According to Whittock and Leonard (2003) and Burnett (2007), there are several altruistic motives for entering nursing. These reasons include helping humanity and providing healthcare services to the patients that need these services.

The public's perceptions of nursing, regarding subordination of women and the low pay and long working hours associated with this profession; show that the media can influence this profession's reputation among young college students. Therefore, the nursing field must invest in promoting a more positive image if it wants to attract young individuals. For example, nursing organizations should develop cordial and communicative relationships with the media enterprise while simultaneously educating these groups about the work that nurses do and the roles they play in different hospital settings.

Nurses' Perception of Nursing

An efficient way to learn about an issue is to listen to the experiences and reflections of the individuals who it directly affects. There were different studies conducted to understand how nurses perceive nursing (Buerhaus et al., 2005; Buerhaus et al., 2007). According to hospital nurses, the nursing career is neither respected nor rewarding. Rather, nurses consider their career to be a burden (Buerhaus et al., 2005; 2007). To date, no known studies have investigated the perception of nursing held by nurses belonging to minority groups.

Gender Perceptions of Nursing

Tanner (2015) reports that there are two million registered nurses nationwide, of which around 10% are men according to the 2013 data studied. Surprisingly, this gap grows persistently every year. As a result, gender seems to be a formative role in the development of nursing perceptions. Female college students reported that they perceived this profession as a feminine career, and this was the principal reason that female students selected this career (Ditommason, Rheame, Woodside & Gautreau, 2003; Muldoon & Reilly, 2003).

Health economist Peter McMenam for the American Nurses Association states that male nurses are shrinking the gap in the female-dominated profession because men are getting more nursing degrees than in previous decades (USA Today, 2015). Men are the minority group in the field of nursing, and this contributes to a difference in perception of nursing when compared to women (Saha & Shipman, 2006).

A common hurdle that prevents men from entering the field of nursing is sexual stereotyping. Studies show that males identify with female dominance in the field of nursing, and the limited representation of male nurses in the media as an indication that nursing is a “female field” (Burnett, 2007; Meadus, 2000; Meadus & Twomey, 2007; O' Lynn, 2004; Whittock & Leonard, 2003). Although, males describe that they chose not to pursue nursing because of discouragement from peers and family members because some people believe that nursing is an inappropriate career for men (Burnett, 2007; Meadus, 2000; Meadus & Twomey, 2007). Listed below are examples as to why there are a low number of male nurses. For example, a disincentive for a man to choose nursing is based

on their peer's thoughts of nursing as emasculating and males may decide not to go into this field (Minority Nurse: The Career and Education Resource, 2013). Minority Nurse (2013) reports that a common reason is men are not likely to take a job that primarily represents women than if women were to take a job that is traditionally dominated by men; however, it is now suggested that male nurses bring stability to the profession of nursing. Since the recession in 2009, there is a surge in males entering nursing.

Although, male college students expressed that their decision not to pursue nursing had to do with its low salary and limited benefits. According to a study by Dockery and Barnes (2005), nonnursing college students identified salary as a major detractor to choosing a career in nursing. Another study by Scott (2007) found that male nursing students can feel isolated and find practicing nursing harder than their female counterparts. Scott (2007) stated that male nursing professionals are unable to exhibit a caring and sympathetic attitude toward patients, which is a drawback in the nursing practice.

Not all male perceptions' in the literature were negative. For example, men who would be willing to pursue a career in nursing said that they would do so because of the job security, salary, and increased career opportunities (Meadus, 2000; Meadus & Twomey, 2007; O'Lynn, 2004; Whittock & Leonard, 2003). A study conducted in 2013 proposes men over represent in the senior nursing positions, but that in the nursing field in the United Kingdom, United States, and Canada men still make-up between 6%-11% of the nursing workforce (Minority Nurse: The Career and Education Resource, 2013). Although, attraction into the nursing field by males is due partly because of the abundant

opportunities, the chance to make a difference in people's lives, and good salaries (2013). The profession of nursing has worked for many years to overcome the misconceptions of males working in this female-dominated field. Another reason identified for the males reacting positively to the nursing profession was the geographic mobility that it allows (Burnett, 2007; Meadus & Twomey, 2007). That is, nursing is a profession that requires that job in communities of virtually any size.

In a study with the most direct relevance to the purpose of the study, Whittock and Leonard (2003) examined male minorities on their perceptions of nursing. Some male participants expressed how they were hesitant in selecting nursing as a career choice because they worried how women would receive men in the nursing field. Although, minority-based studies like this one are rare. Further exploratory research is needed to examine the nursing perceptions of male minorities (Whittock & Leonard, 2003).

School Counselors' Perceptions of Nursing

The formative role school counselors have in the development of the beliefs and attitudes about the world cannot be denied. Counselors serve as the primary agents influencing a student's career choice (Blasdell & Hudgins-Brewer, 1999). In other words, student perceptions are dependent on the knowledge and ideas presented by their counselors.

This relationship between student and counselor is pertinent when it comes to shaping students' perceptions of nursing. Although school counselors are active in the early career planning of young students, several studies determined that counselors do not possess enough knowledge about the nursing field (1999). This minimal knowledge about

nursing as a career is a significant barrier to students' perceptions (Blasdell & Hudgins-Brewer, 1999; Bolan & Grainger, 2005; King et al., 2007; Olichwier, 2009).

Regarding their personal perception of nursing, a study of counselors by Bolan and Grainger (2005) determined that an important characteristic told about nursing to the students is the caring aspect of being a nurse. Some other characteristics that school counselors identify include leadership skills, professional expertise, and intelligence (Bolan & Grainger, 2005). High school guidance counselors identified nurses as direct healthcare providers and caregivers working in hospitals (Bolan & Grainger, 2005). According to the study conducted by Blasdell and Hudgins-Brewer (1999), school counselors reported that the area of engineering and medicine is one of the major requirements of higher academic achievement in the field of nursing. Counselors indicated they provided this information only when asked about the nursing field from the students they counsel.

Meanwhile, a study by Mignor, Cadenhead, and McKee (2002) concluded that ethnicity and gender biases were factors affecting counselor perceptions of nursing. For this reason, female counselors rated nursing much higher than male counselors. In fact, European American female counselors rated the nursing profession higher than any other group of counselors. African American counselors gave nursing a low rating, including male African American counselors (Mignor et al., 2002). The finding suggests the lack of interest shown by university students toward the field of nursing attributes to discrepant attitudes across social influencers during a formative period of their lives.

School-Age Students' Perceptions of Nursing

There is a fundamental need to understand how school-age students perceive the nursing profession. Early perceptions could impact the career selection process when the time to decide comes. Several studies were conducted to determine students' perceptions of the nursing profession. Altogether, these studies established several factors that affect perceptions of nursing. For example, students believed that nurses only worked in subordinate (i.e., less prestigious) roles and that physicians and doctors were the lifesavers who cured the different illnesses (Neilson & Lauder, 2008). Another study indicated that students viewed nursing figures as physician assistants. They believed that the only function of nurses is to assist physicians in their work and that they did not have separate duties. They had little to no knowledge regarding the different roles nurses perform or on the multiple numbers of nurse specialties. Students were unaware of the education level required for this field (Spindola, Seibert, Francisco & Clos, 2005).

Students in the Hoffner et al.'s (2006) study depicted that they would prefer working in a field other than nursing because nursing do not pay well and requires longer working hours. Other studies have reported that many students avoid nursing as a career path because the pay scale for nurses is lower than other professions (Cohen et al., 2004; Gushue & Whitson, 2006; Lew & Arthur, 2003). One study focused on understanding why students do not choose nursing as a career revealed that the fear of getting a disease or working with ill or dying people is a deterrent (Cohen et al. 2004).

Two other themes stood out across the literature. Academic ability and socioeconomic status emerged as relevant points in the decision-making process. Studies

with students from Hong Kong, South Korea, and Australia clearly demonstrated that some students who selected nursing as a career belong to lower socioeconomic classes, but have higher academic performance (Cho, Jung & Jang, 2010; Dockery & Barnes, 2005; Law & Arthur; 2003). Although, students with lower socioeconomic status, such as African Americans, are prone to choose nursing as their career because of the socioeconomic status upgrade it offers (Cho et al., 2010; Dockery & Barnes, 2005). In fact, students belonging to higher socioeconomic groups perceived nursing less favorably. The presumption is because they have several other career choices and resources available. Therefore, this profession is least accepted in high socioeconomic groups (Cho et al., 2010).

Academic performance appears to be a potential factor influencing perceptions of nursing. For example, Scottish (Neilson & Lauder, 2008) American students (Cohen, Palumbo, Rambur, & Mongeon, 2004) expressed that the primary reason for selecting nursing as a profession was that this occupation did not require students to have good grades compared to other occupations. Australian middle school and high school students reported that nursing's penchant for altruism and job flexibility was appealing (2004). Another study reinforced that high school students like the job security and increased career opportunities as positive reasons for pursuing this field (Dockery & Barnes, 2005).

College Students' Perceptions of Nursing

The current study is to understand African American college students' perceptions about a career in nursing. Another study conducted reports why students may be interested or disinterested in the nursing profession (Auerbach, Buerhaus, & Staiger

2000; Saha & Shipman, 2006). According to one study conducted by Fouad & Byars-Winston (2005), standards and values associated with economic, political, and social forces are important in shaping college students' perception of nursing. Students make decisions about their job based on cultural context. External challenges are considered when minorities' perceptions about what careers face them with the least amount of discrimination (Fouad & Byars-Winston, 2005).

Students who expressed an interest in nursing do so for a lot of reasons. For example, they showed an interest in the actual occupational tasks performed by nurses and the autonomy associated with the job (Marcinowicz et al., 2009; Palumbo et al., 2008; Seago et al., 2006). They signal that the nursing profession implies job security and provides employment opportunities (Buerhaus et al., 2005); Larsen et al., 2003; Norman et al., 2005). Others indicated that nursing is a noble profession and extols a sense of ethics and caring (Degazon & Shaw, 2007).

Other college students reported that nursing was not a prestigious profession because nursing professionals are underpaid (Grainger & Bolan, 2006; Palumbo et al., 2008). Another study investigating students' perception of nursing at the beginning of their nursing program indicated that students often had idealistic and positive views on their nursing career. That is, according to participants, nursing is a career of compassion and caring. After completing clinical experiences, some of the student's views changed. After working in the nursing field, they perceived it as a technical field that consisted of completing lots of documentation and using sophisticated procedural skills (Safadi et al.,

2011). The typical findings show there is a disconnection between perceived nursing beliefs and actual nursing practices.

African American students should explore HBCUs along with many other institutions of higher learning. HBCUs offer a combination of tangible benefits coupled with affordability that one cannot receive at some of the other schools (e.g., personal attention and culturally-supportive environments).

While there is evidence that HBCUs' learning environment encourages a supportive atmosphere, the professors manage smaller classrooms and lecture halls than their counterparts at other institutions. Students crave personal attention when they transition from high school to college, and HBCU professors provide this element (Benefits of Historically Black Colleges, 2017).

Benefits of Historically Black Colleges (2017), a study, provided evidence that about 40% of African American students who complete their undergraduate degrees continue to pursue post-graduate studies which are impressive figures given there are only 107 historically black college and universities in the United States. Employment of any type may seem far away, but attending and graduating from an HBCU for African American students remain well within their sights. In addition, companies who are looking to diversify the workplace would seek top talent from HBCUs first because they could find a good fit from these colleges and universities (WCRAA, 2012).

There is a sense of pride and community among HBCUs. Some leaders and professors at the HBCUs are African American. A sense of confidence and empowerment are among the students who attend HBCUs. Looking at the history, HBCUs have

provided a support system and some nursing programs for African American college students where they found attention and a cohesive atmosphere with other students of the same ethnicity.

A new generation of African American students is entering HBCUs' nursing programs which provide educational benefits. Students from a range of ethnicities are enjoying the advantages of these HBCUs. For example, Prairie View A&M University College of Nursing where African American students are the minority and represent less than half of the student population, the other half is made up of other nationalities (Minority Nurse, 2013).

Today's HBCUs could place more focus on cultivating the next generation of potential nursing students in these schools. They should continue to reach out to high schools and elementary schools to provide the necessary information about nursing careers, and what it takes to be a nurse. Although, there is room for additional improvement by all HBCUs before we are successful in the attainment African American students who graduate with nursing degrees.

In 2006, one of the first HBCU to offer a nursing program west of the Mississippi was Prairie View A&M University of College of Nursing, located in Houston, Texas. The university was founded in 1918 and has opened a fourteen-story, \$21 million building that offers skill labs and classrooms that house nursing-related tenants (Minority, 2013).

In recent years, groundbreaking ceremonies held by North Carolina Central University in 2011 show off their new nursing department building which allows an increase of nursing students from 125 to 250 (Minority, 2013).

There is room for improvement in projecting the reason why African American students are not choosing nursing as a career. New (2015) indicates that 28% of African American students who do not attend an HBCU were “thriving in financial well-being” and 52% of students who attended HBCUs reported to be doing so as well. African American students who attend HBCUs say they are likely to graduate than those who graduate from predominantly White institutions because they feel the support and attention by professors (New, 2015).

Summary and Conclusions

In summary, Gottfredson’s theory of circumscription and compromise (1981; 1996; 2002) was supported by the review of the literature. Other researchers conducted a study with college students (Muldoon & Reilly, 2003; O’Brien et al., 2008), high school students (Cho et al., 2010; Neilson & Lauder, 2008) and middle school students (Andrews, 2005; Dockery & Barns, 2005) revealed that gender is a factor on how people compromise during their career selection process. A few studies showed that males perceive the nursing field as a chiefly female profession and, in turn, show reluctance toward adopting the field of nursing as a career (Burnett, 2007; Meadus, 2000; Meadus & Twomey, 2007; O’Lynn, 2004; and Whittock & Leonard, 2003).

