HAMMER TO THE GLASS CEILING: THE EFFECTS OF TELECOMMUTING ON OPPORTUNITIES FOR CAREER ATTAINMENT

by

Tashika Hamilton

A dissertation submitted to the faculty of The
University of North Carolina Charlotte in
fulfillment of the requirements for the degree of
Doctor of Business Administration

Charlotte

2024

Approved by:

_____
Dr. Reginald Silver

_____
Dr. Laura Stanley

_____
Dr. Chandrika Johnson

_____
Dr. Scott Tonidandel

ABSTRACT

TASHIKA HAMILTON. Hammer to the Glass Ceiling: The Effects of Telecommuting on Opportunities for Career Attainment (Under the direction of DR. REGINALD A. SILVER)

Human Capital Theory has been widely used in academic research to explain the factors that affect career attainment and job promotion potential. Investing in human capital can improve career prospects. While previous studies have focused on human and social capital to explain leadership growth within organizations, this research takes a new approach by analyzing work type and how psychosocial support, human capital, and social capital influence employees' perception of career advancement. In this study, psychosocial support refers to trust, emotional support, and building strong social networks. Education, training and skills represent human capital, while network ties foster a diverse social level of sponsorship for social capital. All three variables played a role in moderating the relationships between gender, work type, and race as a catalyst for career attainment.

The results of this research suggest that gender moderates the relationship between human capital and career attainment. Similarly, work type was found to moderate the relationship between human capital and social capital. These findings suggest that the nature of the work environment, specifically as it relates to remote work and gender, plays a role in shaping human capital acquisition and its impact on career progression. Organizations should consider how to effectively leverage remote work arrangements to enhance human capital development and support employees' career growth.

Keywords: Work Type, Career Attainment, Promotion, Human Capital, Social Capital, People of Color

ACKNOWLEDGMENTS

I want to express my gratitude to everyone who supported me throughout this journey. First, my right-hand man, Mr. Kerr, thank you for your humbling support and faith in everything I aspire to become. I would also like to thank my corporate America family of 25 years, who provided me with the opportunity to achieve my lifelong dreams. My dear sister, Dr. Wesley, deserves a special thanks for hosting me at The Carter Estates and pushing me to stay committed to my academic goals. I am grateful to DBA Cohort V for the memories we have created, especially during our first year of virtual learning due to COVID-19 restrictions. Thank you for choosing me as the Cohort V tour guide to plan our adventures.

I am also grateful to my phenomenal committee. Dr. Tonidandel, thank you for understanding my vision and providing feedback required for my sample size and study. Dr. Stanley, thank you for supporting my work throughout this program and, most importantly, providing the methodological support I needed to be successful. Dr. Johnson, thank you for your encouraging words and support throughout this commitment. Dr. Silver, thank you for chairing my committee and keeping me on track. I cannot thank you enough for trusting in me and keeping me from fainting. Your leadership is reflected by your success in forming the most diverse and inclusive academic cohort I have ever experienced. Your involvement in this study marks the beginning of a significant journey towards greater equity and inclusivity in the workplace. Together, we will continue this research on the challenges faced by minorities and work towards fostering a more inclusive work environment.

DEDICATION

I dedicate this dissertation to my children, Destiny, Rafeale, and Keith, whose boundless inspiration propels me toward heights I once deemed unattainable. To my parents, bonus parents, siblings, and special friends, I extend my gratitude for your prayers and unwavering support. Your encouragement has been a guiding light throughout this journey, and I am profoundly thankful for the collective love and encouragement that has propelled me toward the achievement of this academic milestone.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

DV	Dependent Variable
DEI	Diversity Equity Inclusion
EENDEED	Enhanced Engagement Nurtured by Determination Efficacy and Exchange
HCT	Human Capital Theory
IV	Independent Variable
SCT	Social Capital Theory
SPSS	Statistical Package for Social Science
SSS	Social Support Scale
TMP	Top Management Position
TMT	Top Management Teams
US	United States
WFH	Work from Home
AVE	Average Variance Extracted

CHAPTER 1: INTRODUCTION

The expression "hammer to the glass ceiling" symbolizes the necessary action of breaking down the obstacles that women and people of color face when aspiring to executive positions. Although companies claim to value diversity, equity, and inclusion, they often only hire White men for top-level positions. Businesses have faced criticism for their lack of effort in promoting people of color to important leadership positions and for not providing a sense of value and equality for these individuals within the company (Center for Talent Innovation, 2019; O'Brien, 2016).

Kulik (2019) published literature about Hynmowitz and Schellhardt (1986) who introduced the metaphor "glass ceiling." According to Kulik (2019), Hynmowitz and Schellhardt (1986) intended the term to be used only for women. However, in compliance with government contracts and the U.S. Department of Labor's "non-discrimination" mission, the U.S. Department of Labor included racial minorities in the term's evaluation in 1991 (A Report on the Glass Ceiling Initiative, 1991).

The examination of metaphors such as "hammer to the glass ceiling" continues to work as powerful tools for conceptualizing and conveying complex sociocultural phenomena and their profound influence on the understanding and representation of the experiences for people of color. Research conducted by Kulik in 2019 shows that when metaphors incorporate considerations of sex, race, and people of color, they can shed light on the experiences of marginalized communities in new ways (Kulik, 2019). For instance, the "glass ceiling" metaphor, which was initially used to represent gender-based barriers, has expanded to encompass the complex layers of discrimination that individuals from racially diverse

backgrounds face. Additionally, Davidson's introduction of the "concrete ceiling" metaphor further emphasizes the nuanced struggles that minorities encounter (Davidson, 1997).

This conceptual framework vividly portrays the obstacles that obstruct the path to success for people of color, emphasizing the opacity of the barriers they face, which are often impenetrable and render the journey toward advancement and equality profoundly challenging. This dissertation investigates strategies organizations could consider shatter some of the barriers that limit people of color's access to top management positions (TMP). As stated by Humberd & Rouse (2016), mentoring has been suggested as one of the strategies by academics and practitioners to deal with these problems due to its capacity to help mentees enhance their career paths, offer psychosocial support, and promote personal and professional development (Humberd & Rouse, 2016).

Finally, the synthesis of these contributions, along with the "hammer to the glass ceiling" metaphor, not only reflects societal perceptions but also has the potential to shape them. Through metaphorical language, organizations can shed light on the multifaced challenges faced by people of color and draw more attention to the urgent need for true diversification, equity, and inclusion in the workplace.

1.1 State of the Problem

Human capital theory suggests that if minority groups, such as women and people of color, are not well represented in senior management positions, it could be assumed that they have less access to human capital resources, social capital, and psychosocial support. This assumption means that they may have lower chances of being promoted to executive-level roles in corporate America. Recent data shows that work dynamics have undergone significant transformations. The 2021 American Community Survey (ACS) 1-year estimates released by the

U.S. Census Bureau reveal that the percentage of individuals who predominantly work from home has tripled between 2019 and 2021(United States Census Bureau, 2022). The number of people who work from home has increased from 5.7% (approximately 9 million people) to 17.9% (27.6 million people) (United States Census Bureau, 2022). The shift in telecommuting has not only altered the traditional paradigms of work-life balance but also leads this research to rekindle interest in unpacking how such changes will impact people of color and promotion in corporate organizations. There is a gap in the knowledge of perceived barriers that people of color face as a result of this growing corporate work type shifting heavily towards telecommuting and an even broader gap in determining how to overcome any resulting limitations in access to social capital, human capital, and psychosocial support.

1.2 Research Questions

This dissertation is set to answer the following questions:

RQ1: How does Psychosocial Support affect Career Attainment?

RQ2: How does Human Capital affect Career Attainment?

RQ3: How does Social Capital affect Career Attainment?

RQ4: Does Gender moderate the relationship between Psychosocial Support and Career Attainment?

RQ5: Does Gender moderate the relationship between Human Capital and Career Attainment?

RQ6: Does Gender moderate the relationship between Social Capital and Career Attainment?

RQ7: Does Work Type moderate the relationship between Psychosocial Support and Career Attainment?

RQ8: Does Work Type moderate the relationship between Human Capital and Career Attainment?

RQ9: Does Work Type moderate the relationship between Social Capital and Career Attainment?

RQ10: Does Race moderate the relationship between Psychosocial Support and Career Attainment?

RQ11: Does Race moderate the relationship between Human Capital and Career Attainment?

RQ12: Does Race moderate the relationship between Social Capital and Career Attainment?

Over the last two decades, many Fortune 500 companies have made a deliberate effort to invest in diversity, equity, and inclusion (DEI) initiatives. However, employees often view these initiatives as just superficial gestures (Alliance for Board Diversity, 2021). Notable in several industries, however, the lack of diversity is particularly evident in the finance industry, where there is a noticeable lack of diversity among executives, especially people of color (Herren, 2022). Regardless of one's race, advancing in a career or understanding what it takes to reach top management teams (TMT) in an organization remains the same.

Researchers, such as James (2000), have studied the connection between race-based discrimination in treatment and the differences in work-related experiences and outcomes between Black and White managers. James (2000) stresses that the association between race and work-related experiences is still crucial. The study examines the prediction of outcomes based on education and training, which represents human capital, racial similarity of network ties, and the proportion of strong ties, which represents social capital (James, 2000).

Recent research suggests an opportunity for expanding James's 2000 study to include factors such as gender, work type, and race for a deeper understanding of how these variables affect psychosocial support, human and social capital. Additionally, it is essential to examine these predictors and their impacts on people of color. According to James' survey data, Black managers in Fortune 500 financial services companies received less psychosocial support and had a slower promotion rate than their White peers. Race played a crucial role in these results. Overall, there is a need to review remote work to understand if it increases the disparity of people of color in top management and board of director positions.

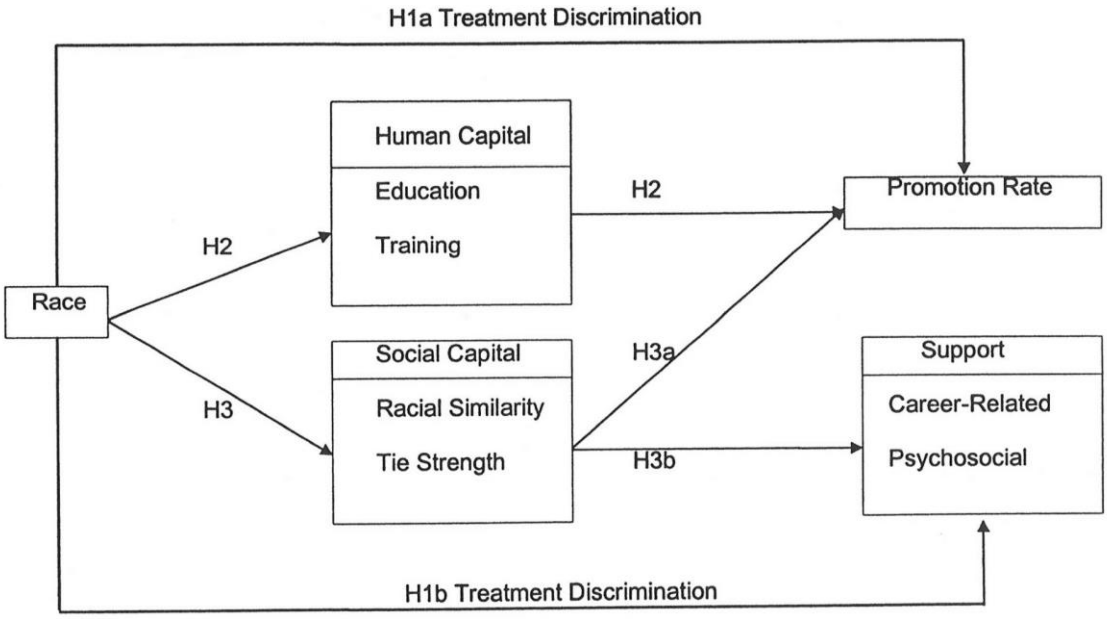


Figure 1: Conceptual Model investigated in Race-Related Differences in Promotions and Support: Underlying Effects of Human and Social Capital study and the hypotheses' linkages (James, 2000 #36).

1.3 Research Objective

This dissertation focuses on career attainment, defined as the highest managerial level an employee has reached through promotion, while acknowledging that other outcomes are also important and can contribute to career advancement in corporate America (Hurley, 1999). This research examines the relationship between psychosocial support and career attainment, human capital and career attainment, social capital and career attainment, and the moderating impacts of gender, work type, and race on people of color in corporate America.

According to Becker (1975), those who support human capital theory claim that disparities in individual advancement or performance, which result from investments in human capital such as education and training, lead to uneven merit and promotion rates between individuals of color and non-people of color (Becker, 1975). Burt (1992) defines social capital theory as the reasoning behind the establishment and importance of developmental relationships. Social capital theory emphasizes the value that a manager brings through the people they work with (Burt, 1992). The theory suggests that differences between individuals in a social context can result in inequalities. The extent to which a manager benefits from their intelligence, education, and seniority is dependent on their position within the social structure of the organization. Some managers are particularly valuable to a company because of their ability to coordinate with other people, as highlighted by Burt in 1992. Social capital theory also emphasizes that employees who possess strong connections through cultivating relationships in the workplace have an advantage over those who lack such networking skills (Burt, 1992).

This dissertation contributes to the historical literature that studies diversity initiatives in organizations. These initiatives aim to promote business growth and establish a genuinely inclusive workplace. As per Adamovic et al. (2023), the absence of networking with influential

decision-makers is a potential cause of the underrepresentation of women and people of color in senior management positions (Adamovic & Leibbrandt, 2023).

This research challenges the notion that individuals are promoted based on their connections rather than their expertise (Adamovic & Leibbrandt, 2023). By highlighting significant factors such as work type, psychosocial support, human capital and social capital, this study aims to elucidate the elements that drive influence career attainment with a lens on the implications for people of color.

While some studies, such as Hurley et al. (1997), have shown that certain social connections can assist employees in obtaining promotions (Hurley, 1997, p.66.), further research is required to establish the path for people of color to achieve leadership positions in demanding organizations without encountering discrimination due to a lack of social resources.

To establish a genuinely diverse workforce, it is important to offer equal opportunities for people of color to advance their careers in corporate America. Companies can boost their comprehension of career determinants to better equip talented employees for growth. Employees who recognize their potential for senior positions will also benefit from improved career planning (Hurley et al., 1997).

1.4 Organization of this Dissertation

This dissertation is structured into five chapters. The first chapter provides an introduction that covers the foundational background and presents research statements and questions. Chapter 2 includes a literature review and essential definitions of variables that support the hypothesis development and research model. In the third chapter, the proposed methods and procedures for survey data collection and analysis are discussed. Chapter 4 will include reports and analysis of the research results. Finally, the fifth chapter will discuss the

limitations of the results, conclude the dissertation, and provide recommendations for future research.

CHAPTER 2: LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

This chapter emphasizes the pivotal theoretical underpinnings derived from the existing literature, which serves as the foundation for the conceptual frameworks utilized in this research. Chapter 2 comprehensively synthesizes the literature and formulates hypotheses concerning the intricate interplay between employee experiences and career attainment. Moreover, it delves into the nuanced understanding of career advancements, dissecting the influence of critical psychosocial support, human capital components such as educational achievements, professional proficiencies, and training, and the impact of social capital encompassing mentorship, sponsorship, and networking within corporate settings. The review also navigates the intricate terrain of how gender, work type, and race function as moderating variables, shaping the dynamics of these factors within the context of career progression.

2.1 Introduction

The work environment can sometimes be difficult, particularly when White males with the same level of professional experience as women and people of color are promoted more quickly. This can leave those who have been passed over for a position feeling frustrated and having to repress their emotions, even though they are qualified for the job. Devaro (2018) proposed a theory called the "Invisibility Hypothesis," which suggests that individuals with connections in their social networks, such as an "old boys club," have a higher chance of having their skills noticed by potential employers (Devaro et al., 2018). This theory also implies that discrimination exists when it comes to promotions.

Employers who have access to private information about their workers' productivity can take advantage of highly productive workers who are not as visible to other employers, allowing the employer to earn excess profits (Devaro et al., 2018). White professionals appear to have an

edge on social networks because they mingle in the same social networks as White executives (Silver, 2013). Silver's 2013 research pointed out that minority professionals face disadvantages since they are less likely to mingle in the same social settings as White executives (Silver, 2013).

Koopman et al. in 2023 suggest a workplace culture that promotes political correctness and emphasizes the importance of understanding the impact of language and behavior in social networks (Koopman et al., 2023). Research suggests that a crucial aspect of this approach involves being willing to change or avoid using words or actions that could potentially be offensive, thus developing an atmosphere of sensitivity and tolerance towards others. Literature published in 2020 states that over the past ten years, there has been a marked growth in political polarization in society, and whether consciously or unconsciously, employees at all levels carry their political ideology into their workplaces (Swigart et al., 2020).

In this study, it is argued that political ideology is distinct and therefore deserves attention from organizational researchers. The literature that examines political ideology from an identity-based perspective and explores its impact on various social dynamics, such as stereotyping, diversity in teams, and alignment between individuals and organizations, is then reviewed (Swigart et al., 2020). Political correctness in the workplace can manifest in various ways. It could mean refraining from sharing a vulgar joke for fear of offending someone, using gender-neutral language, avoiding sensitive or controversial topics altogether, or holding back from saying something that could be perceived as insensitive (Koopman et al., 2023). Additionally, an individual's political ideology can significantly impact how they allocate scarce resources such as wages and promotions (Swigart et al., 2020). The article points out that African Americans often face a difficult challenge in advancing their careers due to limited access to influential networks and high-level positions that have traditionally been dominated by Whites.

This challenge is often related to identity and can play a significant role in the development of professional relationships (Chanland & Murphy, 2018).

Because employees may hold strong opinions, engage in microaggressions, and be hesitant to interact with those who hold opposing views, managers and organizations must take political correctness into account when creating a comfortable and inclusive work environment.