Additionally, research indicates that the choice to join the nursing profession is associated with a desire to help others (Beck, 2005; Ditommason et al., 2003; Larsen et al., 2003; Norman et al., 2005, and Sand-Jecklin & Schaffer, 2006). Some studies suggested men who work as nurses are attracted more to the technical aspects of nursing

(Burnett, 2007; Meadus, 2000; Meadus & Twomey, 2007; O'Lynn, 2004; and Whittock & Leonard, 2003).

Other studies pointed to prestige as playing a role in the selection of the nursing (Dockery & Barns, 2005; Grainger & Bolan, 2006; Marcinowicz et al., 2009; Norman et al., 2005; and Palumbo et al., 2008;).

Although the literature describes several potential influencing factors in how people perceive and join the nursing profession, there is demonstrably less information available regarding the perception of nursing in the minority population, among black African Americans (Wong et al., 2008). The studies in the literature discuss the hurdles and impediments that minorities face while selecting the profession of nursing, which a lack of education appears to be a robust factor (Amaro et al., 2006; Gardner, 2005; Mills-Wisneski, 2005; Wood et al., 2009).

By conducting this integrative literature review, a gap was identified that requires addressing. There is minimal research addressing how African American college students perceive the field of nursing. Therefore, the study focuses on African American college students attending HBCUs to obtain their views on the selection of nursing as a career. There is a need to change the perceptions of black minorities regarding the nursing field so they can be part of an equitable workforce; that way the quality of healthcare improves for populations that need it the most. The expanded inclusion of African Americans in the nursing workforce can, as a result, minimize some health disparities and inequalities that this ethnic population experiences. Chapter 3 includes how the research is done. The

objective of this study is to provide recommendations that can enhance the enrollment of African Americans in the nursing profession.

Chapter 3: Research Method

Introduction

Chapter 3 includes the explanation of the survey instrument, study design, setting, sample, and data analysis. This chapter includes information as to the procedures and policies used to protect the study participants from unethical practices. I used Gottfredson's (1981; 1996; 2002) theory of circumscription and compromise to understand the perceptions of African American students who attend HBCUs for nursing based on interest, gender, and prestige. I found limited comprehensive research on the perception of nursing as a career for students in HBCUs. Minimal studies in this area hampered my efforts to vividly describe how students in HBCUs perceive nursing as a career. I located data that represents an insufficient number of African-American employees that work in the nursing profession as well as in the entire healthcare sector of the United States. The data showed that African Americans make up approximately 15.2% of the United States population, and suggests a portion of Americans may lack access to proper healthcare (Bloothoof, Christen, Mandemakers & Schraagen, 2015).

I worked to find a correlation in the interest in the nursing profession and positive reinforcement for African Americans desiring a career in the nursing field using the control of demographic variables. I sought reasons for a limited number of African Americans in the healthcare profession and measured the impact of this discrepancy in the American healthcare system. A quantitative research inquiry assisted in compiling similar findings related to the problem. The results included quantitative comparisons and evaluations, which are necessary to draw an informative conclusion to use for affirmative

action. These were substantial for the recommendation of solutions as well as areas of future research aimed at understanding further data.

In this study I aimed to describe its purpose, procedure, and findings clearly. I compared findings from other research studies related to the perception of nursing as a worthwhile profession for students in HBCUs, as well as the lack of an adequate number of African American nurses in the United States health sector. In addition to these comparisons, I compared the research findings with the recent problem. I used the data collected and the comparisons described above as the basis for drawing conclusions and making recommendations for possible solutions and affirmative actions.

This research inquiry was unique in that it was not designed to observe variation in trends. For instance, as stated earlier in the introductory and the literature review sections, I found that there are a low number of African-American nurses as compared to the proportion of African American population in the United States. This inquiry was exploratory in nature. I also sought out to research how students in HBCUs perceive nursing as a career. Through this research I cannot check trends or changes in perception of nursing as a career for African American young people, nor can the findings further the knowledge about making nursing a viable career for them as no information regarding this topic exists. This information reinforced the idea that more focus should be given to the nursing profession in all facets of healthcare, such as the underrepresentation of African Americans in the nursing profession in the United States (Schultheis, 2000). The dependent variable in this study included those who are pursuing a career in nursing at

HBCUs. The independent variable was the number of African American student participants pursuing a career in nursing at an HBCU.

Methodology

The purpose of this section is to provide information on how I collected the data in response to the research question, and achieve the research objectives. I discussed the data collection, the research approach, the population size, evaluation and description of variables, as well as methods of data analysis. I identified a suitable design and provided an explanation of its connection with the research question. I described the constraints in terms of time and resources in relation to the selection of the research design. Finally, I provided an elaborate description of the chosen research design to advance knowledge about this subject matter and to discuss facets of the whole discipline.

I included descriptions of the successive details concerning the data collection methods and I included the analysis in the methodology section. The entire group was not studied as a unit. The method of different sampling was chosen to focus on one subgroup, those who attend HBCUs. Additionally, I described a threat to the validity of the collected information and the reliability of the complete research. This chapter also includes information to prove the credibility of the study.

Methodology: The Target Population

The term *target population* loosely refers to the group of individuals targeted by a given research inquiry. This distinct group of persons is recognized to have similar characteristics and is, therefore, chosen for research. The data collected relates directly to the population, and the research question assists in obtaining the maximum amount of

information about this group in order to achieve the desired outcome of the study (Jha, 2008).

In the study, the target population referred to a large assembly of people that formed the core focus of controlled inquiry. This survey was completed for the benefit of the community. Because the target population was so vast, I could not study or test every individual due to time constraints. For this reason, I selected a small group within the population to study while the outcomes were taken to represent the entire population, a procedure known as sampling (Jha, 2008).

Despite the humble beginnings of HBCUs against the backdrop of racial segregation enrollment has grown over the years. Additionally, they have evolved to be as educationally sound as other institutions of higher education and have admitted people of other races as well. By the end of 2014, there were 107 HBCUs in the United States, a number established in the former slave states in the aftermath of the American Civil War. Nineteen states have HBCUs, including the United States, Virgin Islands, and the District of Columbia. By the end of 2014, these institutions had matriculated 222,500 students (National Research Council, 2014). In 2011, 79% of the students in HBCUs were African Americans while 21% were composed of other races. The percentage of students of other races rose by 4% by the end of 2014, while the African American population decreased to 76% (National Research Council, 2014). In order to further research efforts, the number of African American students as a whole attending HBCUs had to be ascertained before the topic of African American students enrolled in nursing programs could be determined.

Sampling and Sampling Procedures

Sampling was necessary in order to get more accurate research numbers as the population of African Americans in HBCUs is so vast. This particular sampling necessitated choosing a small group within the individual institution who possessed similar characteristics in order to study the entire group. A small group within an individual institution and with similar characteristics to those of the target population was selected and studied to represent the whole population. Statistically, the sample resembled the target population and offered advantages, such as being more logistically practicable, which increased the accuracy of the information. Thus, students who attend HBCUs typically find other students who share their experiences in growing up of African descent (whether they live in the same state or other parts of the world). These students are just as diverse as other student group, even though they attend a school with a majority African American student population. Thus, these students have their concerns and experiences regarding what it means to be an African American. For many African American youth, attending a historically Black college and university proves more enriching than attending other institutions of higher learning as these students find others who have experienced a similar upbringing and bonds are forged (John, 2015). These institutions are similar in origin and locations. This study used a random sample to increase the likelihood of external validity. The survey tool SurveyMonkey Audience was used to draw the sample because of its representation of the United States population (SurveyMonkey, 2013). In addition, the utilization of SurveyMonkey Audience allowed for the research to cross geographic boundaries and represent perceptions throughout the

United States. Sample size could prove to be a threat to the external validity of the study. However, random sampling minimized the risk (Triola, 2008). The survey is a cross-sectional study, hence, internal validity such as regression, experimental mortality, and history are minimal. I used data from completed surveys to limit threats to construct validity. Stratified sampling was suitable for target groups that have different categories of individuals within them.

Research Question

The research question explores African American students' perceptions of nursing as a career using Gottfredson's (1981; 1996; 2002) theory of circumscription and compromise.

RQ1: How do interest and gender play a role in African Americans students at an HBCU pursuing a career in nursing?

- **Dependent Variable:** The dependent variable was African American student participants pursuing a career in nursing at an HBCU.
- **The independent variable** was the number of African American student participants pursuing a career in nursing at an HBCU.
- **Covariate Variable:** Number of African American students interested in a nursing career at an HBCU.

I created an online advertisement that was placed on social media to attract willing African Americans attending HBCUs to apply and participate in the study. Signing up was voluntary for participants to be a part in this investigation. Initially, I acknowledged

that the number of people willing to participate could vary from dozens of respondents to thousands of respondents.

A sample frame, a collection from a list or a group within a defined population listed of people who applied to participate in the online research. I collected a random sample from the group who filled out the proper paperwork. I used the inclusion criteria to obtain the sample frame. In this study, the requirements included that each participant should be an African American, 18-25 years of age, and a current student at an HBCU.

Because of the nature of this research, conducting the survey in a priori was not possible since the research did not involve experimental hypothesis testing. For this reason, the upper limit of the sample size determined the amount of time and resources available and the allowable margin of error. I noted that small sample sizes tend to increase mistakes and do not provide the required information (Welman, Kruger, Mitchell & Huysamen, 2005).

Assuming the sample size given earlier uses 50% the normal distribution curve, where the results show 95% of confidence level, the sample size required, when the allowable error is 5%, which equals to using 295 students. The sample obtained for this study was 386 African American students enrolled in an HBCU; however the final sample was reduced to 295 due to certain exclusion criteria and missing data.

Specifically, inclusion criteria involved being an African American individual, attending an undergraduate program at an HBCU and being born in the United States.

If the allowable error reduces to one percent, a higher sample of students is required. This paper utilized the first option of 95% of confidence level and 5% of allowable error following recommendations of a standard survey.

Procedures for Recruitment, Participation, and Data Analysis Collection

After I posted an online advertisement with SurveyMonkey Audience, the next step involved was scrutinizing applicants to find out if they qualified. For this study, I obtained 386 African American students who were enrolled in an HBCU; however the final sample was reduced to 295 due to certain exclusion criteria and missing data. Specifically, inclusion criteria involved being an African American individual, attending an undergraduate program at an HBCU and being born in the United States.

These individuals were provided details about the study, and given the option to participate or withdraw. Information was given to the participants stating their information would be used solely for the purpose of this study. In addition, I provided a clear explanation of their role in this research. All the participants needed to do was fill in the revised Career Values Scale (CVS) for measuring attributes of success in college students by Seago, Spetz, Keane, and Grumbach (2006). Since the population collection was voluntary, the population chosen possessed all the demographic characteristics of the target population regarding age, sex, social and economic background, as well as their perception of some issues. Both personal information and the question related to each respondent's socioeconomics and the institution they attend was obtained using CVS.

Participation of interviewees was voluntary, and the assumption for their involvement was agreed upon when they received the information about the research. An

informed consent form was included in the documents accompanying the information letter. However, further information was given to the participants that explained their role in the research, and if they are not willing to give such information they were free to decline participation and exit the survey at any point. I created a procedure to replace participants randomly from the sample frame so that the research would have the required number of respondents. The respondents were encouraged to select their answer to every question and exit the SurveyMonkey Audience. The respondents were thanked since they were an important part of providing the information and making the research successful. Since this was a quantitative study, it was unnecessary to determine follow-up activities as far as it focused on obtainment of more information from the respondents, confirmation, or clarification of some responses. The participants exited out of the CVS when they reached the end of the survey. At the conclusion, the data was collected and securely obtained through SurveyMonkey as a Secure Sockets Layer (SSL) encrypted spreadsheet. The encryption protects any personal data as it moved across the internet. The personal identifiers were removed to reduce bias. The data is being kept confidential in a password-protected spreadsheet for the required number of five years according to the university's policy.

Additional Information When Conducting a Pilot Study

The study does not seek any intervention; it is intended to find out the perception of African American students attending HBCUs toward nursing as a viable career choice. This research is a primary research and not a secondary one. Primary research means that first-hand data was acquired through the online administration by using the CVSs. The

contextual information, for instance, concerning the history and background of HBCUs is obtained through a literature search in libraries, involving secondary sources. I searched the literature to find the background information about HBCUs from documented work completed by researchers and other institutions. Many of the HBCUs have provided information on how their HBCU's came into being and circumstances that led to their formation, as well as milestones of their success in addition to challenges they have faced as they developed. The HBCUs has information on their websites and web publications, which were accessed from the Internet as well as various libraries. For this reason, it is not necessary to search for archival data.

The data collected through the literature search for the background information of the HBCUS is credible and reliable when drawn from the official websites of these institutions. The data is significant because such information obtained from their archived data is their history, and is well preserved (Gasman & Commodore, 2014). The data collected for the primary study, which aims to find out the perception of African American students in HBCUs toward nursing as a career, was acquired through the use of the CVS, which was uploaded to SurveyMonkey Audience. The data collected through this method is a reliable and a credible primary source. It is an advantage associated with all sources of primary data, such as CVSs, surveys, and personal observation (Chandra & Sharma, 2013).

Instrumentation and Operationalization of Constructs

Researchers generically use the term 'instrument' for devices utilized in research for measurement. They may include survey tools, checklists, matrices, and CVSs.

Instrumentation is derived from this term, referring to the process in which the measuring takes place. Therefore, instrumentation is the process in which research instruments develop, test, and utilize the data collected (Chandra & Sharma, 2013). Researchers' instruments can be divided into two categories, depending on the person who fills in the information. These categories include a researcher-completed category in which the researcher writes in the tool after acquiring the required information, and a subject-completed category, completed by respondents or participants of the research. The researcher is the one who determines which instrument or a combination of instruments to utilize in research (Chandra & Sharma, 2013). In this research, the instrument used is a subject-completed CVS created by Seago et al. in 2006. In 2014, a previous research which used this tool and Karen Olichwier requested approval to use the original instrument, but revised the instrument. The revised CVS is the instrument used in this research, and a request to use the instrument was sent, and the approval was given by Karen Olichwier (2014).

Operationalization in research design is used often in social sciences, psychology, and physics among others. It is a procedure which describes how to measure a phenomenon that is not directly measurable. In this process, a mixture of abstract concepts that causes the phenomena to break down and clearly describes the creation of the distinct and quantifiable concept observed empirically (Kumar, 2005). In this research, for instance, the term perception needs to be operationalized as it is one of such complex combinations of ideas and impressions that are not directly quantifiable. Perception in this research does not relate to reception of stimuli through senses. Apart

from some specific knowledge, it encompasses what the person feels toward a particular idea or subject (Eliason, 2014). In this research, the perception of nursing as a career can be operationalized as real or the alleged nurse's income, living standards, working hours, cultural appeal, and respect; this method of instrumentation derives from Kalleberg's (2011) description of a good job. For instance, if African American students in HBCUs think of nursing as a career that provides high income and high living standards, being historically and culturally appealing as well as respectable, many people would be attracted to this job. In addition, if they think of it as a career that leads to success and prestige, being suitable for one's sex, many would enroll in nursing as a career.

In philosophy, psychology, and other social sciences, a construct is an object whose existence depends on a person's mind; it is an abstract object. In research, it is an explanatory variable not seen in observation directly. In this study, perception can be viewed as a construct as it depends on people's minds. The process of operationalization described above is the creation of a construct (Kumar, 2005). Seen through the whole process of creating assessable definitions for abstract terms where seeing them as operationalization or the creation of constructs.

This research did not utilize published instruments; it chose subject-completed CVS developed by Seago et al. (2006), and revised by Karen Olichwier in 2014. CVS is appropriate for this study as it helps in collection of accurate data. It is statistically difficult to determine the effectiveness of the use of the CVS. The reliability, validity, and consistency of data collected through the utilization of the CVS depend on how well the defined variables are categorized, the consistent construction of the CVS, and the

respondents. When the research variables are well defined, and the creation of the CVS is consistent, the consistency of the data acquired is enough to make valid conclusions regarding the perception of nursing as a career by African American students in HBCUs.

Procedures for Data Analysis

A probability level (*P*-value) of $p > 0.05$ assists in rejecting or accepting the hypothesis. The Student's *t* test will not be used to compare the normally distributed data in this instance because it may not be normally distributed data. In this case, a nonparametric test and the Mann-Whitney U test were used to compare means. Kutz (1999) recommends the use of the Levene's test for the assumption that there are equal variances between variables. The standard deviations and the means were interpreted to describe the findings. The null hypothesis rejection will occur if the value is greater than 0.5.

Ethical Procedures

The process of collecting the data should adhere strictly to the laws and regulations, and respect should be given to the respondents during a study (Gregory, 2003). These include rights to an informed consent, privacy, and confidentiality of information. In addition, an age requirement of 18-25 was communicated during the recruitment of participants (Gregory, 2003). However, the law may allow minors to participate in research if they can benefit from its outcome. Although, they should be old enough to understand what the research is about and have a signed consent from their parents (Sales & Folkman, 2000). The American Students Demographics of 2012 reveals that about 80% of college students are between 18-25 years.

Colleges and universities admittance of career-oriented students and a high percentage of students are of majority age, a collection of the data in an ethical manner maybe easier to obtain from adequate respondents who certify all the ethical requirements upfront. For purposes of getting participants, I provided SurveyMonkey with a list of all eligibility criteria, which includes an age limit of at least 18-25years of age and must be currently enrolled at an HBCU. I stated the purpose of the study and provided the data needed to the participants so they could make an informed consent if they chose to participate. I applied to the Institutional Review Board (IRB) for approval which holds the researcher to high, strict research standards, including requirements for conducting the data collection in an ethical manner (Walden IRB approval no. 11-14-16-0340119).

Unlike other forms of data which are highly confidential, such as information about a patients' condition, or a training procedure of disciplined forces, the data collected for this research do not require that level of confidentiality. Still, I will maintain the confidentiality of the information and the anonymity of the respondents while discussing the results and presenting conclusions. No respondent will have their personal information revealed when presenting the results.

There have been instances in the past when people have refused to participate in research for many reasons. In some cases, participants have declined to continue their participation in the process of data collection, thereby stalling the completion of a research inquiry. Although, many stakeholders, including staff members, sponsors, management, and students, are eager to build and popularize these institutions to make them larger, better, and more inclusive for the African American minority (Gasman &

Commodore, 2014). The research could possibly assist these institutions in being more inclusive to the needs of African Americans, as well as all other Americans. The response from the agency could motivate African American students in HBCUs to participate in this research. To prevent respondents from not completing the CVS ahead of time, I made the process of collecting data from the respondents short; it only involves filling in one CVS.

The result analysis included evaluating the data from the respondents' answer to the research questions, which was designed to elucidate how predictive interest and gender of pursuing a career in nursing while attending HBCUs. The evaluation seeks to determine how interest and gender influence the career choice of students attending HBCUs using descriptions of Seago et al. (2006). According to Kalleberg (2011), jobs are classified as good or bad, such as the real or perceived salaries and wages, working hours, fringe benefits, as well a social ranking of the job, namely its correspondence to a particular social class. Often, some jobs are perceived to have a high income, few working hours, great fringe benefits, and health insurance, while other jobs may seem to have a high social class that attracts more people. If a job is perceived as having a lack of attractive features, people most likely will not pursue a career related to such jobs. The factors that people consider, as described above, may not be realistic and may be misinformed perceptions.

Summary of Design and Methodology and Transition to Chapter 4

The methodology section of this research inquiry meticulously describes ways in which the data was collected and used to respond to the research question and to achieve

the aims of this study. The process included selecting respondents and sending the CVSSs so that the participants could answer all the questions, and to provide information needed to analyze results and draw conclusions. I presented the details and the description of the methodology in a way that other researchers can repeat the process and obtain similar results.

Chapter 3 in this research inquiry comprehensively described how to obtain meaningful data to respond to the research question and ultimately achieve the goals of the investigation. It elucidated some of the challenges expected, while providing means of countering them and minimizing against their effects. The role of ethics in data collection is in the lawful collection of the data. However, data collection alone do not make a research successful unless the information collected was recorded, presented, and analyzed correctly, and conclusions drawn. The next chapter deals with results presentation. The outcome of the data collected was submitted and expounded to pave the way for discussion and further conclusions.

Chapter 4: Results

Introduction

The study was to explore the perceptions of African American students concerning the nursing profession. Included in this chapter is a summary of the research findings, research questions, and a rationale for statistical analysis methods. The sample obtained for this study was 386 African American students enrolled in an HBCU; however the final sample was reduced to 295 due to certain exclusion criteria and missing data. Specifically, inclusion criteria involved being an African American individual, attending an undergraduate program at an HBCU and being born in the United States. Students enrolled in an undergraduate program at an HBCU was recruited and asked to complete a questionnaire assessing their attitudes toward nursing. I attempted to thoroughly investigate the data obtained and employed a series of descriptive and inferential statistical analyses. Particularly, I initially performed a frequency analysis to gain a preliminary insight into the demographic characteristics of the sample. Afterwards, I made a comprehensive account of the items evaluating perceptions of a nursing career, by calculating percentages of agreement with each statement and comparing mean levels of agreement among items. I subsequently investigated mean differences in attitudes toward the nursing profession between men and women, as well as between students who majored in nursing and those who do not. Lastly, I presented certain remarks on the reported reasons why a nursing career is considered and a summary of the findings.

Data Collection

The data collection process began in November, 2016, using a CVS survey uploaded to SurveyMonkey Audience after the approval from the university's IRB. The consent form was uploaded along with the survey asking qualified questions and inviting students to participate. One of the first questions asked was whether the participant attended an HBCU. The next question asked if the participant identified as African American. The six students who responded were African American but did not attend an HBCU. Thus, the respondents did not meet the inclusion criteria. After relying on the SurveyMonkey Audience for a little over 75 days with time pushing forward with not enough participants, I decided to request a change through the IRB to use a local HBCU. I sent a request to use the local HBCU's student population where I received their approval along with my university's IRB. E-mail invitations were sent out to the students from a list of e-mail addresses sent to me to use per my request by the local HBCU. I used the Statistical Package for Social Sciences (SPSS) Version 23.0 to summarize, code, and tabulate data.

Demographic Characteristics

A frequency analysis was conducted to examine the demographic characteristics of the sample. Although a sample size of 386 participants was initially collected, it was ultimately reduced to 295 cases due to certain exclusion criteria and missing data. Specifically, inclusion criteria involved being an African American individual, attending an undergraduate program at an HBCU, and born in the United States.

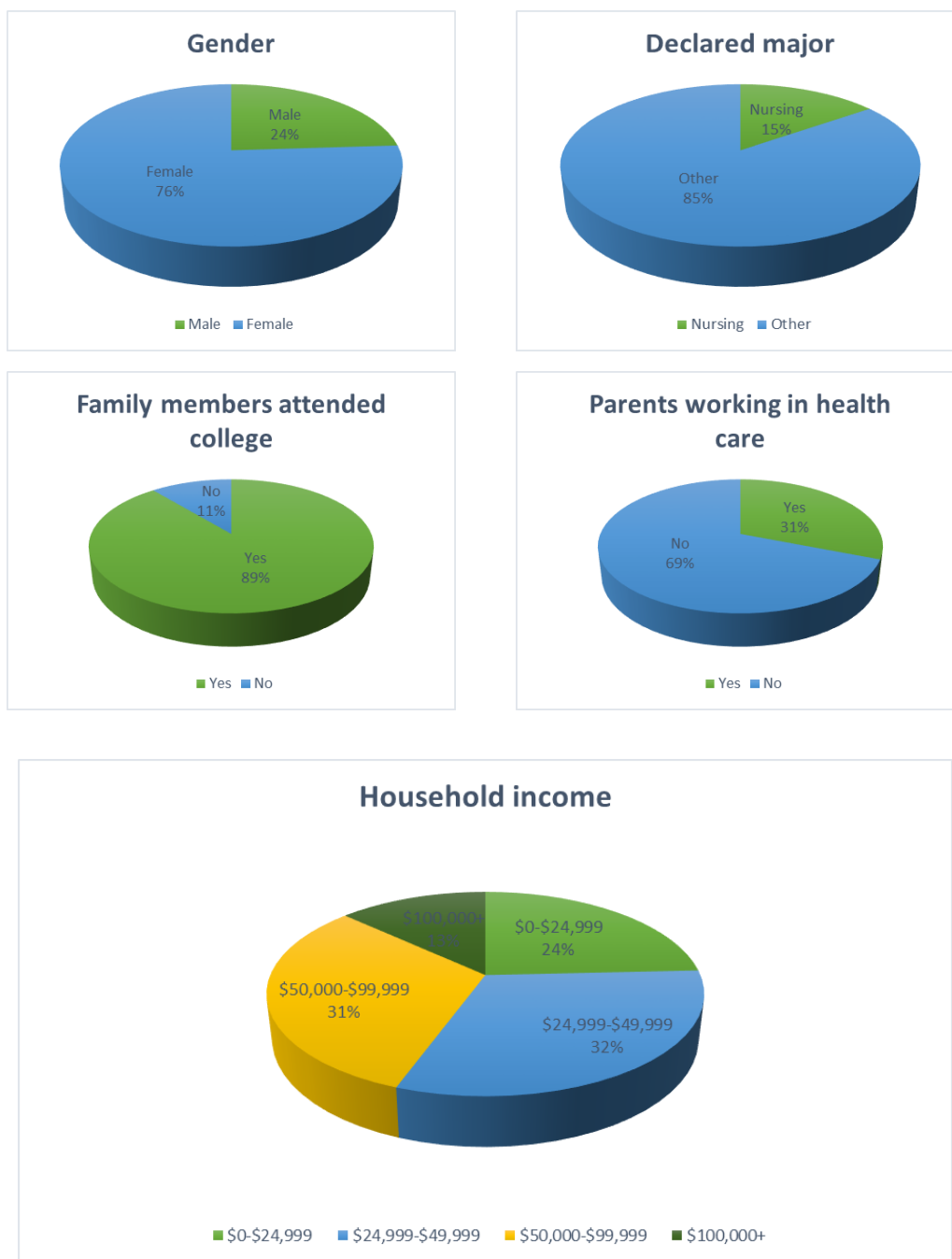
An overrepresentation of women (76%) was observed, while an underrepresentation of nursing students (15%) was identified. Eighty-Nine percent of the respondents reported that their family members had attended college and 31% mentioned that their parents worked in the healthcare sector. Finally in reference to the household income of the participants, more than half of them earned between \$25,000 to \$49,999 (31%) or between \$50,000 to \$99,000 (31%), followed by those earning between \$0 to \$24,999 (24%); (See Table 2 and Figures 1-5).