For instance, Jack, a male employee, and Liz, a female coworker, found themselves in competition for the same promotion in a situation reported by Koopman et al. (2023). Jack initially congratulated Liz on her promotion, thinking it might have been brought about by a disparity in gender in the management structure of their division. However, after some thought, he became concerned that suggesting Liz's gender was the main factor in her promotion may upset someone. Despite his best efforts, Jack was concerned that Liz could feel unqualified for her new managerial position after hearing such a comment. He chose to control his original emotions after taking these things into account and changed his word choice accordingly (Koopman et al., 2023).

People of color often find themselves in a position where they must quickly learn how to navigate their way up the career ladder. When competing for jobs, and opportunities for promotions, it often becomes a matter of networking rather than qualifications, which can create additional obstacles for people of color (Hurley et al., 1997 p.66). The traditional "good old boy network" and informal social networks both play a role, indicating that a candidate's ability to advance in their profession is more determined by their connections than by their education and experience (Silver, 2013, p.24).

In a research study by Ahearn et al., (2004), political skills are defined as an employee’s ability to manage their own career growth while also influencing their peers to perform in ways

that benefit both their personal and organizational growth. This highlights the importance of politically astute employees who are more likely to act in ways that are suitable for a particular situation, ultimately contributing to the organization's growth by building social capital (Treadway et al., 2005 (Breland et al., 2007). Additionally, to understand how people of color succeed in the corporate environment, it is necessary to explore the interplay between personal traits, social networks, and psychosocial support. In a recent study by Harris, Brown, and Pattie (2022), they investigated how years of service and managers' human capital influence employee career advancement, addressing gaps in existing research.

Previous research studies have highlighted the necessity to reevaluate disparities in total monthly pay (TMP), particularly among individuals of color. This research delves into the intricate connections between career achievement and various factors, such as psychosocial assistance, human and social capital, building on the groundwork laid by James in 2000. It aims to determine if gender, race, and work arrangements, often referred to as "work type," play a role in moderating the relationships between these independent variables (IVs) and professional accomplishments, meaning career attainment. This research study examines the association between work type and career attainment and investigates whether working from home impacts the relationships between psychosocial characteristics and career attainment, social support and career attainment, and human capital and career attainment.

The United States Census 2020 results reveal that the Black population is the third-largest race or ethnic group in the country. However, Black individuals are not well-represented in the upper levels of leadership in Fortune 500 companies in the U.S (Measuring Racial and Ethnic Diversity for the 2020 Census, 2021). James (2000) found that in a Fortune 500 financial services company, Black managers reported less psychosocial support and a slower promotion

rate compared to their White peers, (James, 2000). James, (2000) found no significant differences between the Black and White samples for the human capital variables. Black managers were equally educated and had participated in an equivalent amount of training as their White counterparts (James, 2000). However, White managers reported having more social capital than Black managers. Whites had a significantly higher proportion of same-race and strong-tie relationships than did Blacks. Race remained a significant predictor, but participation in workplace training strongly predicted reported promotion rates.

Additional research indicated some form of treatment discrimination against Blacks and that race moderates the association between human capital and promotion rate. According to James, 2000, although social capital mediated the relationship between race and psychological support, it did not predict promotion rate, contrary to expectations (James, 2000 p. 212). This study aims to observe the moderating variables, gender and race, and their contextual influences on relationships between human capital and social capital as predictors of career attainment. Specifically, this study examines the relationship between psychosocial support and career attainment moderated by gender, work type, and race, examining the relationship between Human capital and career attainment moderated by gender, work type, and race.

2.2 Definitions of Career Attainment

According to Hurley (1999), Career Attainment is a crucial organizational experience for employees who want to advance their careers. It refers to the highest managerial level an individual has reached within their organization. Hurley (1999) focuses on understanding the effects of age, gender, and minority group status on managerial career attainment. However, the salary data was not included in the initial study conducted in 1994, which is highly correlated with career level. Although no salary data was available for those managers, the pay structure is

based on a grade system, and level and pay are closely associated. This justifies that increasing human capital can lead to a greater rate of financial return for the employee (Becker, 1975). James (2000) claims that promotions and salaries are interrelated. Salary typically increases as one advances in the organizational structure (James, 2000).

In 1999, Hurley conducted a study to assess the job success levels of women and people of color in the internal labor market. The study analyzed the impact of age, gender, and race on the career progression of Asian Americans, Black Americans, Hispanics, and women. The results confirmed that women and people of color had comparatively lower rates of career advancement than White men. Discrimination emerged as a key factor that hindered the progression of minorities in corporate organizations, as noted by Hurley in 1999 (Hurley, 1999). This finding aligns with previous studies that have consistently shown that minorities and women have lower chances of achieving career success than White men, as highlighted by Judge et al. in 1995 (Judge et al., 1995).

In the past decade, people of color have faced various obstacles in achieving successful careers. One significant hindrance is discriminatory treatment, as highlighted in James' (2000) article on race-related differences in promotions and support. Another factor is discrimination based on age, gender, and race, as noted in Hurley's (1999) research. For instance, women were often rated less favorably during the hiring process, and they were offered lower starting salaries compared to men, according to Hitt and Barr's (1989) study on the impact of age, race, and gender on managers' evaluations of job candidates and initial pay (Hurley, 1999).

The impact of gender, race, and age on compensation for a sample of non-managerial workers was examined by Barnum et al. in 1995. They discovered that minorities were paid far less than White men. Additionally, they discovered that this compensation gap grew more

prominent with age. The authors recommended more studies on management and professional workers to determine whether these findings may be generalized to other occupational groups (Hurley, 1999). The research of Hurley (1999) incorporates the examination of career attainment, which we are still here years later, working to understand why there is a disproportionate number of people of color in C-suite positions of Fortune 500 companies (Hurley, 1999). Research on the glass ceiling reveals that women and minorities may still be barred from high-level, high-status, and high-paying work prospects in organizations. However, employment opportunities for women and minorities have increased in several professional areas. Second, there will always be fewer job openings than qualified candidates in businesses with typical pyramidal structures. Understanding the factors that predict professional success as determined by career achievement is crucial in a framework like this.

The abstract and conceptual nature of most managerial positions makes it difficult to quantify performance evaluation and promotion criteria objectively. This means that higher-level managers may subjectively assess the "promotion suitability" of managerial employees. As a result, these employees may be more vulnerable to age, gender, and minority status discrimination in the workplace compared to lower-level employees (Hurley, 1999)

Previous research has tended to group all members of minority groups into a single category, which has made it challenging to gather meaningful samples of minority managers. As a result, published studies on minorities have rarely examined management samples (Cox & Nkomo, 1990). While previous studies have shown that organizations are striving to promote diversity initiatives, there are still challenges to successfully implementing these initiatives. This literature is significant for those who are striving to have their voices heard and be included in decision-making processes. In addition to examining the effects of race, gender, and age on

career attainment, this study will investigate how gender, race, and worker types interact in relation to career attainment. The study will also consider the effect of company tenure on promotion (Tsui & Gutek, 1984) (Hurley, 1999).

Since career growth is not linear, controlling organizational longevity is crucial. According to Rosenbaum, (1979) promotions are more likely to happen early in a person's career than they are later (Rosenbaum 1979). The minority groups included in this research are Black Men and Women, Latinos, and Asian Americans. Finally, this research suggests that identifying the gaps in psychosocial influences between gender and race remains essential. Human capital and social capital have an impact on career attainment. There remains a noticeable gap in propelling minorities, specifically Black Men and Women, to C-suite roles in Fortune 500 organizations. This literature highlights the importance of ensuring that people of color, in general, are provided with equal opportunities to succeed in an organization.

Psychosocial Support and Career Attainment

According to Kram (1985), mentoring can take two different forms: career (helping the employee develop on a career trajectory to advance organizational position or be in a better position to change organizations) and psychosocial (helping someone handle the day-to-day aspects of organizational functioning). Each time, the more senior individual would "do" the mentoring task while the mentee would "receive" the rewards. There are no certainties, even though the mentor might gain from the relationship. Role-modeling behaviors and the relationships that result from them tend to be more informal than mentoring connections, which tend to be more formal (Vidyasagar & Hatti, 2018).

Compared to earlier times, employees are now more actively involved in and accountable for managing their careers (Greco & Kraimer, 2020). Greco & Kraimer's (2020) research

illustrates the similarities between career mentoring, serial techniques, and psychosocial mentoring and investment tactics. There is a potential justification for the favorable correlation between mentoring and protegee career outcomes, specifically content and quality of career aspirations (Greco & Kraimer, 2020). In this study, we define mentoring as Career mentoring, including the development of career support required to enhance and advance within an organization and new role (Van Maanen & Schein, 1979). Advancing in the development of one's career includes coaching, sponsorship, providing exposure to senior leadership, protecting, and providing support for challenging work-related assignments (Greco & Kraimer, 2020).

Women in the highest positions in an organization face the same biases as women who are lower on the corporate ladder (Schipani & Amp; Dworkin, 2019). Traditional management practices were established in collocated workplaces, leaving supervisors and subordinates to identify creative ways to facilitate career advancement in remote environments (Gong et al.; Young-Bristol, 2023). In remote work environments, networking opportunities must be deliberate to replicate the random networking opportunities provided in collocating work environments (Gong et al.; Young-Bristol, 2023). Though Black women are graduating college in higher numbers, they still tend to work in supporting roles (Branch & Kasztelnik, 2023; McGirt, 2017). The glass ceiling impedes organizational advancement and continues to be challenging for Black women (Branch & Kasztelnik, 2023).

Human Capital and Career Attainment

Harris et al. noted that 2021 human capital is "the set of knowledge, skills, and abilities" embedded in human resources (Harris et al., 2021, p.506; Lado & Wilson, 1994, p. 705). A specific and distinct set of human capital characteristics is associated with a particular career path (Harris et al., 2021). According to human capital theory, employees with higher levels of

human capital for a specific career path tend to have more notable career success (Harris et al., 2021). Human capital theorists (Arrow, 1972; Becker, 1957, 1975) suggest people should invest in specialized skills, like education and work experience, to reap rewards in the future that outweigh the expenditures. Employers frequently reward employees with higher levels of human capital investment because they view it as a sign of increased productivity and firm loyalty. Human capital theorists have proposed that inequalities in the amount of human capital that Black and White employees tend to bring to the workplace account for racial disparities in workplace attainment (Baldi & McBrier, 1997).

As best stated by Patton (2016, p. 19), "Popular eloquence suggests higher education is the equal medium to work-life opportunities, particularly to those who "work hard," regardless of circumstance." Although hard work is immeasurable as it relates to Human Capital Theory, a functional tract, career experience, and trickle-down effect of mentorship (Patton, 2016) states that "mentorship alone will not be enough for underprivileged minorities to succeed" in a role (Patton, 2016). According to Gillborn (2008), our system's historical imbalance ascribes grandeur to higher education without considering its role in the inequity it professes to alleviate (p.19). Gillborn (2008) also believes that the achievement gap is a permanent element of the English educational system based on the concepts of Critical Race Theory and Roithmayr's (2003) concept of "locked-in inequality" (Gillborn, 2008).

A concept in education that also makes its way into the disparities among people of color in corporate society. As noted, Bradley (2006) highlights a historical prejudice against minority ethnic groups that has become institutionalized, resulting in chronic inequality even when current barriers are equally removed (Bradley, 2006, p. 29). Our American history chronicles the disadvantages that people of color have had to face. Nevertheless, Wilder (2013) claims that the

United States' higher education system has significantly contributed to persistent disparities from its inception (Wilder, 2013). In Wilder's work, the researchers investigated the relationship between Ivy League colleges and slavery. Along with Wilder, Phillips (2011) study pointed out that the founding members of colonial colleges came from slave-owning families who gained their fortunes from slavery and the crops/products produced by slave labor (Phillips, 2011).

Brown University (Wilder, 2013) was among the first to commission research on its connection to slavery, and other institutions followed. Knowing this, as well as the foundations of Human Capital Theory and related research, claims that human beings can raise their productive capacity through increased education and skills training, but minorities are disadvantaged. The disclosure of a past in which human people were taken and mistreated for institutional growth and financial stability illustrates how the formation of higher education paralleled the formation of the US (Wilder, 2013).

Higher education also involved institutional patrons, trustees, and leaders. Patton (2016) noted the following, "It is concerning that so few institutions have taken concerted efforts to connect their past in appealing ways to address long-standing imbalances that harmed Black Americans and minorities," as well as the massive wealth accumulation that propelled these institutions forward" (Patton, 2016). Other notable instances linked higher education's past to today, such as the working US Congress, Senate, and Supreme Court, primarily White individuals. Only 26 persons of color have served as senators in the US for nearly 247-year existence (Patton, 2016). Most Supreme Court justices are graduates of Harvard and Yale, and many of their rulings are based on racist views that disenfranchise racially marginalized people (Patton, 2016). The failure of schools to educate students to live, work, and interact across differences for racial fairness is reflected in why so many leaders are non-minorities. In

wrapping up this thought, minorities graduate without being asked or encouraged to study race and racism (Patton, 2016, p. 19). These findings and other factors carry over into Corporate America, making it a reality as we explore those leading the business.

In addition to these facts are the gaps that possibly support the remark that many people of color face being called "good worker bees" by non-minorities" and not "good managers." Comments like this stem from the history of ownership and leaders with a slave-owning mentality. The theme of this research is the dissection of the phenomenon of people of color being overlooked for roles based on color and highlights the need for mentorship and skills training in hopes of suppressing the stigma on color and focusing on breaking through the impediments that stand in the way of people of color and career attainment.

The objective of this research effort is to review the educational promotion literature and race while evaluating Human Capital Theory. Several existing studies, including Elman (2004), mentioned that Human Capital Theory and its variations are some of the most widely accepted theories for the rate of pay relationship (Elman, 2004). Although the idea divides the components of human capital attainment between those that fall before and those that fall after employment, human capital acquisition is seen as a lifelong activity (Elman, 2004). The public precedes formal labor market entry, and private schooling plays a role, as educational achievement impacts labor market placement and reflects projected salary remuneration (Elman, 2004, p.39). Education, an essential national economic and social construct, is necessary; however, in recent years, the enrollment rates in post-secondary education in the US have remained stable (Elman, 2004). The stabilization of post-secondary education relates to student loans and the lack of forgiveness opportunities for corporate working Americans. Furthermore, huge and growing income-related and racial disparities in access to higher education and college graduation rates

(Ou et al., A. J. (2014). Another future consideration in access to higher education could relate to family dynamics.

According to Harris et al., 2021 the manager or supervisor of an employee is a significant person in their career. A person’s manager or supervisor can impact their success and ability to grow (Harris et al., 2021). The quality of the relationship between the manager and employee, based on leader-member exchange (LMX) or mentorship, is often the emphasis of earlier research on the effects of managers on employees' careers rather than the managers' human capital (e.g., Allen et al., 2004; Scandura, 1992). Positive outcomes include enhanced access to the manager, improved communication from the manager, and access to learning opportunities for employees in high-quality LMX interactions (e.g., Graen and Uhl-Bein, 1995) (Harris et al., 2021). According to most studies on mentoring, people who get it are more likely to be successful in their careers (e.g., Ramaswami et al., 2010; Allen et al., 2004; Turban & Dougherty, 1994; Scandura, 1992).

In the mentoring research, factors including sex, age, personality qualities, and socioeconomic background are determinants of mentoring relationships and mentee career success (e.g., Ramaswami et al., 2010; Allen et al., 2004; Turban & Dougherty, 1994; Whitely et al., 1991) (Harris et al., 2021). More research needs to be done on the quality of mentors' human capital and how it may affect mentees' human capital and professional success, even though much is known about these traits. Although the literature on mentoring provides a wealth of information regarding the mentor-mentee relationship, there are two critical ways in which this differs from the as-yet unstudied influence of managers' human capital on subordinate human capital and career progress. First, a manager-subordinate relationship is not necessarily present in a mentor-mentee relationship. Mentors can occasionally be found further up the organizational

hierarchy, in different organizational units, or outside the organization. Second, only some employees have a mentoring connection with their manager (Harris et al., 2021).

The impact of managers' human capital on employees' human capital and career advancement is understudied to a significant extent when the mentor-mentee connection is the only focus. By concentrating explicitly on the standard of employee managers' human capital and its effect on their human capital and career advancement, we close numerous study gaps. Human capital comprises people's knowledge, abilities, and other performance-enhancing traits (e.g., Wright and McMahan, 2012; Nyberg et al., 2018). Human capital is strategically crucial for people to succeed in their occupations and advance in their careers, according to the human capital theory (Employee Career Advancement 507; Collins, 2021; Becker, 1964) (Harris et al., 2021).

Table 2.2.a

HCT Theory

Source	Theory	Citations	Year	Author	Topic	Relevance
National Bureau of Economic Research	Human Capital Theory	59969	1975	GS Becker	Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education-Third Edition	The discovery that there has been a significant increase in income in the United States even after accounting for increases in labor and capital growth and certain economists' emphasis on the significance of education in fostering economic development are both factors that can be used to explain the beginnings of this study. Education and on-the-job training are examples of activities that are regarded as investments in one's human capital.

Table 2.2.a *HCT Theory (Continued)*

Organizatio n Science	Human Capital Theory	388	2000	EH James	Race-related differences in promotions and support: Underlying effects of Human Capital and Social Capital	In this study, treatment discrimination based on race and variations in human and social capital were both investigated as potential explanations for the discrepancy in reported work-related experiences and outcomes between black and white managers. To determine whether human and social capital would mediate the relationship between race and the work-related experiences and outcomes under investigation, education and training, which represent human capital, and racial similarity of network ties and proportion of strong ties, which represent social capital, were used.

Education and Training

Education and training play a crucial role in shaping individuals' ability to obtain human capital and career advancement. Since an individual cannot be separated from his or her knowledge and abilities, education and training are typically viewed as two of the most significant human capital investments one can make (Becker, 1993). Training not only improves human capital it also boosts one's social capital by facilitating networking opportunities within training and development programs (James, 2000). These networking experiences can foster collaboration and knowledge-sharing, which are essential for promotion and career advancement (James, 2000).