Table 2

Frequency Analysis on Demographic Characteristics of the Sample

	%
Gender	
Male	24%
Female	76%
Declared major	
Nursing	15%
Other	85%
Family members attended college	
Yes	89%
No	11%
Parents working in healthcare	
Yes	31%
No	69%
Household income	
\$0-\$24,999	24%
\$25,000-\$49,999	31%

\$50,000-\$99,999	31%
\$100,000+	13%



Figures 1-5. Frequency analysis on demographic characteristics of the sample.

Research Question and Hypotheses

RQ1: How do interest and gender play a role in African Americans students at an HBCU pursuing a career in nursing?

H_01 : There will not be a statistically significant difference in perceptions toward the profession of nursing between male and females African American college students attending an HBCU. $H1n: \mu1 = \mu2$

H_a1 : There will be a statistically significant difference in perceptions toward the profession of nursing between male and female African American college students attending an HBCU, with women expressing more positive attitudes toward the profession of nursing. $H1a: \mu1 \neq \mu2$

Perceptions of Nursing Career

In order to rigorously examine the perceptions of African American students regarding the pursuit of a nursing career, I first conducted a frequency analysis on each of the nineteen items included in the relevant questionnaire. The responses for all statements was given on a three-point Likert scale ranging from one (*does not apply*) to three (*applies*). The results are presented both in-text and visually to enhance levels of understanding.

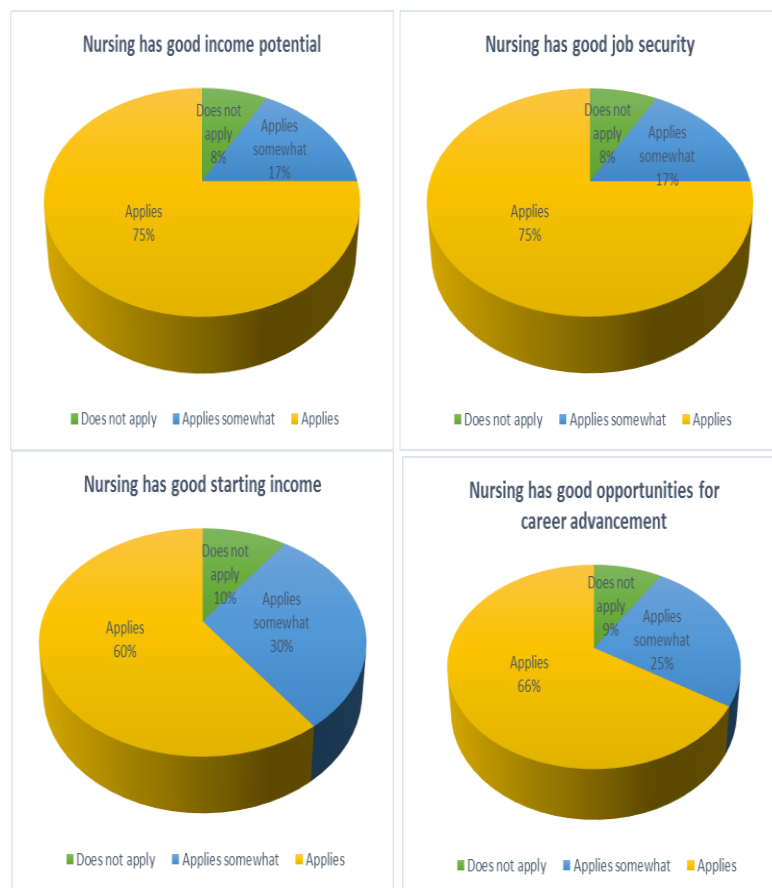
Perceived Job Prospects

The perceived job prospects of the nursing profession were assessed by the inclusion of four items. The positive attitudes expressed by most of the respondents considered the earnings, job security, and career advancement linked to nursing to be satisfactory (See Table 3 for and Figures 6-9).

Table 3

Frequency Analysis on Perceived Job Prospects of Nursing Profession

Items	Does not apply	Applies somewhat	Applies
1. Nursing has good income potential	8%	17%	75%
2. Nursing has good starting income	10%	30%	60%
3. Nursing has good job security	8%	17%	75%
4. Nursing has good opportunities for career advancement	9%	25%	66%



Figures 6-9. Frequency analysis on perceived job prospects of nursing profession.

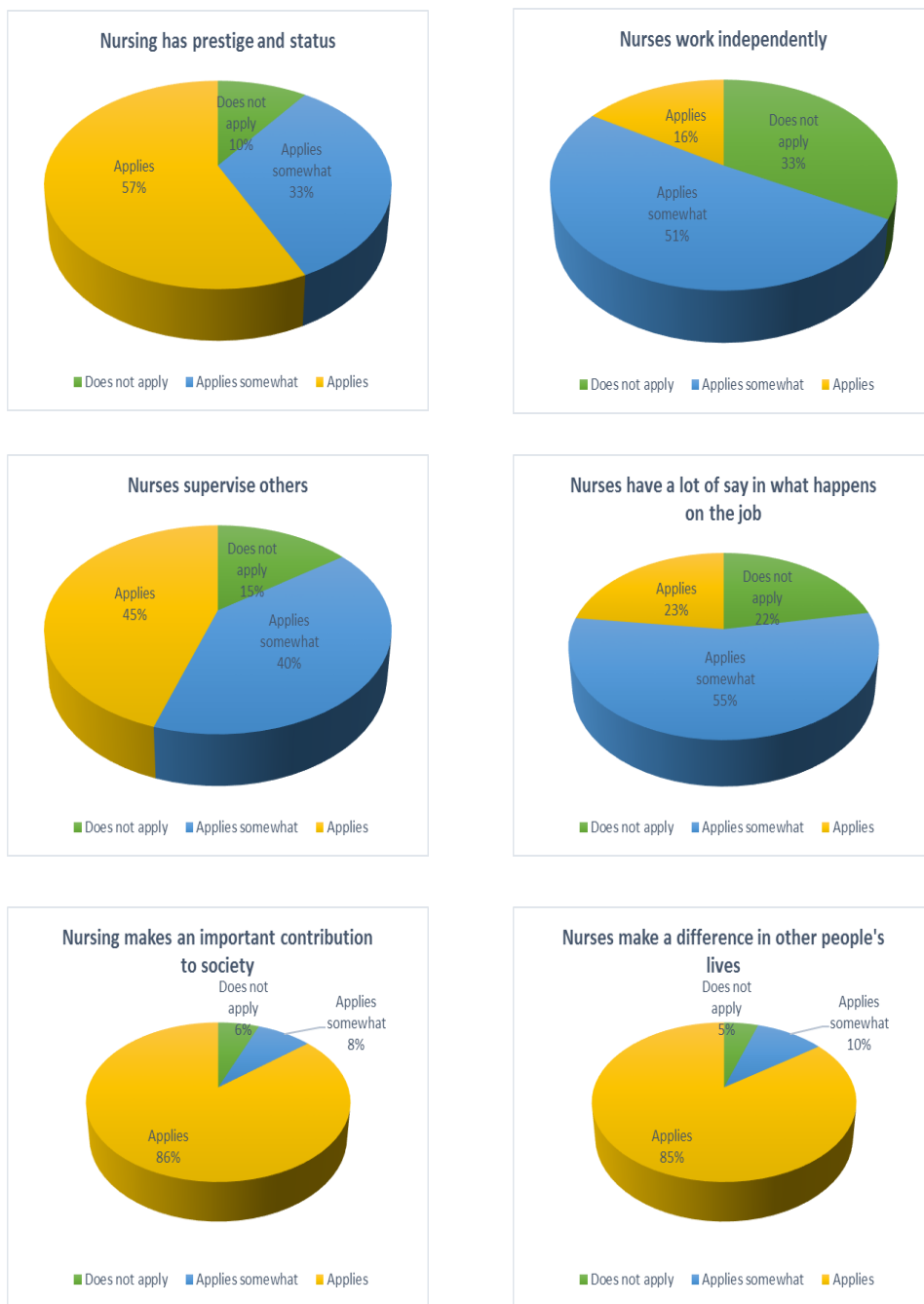
Perceived Prestige and Status

The perceived prestige and status of nursing career was examined by the inclusion of six items. Favorable perceptions of nursing prestige and status were identified, with particularly positive attitudes toward the contribution of nursing to people's live and society (See Table 4 and Figures 10-15).

Table 4

Frequency Analysis on Perceived Nursing Prestige and Status

Items	Does not apply	Applies somewhat	Applies
1. Nursing has prestige and status	10%	33%	57%
2. Nurses work independently	33%	51%	16%
3. Nurses supervise others	15%	40%	45%
4. Nurses have a lot of say of what happens on the job	22%	55%	23%
5. Nursing makes an important contribution to society	6%	8%	86%
6. Nurses make a difference in other people's lives	5%	10%	85%



Figures 10-15. Frequency analysis on perceived nursing prestige and status.

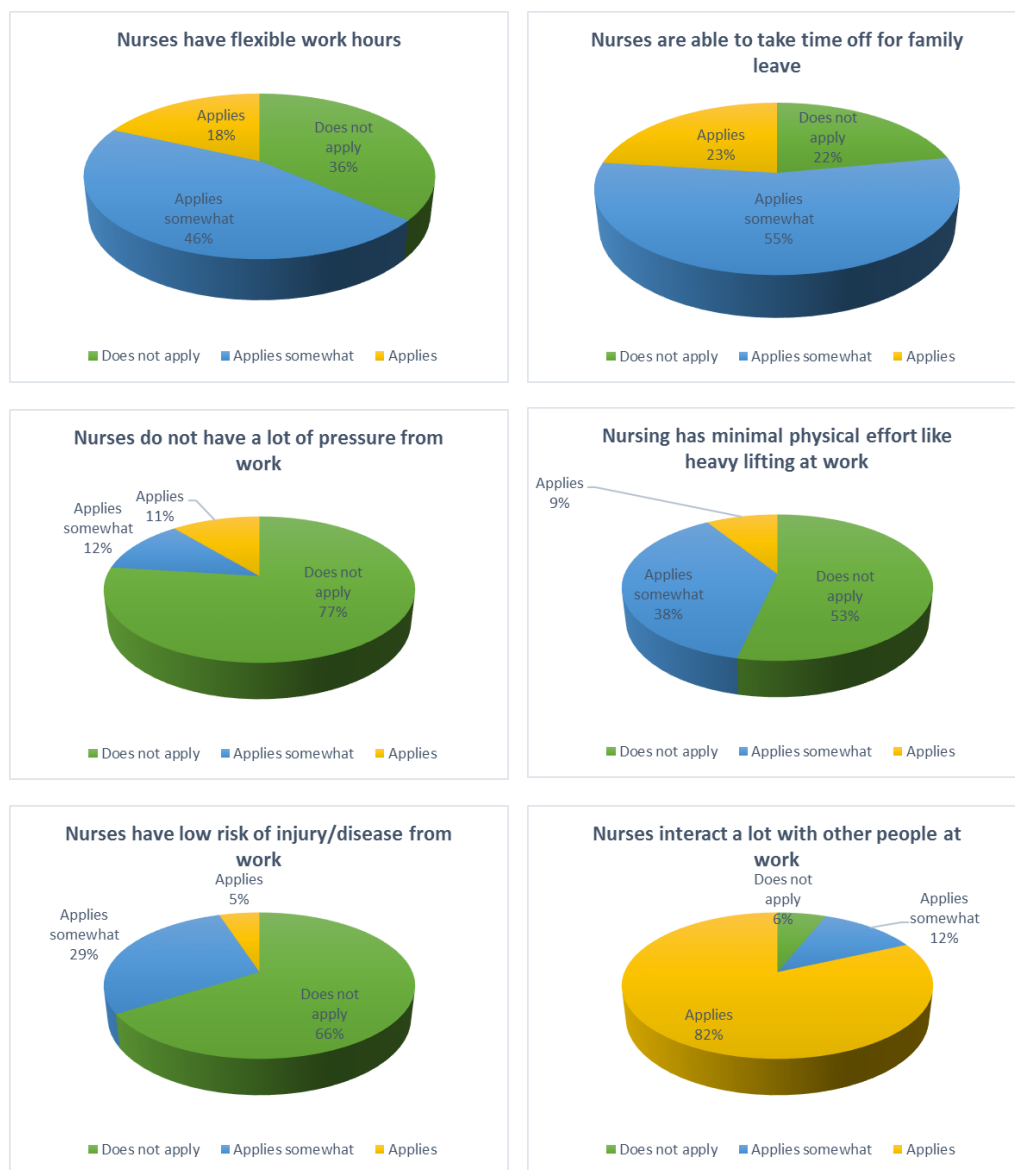
Perceived Working Conditions

The perceived working conditions of the nursing profession were assessed by the inclusion of six items. Nursing is considered a demanding and hazardous role in healthcare, as some respondents expressed rather negative attitudes toward several elements of nursing working conditions (See Table 5 for Figures 16-21).

Table 5

Frequency Analysis on Perceived Nursing Working Conditions

Items	Does not apply	Applies somewhat	Applies
1. Nurses have flexible work hours	36%	45%	18%
2. Nurses are able to take time off for family leave	22%	55%	23%
3. Nurses do not have a lot of pressure from work	77%	12%	11%
4. Nursing has minimal physical effort like heavy lifting at work	54%	38%	9%
5. Nurses have low risk of injury/disease from work	66%	29%	5%
6. Nurses interact a lot with other people at work	6%	12%	81%



Figures 16-21. Frequency analysis on perceived nursing working conditions.