Empirical studies, such as those conducted by Freeman (1976), Murphy and Welch (1989), and Veum (1995), have consistently shown the financial benefits of education and

training. College graduates typically experience higher wages compared to high school graduates, and employees who participate in workplace training tend to earn more than those who do not (Freeman, 1976 James, 2000). These findings highlight the importance of expanding the research of investing in education and training programs to improve work skills and competencies, as key components in career attainment.

Higher education is regarded as the most significant factor influencing the working world and significantly impacts higher status and innovative working ideas. It is a dynamic occupational system that is expanding and offers a variety of training options (Ali & Jalal, 2018). Both men and women can advance their careers through education. Higher education is the most significant determining factor for the working class and a major factor in higher status (Ali & Jalal, 2018). Education and psychosocial support can help mentees better grasp their duties to accomplish their goals and contribute to society (Saurage-Altenloh et al., 2022).

Overall, education and training are integral components of human capital as the two not only improve chances for promotion, but they also enhance individuals' capabilities of advancing the importance of fostering a conductive work environment.

Social Capital and Career Attainment

James in 2000, identified two important network characteristics for social capital: racial similarity and tie strength. Racial similarity refers to social groupings that share similarities on various dimensions such as sex, race, social status, organization affiliation, educational level, etc. According to previous research by Kram (1985) and Tsui et al. (1992), people belonging to the same racial group tend to build stronger relationships with each other than with those from different races. Tie strength, as identified in James's (2000) and Granovetter's (1973) research,

refers to the amount of time invested and the level of relationship building between individuals, which are crucial factors in building strong networks.

Social capital theory refers to the benefits of social membership in social networks (Metz et al., 2022; Portes, 1998). High-quality sponsorship includes developing connected identities, validating protégé capability, utilizing social capital, challenging organizational norms, and providing ongoing advocacy (Randel et al., 2021). Randel, Galvin, Gibson, and Batts (2021) contend that sponsorship can potentially increase career advancement for all races (Randel et al., 2021). However, sponsorship by majority group mentors is a beneficial form of mentorship for Black professionals because majority group members often have greater access to informal networks (Randel et al., 2021). Due to bias and discrimination in organizational environments, sponsorship is critical for career advancement (Randel et al., 2021). Further, cross-race sponsorship is instrumental to career advancement among people who identify as Black or African American as it can increase access to new networks and opportunities (Randel et al., 2021).

Organizations today have a diverse workforce of people from different cultures, backgrounds, and religions. Companies recognize the importance of hiring individuals from varied multicultural and racial backgrounds and are strengthening their hiring procedures to accommodate them. While minorities bring a wide range of skills and expertise to the workplace, they often feel excluded from mainstream social and professional organizations. Some minorities can successfully blend into society, but others may feel distant due to the Leader-Member Exchange Theory's "outgroup" classification (Chekwa, 2018). As outgroup members, they may have fewer opportunities to form close relationships with executives and other important figures in their respective firms and, therefore, may miss out on certain benefits. Due to barriers

connected to the job, such as distance from the office, different time zones, and little face-to-face interaction, Chekwa, 2018 highlights the difficulty of assimilating with peers and superiors in non-traditional work settings (Chekwa, 2018). As a result, for support and information, minorities frequently look for informal networking opportunities with other members of an identifying group (Chekwa, 2018). The literature presented by Chekwa, 2018 argues that the best indicator of job satisfaction and performance in unconventional work settings is peer interactions among minority cultural groups (Chekwa, 2018). As a result, businesses should encourage more networking opportunities for minorities in unconventional workplaces (Chekwa, 2018), allowing minorities and non-minorities the same opportunities to build social relationships.

Baldi and McBrier (1997) reference Kanter's earlier work, indicating that sponsorship is critical to career advancement. Further, Kanter (1977) indicated that members with similar backgrounds and social networks tend to be promoted from within their ranks. Sponsorship is an essential mechanism in an organization’s opportunity structure for career advancement (Baldi & McBrier, 1997). White males affiliated with social networks comprised of other white males are said to be members of “the old boys' club" and benefit from these connections (Devaro et al., 2018). Minority networks do not share the level of benefits associated with the “old boys club.” There is evidence to support this claim. Increasing career advancement opportunities, Figure 2 illustrates the model presented in the Randel et al. (2020) article and addresses potential barriers to cross-race mentoring. A role structure that directs interactions across identity disparities is present in mentoring relationships that involve sponsorship (Ibarra et al., 2010).

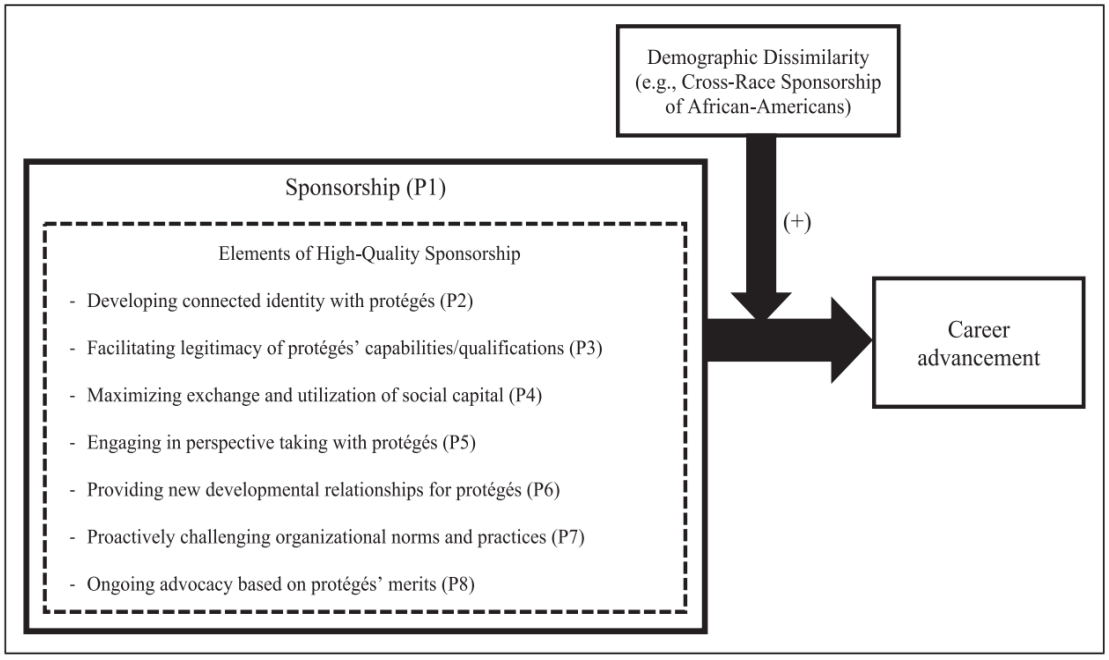


Figure 2: Increasing Career Advancement Opportunities through Sponsorship (Randel et al., 2020).

It is staggering to know that 90% of the CEOs of Fortune 500 companies are White males (Tomasdottir, 2021). This is disproportionate as White men make up less than 36% of the total population, yet they dominate the upper ranks of Fortune 500 CEO positions (Zweigenhaft, 2020). In the United States, only 19 Fortune 500 companies are led by women and Non-Whites (Gino, 2017). Unfortunately, the lack of representation of Blacks and other people of color in upper management continues to be a significant issue (Randel et al., 2021).

It was difficult for women to progress in their careers because most managers were men who tended to favor and support other men over women (Baldi & McBrier, 1997). According to Turner's theory of homosocial reproduction, men usually advance in the workplace by being sponsored by their male peers, while women usually advance through a contest model which involves official qualifications and formalized processes (Turner, 1960). The sponsorship model is an informal system of promotion through homosocial mentoring,

whereas the contest model suggests a promotion system that is only accessible through official qualifications and formalized processes (Baldi & McBrier, 1997).

Schipani and Dworkin (2019) contend that women benefit from mentoring and networking as they climb the corporate ladder. While sharing cultural capital will not eviscerate the adverse effects of gender stereotypes, it is still an asset to women (Schipani & Dworkin, 2019). Unfortunately, considering the # MeToo movement, women's access to mentors and networks has significantly decreased due to larger numbers of mean avoiding these relationships out of fear of sexual harassment allegations (Mahdawi, 2019; Schipani & Dworkin, 2019). White managers and sponsors are likelier to associate with and support individuals who share their social background and race. This suggests that White people will be promoted more frequently than Black people. According to Baldi & McBrier, 1997, these two studies show that race has a negative impact on sponsorship relationships and promotion opportunities, they do not adequately account for the implications of their findings, which suggest that while Whites benefit from informal sponsorship because of belonging to primarily White workplace networks, Blacks only benefit from formal bureaucratic mechanisms because of their exclusion from certain social networks (Baldi & McBrier, 1997).

The Role of Race and Gender in Career Attainment

Studies consistently show that Black, Indigenous and Other People of Color (BIPOC), particularly Black, and Hispanic people face challenges in advancing their careers compared to their White counterparts. These disparities are just as evident in corporate America environments as they are in academic literature. The intersectionality of race and gender provides different results for White women versus Black Women in corporate America (Smith et al., 2019) Black women are subjected "to stereotypical ascriptions of multiple subordinate

categories" (Smith et al., 2019, p. 1716) while White women are not. Empirically, men and women are assigned various positions when joining a company (Bielby & Baron, 1986; Kanter, 1977; Reskin, 1988; Tomaskovic-Devey, 1993). A significant amount of the income disparity between White men and other groups is also caused by racial and sexual segregation (Baron & Newman, 1990; England et al., 1988; England et al., 1994; Sorenson, 1989; Tomaskovic-Devey, 1993) (Maume, 2004). The negative relationship between race and career attainment is attributed, in part to discriminatory treatment and systemic racism.

According to the US Census, Black women represent 7% of the population, but according to Catalyst (2017), only 1.3% of senior management and executive roles in Fortune 500 companies are held by Black women (Smith et al., 2019). At the same time, White women represent 38% of the US population and occupy 29% of senior management and executive roles in Fortune 500 companies (Smith et al., 2019).

Research conducted by Joshi et al. (2015) highlights that gender differences in rewards such as salary increases, bonuses, and promotions were 14 times larger than the gender differences in performance evaluations and that differences in performance evaluations did not explain the gender differences in rewards between men and women (Joshi et al., 2015). These findings are based on studies conducted across various work settings spanning nearly 30 years. The male-female performance and pay disparities were made worse by the proportion of men in a profession and the difficulty of the employees' work. Women performed equally well in highly esteemed professions but received much lower pay than men. Women could only close the gender pay and performance rating gap by having more female CEOs at the industry level (Joshi et al., 2015).

The term "glass ceiling" refers to the invisible barriers that prevent women from being promoted to higher positions in organizations. In other words, it is a gender-based disadvantage that affects women as they try to navigate their careers. This term was first used by Hymowitz and Schellhardt in 1986 and was later expanded to include other personal characteristics like race. The U.S. Department of Labor adopted the term in 1991 to ensure that companies receiving federal government contracts did not discriminate based on personal characteristics. However, some scholars have criticized the metaphor for not accurately describing the experiences of racial minorities, particularly women of color. Studies that have adopted a formal definition of the term "glass ceiling" have revealed contradictory evidence of its existence in different companies and countries. Similarly, researchers who have expanded the definition of the "glass ceiling" to include individuals of color have found mixed results (Kulik, 2019).

It is essential to acknowledge that there are still significant obstacles facing Black men, Black women, and White women in the workplace. According to several business journals, these groups are significantly underrepresented in executive positions in large companies (Cordtz, 1994; Maume, 2004). The term "glass ceiling" refers to the phenomenon where, despite having a more significant presence in organizations, Black men, Black women, and White women still face barriers to reaching top executive positions.

The Role of Work Type in Career Attainment

In this dissertation, the term "work type" refers to the categorization or grouping of work arrangements, with a primary focus on telecommuting. Work type includes the unique characteristics and dynamics of different working arrangements, such as working from home during designated hours without in-person contact with colleagues or clients (Asfaw, 2022).

Asfaw (2022) defines teleworking as an alternative term used to describe the "type of work" arrangement known as telecommuting, which enables workers to perform some or all work from home (Asfaw, 2022, p.1). Telecommuting delves into the potential career consequences of remote work for people of color, considering factors like psychosocial support, human and social capital, and disparities in career attainment. Furthermore, it acknowledges the challenges and drawbacks associated with working remotely, such as hindrances in mentorship, employee engagement, and relationship development, which are essential considerations for organizational leaders and human capital specialists seeking to promote employee well-being and organizational stability.

Employees have faced many challenges due to the shift to telecommuting, particularly regarding time management and balancing work, family, and other domestic duties (Asfaw, 2022). The COVID-19 pandemic drastically changed daily life worldwide through social distancing measures and had a significant impact on the dynamics of the workplace. As a result, a significant portion of the workforce began to frequently work remotely, also called work-from-home (WFH). Due to the pandemic, up to 38% of American workers worked from home in May 2020 (Gaffney et al., 2021).

The COVID-19 pandemic brought about considerable adjustments in the workplace, including a sharp rise in telecommuting that predominantly affected women. However, there were negative mental health consequences that came along with this transition, especially for women who reported having higher feelings of depression, loneliness, anxiety, and stress. Inequities in career progression may be made worse by this gender gap in telecommuting in combination with the already present gender discrepancies in pay and promotion (Fang et al., 2022). The pandemic's effects on historically marginalized communities in the United States

vary due to unequal access to resources, staff, and funding; some areas were disproportionately impacted (Hoxhaj & Miti, 2023). In this study, we investigate two essentials yet little-researched questions. First, we investigate whether people of color's participation in work-from-home (WFH) was disproportionately affected by psychosocial support and human and social capital compared to non-people of color. Second, we investigate how working remotely has affected racial and ethnic minority groups. Lastly, this dissertation explores the idea of WFH as a unique work-type construct with possible career consequences for persons of color. Remote work has been found to have some drawbacks, according to Saurage et al. (2022).

Remote work settings make it easy to overlook essential elements of communication, such as verbal intonation and facial expression, which are critical for building relationships (Saurage-Altenloh et al., 2022). Even though some remote workers can perform well with minimal interaction from supervisors and colleagues, being cut off from the main office and influential leaders can have negative consequences. A lack of effective communication, social support, and accessible ways to stay involved in organizational activities can lead to several drawbacks (Chekwa, 2018). It is necessary to conduct further research to compare the effectiveness of two types of teams during a systemic crisis affecting all organizational levels, especially regarding human capital. To properly analyze how corporate leadership can promote employee engagement, factors such as work environment, gender, education, sponsorship, and mentorship need to be considered. Organizational leaders and human capital specialists are interested in navigating the complexity of unpredictable and challenging situations that can significantly impact an organization's stability (Saurage-Altenloh et al., 2022)

2.3 Hypothesis Development

The existing body of literature has offered insights into the domains of promotion, racial disparities in human and social capital, and treatment inequality within the context of career advancement for minorities in the finance industry (James, 2000). Previous research has only briefly explored the multifaceted direct and indirect relationship and mediating effects in this context (James, 2000).

James (2000) suggests that race and sex may influence the complex interplay between human and social capital, along with other control variables like age, tenure, and performance rating (James, 2000). Building on this foundation and expanding historical research, this scholarly approach conducts a comprehensive analysis of the challenges faced by people of color in pursuing TMP. This research also highlights work type as a crucial factor in assessing promotional outcomes.

Overall, this research focuses on examining moderating effects, such as gender, work type, and race. It explores the relationship between psychosocial support, human capital, social capital, and their collective influence on career advancement. Additionally, this study recognizes the significance of workplace-related factors, including tenure, age, and performance ratings, as well as other contextual influences that have received limited attention in existing research.

Psychosocial Support and Career Attainment

The vast body of current academic literature highlights the significance of career success as a crucial organizational experience that is integral to people's professional paths. Career accomplishment, according to Hurley (1999), can be defined as the highest managerial position an employee can attain within a company. Existing research has consistently shown a

widespread pattern of lower career success among people of color, particularly women, when compared to their White male colleagues, as supported by Judge et al. (1995) and Hurley (1999). This issue also extends to the perceived disparity in advancement opportunities, which White men are believed to benefit from disproportionately, as evidenced by Greenhaus et al. (1990) and supported by Hurley (1999).

Randel et al. (2021) emphasize the need for mentoring programs that transcend racial boundaries to address entrenched racial representation inequities. They do this by acknowledging the limitations of well-intentioned mentoring programs in redressing these disparities and responding to the increased urgency caused by global events like the Black Lives Matter movement (Randel et al., 2021). Promotions are widely acknowledged as crucial drivers for wage development within organizational contexts, as stated by James (2000) and McCue (1996). Rosenbaum (1979) and James (2000) argue that early career advancements provide employees with a competitive edge when seeking higher-level executive positions, which is particularly noteworthy.

The academic discourse also emphasizes the importance of psychosocial and career-related support, as defined by Kram (1988), which includes emotional encouragement, mentorship, and social networks, as James (2000) argued. The bottom line is that these theoretical and contextual foundations serve as a basis for the following hypothesis in this research. Therefore, I propose:

H1: Psychosocial Support is positively associated with Career Attainment.

Human Capital and Career Attainment

As stated by Becker in 1964, individuals with higher human capital are more likely to succeed in their careers. When evaluating human capital in relation to career development,

general indicators such as higher education, work experience, specialized job training, and schooling are considered. These components of human capital are empirically linked to higher promotion rates, larger salaries, and a greater likelihood of achieving career milestones, as noted by Ng & Feldman (2010) and Harris et al. (2021).