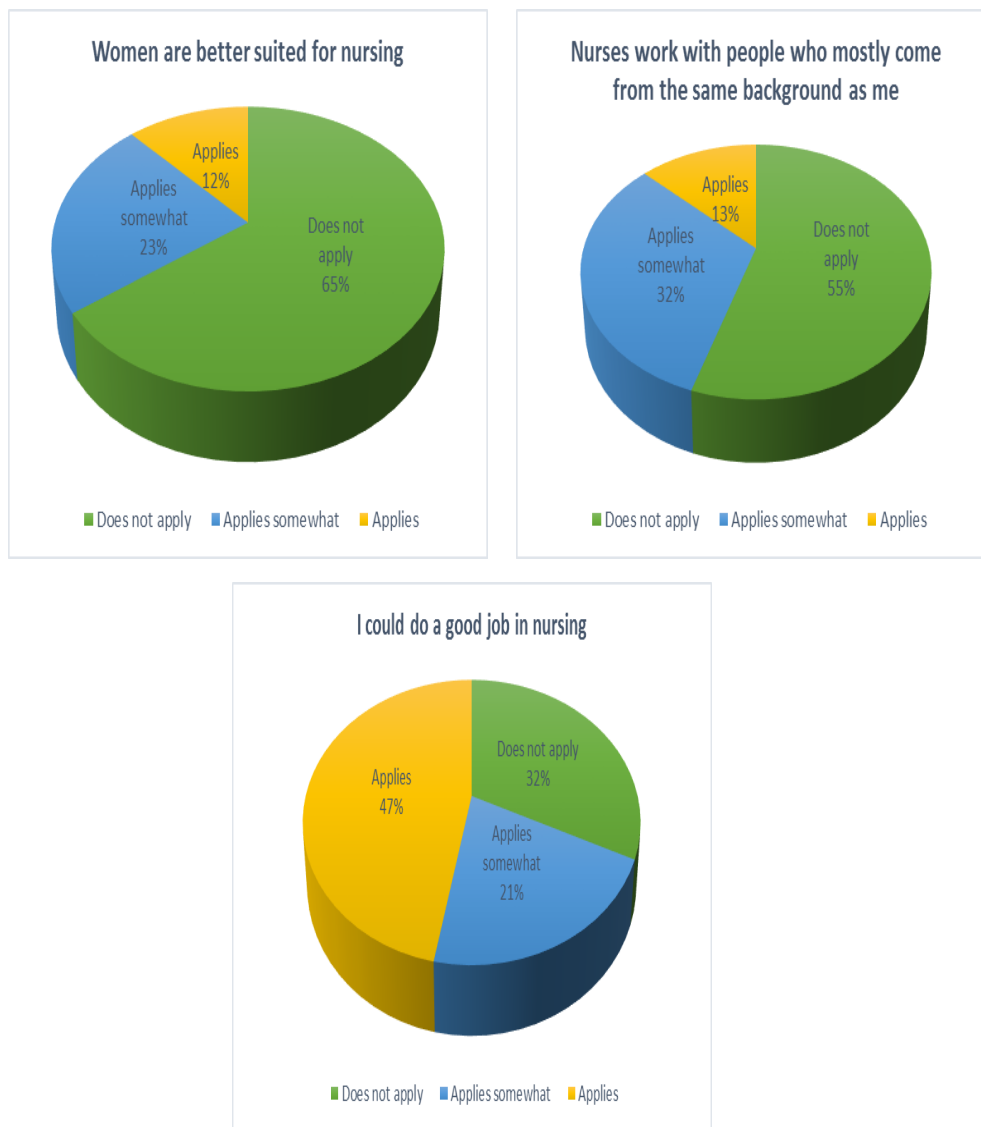
Miscellaneous Aspects

The participants were requested to indicate their agreement with three statements examining miscellaneous aspects of nursing career. To elaborate, nursing was considered suitable for both men and women, but the people nurses work with were perceived as individuals with different socioeconomic background from the one of respondents. There were statements by the African American students that they would be competent professionals in the field of nursing (See Table 6 and Figures 22-24).

Table 6

Frequency Analysis on Miscellaneous Aspects of Nursing Career

Items	Does not apply	Applies somewhat	Applies
1. Women are better suited for nursing	65%	23%	12%
2. Nurses work with people who mostly come from the same background as me	55%	32%	13%
3. I could do a good job at nursing	32%	21%	47%



Figures 22-24. Frequency analysis on miscellaneous aspect of nursing career.

In order to compare mean agreement levels among the items assessing perceptions of nursing profession and identify the aspects that concentrated the most and least positive attitudes, a descriptive analysis was subsequently employed. Results indicated that the items associated with nursing prestige were the ones perceived most favorably, whereas the statements linked to occupational hazards and pressure were the

least (Table 7 for further information on descriptive analysis; Means are presented in a descending order for ease of comparison).

Table 7

Descriptive Analysis on Items Assessing Perceptions of Nursing Profession

Items	<i>M</i>	<i>SD</i>
1. Nurses make a difference in other people's live	2.80	.52
2. Nursing makes an important contribution to society	2.80	.53
3. Nurses interact a lot with other people at work	2.75	.56
4. Nursing has good job security	2.68	.61
5. Nursing has good income potential	2.67	.62
6. Nursing has good opportunities for career advancement	2.57	.65
7. Nursing has good starting income	2.50	.67
8. Nursing has prestige and status	2.46	.68
9. Nurses supervise others	2.29	.72
10. I could do a good job in nursing	2.15	.88
11. Nurses are able to take time off for family leave	2.02	.67
12. Nurses have a lot of say in what happens on the job	2.01	.67
13. Nurses work independently	1.82	.68
14. Nurses have flexible work hours	1.82	.72
15. Nurses work with people who mostly come from the same background as me	1.58	.71
16. Nursing has minimal physical effort like heavy lifting at work	1.55	.65
17. Women are better suited for nursing	1.47	.70
18. Nurses have low risk of injury/disease from work	1.39	.59
19. Nurses do not have a lot of pressure at work	1.34	.67

Assumption Testing

Prior to conducting the following inferential statistical analyses, their relevant assumptions were investigated. Particularly, independent samples *t* tests require normally distributed data and homogeneity of variances. In order to assess the normality of distributions, I consulted the graphical method of normal Q-Q plots, as in large sample sizes normality tests may indicate even minor deviations from normality as statistically significant. Normal Q-Q plots indicated approximately normally distributed data in all cases, both for gender and majoring groups. As far as the assumption of homogeneity of variances is concerned, the Levene's test revealed heterogeneous variances in several instances. In those cases, corrections were applied and the adjusted *Welch's t* test was used (Field, 2013).

Gender Difference in Perceptions of Nursing Career

In order to investigate potential differences in perceptions of nursing career between men and women, I conducted several independent samples *t* tests

Perceived Job Prospects

Four independent samples *t* tests were conducted to explore if there are any statistically significant differences in perceived job prospects of nursing career between men and women. Descriptive analysis revealed that women expressed more positive attitudes toward nursing job prospects, as compared to men (Figure 25 for mean differences in perceived job prospects of nursing profession between men and women).

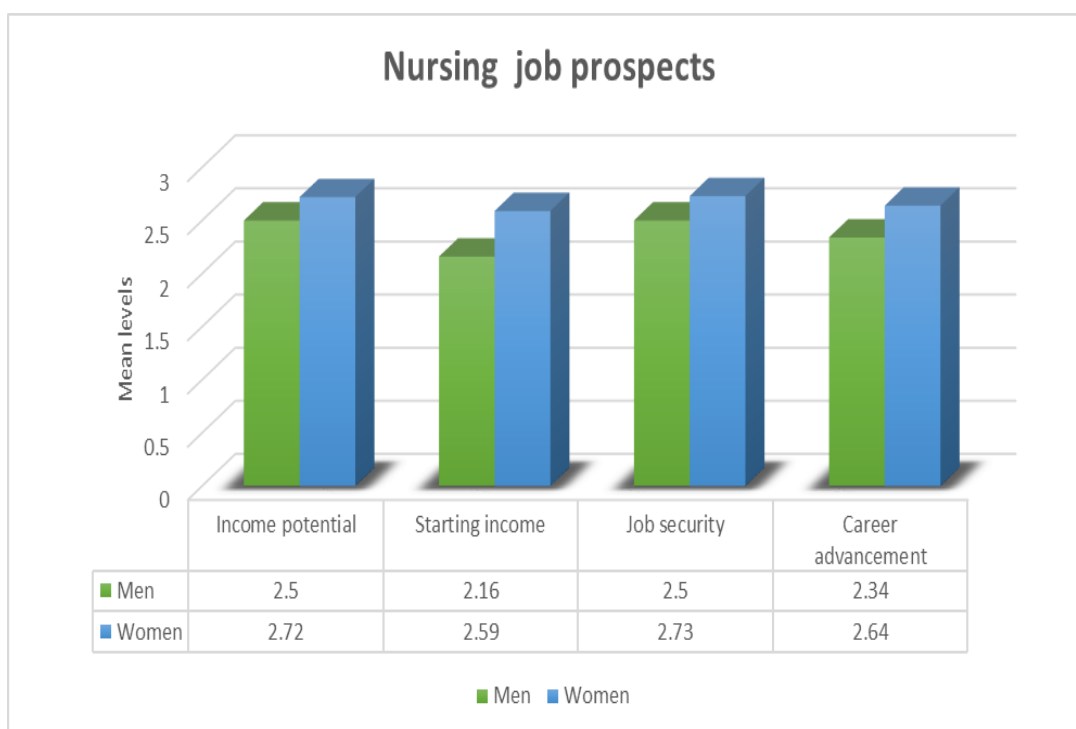


Figure 25. Mean differences in perceived job prospects of nursing profession between men and women.

Independent samples *t* tests indicated statistically significant mean differences between men and women in nursing perceptions of:

- Income potential, $M = -.22$, 95% CI [-.43, -.018], Welch's $t(77.46) = -2.15$, $p = .035$, $d = -0.49$
- Starting income, $M = -.43$, 95% CI [-.62, -.23], $t(244) = -4.29$, $p < .001$, $d = -0.55$
- Job security, $M = -.23$, 95% CI [-.44, -.017], Welch's $t(74.80) = -2.16$, $p = .034$, $d = -0.50$
- Career advancement, $M = -.30$, 95% CI [-.52, -.081], Welch's $t(77.34) = -2.74$, $p = .008$, $d = -0.62$.

Perceived Prestige and Status

Six independent samples *t* tests were employed to investigate if there are any statistically significant differences in perceived prestige and status of nursing profession between men and women. Descriptive analysis revealed that women displayed more favorable attitudes toward nursing prestige and status compared to men

(Figure 26 for mean differences in perceived prestige and status of nursing career between men and women).

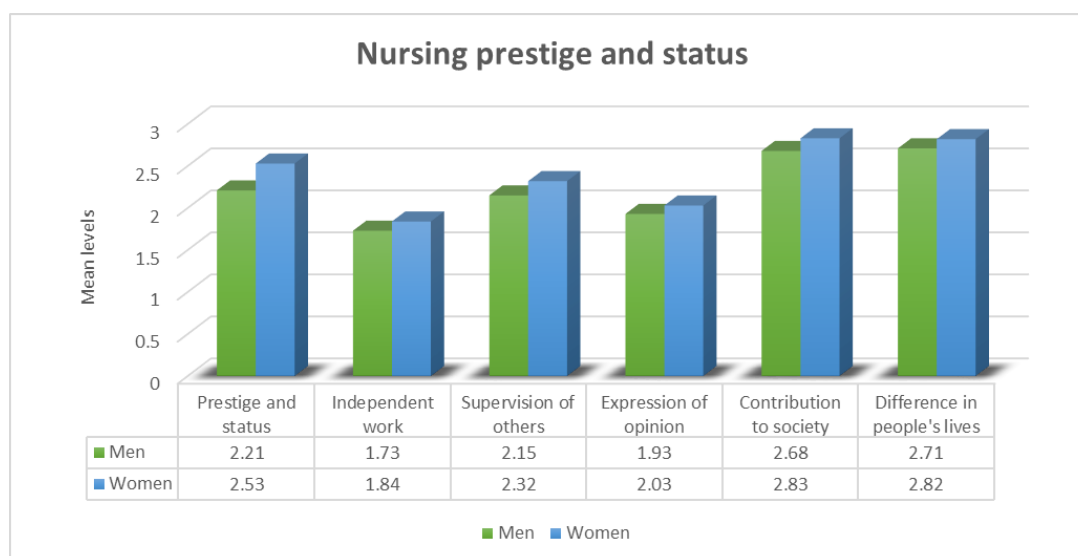


Figure 26. Mean differences in perceived prestige and status of nursing career between men and women.

Independent samples *t* tests indicated a statistically significant mean difference in perceived nursing prestige and status between men and women, $M = -.32$, 95% CI $[-.52, -.12]$, $t(246) = -3.13$, $p = .002$, $d = -0.40$. However, results revealed nonstatistically significant mean differences between men and women in nursing perceptions of:

- Independent work, $M = -.11$, 95% CI [-.31, .091], $t(246) = -1.09$, $p = .28$, $d = -0.14$
- Supervision of others, $M = -.18$, 95% CI [-.40, .036], $t(244) = -1.64$, $p = .10$, $d = -0.21$
- Expression of opinion, $M = -.098$, 95% CI [-.30, .10], $t(244) = -.96$, $p = .34$, $d = -0.12$
- Contribution to society, $M = -.15$, 95% CI [-.34, .041], *Welch's t* (73.13) = -1.57, $p = .12$, $d = -0.34$
- Difference in people's lives, $M = -.11$, 95% CI [-.30, .069], *Welch's t* (72.95) = -1.24, $p = .22$, $d = -0.29$.

Perceived Working Conditions

Six independent samples *t* tests were conducted to explore if there are any statistically significant differences in perceived working conditions of nursing career between men and women. Descriptive analysis revealed that men and women expressed slightly differently attitudes toward different nursing working conditions (Figure 27 for mean differences in perceived working conditions of nursing profession between men and women).

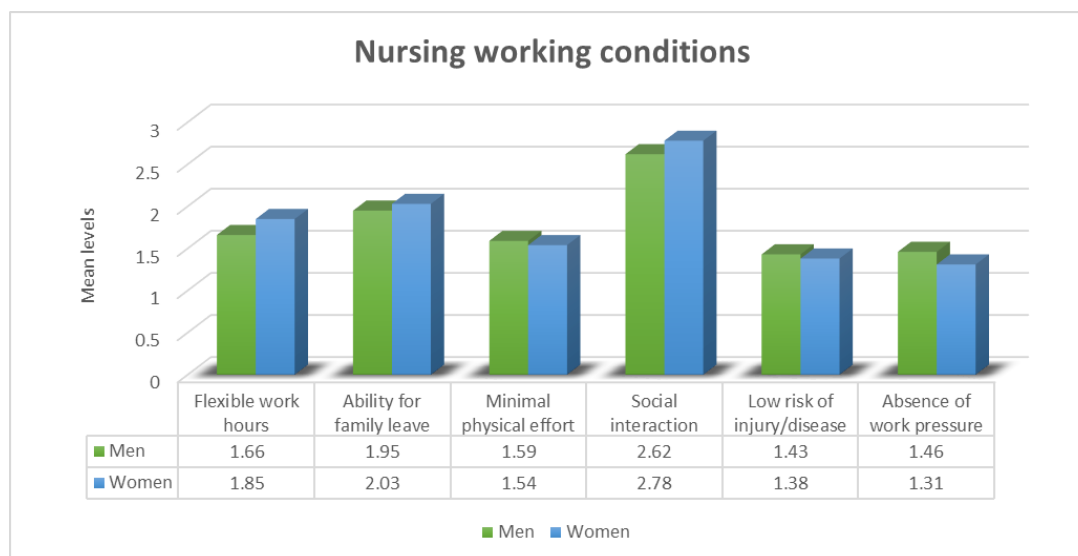


Figure 27. Mean differences in perceived working conditions of nursing profession between men and women.

Nevertheless, independent samples *t* tests indicated nonstatistically significant mean differences between men and women in nursing perceptions of:

- Flexible work hours, $M = -.19$, 95% CI [-.41, .019], $t(246) = -1.79$, $p = .075$, $d = -0.23$
- Ability for family leave, $M = -.080$, 95% CI [-.28, .12], $t(246) = -.79$, $p = .43$, $d = -0.10$
- Minimal physical effort, $M = .050$, 95% CI [-.15, .25], $t(247) = .51$, $p = .61$, $d = 0.06$
- Social interaction, $M = -.16$, 95% CI [-.37, .041], *Welch's t* (71.26) = -1.59, $p = .12$, $d = -0.38$
- Low risk of injury/disease, $M = .043$, 95% CI [-.14, .22], $t(245) = .47$, $p = .64$, $d = 0.06$

- Absence of work pressure, $M = .16$, 95% CI $[-.065, .38]$, *Welch's t* (76.89) = 1.41, $p = .16$, $d = 0.32$.

Miscellaneous Aspects

Three independent samples *t* tests were employed to investigate if there are any statistically significant differences in miscellaneous aspects of nursing career between men and women. Descriptive analysis revealed that men considered slightly more that nursing is more suitable for women, while women believed slightly more that they would be successful in nursing. Lastly, men considered slightly more that nurses work with people who share the same socioeconomic background as theirs (Figure 28 for mean differences in miscellaneous aspects of nursing profession between men and women).

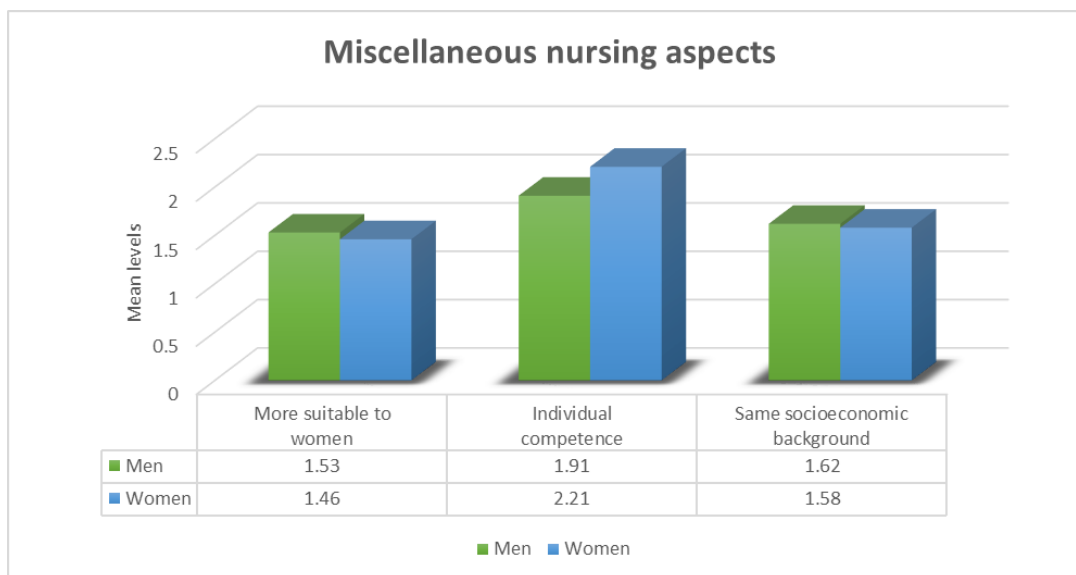


Figure 28. Mean differences in miscellaneous aspects of nursing profession between men and women.

Independent samples t tests indicated a statistically significant mean difference between men and women in perceived individual competence in nursing, $M = -.30$, 95% CI $[-.56, -.038]$, $t(244) = -2.26$, $p = .025$, $d = -0.29$. However, results revealed nonstatistically significant mean differences between men and women in nursing perceptions of:

- Suitability to women, $M = .072$, 95% CI $[-.14, .28]$, $t(244) = .67$, $p = .50$, $d = 0.09$
- Same socioeconomic background, $M = .043$, 95% CI $[-.17, .26]$, $t(246) = .40$, $p = .69$, $d = 0.05$.

Differences in Perception of Nursing Career between Majoring Groups

To investigate potential differences in perceptions of the nursing career between students who majored in nursing and those who do not, several independent samples t tests were conducted.

Perceived Job Prospects

Four independent samples t tests were conducted to explore if there are any statistically significant differences in perceived job prospects of nursing career between students who majored in nursing and those who do not. Descriptive analysis revealed that students who majored in nursing expressed more positive attitudes toward nursing job prospects, as compared to those who do not (Figure 29 for mean differences in perceived job prospects of nursing profession between students who majored in nursing and those who do not).

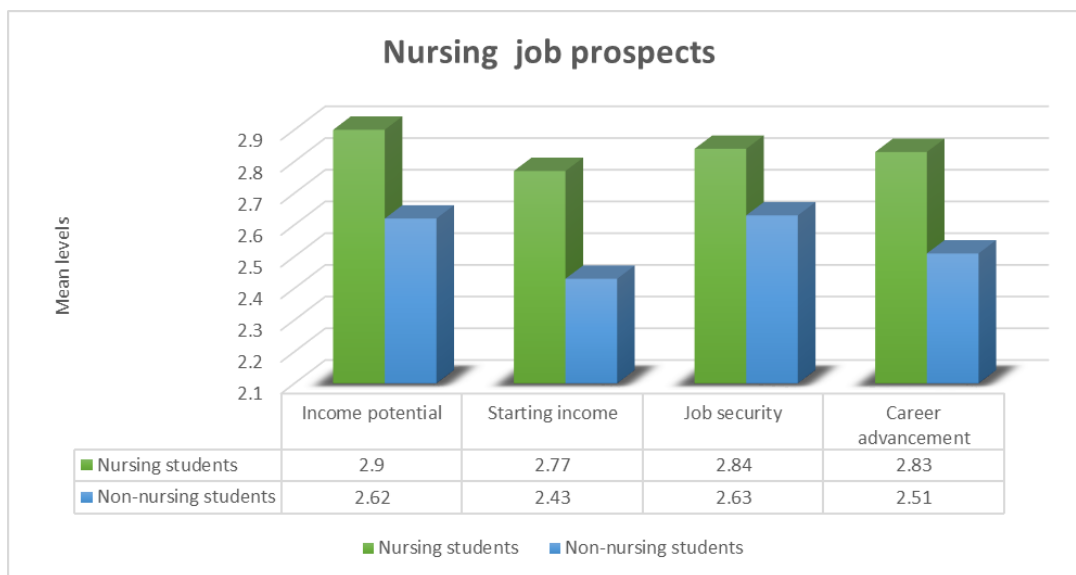


Figure 29. Mean differences in perceived job prospects of nursing profession between students who majored in nursing and those who do not.

Independent samples *t* tests indicated statistically significant mean differences between students who majored in nursing and those who do not in nursing perceptions of:

- Income potential, $M = .29$, 95% CI [.15, .42], *Welch's t* (143.80) = 4.19, $p < .001$, $d = 0.70$
- Starting income, $M = .34$, 95% CI [.19, .50], *Welch's t* (134.11) = 4.42, $p < .001$, $d = 0.76$
- Job security, $M = .21$, 95% CI [.071, .35], *Welch's t* (141.30) = 3.01, $p = .003$, $d = 0.51$
- Career advancement, $M = .32$, 95% CI [.18, .46], *Welch's t* (146.39) = 4.48, $p < .001$, $d = 0.74$

Perceived Prestige and Status

Six independent samples t tests were employed to investigate if there are any statistically significant differences in perceived prestige and status of nursing profession between students who majored in nursing and those who do not. Descriptive analysis revealed that students who majored in nursing displayed favorable attitudes toward nursing prestige and status in four instances, while similar attitudes were observed in two cases (Figure 30 for mean differences in perceived prestige and status of nursing career between students who majored in nursing and those who do not).

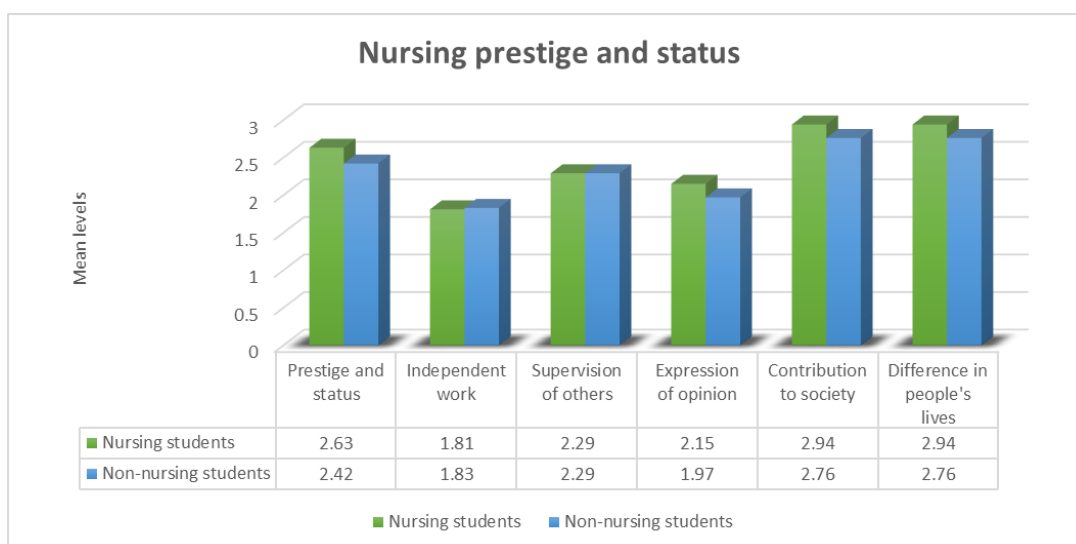


Figure 30. Mean differences in perceived prestige and status of nursing career between students who majored in nursing and those who do not.

Independent samples t tests indicated statistically significant mean differences between students who majored in nursing and those who do not in perceived nursing:

- Prestige and status, $M = .22$, 95% CI [.042, .39], *Welch's t* (104.40) = 2.46, $p = .015$, $d = 0.48$

- Contribution to society, $M = .18$, 95% CI [.080, .29], *Welch's t* (206.70) = 3.50, $p = .001$, $d = 0.49$
- Difference in people's lives, $M = .18$, 95% CI [.078, .28], *Welch's t* (200.63) = 3.49, $p < .001$, $d = 0.49$.

However, results revealed nonstatistically significant mean differences between students who majored in nursing and those who do not in nursing perceptions of:

- Independent work, $M = -.021$, 95% CI [-.23, .19], t (249) = $-.20$, $p = .84$, $d = -0.03$
- Supervision of others, $M = -.006$, 95% CI [-.21, .20], *Welch's t* (90.69) = $-.058$, $p = .95$, $d = -0.01$
- Expression of opinion, $M = .18$, 95% CI [-.025, .38], t (247) = 1.73, $p = .086$, $d = 0.22$.