Human and social capital are closely related characteristics in the field of research. According to Human Capital Theory, employees with more resources that are relevant to their jobs, such as extensive education and training, are entitled to a broader range of organizational benefits, particularly in terms of promotions, than those with fewer resources (Becker, 1975; James, 2000). While James's (2000) study does not explicitly address wage treatment, it is important to understand that salaries and promotions tend to occur together. Advancement within an organization's hierarchy generally accompanies merit-based pay increases or proportional pay increments, as noted by McCue (1996) and Rosenbaum (1979). Therefore, promotions can be seen as a proxy for evaluating salary treatment (James, 2000).

According to Becker's (1975) human capital theory, differences in individual productivity and performance due to investments in human capital, such as education and training, result in disparities in pay and promotion rates across demographic groups. However, James's (2000) analysis found instances of workplace disparities in experiences and outcomes, with Black individuals receiving less psychological support and experiencing slower promotion rates than their White counterparts.

Overall, this research suggests that there is a positive relationship between human capital and career advancement. Therefore, it is proposed:

H2: Human Capital is positively associated with Career Attainment.

Social Capital and Career Attainment

Social capital refers to a variety of resources that are available to people for career advancement. This includes the complex web of connections a person builds with their peers, subordinates, and superiors in an organization. These relationships have significant value since they can provide career-related and psychosocial assistance, acting as conduits for career advancement and the acquisition of organizational support. The study by James (2000) further examines the concept of social capital, focusing on two key network characteristics: racial similarity and tie strength.

Racial similarity refers to the demographic consensus observed within social groupings, characterized by resemblance across various characteristics, including race, gender, organizational connections, and educational status. Research has shown that employees tend to engage more frequently with members of their own social groups. This research examines tie strength as a measure of the closeness or intimacy of relationships between network members. Tie strength is determined for each person identified in the respondent's network, extending the work done by James (2000). Based on the research conducted by Iellatchitch et al. (2003), individuals who possess high social capital and valuable resources in a particular professional field are more likely to receive recognition from the companies that operate in that sector. Moreover, these types of employees tend to have successful career paths. Another study by Randel et al. (2021) suggests that a practical technique for mentees to advance in their careers is through the exchange of social capital between mentors and mentees.

In summary, this dissertation analyzes the concept of social capital and proposes that individuals who possess high social capital, valuable resources, and connections within their professional networks are more likely to have successful career paths. The study also

emphasizes the importance of tie strength and racial similarity in social networks as they impact the exchange of social capital.

Therefore, I propose:

H3: Social Capital is positively associated with Career Attainment.

Psychosocial Support and Career Attainment moderated by Gender

This study aims to investigate how race, gender, and age impacts people's ability to pursue management positions. The disadvantages that minorities and women suffer in their professional paths have continually been reported by studies, demonstrating a difference in job performance when compared to White men (Judge et al., 1995).

The first justification relates to the risk that these people experience discriminatory behaviors, particularly unfair promotion choices. Additionally White men may have easier access to opportunities for advancement than women and persons of color (Greenhaus et al., 1990).

According to Hurley, 1999, prior studies have explored the impact of gender, age, and minority status on factors that are pivotal for career attainment. For instance, Hitt and Barr's (1989) analysis found that women were recommended for lower starting pay than their male colleagues and had fewer favorable evaluations during hiring processes. This conclusion resulted from their investigation of how age, race, and gender affected managerial evaluations of job seekers and initial salary suggestions. In a similar vein, Barnum et al. investigated the impact of age, ethnicity, and gender on remuneration in a sample of non-managerial workers in 1995. Their investigation revealed significant pay inequalities, with men of color being paid significantly less than White males. Additionally, their data revealed that these income differences grew more significant as people aged (Hurley, 1999).

Hurley's research from 1999, which primarily focused on managerial professionals' career advancement, helps to shape this study. This segment of workers' professional aspirations is fascinating for several reasons. First, despite expanded employment prospects in various occupational areas, the "glass ceiling" idea highlights the ongoing challenges that women and people of color face in gaining access to high-level, high-status, and high-paying career chances within organizations.

Second, traditional pyramidal organizational models often have few job opportunities compared to the pool of competent applicants. In a system with such limitations, it is crucial to understand the factors influencing career success, as shown by career achievement (Hurley, 1999). Given this background, it is suggested that the following hypothesis be investigated in this study, emphasizing the moderating effects of gender and psychosocial support. Therefore, I propose:

H4: *Gender moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is stronger for women.*

Human Capital and Career Attainment moderated by Gender

As described by Barbulescu and Bidwell (2013), Fernandez and Friedrich (2011), Polachek (1981), Schweitzer et al. (2011), Brady et al. (2011), Dezso et al. (2016), Singh et al. (2008), and Yao (2023), this study aims to examine the career trajectories of individuals while considering the potential moderating influence of gender on the relationship between human capital and career attainment. The varied career paths taken by men and women, as seen in the research that has already been done, highlight a clear gender gap with significant ramifications. This gap acquires importance because, even in companies that have purportedly

adopted gender-neutral promotion procedures, women's placement in positions with little room for advancement could sustain gender inequity (Yao, 2023).

Human capital theory has a similar assumption, namely that variations in human capital between men and women will result in a smaller pool of female applicants, in parallel with gender-specific career discrepancies. The disparity between the career trajectories taken by men and women, as documented by Barbulescu and Bidwell (2013), Fernandez and Friedrich (2011), Polachek (1981), and Schweitzer et al. (2011), highlights the potential effects of gender variations in human capital on career advancement.

Furthermore, Bonet et al. (2020) highlights the stark contrast between the career experiences of men and women. Women typically perform worse than men across a range of career-related domains, according to several studies from various academic fields, with some of the most glaring discrepancies being visible in leadership roles. As Mitchell (2016) has shown, this is especially important in workplaces where women continue to be underrepresented. Women hold about 9% of top management roles in S&P 1500 businesses, according to Dezso, Ross, and Uribe (2016) and Bonet et al. (2020).

The collection of research already done, as outlined by Hurley (1997), highlights the ubiquity of racial and gender-based career development patterns that are selective (Hurley, 1997). Female managers and people from minority groups report having a harder time progressing their careers than their male and White peers (Hurley, 1997). According to Greenhaus et al. (1990), Ibarra (1993), Tsui and Gotek (1984), and Hurley (1999), the low career attainment seen among people of color and women compared to White males is due to a lack of access to early-career organizational experiences that are highly valued by the organization.

According to a parallel extension of the human capital hypothesis, which is consistent with these observations, a smaller pool of female candidates for positions in advanced careers is expected to result from differences in human capital between men and women.

The following claim is made for investigation based on these theoretical underpinnings and empirical findings, considering the potential moderating role of gender and human capital. Therefore, I propose:

H5: Gender moderates the relationship between Human Capital and Career Attainment such that the relationship is stronger for women.

Social Capital and Career Attainment moderated by Gender

In accordance with Burt's (1992) social capital hypothesis, the goal of this study is to examine how gender, social capital, and professional achievement interact. The concept emphasizes that individuals who don't have specific qualities in their working connections, such strong attachments, are less likely to be able to take advantage of organizational benefits (Burt, 1992) (James, 2000).

Based on this theoretical framework, factors connected to human and social capital are considered while analyzing the influence of race on work-related experiences and outcomes. According to James (2000), if differences between Black and White people's career experiences and outcomes can be attributed to human and social capital factors, the impact of race should lessen and possibly disappear when these factors are considered (James, 2000).

Social capital, similar to human capital, refers to the resources available to individuals. These resources are reflected in a person's network of connections within an organization, including peers, superiors, and subordinates. According to Coleman (1986), these connections help in career advancement and in obtaining organizational support, including career-related

and psychosocial support. This study focuses on two critical variables tie strength and racial similarity, which have been previously researched by Ibarra (1993) and elaborated upon by James (2000).

Both men and women aspire to hold top management positions. However, gender disparities can emerge in how individuals perceive themselves, which can distort women's self-image and impact their likelihood of applying for such positions. This phenomenon is well-documented by Correll (2001, 2004) and Powell & Butterfield (2013), and may be exacerbated if women feel that they were discriminated against during the hiring process (Fernandez-Mateo & Fernandez, 2016; Storvik & Shone, 2008).

According to Tost et al. (2021) and Yao (2023), women may also face challenges due to gender discrimination experiences that negatively affect their self-efficacy and sense of belonging (Yao, 2023). Considering these theoretical and empirical findings and taking into account the moderating effects of gender and social capital, Therefore, I propose:

H6: Gender moderates the relationship between Social Capital and Career Attainment such that the relationship is stronger for women.

Psychosocial Support and Career Attainment moderated by Work Type

While unconventional work arrangements can increase job satisfaction, they also present difficulties for managers and staff members (Chekwa, 2018). The dynamics of social support and communication between managers and employees in remote work contexts differ noticeably from those in traditional in-person work situations (Chekwa, 2018). According to (Chekwa, 2018), in typical office settings, managers are more likely to interact with their team frequently, provide quick feedback, offer necessary resources, and provide ongoing support (Chekwa, 2018). However, these in-depth and private chats may pose difficulties for remote

employees with little to no face-to-face engagement with managers or coworkers. In these situations, interactions are frequently limited to virtual interactions, online conferences, and other forms of technological communication.

As a result, workers in this remote environment may face consequences of becoming disengaged from management and peers (Chekwa, 2018). Despite being widely accepted, remote work restricts access to essential leaders, adversely affecting development connections and trust among key leaders. Nevertheless, there are serious consequences when good communication, social support, and inclusive policies are lacking within a company, even when remote workers can succeed with little engagement with managers and colleagues outside of the traditional workplace. Due to their separation from the main office, these remote workers could neglect important tasks or assignments.

Engaging remote workers can also be problematic when resources, support, and communication are lacking. More significant opportunities are required as the workforce becomes more diverse, and management faces difficulty building relationships with those who look different from them and are from other cultural backgrounds (Chekwa, 2018). Therefore, I propose:

> *H7: Work Type moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is stronger for remote workers.*

Human Capital and Career Attainment moderated by Work Type

Significant gaps in professional accomplishment, particularly for people of color, have been emphasized by prior studies. African Americans, across all categories, have less upward mobility within a single firm than their white counterparts, according to Work (1984). African American MBAs experienced slower rates of promotion and advancement possibilities,

underlining the inequities in career accomplishment, according to Brown and Ford (1977). Despite these findings, little study has been done on the organizational experiences of individuals of color. Particularly in later phases of their careers, little is known about how ethnic minority groups' career paths have developed (James & Khoo, 1991; Watkins & Sobich, 1995; Swanson, 1992).

Although Asian Americans are just as likely as Whites to work in executive positions, this gap persists (Barringer, 1992; Hurley, 1999). One's value as a networker is greatly influenced by the skills, experiences, resources, and knowledge acquired. Building relationships with people who exhibit these qualities is essential, but exhibiting these qualities oneself is just as important (Chekwa, 2018).

This study explores how work arrangements and workplace structure affect how people of color achieve careers and the relationship between human capital and career success. An individual's work style, whether traditional, remote, or non-traditional, impacts how human capital and career advancement are related. Therefore, I propose:

H8: Work Type moderates the relationship between Human Capital and Career Attainment such that the relationship is stronger for remote workers.

Social Capital and Career Attainment moderated by Work Type

Non-traditional work arrangements are increasingly common and frequently lead to greater job satisfaction. In contrast to typical working environments, these arrangements have drawbacks that affect managers and employees differently (Chekwa, 2018). This dissertation aims to investigate how work type or work arrangement moderates the relationship between social capital and career attainment.

Employees can use networking to widen their connections and create partnerships that benefit both parties. Building trusting relationships with the right individuals can help share knowledge, offer support, and advance one's career. According to Chekwa (2018), businesses that encourage networking opportunities build an environment where staff members may interact, share knowledge, educate one another, and develop strong working connections. These links are crucial in assisting firms in achieving their strategic goals. Colleagues and peers with similar professional interests or activities make up professional networks in general (Chekwa, 2018).

Businesses today are multicultural melting pots made up of people from different racial and ethnic origins. Organizations have modified their hiring procedures to accommodate applicants from various racial and ethnic backgrounds as they become more aware of the benefits of a diverse workforce. Although they offer a diverse range of abilities and experiences to the workplace, these people frequently struggle with feelings of professional and social exclusion from majority groups (Chekwa, 2018).

Lastly, the main goal of this study is to determine how much work type, which encompasses a variety of work settings, including traditional, remote, and non-traditional settings, modifies the relationship between social capital and career achievement (Chekwa, 2018). According to specific theories, a person's work type and the chances for networking and social capital accompanying it may significantly impact how quickly they develop in their careers. Therefore, I propose:

> *H9: Work Type moderates the relationship between Social Capital and Career Attainment such that the relationship is stronger for remote workers.*

Psychosocial Support and Career attainment Moderated by Race

Previous studies have repeatedly demonstrated that women and people of color achieve lower career attainment than White men (Judge et al., 1995). According to Kanter (1977), being a minority is linked to stresses at home and at work that have a negative impact on people's achievements. Additionally, dominant group members frequently have higher standards and pay closer attention to how people of color behave at work. The performance of minorities compared to members of the dominant group is hampered due to such scrutiny. People of color are treated differently than the majority in this situation, which amounts to treatment discrimination (James, 2000). This unequal treatment has a negative impact on the underrepresented group's performance and the distribution of organizational incentives (James, 2000).

Social groups that share characteristics on various dimensions, such as race, sex, status, organizational affiliation, and educational attainment, are demographically similar. According to James (2000), White people, who have a more significant social position than Black people, could find it challenging to see Black people as equals, especially in the workplace. Hurley (1999) offered a similar justification for women: individuals of color may not achieve as high a career as White men because they are not afforded early access to organizational experiences that the organization values (Greenhaus et al., 1990; Ibarra, 1993; Tsui & Gotek, 1984). Therefore, I propose:

H10: Race moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is weaker for people of color.

Human Capital and Career attainment Moderated by Race

Historically, people of color face stereotyping as having low status and playing inferior roles (James, 2000). People of color have been stereotyped as being less intelligent and more sluggish than White people. As a result, it could be challenging for White people, who have a higher social status, to see Black people as equals, especially at work. For instance, Essed, 1991 mentions in the research that teams of Black and White job applicants were dispatched to apply for the same positions in one study (Essed 1991). The candidates were compared based on their sex, age, looks, communication skills, submitted applications, and made-up job requirements (Essed, 1991). According to the study, White candidates were preferred over Black candidates in 29% of the instances, whereas Black candidates were picked over White candidates only 5% of the time (Essed, 1991) (James, 2000).

Human capital theory, according to Becker (1975), includes actions that increase people's resources and hence affect future monetary gain. Investing in oneself creates human capital, and the person who makes those investments cannot have them taken from them (James, 2000). Education and on-the-job training are regarded as investments in human capital that enhance an individual's skill set and knowledge base (James, 2000).

In conclusion, the human capital theory's proponents contend that individual disparities in productivity or performance from human capital inputs like education and training cause differences in pay and promotion rates between groups of people (Becker, 1975) (James, 2000). Therefore, I propose:

H11: Race moderates the relationship between Human Capital and Career Attainment such that the relationship is weaker for people of color.

Social Capital and Career attainment Moderated by Race

Mentors in sponsorship relationships trade social capital with mentees and use network connections to help proteges achieve professional growth goals. According to Burt (2000) and Nahapiet & Ghoshal (1998), social capital is described as assets which promote the attainment of objectives and is acknowledged as being present in social networks of people. Through contacts with one another, a protégé and mentor might exchange social capital in order to leverage the relationships in the network and provide chances for resources (Randel et al 2020). Resources for social capital are the characteristics of a person's network of relationships with peers, subordinates, and superiors in an organization. The ability to progress professionally and get organizational support, such as career-related and psychosocial support, is made possible by these interactions (Coleman, 1986) (James, 2000).

The advantage of interactions between people of the same race is that they are more likely to result in positive organizational outcomes, such as knowledge sharing, social support, and job progression. According to a number of studies (Ibarra 1995, O'Reilly et al. 1989, Tsui et al. 1992), having little or no social capital in the form of racial similarity hinders relationship building and, as a result, limits the organizational benefits that come from such ties (James, 2000). Therefore, I propose:

H12: Race moderates the relationship between Social Capital and Career Attainment such that the relationship is weaker for people of color.

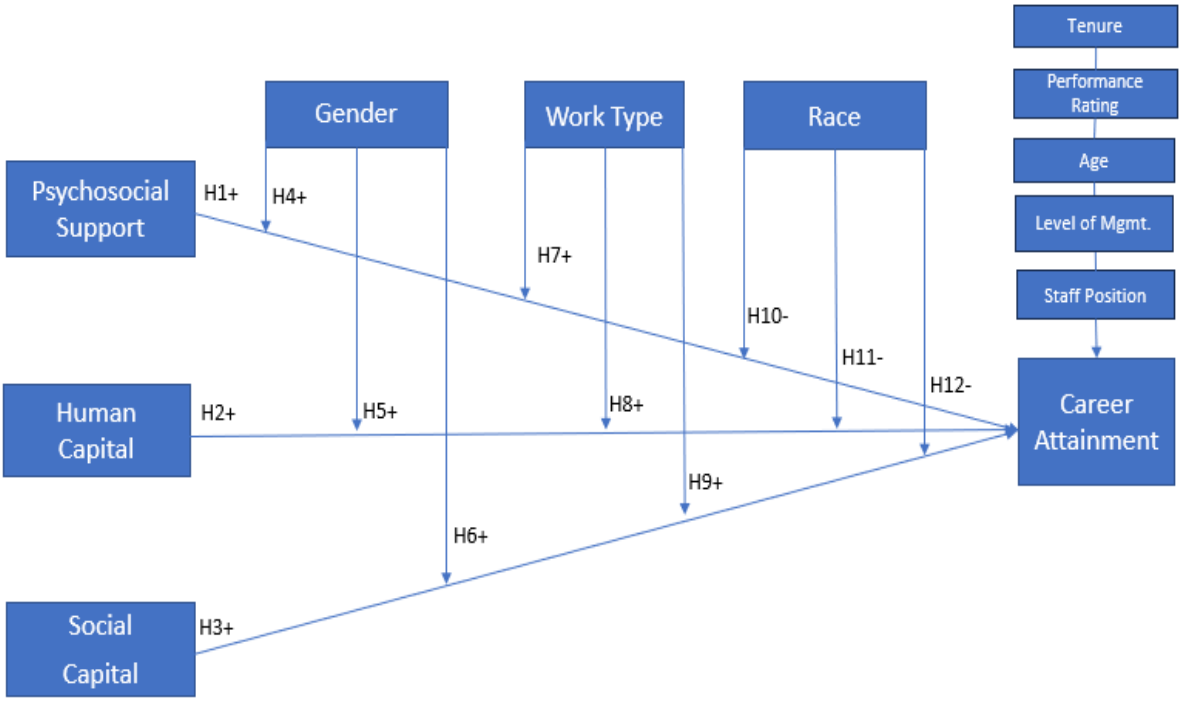


Figure 3: Hypothesized Model

Illustration of the direct and the moderating effects discussed in the hypothesis development overview.