Perceived Working Conditions

Six independent samples t tests were conducted to explore if there are any statistically significant differences in perceived working conditions of nursing career between students who majored in nursing and those who do not. Descriptive analysis revealed that majoring groups expressed slightly differently attitudes toward different aspects of nursing working conditions (Figure 31 for mean differences in perceived working conditions of nursing profession between students who majored in nursing and those who do not).

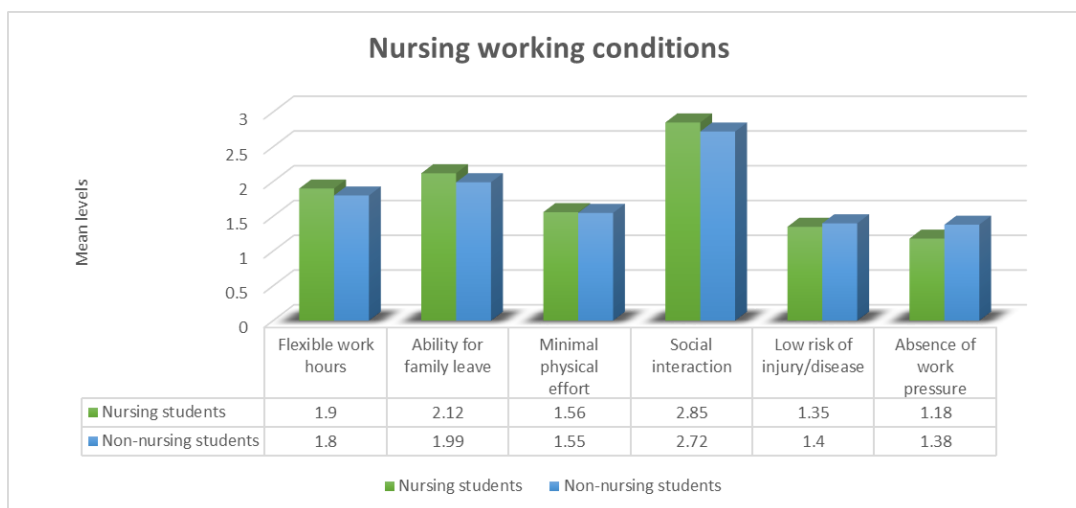


Figure 31. Mean differences in perceived working conditions of nursing profession between students who majored in nursing and those who do not.

Independent samples *t* tests indicated a statistically significant mean difference in perceived absence of work pressure between majoring groups, $M = -.20$, 95% CI [-.37, -.035], *Welch's t* (112.81) = -2.41, $p = .018$, $d = -0.45$. Nevertheless, results revealed nonstatistically significant mean differences between students who majored in nursing and those who do not in nursing perceptions of:

- Flexible work hours, $M = .11$, 95% CI [-.11, .32], *Welch's t* (86.19) = .99, $p = .32$, $d = 0.21$
- Ability for family leave, $M = .13$, 95% CI [-.080, .33], t (249) = 1.21, $p = .23$, $d = 0.15$
- Minimal physical effort, $M = .008$, 95% CI [-.19, .21], t (250) = .076, $p = .94$, $d = 0.01$
- Social interaction, $M = .12$, 95% CI [-.027, .28], *Welch's t* (99.24) = 1.63, $p = .11$, $d = 0.33$

- Low risk of injury/disease, $M = -.058$, 95% CI $[-.24, .12]$, $t(248) = -.63$, $p = .53$, $d = -0.08$.

Miscellaneous Aspects

Three independent sample t tests were employed to investigate if there are any statistically significant differences in miscellaneous aspects of nursing career between students who majored in nursing and those who do not. Descriptive analysis revealed that non nursing students considered slightly more that nursing is more suitable to women, while nursing students believed notably more that they would be successful in nursing. Lastly, nonnursing students considered slightly more that nurses work with people who share the same socioeconomic background as theirs (Figure 32 for mean differences in miscellaneous aspects of nursing profession between students who majored in nursing and those who do not).

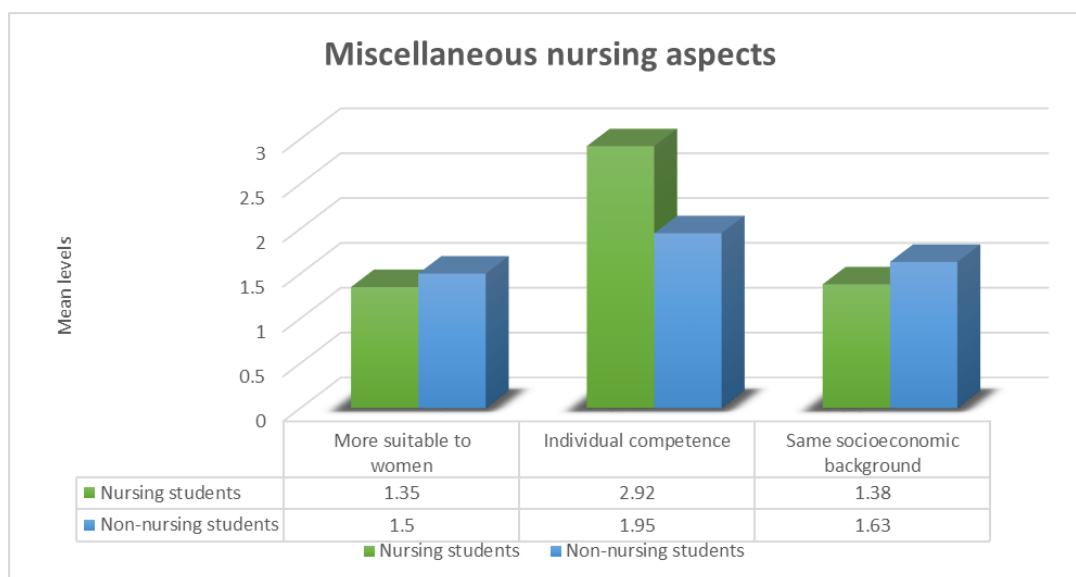


Figure 32. Mean differences in miscellaneous aspects of nursing profession between students who majored in nursing and those who do not.

Independent samples *t* tests indicated statistically significant mean differences between students who majored in nursing and those who do not in nursing perceptions of:

- Individual competence, $M = .97$, 95% CI [.81, 1.12], *Welch's t* (210.69) = 12.44, $p < .001$, $d = 1.71$.
- Same socioeconomic background, $M = -.24$, 95% CI [-.46, -.028], t (249) = -2.23, $p = .027$, $d = 0.28$.

However, results revealed a nonstatistically significant difference between students who majored in nursing and those who do not in perceived nursing suitability to women, $M = -.15$, 95% CI [-.35, .048], *Welch's t* (89.47) = -1.51, $p = .13$, $d = -0.32$.

Reasons for Considering a Nursing Career

Respondents were asked if they had considered a career in nursing and provided the reasons of having done or not done so. I examined each answer to the open-ended question and identified certain themes.

In reference to the reasons of considering a nursing career, three prevailing themes emerged, namely contribution to society and people's well-being, job prospects, and family influences.

Contribution to Society and People's Well-Being

A considerable number of participants reported that they had considered a career in nursing, because they wanted to make a difference in society and people's lives.

Representative responses included:

- “I truly believe Nursing is a calling and a noble profession. I am fulfilling my purpose in life.” or “I am in nursing because it is serving humanity, is the core for my existence.”
- “I’m interested in caring for people and families at the most vulnerable time in their life.”
- “I want to make a difference in people’s lives using compassion and science.” or “It’s a chance for me to directly affect a person’s life.” or “I love helping people and learning how to make a lasting impact on others.”

Job Prospects

Several individuals mentioned that they were attracted to the profession of nursing due to the promising job prospects thereof. Indicatively, participants reported that:

- “Nursing allows flexibility to move and advance through the career. It is in high demand.”
- “Great way to give back with great benefits and job security.” or “see nursing as a lifelong career with many opportunities and benefits.”
- “I was told they make a lot of money.” or “job security and my grandparents always told me they were paid well.”

Family Influences

Certain respondents appeared to be influenced by the career paths of their family members and their experiences. Illustrative instances involved:

- “Because of my grandmother. She has told me so many stories about her being a nurse when she was younger and I used to go to work with her when I was younger and I love it every single time.”
- “I did consider nursing as a career because my grandmother is a nurse and nursing was all I ever knew”
- “Because my father died of cancer, I have chronic asthma and my mother is a nurse. Being around all of these things made me want to be better than the nurses I had when I was sick and to make a difference in another person’s life while they are sick.” or “My dad was sick a couple years ago and I saw how those nurses nursed him back to health.”

The reasons for not considering a nursing career is concerning, but the primary themes state interests in other fields as being some of the reasons for not choosing the nursing the profession.

Peculiarities of the Profession

A number of respondents mentioned being deterred by the peculiarities of profession, including exposure to blood and demanding or stressful situations.

- “I don’t have what it takes to be a nurse (care, patient, time, and I don’t like the site of blood)” or “I can’t stand the site of blood or needles.”
- “Psychologically, I don’t think that I can work around a lot of sick and hurt people.” or “too much emotional attachment and trauma.”
- “My mother was a nurse for 14 years, my grandmother was a nurse for 51 years and my aunt has been a nurse practitioner for 12 years. Being in

healthcare isn't easy and you have long demanding hours. I remember being a kid my mom missed some important things in my life because her job had long hours. I never wanted the same.”

Summary

Based on the obtained results, the following remarks could be made:

- Nursing was positively perceived in terms of job prospects, prestige and status, while working conditions were considered to be rather demanding and hazardous to the health.
- Nursing was deemed suitable for both men and women and feelings of competence regarding the field were expressed by some participants. Although, over half of the respondents believed that nurses work with individuals with different socioeconomic background from theirs.
- The contribution of nursing to society and people's lives concentrated the highest levels of agreement, whereas the absence of occupational hazards and work pressure the least.
- Women expressed favorable attitudes toward the perceived job prospects, and prestige-status of nursing and displayed higher levels of perceived competence in nursing.
- Nursing students perceived more positively the job prospects and prestige of nursing and more negatively the associated work pressure. Nursing students expressed higher levels of perceived competence in nursing, while nonnursing

students considered more that nurses work with people who share the same socioeconomic background as theirs.

- Respondents lastly indicated that they were motivated to pursue a career in nursing due to its contribution to society and people's lives, promising job prospects, as well as due to family influences and experiences. In contrast, individuals who had not considered a nursing career were mainly either interested in another field or were discouraged from the peculiarities of nursing profession.

Nevertheless, any conclusions should be drawn with caution, as certain methodological issues were identified. Particularly, a non-probability sampling method was employed and thus generalizations to the population interest are not feasible. While the highly unequal group sizes may have introduced a certain extent of bias that cannot be ignored.

The challenge at the beginning was getting enough African American students who were undergraduates and attending an HBCU which was the inclusion criteria to participate in the study. Initially starting with SurveyMonkey Audience ended up being difficult than originally thought with only six African American students responding, but did not attend an HBCU. I used the student population at the local HBCU which proved to be positive after receiving 386 responses. A sample size of 386 participants was initially collected; it was reduced to 295 cases due to certain exclusion criteria and missing data. Specifically, inclusion criteria involved being an African American

individual, attending an undergraduate program at an HBCU and being born in the United States.

In Chapter 5 there is further discussion of the results of the study and any similarities in the literature included in this study. Limitations and further recommendations for research are discussed. Chapter 4 includes the data collection, demographics, rationale for statistical analysis methods and a summary of the findings.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The focus of the present exploratory investigation pertained to the examination of the nursing perceptions of a sample of African American undergraduate students at an HBCU. Notably, I was interested in addressing the following research question:

RQ1: How do interest and gender play a role in African Americans students at an HBCU pursuing a career in nursing?

The dependent variable was African American student participants pursuing a career in nursing at an HBCU. The independent variable was the number of African American student participants pursuing a career in nursing at an HBCU. The measurement was done by comparing the means of the sums of questions 10 through 26 on the revised Career Values Scale.

H_01 : There will not be statistically significant differences in nursing perceptions toward the profession of nursing between male and females African American college students attending an HBCU. $H1n: \mu1 = \mu2$

H_{a1} : There will be a statistically significant difference in perceptions toward the profession of nursing between male and female African American college students attending an HBCU, with women expressing more positive attitudes toward the profession of nursing. $H1a: \mu1 \neq \mu2$

A questionnaire survey was prepared and administered via the online data collection platform SurveyMonkey Audience. The inclusion criteria for individuals to participate were (a) were African Americans, (b) attending an undergraduate program at

an HBCU, 18-25 of age, and (c) were born in the United States. Individuals who were both qualified and willing to participate were asked to provide their answers to certain demographic questions, as well as rate their attitudes toward the profession of nursing using a three-point Likert scale. I used the 19-item nursing scale to explore perceptions about nursing job prospects, prestige and status, working conditions, and certain miscellaneous aspects. Lastly, the survey consisted of one open-ended question to enable respondents to state why they either have or have not considered a career in nursing.

The sample obtained for this study was 386 African American students enrolled in an HBCU; however the final sample was reduced to 295 due to certain exclusion criteria and missing data. Specifically, inclusion criteria involved being an African American individual, attending an undergraduate program at an HBCU and being born in the United States. I employed the Statistical Package for Social Sciences (SPSS), version 23.0, to analyze the data obtained. I conducted a descriptive analysis to identify (a) the number of African American HBCU students who attended an undergraduate nursing program, and (b) the perceptions of African American HBCU students in regard to the profession of nursing. I employed an inferential analysis to assess if there were any statistically significant differences between men and women, as well as between students who majored in nursing and those who did not. I considered independent samples *t* tests the appropriate statistical analysis for the hypotheses under investigation. Finally, I performed a thorough examination of the answers provided to the open-ended question, making note of enlightening themes in responses that would offer insight into why students either are or are not attracted to the career of nursing.