CHAPTER 3: METHODOLOGY

This chapter aims to provide an explanation of the methodologies used to test the model and hypothesis presented in Chapters 2 and 4 of this dissertation. The first section of Chapter 3 gives an overview of the research. The second section provides details of the survey instrument that was used to collect data. The third section describes the survey approach, including well-cited survey questions. The fourth section highlights the measures and scales for each construct from the survey questionnaire. Lastly, the final section will cover the procedures and data analysis for the study.

3.1 Overview

A study conducted by James in 2000 investigated the disparity in work-related experiences and outcomes between black and white managers. The research investigated treatment discrimination based on race and the variations in human and social capital as potential explanations for the difference. Education and training were used to represent human capital, while racial similarity of network ties and proportion of strong ties were used to represent social capital. The study surveyed White and Black managers in a Fortune 500 financial services company and found that black managers experienced less psychosocial support and a slower promotion rate than their white counterparts. Race directly and indirectly affected these financial industry results, with the manager levels being Manager, Director, Vice President, and President. My present research seeks to extend what I have learned from James' work in 2000.

This dissertation was a US based survey study collecting a total population sample of 301 active employees. The survey data was collected from leaders in the finance industry with the job titles, Managers, Directors, Vice President's, and President's. The data was collected using Qualtrics (XM) survey tool, and participants in this study were randomly selected from a list of

finance industries. The demographic information from the data was reported in Chapter 3 and Chapter 4 of this dissertation. The proposed survey instruments were validated and accepted scales, and the overall response rate was considered and reported.

3.2 Participants

The research study focused on working adults in finance companies located in the United States. To determine the sample size required for the study, the G*Power (v3.1.9.7) calculator was used, which indicated a minimum sample size of 154 as shown in Figure 4. However, the general research practice suggested that an acceptable sample size should be ten times the number of variables analyzed. To ensure a more robust study, the sample size was increased from 154 to 300 participants.

3.3 Survey Instrument

In this study, the sample size for the surveys was determined using the G*Power (v 3.1.9.7) calculator. To calculate the sample size, I selected the following parameters on the calculator: Test Family: F tests: Linear multiple regression: Fixed model, R^2 increase; Effect size f^2: 0.15 (Medium Effect); Power (1-β err prob): .95; Number of tested predictors: 7; Total Predictors: 12. After entering these parameters, the total sample size calculated by the calculator was 154.

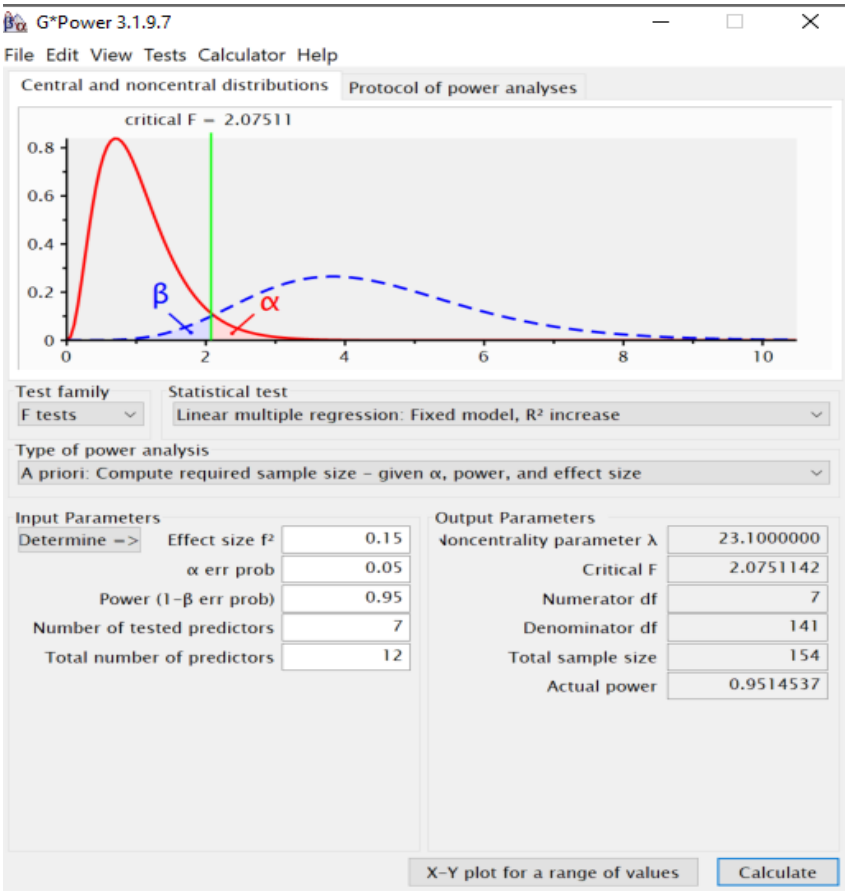


Figure 4: G* Power (v 3.1.9.7) Analysis

3.4 Survey Analysis

The study utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) to investigate the relationships between latent variables. PLS-SEM was deemed the most suitable way for representing the relationships between the variables under investigation because it allows one to test multiple path relationships simultaneously (Hair et al., 2021). SmartPLS® and the Statistical Package for Social Science (SPSS) version 28 were used to validate measurements and assess the structural model.

3.5 Data Collection

A Qualtrics (XM) survey was conducted one week after the launch, and anonymous data was collected. All participants were given a consent form and study details. The data was collected through the Qualtrics (XM) tool, allowing participants to answer electronically. The contingency plan, which involved using social media platforms to identify professionals in the finance industry, was not used due to the complexity of the IRB approval process and timing. The survey contained basic demographic questions, including job classification, age, and tenure within the company. All participant information was anonymous. The IRB submission (Study #: IRB-24-0335) was reviewed and approved by the Office of Research Protections and Integrity (ORPI) and was found to meet the exempt category cited under 45 CFR 46.104(d). Survey respondents could opt-out via the Qualtrics (XM) tool, and all survey data was voluntary.

3.6 Measurements (Per Variable)

Career Attainment (DV)

Promotion rate and Tenure

Career attainment was measured on account of the number of promotions that were reported by respondents. Capturing the measure in this way created the possibility of analyzing the number of promotions and/or the rate or promotions reported in the study. Promotion rate is calculated by comparing the number of promotions an employee has received with the length of time they have worked for the company. This is referred to in some instances as promotion rate (James, 2000). The number of promotions that an employee has earned, based on increased job responsibilities and pay (Rosenbaum, 1984) was self-reported by the respondents.

Psychosocial Support (Independent Variable)

In research studies, Likert-type scales are frequently used to measure respondents' level of agreement or disagreement with a list of items. Respondents were asked to rate their level of

agreement with a statement on a numerical scale ranging from 1 to 5 or 1 to 7. This method of measurement was used to evaluate various psychosocial support factors and career-related support, including support from family, friends, and the community.

The scope of psychosocial research is broad and may include mental health, well-being, social support, and quality of life. Likert scales, which usually have options ranging from "1-strongly disagree" to "5-strongly agree," enabling researchers to measure and examine people's level of agreement or disagreement with certain statements pertaining to various subjects. Survey questions are provided in Appendix E. For example, James (2000) proposed the question, "How much psychosocial support was received?" to measure psychosocial support using Kram's 1985 depiction of psychosocial support, which included trust, respect, and emotional support (James, 2000). Responses were rated on a scale of 1 to 5, where 1 equaled no support at all, 2 equaled some support, 3 equaled partial support, 4 equaled a good amount of support received, and 5 equaled a great deal of support received.

James (2000) proposed a scale for career-related support based on three questions taken from a social support scale (SSS) used by Ford and Wells (1985) and Thomas (1990), according to Kram's (1985) concept of career-related support. The dissertation proposes a 5-point rating system (1 being not at all, and 5 being a great deal) for participants to indicate their responses to the following stem questions for each item: "To what extent does each network member provide you with career direction and guidance," "access to resources to do your job," and "help in learning the ropes" (James, 2000, p. 499).

Table 3.6.a:

Qualtrics (XM) Psychosocial Support Questions

SSS used by Ford and Wells, 1985- Thomas, 1990 (James, 2000)

1. To what extent does this network member provide you with trust?
2. To what extent does this network member provide you with respect?
3. To what extent does this network member provide emotional support?
4. To what extent does this network member provide affirmation of ideas?
5. To what extent does this network member provide you with career direction?
6. To what extent does this network member provide you with guidance?
7. To what extent does this network member provide you with resources to do your job?
8. To what extent does this network member help you learn the ropes?

Human Capital (IV)

Similar to James (2000) I measured Human Capital as a categorical variable with six factors. Participants were asked to indicate their highest level of education attained on a 6-point scale. The six options available were: 1 = high school or equivalent, 2 = some college, 3 = bachelor's or associate degree, 4 = some graduate courses, 5 = master's degree, and 6 = doctorate or professional degree. In this sample, the model response was "master's degree" with a mean education level of 4.39 and a standard deviation of .97. 62.2% of the sample had achieved this level of education.

Work Skills and Training

Training was measured using a single item with the following stem: “To what extent have you participated in work-related training programs since joining the organization” (James,

2000)? Participants answered using a 5-point scale ranging from 1 (not at all) to 5 (a great deal) (James, 2000).

Social Capital (Independent Variable)

Racial Similarity

As a replication of the James (2000) study, a method to identify the names of individuals in a person's network of relationships was called the name generator (James, 2000). In the survey used for this dissertation, respondents were required to provide the names of individuals in their workplace with whom they interacted the most frequently for work-related or task-related purposes (known as their "advice network") and social reasons (known as their "friendship network") (James, 2000, p. 499). To safeguard the privacy of network members, respondents were only asked to provide the first names of each network member. The degree of demographic similarity between a respondent and the people in their network varies depending on their racial similarity. Respondents were asked to identify the race of each network participant, and this data was recorded as a 1 if it was the same as the respondent's and a 0 if it was different.

The percentage of same-race network members was then used to calculate the degree of racial similarity in a network. Although the data for racial similarity was collected, this data was not included in the survey model results for this dissertation. A score of 1.00 indicated complete resemblance among all network members. Conversely, the greater the variation in the network members' closeness to the respondent, the closer the similarity score was to zero (James, 2000). Using the same approach, this study measured the relationship between social capital and career attainment.

Strong Ties

The tie strength of a person's network could be determined by their level of closeness or intimacy with the members of their network. In measuring tie strength, a 4-point social-distance scale was used, ranging from 1 (extremely far) to 4 (very close) for each identified member. According to Granovetter (1973), "weak ties" are those with responses such as "distant" and "somewhat close," while "strong ties" are those with responses such as "close" and "very close." Ibarra (1995) used the strong-to-total ties ratio to determine the percentage of strong ties in each respondent's network. The closer this ratio was to 1.00, the more solid ties there are in the network (James, 2000). The mean of these responses was calculated and was used as the measurement item for Social Capital during my model analysis.

Table 3.6.b:

Qualtrics (XM) Tie Strength Question

Social Distance Scale Granovetter, 1973) and Ibarra, 1995 (James, 2000)

1. How close are you to the following network member? First name only (network member)

Moderating Variables

Race

The survey for this dissertation included questions regarding the race of the respondents. In James, 2000 study, White respondents were assigned a value of 1, while Black respondents were assigned a value of 0. The representation of race was done through a dummy variable. It was crucial to note that the sample only included individuals of two races - White and Black. No other non-white racial groups, such as Hispanics, were considered (James, 2000). However, this

study acknowledged the necessity of recognizing people of color and other races, as defined by the 2020 Census Bureau diversity index (United States Census Bureau, 2022). This index included White alone, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander. According to this research, people of color refer to anyone who is not considered White.

Gender

Gender was captured as a categorical variable with a value of 0 assigned for male respondents and 1 for female respondents. It was included as a control variable due to previous research indicating that women tend to receive promotions less frequently than men (Morrison & Von Glinow, 1990). Additionally, the study explored interaction terms to investigate how gender, race, and age may moderate the effect on career attainment.

Work Type

The EENDEED tool, which stands for Enhanced Engagement Nurtured by Determination, Efficacy, and Exchange Dimensions, was used to measure virtual employee engagement. It was developed by Lartey and Randall in 2022 and consists of nine items to assess remote employee engagement. The tool's reliability is supported by a Cronbach alpha value of 0.82, as reported by Saurage et al. in 2022 (Saurage et al., 2022). To determine if an employee works from home (WFH) or teleworks for pay, the survey asked a single question, “do you work from home, yes or no.” similar to the Bureau of Labor Statistics (BLS) survey. Asfaw used this measurement previously to create a binary variable for teleworking, coded as 1 for yes and 0 for no in 2022 (Asfaw, 2022).

Other Control Variables

Staff Position

A variable was assigned a value of 0 for line managers and 1 for staff positions. This variable was added as a control variable because individuals in line positions tend to get promoted at a faster rate compared to those in staff positions. These findings were reported by Nkomo and Cox in 1990, as well as James in 2000 (Nkomo & Cox, 1990 and James, 2000).

Age

A control variable of the respondent's age, measured in years, was included as it affects career outcomes such as promotion rate.

Performance Rating

In a study conducted by James in 2000 on race-related issues, the supervisor used a rating system to evaluate employees' performance in five areas: meeting customer needs, maximizing quality, people skills, integrity, and teamwork. The ratings were given numerical values ranging from 1 (not effective) to 5 (exceptionally effective). The performance measure was used as a control variable to ensure that promotion rates were not affected by variations in performance. Stumpf and London (1981) noted that high performance often leads to promotions, which can create a cycle of increased performance perceptions and additional promotions (James, 2000, p. 498).

Supervisory performance ratings were used in James's study to measure employee performance; however, this information will be self-reported in this research. The ratings range from 1 (not effective) to 5 (exceptionally effective) based on self-reported information from the most recent evaluation of the employee's performance in the following areas: satisfying customer needs, optimizing quality, people skills, honesty, and teamwork. To ensure that performance

variations did not influence promotion rates, the performance measure was used as a control variable, as noted in James' study on race-related issues (2000) (James, 2000). This is particularly important considering the cyclical relationship between performance and promotions.

Table 3.6.c:

Qualtrics (XM) Performance Rating Questions

Self-Reported Performance Rating and Promotion Stumpf and London 1981(James, 2000)

1. To what extent are you meeting customer needs?
2. To what extent are you maximizing quality?
3. To what extent are your people skills met?
4. To what extent have you shown integrity and teamwork?

Reliability and Validity

I conducted reliability and validity checks on all variables to ensure their relevance and appropriateness. However, the study findings are reported in Chapter 4. Cronbach's Alpha (α) was used for reliability checks, evaluating the suitability of chosen constructs for each variable through a specified SPSS process. Stratone et al. (2022) recommend carrying out reliability and validity checks for all variables to assess the chosen constructs' suitability (Stratone et al., 2022). For validity investigation, the Pearson Correlation test was used to evaluate the relationship between each questionnaire item and its overall value. The Pearson's Correlation Coefficient value at the significance level (α) 0.05 was calculated given the sample size (N = 301). The questionnaire items' Pearson Correlation values with their sums were all above this cutoff, establishing the study instrument's validity.

Survey Respondent Characteristics

The survey respondents' characteristics varied in terms of age, gender, race, and organizational features, as shown in Table 3.6.d. This research also collected data on organizational characteristics, including years of service, length of employment, and job-specific details. All the organizational data was collected through Qualtrics (XM), and the participants' identities remained anonymous. Therefore, the study did not track individuals, and there is no way to confirm the participants' identities from other sources. The SPSS dummy coding variables process was used to analyze the initial theoretical model. Categorical variables were dummy coded as 0/1; in a two-category scenario, the "0" represented the reference group, while the "1" represented the other category. Once all the required variables were dummy-coded, the CSV file was imported to SmartPLS® (v 4.1.0.0), where analysis was conducted on all the latent variables, indicators, and control variables.

Table 3.6.d:

Characteristics of Survey Respondents

Characteristics of Survey Respondents		Number of responses	Percent
Q1	**Age**		
	Under 25	21	7%
	Over 25 to 35	103	34%
	Over 35 to 50	111	37%
	Over 50 to 65	63	21%
	Over 65	3	1%
	Total	301	100%
Q2	**Gender**		
	Male	173	58%
	Female	128	42%
	Total	301	100%
Q3	**Race**		
	Asian/Pacific Islander	28	9%
	White	188	62%

Table 3.6.d: ***Characteristics of Survey Respondents (Continued)***

	Native American or American Indian	2	1%
	Black or African American	61	20%
	Hispanic or Latino	17	6%
	Other	5	2%
	Total	301	100%
Q4	**Highest level of education**		
	high school or equivalent	16	5%
	some college	27	9%
	bachelor's or associate degree	166	55%
	master's degree	67	22%
	some graduate courses	14	5%
	doctorate or professional degree	11	4%
	Total	301	100%
Q6	**Tenure**		
	Under 10 years	224	75%
	Over 10 to 15 years	30	10%
	Over15 to 20 years	19	6%
	Over 20 to 25 years	17	6%
	Over 25 years	11	4%
	Total	301	100%
Q7	**Number of Promotions**		
	0 promotions	32	11%
	1 to 3	212	70%
	4 to 5	45	15%
	6 to 8	6	2%
	Over 8	6	2%
	Total	301	100%
	Job classification		
Q9	Line Manager	250	83%
	Staff	51	17%
	Total	301	100%
Q10	**Level of employment**		
	Director	40	13%
	Manager	238	79%
	Vice President	14	5%
	President	9	3%
	Total	301	100%

Research Model Testing

This dissertation used a theoretical model that incorporated three primary constructs: psychosocial support, human capital, and social capital. These constructs have been previously studied in literature and are further developed to propose a connection between the three variables and career attainment, moderated by race, gender, and work type. To test the hypothesis, PLS-SEM analysis was conducted using SmartPLS® 4. The analysis examined and tested the dissertation hypotheses with career attainment as the dependent variable and various independent variables such as psychosocial support, human capital, social capital, and their interactions. The PLS-SEM approach was chosen because of its ability to reduce the impact of sample sizes on the results (Hair et al., 2021).