Study Findings and Interpretation

A wealth of data was obtained from the analyses. I attempted to present them in a succinct manner to ensure the credibility of the report. Therefore, the interpretations of the results are presented in three subsections, descriptive analyses, inferential analyses, and an open-ended question.

Descriptive Analyses

A frequency analysis revealed that only 24% of the African American HBCU students attended an undergraduate program in nursing. The other 76% of students reported a variety of other majors, including undergraduate programs in business management, life sciences (e.g., biology), and social sciences (e.g., psychology).

Regarding the perception of nursing as a career by African American HBCU students, several insights were gained by the relevant frequency analysis. The job prospects of nursing, including income potential, starting income, job security, and opportunities for career advancement, were positively regarded by some respondents. Particularly, the income potential and job security were perceived favorably, whereas nursing starting income was considered by certain participants to be moderately satisfactory. As far as the prestige and status of nursing is concerned, the majority of respondents argued that the nursing is an important contribution to society and a difference in people's lives. Almost half of the students were skeptical about the ability of nurses to work independently, supervise others, and express their opinion regarding work issues.

When the question was asked about the working conditions of the nursing profession, negative attitudes were observed in almost all cases. Some participants felt that nurses face a lot of pressure and are placed at high risk of injuries and diseases from work. Additionally, flexibility of work hours and ability to take time off for family leave was perceived as limited. The only exception was the interaction of nurses with other individuals at work, where respondents argued that nurses are involved in a satisfactory amount of social interactions. As to miscellaneous aspects of nursing, students did not consider that nursing is more suitable to women, but some of them stated that nurses did not share the same socioeconomic background as they had experienced. In addition, half of the respondents thought that they could be competent professionals in the field of nursing, with the other half being either uncertain or not certain at all. Lastly, a descriptive analysis described prestige and the status of nursing as a career with positive attitudes and was followed by nursing job prospects, whereas nurses' working conditions gathered the least positive attitudes.

Inferential Analyses

As far as gender differences regarding attitudes toward the nursing profession are concerned, the results indicate that women perceived more favorably the job prospects of nursing, including its income potential, starting income, job security, and career advancement. Some women identified that the profession of nursing provided prestige and status and reported higher levels of confidence in their potential competence as nurses. Women and men expressed similar attitudes regarding the working conditions of

nursing and its suitability to women; thus, nonsignificant differences were observed in those cases.

In reference to differences in perceptions of nursing career between students who majored in nursing and those who did not, quite expectedly, nursing students considered all job prospects of nursing to be satisfactory. Nursing students perceived nursing as a profession with prestige and status, as well as a profession that makes an important contribution to society and a difference in people's lives, significantly more than nonnursing students. In addition, students who majored in nursing considered that a nursing career is linked to work pressure and that nurses do not share the same socioeconomic background as their patients. However, they expressed higher confidence in their ability to practice the profession of nursing.

Open-Ended Question

The analysis of the open-ended question led to the identification of three key themes as reasons for considering a career in nursing, and two primary themes across reasons for not considering the profession of nursing. On the topic of reasons for considering a career in nursing, students appeared to be motivated by the contribution of nursing to society and people's well-being. In numerous instances, survey responses indicated factors such as healing, support assistance, education, and service in general as reasons why nursing is regarded as a noble and purposeful profession. The auspicious aspects of nursing that pertain to its income potential, job security, and opportunities for career advancement emerged as other influential factors of students' consideration. Nursing allows flexibility in advancing through the career, along with good money.

Finally, a lesser number of respondents indicated that their family experiences shaped their positive perceptions of nursing. Those experiences included either a family member who was working as a nurse and functioned as a role model, or family members who were cared for by exceptional nurses and inspired individuals to follow the same path, thereby fulfilling a purpose in life by serving and giving back to people when help is needed.

The opportunity for nurses to set their own hours, in relation to the specialty of nursing, was viewed as a measure of job security by some students. Such results agree with Hode (2005), Meadus and Twomey (2007), and Whittock and Leonard (2003), who reported that men were interested in the career of nursing because they perceived its salary, job security, and opportunities for career advancement to be promising, and its geographic mobility an attractive benefit. These results are in agreement with the notion of choosing nursing when it comes to learning how to make a lasting impact on a person's life and how to care for others at their most vulnerable time.

A recurring reason for not considering the profession of nursing identified by several students was an interest in another area of study. The working conditions appeared to discourage less than 4% of the total number of participants. Some participants stated it takes a special, a dedicated person to care for people who are sick. The majority of students who noted working conditions are discouraging also indicated stressful situations and the frequent exposure to blood as being the a prominent deterrents. Participants said they did not believe they had what it took to be a nurse. Notably, one student did not believe they had the patience and time to spend working

around ill people. Demanding hours was another recurring response for not wanting to choose nursing as a career

Limitations

Importantly, readers were informed about certain methodological limitations that were present in this study. The first critical issue refers to the representativeness of the sample and the generality of the findings. In particular, I employed a non-probabilistic sampling method and a convenience sample was recruited online. Although this method is less time-consuming and more affordable compared to probabilistic sampling methods, it does not allow for generalizations of the population of interest to be made. The rationale of this restriction pertains to non-probabilistic sampling methods do not enable each individual to have an equal chance of being included in the sample. For instance, individuals without internet access were ipso facto excluded from the study. Although, this procedure does not control for an equal distribution of demographic variables, and thus the sample cannot and should not be considered representative of the population. Indicatively, in this study, a disproportional ratio of men to women was observed, with almost 76% of the respondents being women. Therefore, situations are apparent that conclusions cannot be assumed to accurately represent the attitudes of men.

Another research tool used was a quasi-experimental which examines the differences of perceptions of nursing between men and women, as well as between students who majored in nursing and those who did not major in nursing. Quasi-experimental designs do not control for extraneous variables, as allocation to groups is not random. However, in situations of nonrandom allocation, a potential effect of

confounding variables of interest cannot be excluded. As an illustration, the differences observed in men and women may not be solely attributed to their gender, but to their socioeconomic status as well.

Lastly, it should be mentioned that the strength of the research is also its weakness. In other words, the focus of this exploratory investigation was on the nursing perceptions of African American students who attended an undergraduate program at an HBCU. Although this scope enabled the researcher to gain several insights into the attitudes of those individuals, it prevented the researcher from the assessment of nursing perceptions in a wider audience.

Recommendation

The present study revealed that only a minor number of African American students attended a nursing program at an HBCU. Taking into account that research exploring the nursing perceptions of African American HBCU students is scarce, a variety of recommendations can be proposed to interested scholars. Specifically, the relevant field would benefit from methodological improvements and conceptual enhancements.

First, it is important to assess nursing perceptions in samples of larger sizes, as larger samples enable researchers to draw conclusions with greater accuracy and confidence. It is necessary to examine those attitudes with the employment of reliable and valid instruments; thus, the need for psychometricians to contribute to the development of sound scales. Finally, it is significant that experimental research designs are employed to control and assess potential confounding variables.

In terms of conceptual recommendations, it would be interesting to conduct longitudinal studies and examine how the career choices of African American individuals change across time and, what influences those changes. This type of study allows researchers to complementary assess the theory of Gottfredson (1981; 1996; 2002) on the stages of career development by recruiting a population that is typically under researched.

In terms of methodological improvements, qualitative research is a suggestion to gain in-depth insights of students' attitudes toward nursing. In terms of, semi-structured interviews could be conducted to provide African American students with the opportunity to freely express their concerns, thereby providing the opportunity to influence successful policy changes. A qualitative research is more objective and reliable and can utilize stats to generalize the findings. Importantly, qualitative research assumes that the sample is a representation of the more prominent population.

In addition, a comparison of nursing perceptions between African Americans and European Americans revealed valuable information that could be used to further explain the underrepresentation of African Americans in healthcare workforce could be achieved. Along the same line, attitudes toward nursing among African Americans who study at HBCUs and African Americans who attend undergraduate programs in other academic institutions could be examined. Further, longitudinal studies can explore whether nursing perceptions are dependent on the quality of education offered.

Implications for Positive Social Change

The development of more marketing strategies for the field of nursing should continue to be the primary focus on improving nursing diversity and highlighting how the

nursing profession makes a positive contribution to society and enhances public knowledge of the career paths that are available. Relevant stakeholders, such as nurse educators, middle school and high school counselors, and hospital marketers, can take the necessary steps to improve the perception of nursing as a career choice among African American college students. Parents and other stakeholders, such as educational institutions, should take the opportunity to assess whether their roles in influencing the careers of children have a positive influence on jobs.

With a clear understanding of the values and self-concept that African Americans use to make their career choices, the results may lead to social change by adding or changing some processes and policies that would meet the unique needs of this population. The implications of having a greater number of African American healthcare practitioners are numerous. For one, increased representation could lead to positive social changes by making improved access to care and better clinical outcomes in African American communities available. The results of this study would provide information that could be used to develop ways to attract a greater number of African American women and men into the nursing profession that leads to a positive societal change to African Americans communities across the nation.

Conclusion

The results of this research are in alignment with the findings of previous studies. The findings concluded from this exploratory investigation are being reported for ease of comparison. The demonstration of analysis, such as African American students attending an undergraduate program in nursing at an HBCU and pursuing a career in nursing, are

perceived favorably. Themes included are job prospects, compensation, status, and prestige. Nursing is considered demanding, stressful, and with occupational hazards by the same students. Nursing as a profession remains a suitable career choice for both genders. While some students' perception indicated that they felt nurses should work in areas where patients are from different socioeconomic backgrounds. Female participants expressed positive attitudes toward nursing job prospects and its prestige and status, and expressed higher confidence levels in their potential competence as nurses, in comparison to men participants who major in other careers. Lastly, the reason for considering a career in nursing includes its contribution to society, the ability to help people, and its job prospects. In contrast, respondents who do not consider the profession of nursing are working toward another career field. A number of these students said they do not want to work the long hours or work in a hazardous environment.

In comparison to the growing number of predominantly White institutions offering undergraduate nursing programs, only 32 HBCUs provide degrees in nursing. The engagement of proper allocation of resources to address the nursing shortage in the American healthcare workforce which is estimated to reach a shortage of 29% by 2020, as indicated by the Health Resources and Services Administration (Saha & Shipman, 2006) would have a positive outcome. The situation has led to an underrepresentation of African Americans in the healthcare workforce. It is quite worrisome to know that, although African Americans make up 15.2% of the American population, they represent only 5.2% of the healthcare professionals.

The study analyzed the perception of African American college students at HBCU institutions toward nursing as a career. The results of the study revealed factors that hinder or support students' choice to pursue nursing agree with Gottfredson's theory (1981; 2002; 1996). Gottfredson's theory of circumscription and compromise gives sensible directions on an individual career. Gottfredson's theory focuses on providing answers to the question, "Where do the abilities, interests, and other factors affecting career choice come from?" The study talks about the alternative means for HBCUs to enhance their marketing and communications used to motivate students to choose nursing as a career. The information provided by this research can assist in boosting the nursing career experience of African American college students within both predominantly White and historically Black institutional schools.

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Appendix A: Instrument

Measuring Attributes of Success in College Students

Source of items are listed following the items:

CSS (2001 College Student Survey)

BPS (Beginning Post-Secondary Students Longitudinal Study)

BB (Baccalaureate and Beyond Longitudinal Study)

Demographic Information

Please select a response for each of the following questions:

1. Do you consider yourself African American?

Yes (continue survey)

No (stop survey)

2. Do you attend a historically black college or university (HBCU)?

Yes (continue survey)

No (stop survey)

3. What is your year of birth? (Example: 1992)

Click to enter a date

4. Are you Male Female?

5. What is your declared major at this time?

Write your answer here

6. Have any of the other members of your family attended college? (BPS)

No

Yes Please specify: Sibling Parent Other

7. Do either of your parents work in healthcare?

Yes

No

8. What is your annual household income?

0- 24,999

\$25,001- 49,999

\$50,000 - \$99,999

Career Values

Please answer the following questions about nursing. I would like to know what you think, even if you aren't sure. Please, indicate how much you agree that each quality applies to nursing.

1. Does not apply
2. Applies somewhat
3. Applies

Example: Nurses work in a hospital 1 2 3

4. Nursing has good income potential 1 2 3
5. Nursing has good starting income 1 2 3
6. Nursing has good job security 1 2 3
7. Nursing has prestige and status 1 2 3
8. Nurses work independently 1 2 3
9. Nursing has good opportunities for career advancement 1 2 3
10. Nurses supervise others 1 2 3
11. Nurses have a lot of say in what happens on the job 1 2 3
12. Nurses have flexible work hours 1 2 3
13. Nurses are able to take time off for family leave 1 2
14. Women are better suited for Nursing. 1 2 3
15. I could do a good job in nursing 1 2 3
16. Nursing has minimal physical effort like heavy lifting at work 1 2 3
17. Nursing makes an important contribution to society 1 2 3
18. Nurses work with people who mostly come from the same background as me 1 2 3

1. Nurses interact a lot with other people at work 1 2 3
2. Nurses have low risk of injury/disease from work 1 2 3
3. Nurses make a difference in other people's lives 1 2 3
4. Nurses do not have a lot of pressure at work. 1 2 3

Optional: Write your answer here

Comments: Write your answer here

5. Have you ever considered a career in nursing? Why or why not?

Write your answer here.

Thank you for taking time to complete this survey.