CHAPTER 4: DATA ANALYSIS & FINDINGS

The results shown in this chapter used Partial Least Squares Structural Equation Modeling (PLS-SEM), which can simultaneously evaluate several associations between variables (Hair et al., 2021).

4.1 Descriptive Statistics and Correlation Analysis

A G*Power analysis was conducted to determine an appropriate sample size for the study. The analysis revealed that a sample size of 154 was sufficient, based on a total of twelve predictors and a medium effect size of $f^2 = .15$, as outlined in Chapter 3. However, to increase the survey results, a total of 301 respondents were recruited through Qualtrics (XM) survey. Qualtrics (XM) estimated that 6,956 participants were eligible for the online study, but only 301 responses were received and used for analysis. Missing values were not an issue because Qualtrics (XM) rejected any incomplete responses or short duration responses before the data was transmitted. Each participant provided a completion code, and the mean survey response duration was between 7 and 10 minutes. Any participants who did not provide the completion code or showed less than 7 minutes were discarded.

PLS-SEM Initial Model

Prior to loading the raw data into Smart-PLS®, the file was imported into SPSS version dummy coding was performed on categorical variables where 0 represents of the two categories, called the reference category, while the value one (1) represents the other category in a two-category situation. Following the initial step, loading the clean file into PLS-SEM works with metric, quasi-metric, and categorical selections. Although there are certain limitations, no missing values were reported. Therefore, all indicators were connected to each latent variable and the algorithm along with the bootstrap was run to account for any low scoring scales. Figure 5 accounts for the initial data load.

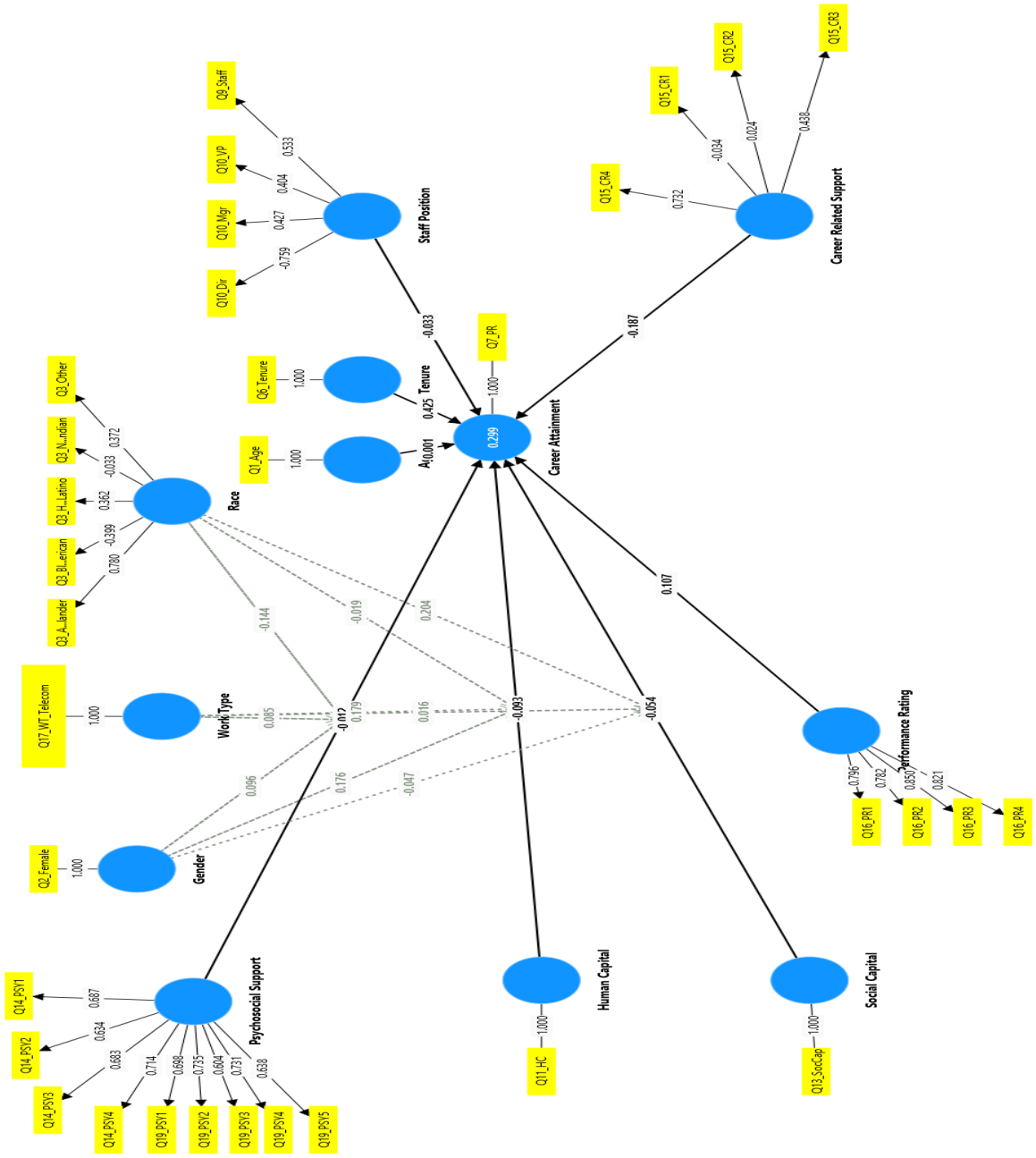


Figure 5: PLS-SEM Initial Model

Initial SmartPLS® model with poorly loaded items.

Initial Measurement Model Results

In measuring independent variable social capital, Q13_1SocCap/Text through Q13_8SocCap/Text was computed by calculating the average of the survey items. In doing so, PLS-SEM indicator of SocCaps was created in total on those constructs' reflective indicators. During the assessment of outer loading, it was determined that questions from the control variable career-related support, along with questions from independent variables psychosocial support, needed to be removed based poor loadings (Table 4.1.a) (Hair et al., 2021).

Table 4.1.a:

Items that were removed

Career-related Support Questions	Psychosocial Support Questions
Q15_CR1	Q14_PSY2
Q15_CR2	Q14_PSY3
	Q19_PSY3
	Q19_PSY5

After removing the items above, I re-ran the PLS-SEM Algorithm again to ensure reliability and validity, and then ran the bootstrap to report the results for of the final model. Figure 6 displays

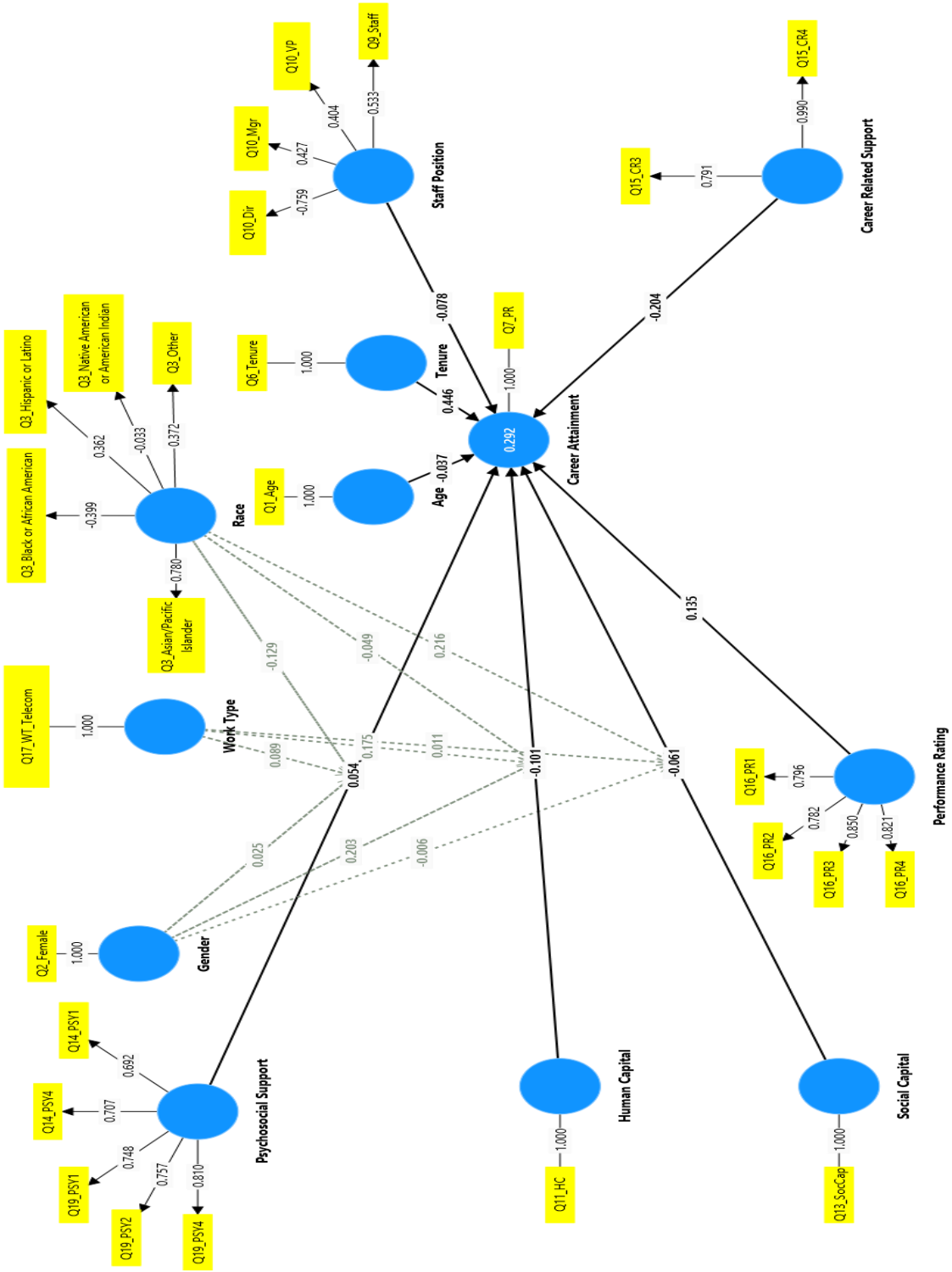


Figure 6: Final SmartPLS® model with poorly loaded removed.

The final model included single-item variables that may cause identification and convergence problems in covariance-based SEM, but this is not a problem in PLS-SEM" (Garson, 2016, p. 31). It may be appropriate to use a single-item construct in SmartPLS® in certain situations (Hair et al., 2022). However, it is generally preferred to have multiple indicators for each latent construct, as shown in Figure 5 and Figure 6. Single items are considered appropriate when expert raters designate the focal construct as doubly concrete or when the researcher finds an excellent single item representing the construct (Sarstedt et al., 2016). In a study by James (2000), training was measured using a single item, and the same item was used in a replication of this study. However, it is generally recommended to have multiple indicators for each latent construct to ensure the reliability and validity of the latent variable model (Hair et al., 2022).

In summary, while using single-item constructs may simplify research, it is essential to consider their potential drawbacks regarding reliability, validity, and generalizability. Therefore, using multiple indicators to measure latent constructs whenever possible is advisable to enhance the robustness of research findings.

Model Descriptive Statistic

Measures such as skewness, Kurtosis, and the Cramér-von Mises test are used to assess the normality of variables. Skewness quantifies the degree of asymmetry within a distribution, whereby values closer to 0 indicate less skewness. Kurtosis measures the peak of a distribution curve compared to a normal distribution, with positive values indicating a relatively peaked distribution (Hair et al., 2022). The Cramér-von Mises test statistic and p-value test assess whether the data comes from a normally distributed population, with low p-values suggesting a departure from normality. In case of significant departure from normality based on the Cramér-

von Mises test, transformation or non-parametric methods might be necessary depending on the analysis. Variables with high skewness and Kurtosis can be log-transformed, or non-parametric tests can be used to mitigate non-normality effects. Understanding the research context and specific requirements of the applied statistical tests is essential in deciding whether to retain or discard variables despite their departure from normality.

The data from the inner model descriptive statistics matrix contains several variables related to this study, including statistical measures such as mean, median, observed minimum and maximum, standard deviation, excess Kurtosis, skewness, number of observations used, Cramér-von Mises test statistic, and Cramér-von Mises p-value. Normality Assessment: The Cramér-von Mises test statistic and p-value are used to assess the normality of the distributions. Q10_Dir shows positive skewness (2.174) and high Kurtosis (2.743), indicating a distribution that is not symmetric and is peaked. Q10_VP shows even higher skewness (4.328) and Kurtosis (16.847), suggesting a more pronounced deviation from normality. The standard deviation values indicated the spread of the data. For instance, Q11_HC has a standard deviation of 1.002, which is relatively higher than Q10_VPs of 0.211, indicating more variability in Q11_HC. Comparing the mean and median can also provide insights into the distribution's symmetry. For Q10_Mgr, the mean (0.791) and median (1.0) are close, suggesting a less skewed distribution despite the negative skewness value (-1.44). Variables with high skewness and Kurtosis, like Q10_VP, might be particularly challenging for methods assuming normality. Depending on the research context, one might consider retaining them cautiously, applying transformations, or using robust statistical methods. The decision to discard or retain variables would also consider the research question and the role of each variable within the study. For instance, if a variable is crucial for

the research despite its non-normal distribution, one might look for ways to include it in the analysis through transformation or alternative statistical methods rather than discarding it.

Table 4.1.b:

Inner Model Descriptive Statistic

	Mean	Median	Observed min	Observed max	Standard deviation	Excess kurtosis	Skewness	Number of observations used	Cramér-von Mises test statistic	Cramér-von Mises p value
Q10_Dir	0.133	0	0	1	0.339	2.743	2.174	301	18.485	0
Q10_Mgr	0.791	1	0	1	0.407	0.063	-1.44	301	15.03	0
Q10_VP	0.047	0	0	1	0.211	16.847	4.328	301	22.935	0
Q11_HC	3.631	4	1	5	1.002	0.244	-0.76	301	3.55	0
Q13_SocCap	2.271	2.38	0	4	0.735	0.24	-0.52	301	0.328	0
Q14_PSY1	3.947	4	0	5	0.973	1.316	-1.07	301	3.705	0
Q14_PSY4	3.831	4	0	5	1.085	1.609	-1.23	301	3.665	0
Q15_CR3	3.801	4	0	5	1.069	0.251	-0.83	301	2.77	0
Q15_CR4	3.608	4	0	5	1.206	-0.017	-0.84	301	2.985	0
Q16_PR1	4.133	4	1	5	0.775	0.488	-0.71	301	4.074	0
Q16_PR2	4.116	4	1	5	0.837	0.249	-0.77	301	3.641	0
Q16_PR3	4.06	4	1	5	0.909	-0.027	-0.73	301	3.175	0
Q16_PR4	4.362	5	1	5	0.814	1.331	-1.28	301	5.326	0
Q17_WT_Telecom	0.405	0	0	1	0.491	-1.862	0.388	301	9.471	0
Q19_PSY1	3.973	4	1	5	0.943	0.772	-0.9	301	3.116	0
Q19_PSY2	3.807	4	0	5	1.045	1.045	-1.01	301	3.128	0
Q19_PSY4	4.166	4	0	5	0.866	1.96	-1.19	301	4.029	0
Q1_Age	40.47	39	0	73	11.278	-0.185	0.305	301	0.484	0
Q2_Female	0.412	0	0	1	0.492	-1.883	0.36	301	9.378	0
Q3_Asian/Pacific Islander	0.093	0	0	1	0.29	5.971	2.816	301	20.501	0
Q3_Black or African American	0.203	0	0	1	0.402	0.212	1.487	301	15.305	0
Q3_Hispanic or Latino	0.056	0	0	1	0.231	13.001	3.862	301	22.416	0
Q3_Native American or American Indian	0.007	0	0	1	0.081	147.97	12.21	301	24.843	0
Q3_Other	0.017	0	0	1	0.128	56.165	7.602	301	24.412	0

Table 4.1.b: ***Inner Model Descriptive Statistic (Continued)***

Q6_Tenure	8.618	7	1	32	6.86	1.284	1.341	301	2.351	0
Q7_PR	2.429	2	0	23	2.471	24.798	4.075	301	3.515	0
Q9_Staff	0.169	0	0	1	0.375	1.145	1.771	301	16.757	0

Demographic information including age, gender, and education was recorded. Table 4.1.c showed a response rate of 37% for the age range of 35 to 50, with 111 individuals recording this age.

Table 4.1.c:

Demographic information

Demographics Age

Age	N	Percent
Under 25	21	7%
Over 25 to 35	103	34%
Over 35 to 50	111	37%
Over 50 to 65	63	21%
Over 65	3	1%
Total	**301**	**100%**

According to the mean calculation, the average age of the senior leaders is 40.465. It appears that one person did not disclose their age, as reflected in the minimum value of the data. However, this missing value does not affect the overall conclusion that the average age of senior leaders is closer to 40 than to 0.

Table 4.1.d:

Demographic information

Demographics Q1 Age

	Mean	Median	Observed min	Observed max	Standard deviation	Excess kurtosis	Skewness	N	Cramér-von Mises test statistic	Cramér-von Mises p value
Age Q1	40.465	39	0	73	11.278	-0.185	0.305	301	0.484	0

Based on the gender data collected, it was found that 58% of the 173 respondents surveyed identified as male, while 42% of the 128 respondents identified as female. In future studies, it may be beneficial to consider binary options or alternative categories to better capture the diversity of gender identity. However, since the survey format was replicated from James (2000), only two options were provided.

Table 4.1.e:

Demographic information

Demographics Gender

Gender	N	Precent
Male	173	58%
Female	128	42%
Total	**301**	**100%**

Table 4.1.f presents the race and ethnicity characteristics of the participants of this study. Out of 301 respondents, 62% identified themselves as non-people of color, while 20% identified

themselves as Black or African American. Additionally, 1% of the respondents identified themselves as Native American or American Indian, while 6% identified as Hispanic or Latino. The remaining 2% of the participants identified themselves as belonging to a race not included in the survey.

Table 4.1.f:

Demographic information

Race and Ethnicity

Race	N	Percent
Asian/Pacific Islander	28	9%
White	188	62%
Native American or American Indian	2	1%
Black or African American	61	20%
Hispanic or Latino	17	6%
Other	5	2%
Total	**301**	**100%**

Measuring human capital can be done through education. Among 301 respondents, 55% reported possessing either an associate or bachelor's degree. This metric helps in determining how education and race impact promotion rates and career advancement. The second most reported education level was a master's degree, with 22% out of 67 respondents holding it.

Table 4.1.g:

Demographic information

Education Level

Highest level of education	N	Percent
high school or equivalent	16	5%
some college	27	9%
bachelor's or associate degree	166	55%
master's degree	67	22%
some graduate courses	14	5%
doctorate or professional degree	11	4%
Total	**301**	**100%**

Qualtrics (XM) compensated targeted respondents, collecting basic demographic information.

4.2 Correlation Analysis

Highlighting the research conducted by Hair et al. in 2021, SmartPLS® version 4.1.0.0 correlation analysis helps obtain insights into the correlation coefficients between various variables (Hair et al., 2021). According to Hair et al. (2021), the correlation coefficients of -1 to 1 displays a value of 1 indicating a perfect negative correlation, -1 a positive correlation, and 0 no correlation at all. The correlation coefficient between Career Attainment and Age is 0.241, indicating a positive correlation. Similarly, the correlation coefficient between Race and Career Attainment is -0.116, suggesting that there is a relationship between being a person of color and reporting fewer promotions (measures of career attainment). The analysis also reveals how a third variable may influence the relationship between two variables. Correlations for the

interaction effects between Work Type x Psychosocial Support are provided along with their corresponding p-values.

Table 4.2.a shows significant positive relationships between various workplace factors. age has a moderate positive correlation with tenure (0.471) and a moderate negative correlation with Race (-0.251). On the other hand, career attainment has a moderately positive correlation with performance rating (0.136).

Human capital exhibits a negative correlation with gender (-0.096) and a moderate positive correlation with race (0.038). The data suggests that psychosocial support has a strong positive correlation with performance rating (0.627) and moderate positive correlations with career attainment (0.135) and career-related support (0.537). On the other hand, Race has a moderate negative correlation with age (-0.251) and a negative correlation with social capital (-0.038). Social Capital, in turn, has a strong positive correlation with psychosocial support (0.358) and negative correlation with Gender (-0.065) and a negative correlation with Race (-0.038). Tenure has a strong positive correlation with Age (0.471) and a moderate positive correlation with career attainment (0.447).

Overall, these correlations provided valuable insights into the potential relationships between various workplace factors. For example, the strong positive correlation between psychosocial support and performance ratings suggests that employees who receive more support tend to have higher performance ratings. It is also worth noting some unexpected correlations, such as the negative correlation between gender and human capital, which may warrant further investigation.

Table 4.2.a:

Correlation Table SmartPLS® Software (Hair, Hult, Ringle, Sarstedt, Danks & Ray, 202

	1	2	3	4	5	6	7	8	9	10	11
1. Age											
2. Career Attainment	0.241**										
3. Career Related Support	-0.166**	-0.120*									
4. Gender	.126*	0.060	-0.024								
5. Human Capital	0.039	0.126*	0.126*	-0.096							
6. Performance Rating	0.093	0.136*	0.431**	0.091	0.159**						
7. Psychosocial Support	0.111	0.135*	0.537**	0.007	0.174**	0.627**					
8. Race	-.251**	-0.116*	0.021	0.064	0.038	-0.084	-0.117*				
9. Social Capital	0.083	0.022	0.228**	-0.065	0.189**	0.240**	0.358**	-0.04			
10. Staff Position	-0.049	-0.102	-0.053	-0.048	-0.137*	-0.098	-0.100	-0.090	-0.081		
11. Tenure	.471**	0.447**	-0.013	-0.014	0.179**	0.073	0.174**	-0.09	0.129*	-0.176**	
12. Work Type	-0.011	0.076	-0.087	0.010	-0.014	0.013	0.007	-0.05	0.016	0.062	-0.117*

** Correlation is significant at the p < 0.01 level
* Correlation is significant at the p < 0.05 level
N=301

Significant correlations are marked with asterisks, with single asterisks indicating significance at 0.05 and double asterisks at 0.01. This matrix provides insights into the dynamics and interdependencies among the studied factors.

4.3 Outer Loading and Outer Weights

Three discriminant validity checks were produced via the PLS-SEM Algorithm check to ensure each construct was uniquely measured and not under the same validity terms. The initial validity check was mentioned using the HTMT, Fornell-Larker criterion, and Cross-Loading (Hair et al., 2021). Cross-loadings are reviewed initially to view constructs with higher loadings associated with the discriminant validity check. According to Hair et al. (2021), avoid using the Fornell-Larcker criterion since it frequently fails to accurately identify discriminant validity issues (Radomir & Moisescu, 2019; Hair et al., 2021). However, many researchers are conversant with the procedure and incorporate this criterion in discussions about validity.

Discriminant Validity

The Heterotrait Monotrait Ratio (HTMT) ratio is a measure used to assess the discriminant validity between constructs in a structural equation model. This ratio is calculated by taking the average of the off-diagonal correlations between the constructs and dividing it by the square root of the average of the on-diagonal correlations for each pair of constructs. If the HTMT value is close to or below 0.85, it is generally considered to indicate acceptable discriminant validity between constructs (Hair et al., 2021). In the provided matrix, all of the HTMT values are below 0.85, suggesting acceptable discriminant validity between the constructs. Specifically, Age and Career Attainment, Gender and Human Capital, Performance Rating, and Psychosocial Support have HTMT values well below 0.85, which indicates that these constructs are distinct from each other. However, a few HTMT values were close to or slightly above 0.85, such as the relationship between psychosocial support and performance rating (0.750) and the relationship between psychosocial support and career related support (0.687).

While these values are relatively high, they are still below 0.85, indicating a potential overlap but generally acceptable discriminant validity.

Table 4.3.a:

Heterotrait-Monotrait matrix Appendix A: Mapping

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Age																				
Career Attainment	0.241																			
Career Related Support	0.153	0.098																		
Gender	0.126	0.060	0.047																	
Human Capital	0.039	0.126	0.146	0.096																
Performance Rating	0.091	0.137	0.562	0.095	0.172															
Psychosocial Support	0.118	0.126	0.687	0.044	0.203	0.750														
Race	0.487	0.182	0.234	0.205	0.218	0.275	0.328													
Social Capital	0.083	0.022	0.253	0.065	0.189	0.257	0.404	0.170												
Staff Position	0.094	0.097	0.195	0.063	0.146	0.133	0.208	0.386	0.090											
Tenure	0.471	0.447	0.062	0.014	0.179	0.069	0.185	0.212	0.129	0.190										
Work Type	0.011	0.076	0.095	0.010	0.014	0.032	0.073	0.234	0.016	0.103	0.117									
Work Type x Psychosocial Support	0.051	0.119	0.357	0.033	0.053	0.460	0.682	0.229	0.206	0.090	0.087	0.019								
Race x Human Capital	0.008	0.020	0.007	0.003	0.252	0.025	0.080	0.238	0.019	0.119	0.015	0.063	0.007							
Gender x Psychosocial Support	0.073	0.072	0.387	0.005	0.035	0.313	0.645	0.193	0.178	0.071	0.099	0.018	0.415	0.024						
Race x Social Capital	0.011	0.037	0.140	0.017	0.019	0.210	0.194	0.168	0.284	0.093	0.027	0.068	0.074	0.218	0.100					
Gender x Human Capital	0.030	0.138	0.085	0.086	0.664	0.044	0.063	0.126	0.099	0.171	0.086	0.004	0.041	0.330	0.052	0.080				
Work Type x Social Capital	0.007	0.013	0.178	0.079	0.016	0.148	0.232	0.058	0.617	0.059	0.068	0.016	0.334	0.045	0.093	0.092	0.004			
Gender x Social Capital	0.079	0.008	0.146	0.057	0.098	0.085	0.181	0.139	0.673	0.035	0.093	0.023	0.081	0.086	0.265	0.248	0.145	0.439		
Work Type x Human Capital	0.029	0.163	0.047	0.058	0.622	0.135	0.065	0.224	0.016	0.064	0.085	0.013	0.086	0.107	0.047	0.043	0.527	0.026	0.003	
Race x Psychosocial Support	0.005	0.055	0.278	0.024	0.065	0.250	0.451	0.265	0.157	0.172	0.078	0.043	0.207	0.082	0.236	0.480	0.011	0.069	0.074	0.007

Fornell-Larcker Criterion

The Fornell-Larcker criterion is a method used to evaluate the discriminant validity of constructs in structural equation modeling (Hair et al., 2021). To assess discriminant validity, there is a comparison of the square root of the Average Variance Extracted (AVE) for each construct with the correlations between that construct and other constructs. Per the finding, if the

square root of the AVE for a construct is greater than its correlations with other constructs, then the construct has discriminant validity (Hair et al., 2021).

To apply the Fornell-Larcker criterion, the AVE was calculated for each construct. This is done by adding up the squared factor loadings for the indicators of the construct and then dividing them by the number of indicators. Once calculated, the AVE for each construct was compared against the correlations between that construct and other constructs to determine whether it has discriminant validity or not.

In this study, the Fornell-Larcker criterion was used to compare the square root of the AVE for each construct with the correlations between that construct and other constructs in the model. In this case, the AVE for each construct Performance Rating (0.661), Psychosocial Support (0.553), Race (0.208) and Staff position (0.301) all are less than 1.000. Therefore, all squared correlations are less than 1.000, indicating that the Fornell-Larcker criterion is met for all constructs. This means that each construct has discriminant validity, as each construct explains more variance in its indicators than it shares with other constructs.

Table 4.3.b:

Fornell-Larcker Criterion results

	Age	Career Attainment	Career Related Support	Gender	Human Capital	Performance Rating	Psychosocial Support	Race	Social Capital	Staff Position	Tenure
Age											
Career Attainment	0.241										
Career Related Support	-0.166	-0.12	0.896								
Gender	0.126	0.06	-0.024								

Table 4.3.b: ***Fornell-Larcker Criterion results (Continued)***

Human Capital	0.039	0.126	0.126	-0.096							
Performance Rating	0.093	0.136	0.431	0.091	0.159	0.813					
Psychosocial Support	0.119	0.132	0.519	-0.005	0.184	0.625	0.744				
Race	-0.251	0.116	-0.021	0.064	0.038	0.084	-0.125	0.456			
Social Capital	0.083	0.022	0.228	-0.065	0.189	0.24	0.366	-0.04			
Staff Position	-0.049	0.102	-0.053	-0.048	-0.137	0.098	-0.093	-0.09	0.081	0.549	
Tenure	0.471	0.447	-0.013	-0.014	0.179	0.073	-0.182	-0.09	0.129	-0.176	
Work Type	-0.011	0.076	-0.087	0.01	-0.014	0.013	0.02	-0.05	0.016	-0.062	-0.117

During the outer loadings analysis process, the PLS-SEM algorithm was used to calculate the latent variables and weights. The Outer loading was evaluated on the reflective constructs. The bulk of the indicators were over 0.708, signifying commonality of influence based on (Hair et al., 2021). However, the following loadings Q10_Dir <- Staff Position, Q_10Mgr <- Staff Position, Q10 <- Staff Position, Q14_PSY <- Psychosocial Support, Q3_Black or African American <- Race, Q3_Hispanic or Latino <- Race, Q3_Native American or American Indian <- Race, Q3_Other <- Race, and Q9_Staff <- Staff Position fell below the minimum threshold for accepting the item as best fit based on. In SmartPLS, outer loadings indicate the relationship between observed indicators (manifest variables) and underlying latent constructs (factors). An

outer loading below 0.708 suggests an indicator doesn't accurately represent its corresponding latent construct (Hair et at., 2020).

Q10_Dir <- Staff Position	-0.759
Q10_Mgr <- Staff Position	0.427
Q10_VP <- Staff Position	0.404
Q14_PSY1 <- Psychosocial Support	0.692/0.707
Q3_Black or African American <- Race	-0.399
Q3_Hispanic or Latino <- Race	0.362
Q3_Native American or American Indian <- Race	-0.033
Q3_Other <- Race	0.372
Q9_Staff <- Staff Position	0.533

Table 4.3.c:

Cross loadings – List

	Outer loadings
Q1 <- Age	1.000
Q10_Director <- Staff Position	-0.759
Q10_Manager <- Staff Position	0.427
Q10_Vice President <- Staff Position	0.404
Q11 <- Human Capital	1.000
Q14_1_1 <- Psychosocial Support	0.692
Q14_1_4 <- Psychosocial Support	0.707
Q15_1_3 <- Career Related Support	0.791
Q15_1_4 <- Career Related Support	0.990
Q16_1_1 <- Performance Rating	0.796

Table 4.3.c: ***Cross loadings – List (Continued***

Q16_1_2 <- Performance Rating	0.782
Q16_1_3 <- Performance Rating	0.850
Q16_1_4 <- Performance Rating	0.821
Q17_Work from Home/Remote Worker <- Work Type	1.000
Q19_1_1 <- Psychosocial Support	0.748
Q19_1_2 <- Psychosocial Support	0.757
Q19_1_4 <- Psychosocial Support	0.810
Q2_Female <- Gender	1.000
Q3_Asian/Pacific Islander <- Race	0.780
Q3_Black or African American <- Race	-0.399
Q3_Hispanic or Latino <- Race	0.362
Q3_Native American or American Indian <- Race	-0.033
Q3_Other <- Race	0.372
Q6 <- Tenure	1.000
Q7 <- Career Attainment	1.000
Q9_Staff <- Staff Position	0.533
SocCap <- Social Capital	1.000
Work Type x Social Capital -> Work Type x Social Capital	1.000

Table 4.3.c: ***Cross loadings – List (Continued)***

Work Type x Psychosocial Support -> Work Type x Psychosocial Support	1.000
Gender x Human Capital -> Gender x Human Capital	1.000
Race x Social Capital -> Race x Social Capital	1.000
Gender x Psychosocial Support -> Gender x Psychosocial Support	1.000
Work Type x Human Capital -> Work Type x Human Capital	1.000
Gender x Social Capital -> Gender x Social Capital	1.000
Race x Psychosocial Support -> Race x Psychosocial Support	1.000
Race x Human Capital -> Race x Human Capital	1.000

4.4 Convergent Reliability

Construct Reliability and Validity

Reliability and convergent validity were assessed based on the review of construct reliability and validity, composite reliability, and the Average Variance Extracted (AVE) Table 4.4.a assuming that each indicator had an equal amount of input on the construct, all Cronbach's Alpha assessments demonstrated internal solid reliability, with all values > 0.70 (Hair et al., 2021). This established the internal consistency of the indicator variables concerning their

constructs. Nonetheless, values between .60 and 0.70 are acceptable for research, and values above 0.70 and 0.90 remain good. A considerable number of the scores for this study fell between 0.60 and exceeded 0.80 but fell short of 0.90, indicating that the constructs were assessing the same phenomena (Hair et al., 2021).

Table 4.4.a:

Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
Career Related			
Support	0.821	0.889	0.803
Performance Rating	0.835	0.886	0.661
Psychosocial			
Support	0.808	0.86	0.553

Collinearity statistics

According to Hair et al. (2021), when two or more indicators in a formative measurement model have a strong correlation, this is known as collinearity (Hair et al., 2021). High correlation leads to type II mistakes (false negatives) by raising the standard error of the indicator weights. Interpretational confusion can result from more marked degrees of collinearity, which can even cause sign shifts in the indicator weights. Regression coefficient stability and reliability may be impacted by multicollinearity, as indicated by high VIF values. A VIF value of 10 or more is usually considered concerning, while other researchers employ a lower cutoff point of 5 or above (Hair et al., 2021). The low VIF values of the majority of the main effect factors show a low likelihood of multicollinearity. Therefore, identifying the variance for the "Q10_Dir >

Q10_Mgr" two variables are uncritical 4.732 and 5.747 (Hair et al., 2021), however, VIF > 5 suggest that collinearity may be problematic. The following steps were to identify potential collinearity problems and brainstorm alternative fixes, such as eliminating a correlated variable or applying regularization strategies.

Table 4.4.b:

Collinearity Statistics (VIF)

Survey Questions	VIF
Q10_Dir	**4.732**
Q10_Mgr	**5.747**
Q10_VP	2.446
Q11_HC	1.000
Q13_SocCap	1.000
Q14_PSY1	2.012
Q14_PSY4	1.746
Q15_CR3	1.945
Q15_CR4	1.945
Q16_PR1	1.832
Q16_PR2	2.098
Q16_PR3	1.769
Q16_PR4	1.823
Q17_WT_Telecom	1.000
Q19_PSY1	1.790
Q19_PSY2	1.670

Table 4.4.b:

Collinearity Statistics (Continued)

Q19_PSY4	1.662
Q1_Age	1.000
Q2_Female	1.000
Q3_Asian/Pacific Islander	1.042
Q3_Black or African American	1.056
Q3_Hispanic or Latino	1.029
Q3_Native American or American Indian	1.004
Q3_Other	1.01
Q6_Tenure	1.000
Q7_PR	1.000
Q9_Staff	1.009
Work Type x Human Capital	1.000
Gender x Social Capital	1.000
Race x Human Capital	1.000
Gender x Human Capital	1.000
Race x Psychosocial Support	1.000
Work Type x Social Capital	1.000
Race x Social Capital	1.000
Gender x Psychosocial Support	1.000
Work Type x Psychosocial Support	1.000

Moderation

The PLS-SEM Algorithm typically requires variables to be measured on a metric scale (ratio scale or interval scale) for the measurement model indicators (Hair et al., 2021). However, the approach also performs well with binary-coded data and ordinal scales with equidistant data points (Sarstedt & Mooi, 2019; Chap. 3.6). A standard method for incorporating moderators or categorical control factors into PLS-SEM models is the use of binary-coded data (Hair et al., 2022). While binary indicators can be incorporated into PLS-SEM models, extra care must be used (Hair et al., 2021). Moderators' gender, race, and work type account for heterogeneity in the data. The moderator variable (or construct) changes the strength or even the direction of a relationship between two constructs in a model (Hair et al., 2021). A bootstrapping technique was used to estimate standard errors. The PLS-SEM bootstrapping subsampled 5000 at a parallel processing rate with Two-tailed testing at a fixed seed (Hair et al., 2021). Using a significance level of 0.05, bootstrapping tested the nonparametric including the path coefficients, outer weights, Cronbach's alpha, HTMT, and the R^2.

R-square is the amount of variance based on the IV's psychosocial support, human and social capital. The R-square from the PLS-SEM Algorithm returned an R^2 of 0.292 for the construct Career Attainment (DV) and an adjusted R^2 of 0.242, which showed no increase over the initial R^2 results. R^2 values of greater than 0.75 show high predictability (Hair et al., 2021).

Table 4.4.c:

Quality Criteria -R-square overview

	R-square	R-square adjusted
Career Attainment	0.292	0.242

As well as other model parameters, the bootstrapping process produced the indicator weights' t-values. To determine whether the coefficients differed substantially from zero, I

compared these t-values with the critical values from the standard normal distribution (Hair et al., 2021). A t-value greater than 1.96 (a two-tailed test) indicates that the indicator weight is statistically significant, assuming a significance level of 5%. The critical values for significant levels of 1% ($\alpha = 0.01$) and 10% ($\alpha = 0.10$) likelihood of error are 2.576 and 1.645 (two-tailed), respectively, according to Hair et al. (2021) (Hair et al., 2021) Table 4.4e.

Table 4.4.d:

Hammer to the Glass Ceiling P-Values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Age -> Career Attainment	-0.037	-0.034	0.056	0.655	0.512
Career Related Support -> Career Attainment	-0.204	-0.186	0.124	1.647	0.100
Gender -> Career Attainment	0.127	0.119	0.102	1.243	0.214
Human Capital -> Career Attainment	-0.101	-0.104	0.086	1.165	0.244
Performance Rating -> Career Attainment	0.135	0.132	0.066	2.051	0.040
Psychosocial Support -> Career Attainment	0.054	0.05	0.081	0.664	0.506

Table 4.4.d: ***Hammer to the Glass Ceiling P-Values (Continued)***

Race -> Career Attainment	-0.326	-0.323	0.175	1.869	0.062
Social Capital -> Career Attainment	-0.061	-0.056	0.076	0.796	0.426
Staff Position -> Career Attainment	-0.078	-0.13	0.228	0.343	0.731
Tenure -> Career Attainment	0.446	0.445	0.056	7.973	0.000
Work Type -> Career Attainment	0.206	0.203	0.094	2.191	0.029
Work Type x Psychosocial Support -> Career Attainment	0.089	0.102	0.106	0.834	0.404
Race x Human Capital -> Career Attainment	-0.049	-0.068	0.2	0.248	0.804
Gender x Psychosocial Support -> Career Attainment	0.025	0.04	0.129	0.195	0.845
Race x Social Capital -> Career Attainment	0.216	0.217	0.285	0.758	0.448

Table 4.4.d: ***Hammer to the Glass Ceiling P-Values (Continued)***

Gender x Human Capital -> Career Attainment	0.203	0.199	0.103	1.965	0.049
Work Type x Social Capital -> Career Attainment	0.011	0.003	0.104	0.106	0.916
Gender x Social Capital -> Career Attainment	-0.006	0.001	0.102	0.063	0.950
Work Type x Human Capital -> Career Attainment	0.175	0.182	0.089	1.963	0.050
Race x Psychosocial Support -> Career Attainment	-0.129	-0.159	0.216	0.599	0.549

f^2 Effect Size

It is possible to evaluate how the absence of external structures affects internal constructs by replicating the model process in SmartPLS®. To achieve this, the study used f^2 effect size, which is analogous to the sizes of the path coefficients. In other words, the relevance order of predictor constructs in explaining a dependent construct in the structural model remains the same when comparing the sizes of the path coefficients and the f^2 effect sizes. The f^2 effect size is measured as f^2 0.005 for a small effect, 0.01 for a medium effect, and 0.025 for a

significant effect (Hair et al., 2021). By contrasting the path coefficient sizes and the f^2 effect sizes, the f^2 effect size provides a different perspective on the data.

According to Hair et al. (2021), these findings result in values predicting the outcome. Therefore, we can conclude that age > career attainment had a small effect, psychosocial support > career attainment had a negligible effect, whereas career-related support > career attainment had a significant effect. These values represent the proportion of variance in Career Attainment explained by each predictor. Larger values indicate a more substantial effect of the predictor on Career Attainment.

Table 4.4.e:

f-square - list

	f-square
Age -> Career Attainment	0.001
Career Related Support -> Career Attainment	0.037
Gender -> Career Attainment	0.005
Human Capital -> Career Attainment	0.005
Performance Rating -> Career Attainment	0.014
Psychosocial Support -> Career Attainment	0.001
Race -> Career Attainment	0.006
Social Capital -> Career Attainment	0.002
Staff Position -> Career Attainment	0.001
Tenure -> Career Attainment	0.195
Work Type -> Career Attainment	0.014
Work Type x Psychosocial Support -> Career Attainment	0.002

Table 4.4.e: *f-square – list (Continued)*

Race x Human Capital -> Career Attainment	0.000
Gender x Psychosocial Support -> Career Attainment	0.000
Race x Social Capital -> Career Attainment	0.002
Gender x Human Capital -> Career Attainment	0.012
Work Type x Social Capital -> Career Attainment	0.000
Gender x Social Capital -> Career Attainment	0.000
Work Type x Human Capital -> Career Attainment	0.009
Race x Psychosocial Support -> Career Attainment	0.001

In examining the effect sizes of path coefficients and the *c* benchmarks provided by (Hair et al., 2021), Age -> Career Attainment: *f*-square = 0.001. This falls below the threshold for a small effect ($f^2 < 0.005$). Career Related Support -> Career Attainment: *f*-square = 0.037. This exceeds the threshold for a large effect. Gender -> Career Attainment: *f*-square = 0.005. This falls along the threshold for a small effect ($f^2 < 0.005$). Human Capital -> Career Attainment: f-square = 0.005. This falls along the threshold for a small effect ($f^2 < 0.005$). Performance Rating -> Career Attainment: *f*-square = 0.014. This falls below the threshold for a medium effect (*f*2 < 0.01). Psychosocial Support -> Career Attainment: -square = 0.002. This falls below the threshold for a small effect ($f^2 < 0.005$). Race -> Career Attainment: *f*-square = 0.006. This falls above the threshold for a small effect ($f^2 < 0.005$). Social Capital -> Career Attainment: *f*-square = 0.002. This falls below the threshold for a small effect ($f^2 < 0.005$). Staff Position -> Career Attainment: *f*-square = 0.001. This falls below the threshold for a small effect ($f^2 < 0.005$). Tenure -> Career Attainment: *f*-square = 0.195. This exceeds the threshold for a significant effect ($f^2 > 0.025$). Work Type -> Career Attainment: *f*-square = 0.014. This exceeds the threshold for a

medium effect and falls between small and medium effects ($0.01 < f^2 < 0.025$). Race x Human Capital -> Career Attainment: *f*-square = 0.006. This indicates a small effect. Work Type x Psychosocial Support -> Career Attainment: f-square = 0.003. This falls below the threshold for a small effect ($f^2 < 0.005$). Gender x Psychosocial Support -> Career Attainment: *f*-square = 0.000. This indicates no effect. In summary, some predictors, such as Career-Related Support, Tenure, and Work Type, show effects exceeding the thresholds for small or significant effects, while others fall below these thresholds.

4.5 Hypothesis Analysis

Hypothesis Results

The dissertation put forth twelve hypotheses, out of which only two received support from the results. Hypothesis 8 (H8) suggests that the relationship between human capital and career attainment is moderated by work type, wherein remote workers reported a stronger positive relationship between human capital and career attainment than individuals working in-person or in a traditional work arrangement. Hypothesis 5 (H_5) is also statistically significant, indicating that gender influences the relationship between human capital and career attainment. The relationship is more vital for women compared to men. However, the remaining hypotheses (H_1, H_2, H_3, H_4, H_6, H_7, H_9, H_{10}, H_{11} and H_{12}) were not supported, but some control variables were significant. For instance, performance rating had a direct relationship with career attainment, while tenure and career attainment also showed a direct relationship that was statistically significant. These findings indicate potential areas for future research.

Table 4.5.a:

Hypothesis Results

H_1: Psychosocial Support is positively associated with Career Attainment

(β = .054, t = .664, p = .506)

H_2: Human Capital is positively associated with Career Attainment

(β = -0.101, t = 1.165, p = .244)

H_3: Social Capital is positively associated with Career Attainment.

(β = -0.061, t = .796, p = .426)

H_4: Gender moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is stronger among women.

(β = .025, t = .195, p = .845)

H_5: Gender moderates the relationship between Human Capital and Career Attainment such that relationship is stronger for women.

(β = .203, t = 1.965, p = .049)

H_6: Gender moderates the relationship between Social Capital and Career Attainment such that the relationship is stronger for women.

(β = -0.006, t = 0.063, p = .950)

H_7: Work Type moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is stronger for remote workers.

(β = 0.089, t = .834, p = .404)

H8: Work Type moderates the relationship between Human Capital and Career Attainment such that the relationship is stronger for remote workers.

(β = .175, t = 1.963, p = .050)

H_9: Work Type moderates the relationship between Social Capital and Career Attainment such that the relationship is stronger for remote workers.

(β = .011, t = .106, p = .916)

H_{10}: Race moderates the relationship between Psychosocial Support and Career attainment such that the relationship is weaker for people of color.

(β = -.129, t = .599, p = .549)

H_{11}: Race moderates the relationship between Human Capital and Career Attainment such that the relationship is weaker among people of color.

(β = -.049, t = .248, p = .804)

H_{12}: Race moderates the relationship between Social Capital and Career Attainment such that the relationship is weaker for people of color.

(β = 0.216, t = .758, p = .448)

This study found a significant relationship between gender x human capital --> career attainment, as well as work type x human capital --> career attainment, which were hypotheses H_5 and H_8.

Table 4.5.b:

Hypothesis Results (Continued)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Gender x Human Capital -> Career Attainment	0.203	0.199	0.103	1.965	**0.049**
Work Type x Human Capital -> Career Attainment	0.175	0.182	0.089	1.963	**0.050**

However, non-hypothesized items in this model showed significance, such as tenure --> Career Attainment, work type --> Career Attainment, and performance rating --> Career Attainment. These constructs may be considered for future research.

Table 4.5.c:

Hypothesis Results (Continued)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Tenure -> Career Attainment	0.446	0.445	0.056	7.973	**0.000**
Work Type -> Career Attainment	0.206	0.203	0.094	2.191	**0.029**
Performance Rating -> Career Attainment	0.135	0.132	0.066	2.051	**0.040**

4.6 PLS-SEM Slope Analysis

Simple slope analyses that provide additional support for the two moderating hypotheses H_5 and H_8 are provided in Appendix A. The slope analysis for Slope Analysis Work Type x Human Capital → Career Attainment illustrates that when Work Type = 1 (work from home), the relationship between Human Capital and Career Attainment is more positive (stronger) than at Work Type = 0, suggesting that Work Type moderates the relationship between Human Capital and Career Attainment in such a way that the relationship between Human Capital and Career Attainment is stronger among people who identified their work type as working from home.

The simple slope analysis for Slope Analysis Gender x Human Capital → Career Attainment shows the linkage between Human Capital and Career Attainment with a moderating effect of Gender. When Gender= 1, the relationship between Human Capital and Career

Attainment is stronger, as demonstrated by a higher slope at Gender = 1, than at Gender = 0, suggesting that relationship between Human Capital and Career Attainment is stronger for those who identified as women.

The findings from both cases suggest that there are significant moderating effects at play. For instance, when considering work type, individuals who work from home (Work Type = 1) tend to have a stronger positive relationship between their human capital and career attainment when compared to those who do not work from home (Work Type = 0). This indicates that one's work arrangement can influence the strength of the relationship between human capital and career attainment. Similarly, when gender is considered, the relationship between human capital and career attainment is more significant for women (Gender = 1) than for individuals identifying otherwise (Gender = 0). Therefore, gender plays a crucial role in moderating the relationship between human capital and career attainment.

CHAPTER 5: DISCUSSION AND CONCLUSION

This dissertation focused on delineating the moderating dynamics of gender, work type, and race in relation to psychosocial support, human capital, and social capital within the workplace. Additionally, this research addressed underexplored facets of the workplace, controlling for variables such as age, tenure, performance rating, and other influential factors within professional environments. As corporate America continues to transition into a more virtual environment, the value added in this study helps organizations unpack how telecommuting benefits or impacts career advancement.

This study focused on women and people of color's challenges in gaining access to high-level, high-status, and high-paying career positions within organizations. Three primary objectives underpin this study: (a) to elucidate the significance of psychosocial support, encompassing emotional support, trust, and the cultivation of robust social networks; (b) the efficacy of individual investments in human capital, including skills, education, and job training, in relation to career advancement; (c) fostering a diverse social sponsorship structure as a catalyst for career progression.

Chapter 5 also outlines the findings of this study in replicating and adding value to race-related differences study, which included mediated factors versus moderation. Section (a) includes the findings of this study, (b) highlights the limitations of the study, and (c) concludes the ideas for future research.

5.1Model Results

The relationship between human capital and career attainment is moderated by work type, indicating that connection between Human Capital and Career Attainment is stronger for people whose work type is work from home. This observation aligns with the rationale

articulated by Becker in 1975, positing that strategic investment in human capital is conducive to increased employee performance and productivity. Consequently, investing in human capital justifies a subsequent increase in monetary returns, as Becker's argument from 1975 advocated (Becker, 1975). This study found significance in work type, education, skills, and training. Therefore, remote workers will report stronger positive relationship between human capital and career attainment compared to individuals working in person or a traditional work arrangement.

This research supported the finding that the relationship between human capital and career attainment is moderated by gender, indicating that the strength of this relationship differs between women and men. This suggests that the relationship between Human Capital and Career Attainment is stronger for women compared to men. Overall, the significance of this finding suggests that gender plays a role in shaping how human capital influences career attainment, with potential implications for understanding and addressing gender disparities in career outcomes.

Concerning this, the article authored by James (2000), titled "Race-Related Differences in Promotions and Support," illuminates the persistent challenges faced by individuals of color in achieving professional success, attributing these obstacles to discriminatory treatment spanning the past two decades (James, 2000). Although James (2000) found results in mediating race, this study moderated race. According to James, 2000, the first argument was treatment discrimination against Black employees at work, as demonstrated by the direct correlation between race and reported promotion rates as well as the availability of career-related and psychosocial assistance. This study expanded the theory and analyzed how race interacts with psychosocial support, human capital, and social capital.

According to the second hypothesis, variables other than race could explain racial disparities in work-related experiences and outcomes. In this instance, social capital variables, strong relationships, and (same-race network ties), which were added to the survey but not to the SmartPLS® model, would affect reported promotion rates. Both ideas receive some support from the facts; however, more is needed to warrant this replication of James's (2000) study.

Hurley (1999) delves into the intricate interplay of age, gender, and race in the context of prejudice, acknowledging their significant roles (Hurley, 1999). Correlations within the dataset were observed, providing theoretical foundations for understanding the complexities surrounding the impact of work type, race, and gender on managers' evaluations of job candidates and their career advancement.

5.2 Limitations

This dissertation acknowledges certain limitations, which are categorized into three key sections: (a) survey measures, (b) considerations pertaining to control variables, and (c) challenges associated with the sample size. Career accomplishment can be measured subjectively and differently for each person. While some workers prioritize pay, others might be more concerned with work-life balance or job happiness. The complex ways in which people view promotions and the highest level of management may need to be fully reflected in the career attainment measures for this study. Future requirements should include HR data collection from reputable firms to where the data is pulled versus completed manually by the respondent. However, doubts about the data's reliability may affect the validity of the study's conclusions. People of color were underrepresented in certain management levels, making the study even more challenging. Based on the survey data, which can create a variance in the data sampling.

5.2.a Limitation a: Survey Measures

It is important to note that the data for this study was provided by Qualtrics (XM), which may have resulted in the sample group not being entirely random. One of the limitations of collecting paid survey data is the need for equal representation of men and women, as well as race dynamics. Moreover, the data collection was limited to the finance industry, with additional restrictions such as US data, industry, and age limits, resulting in a slow but steady collection process. However, the lack of true diversity affects other industries as well, and this study could benefit them. In James's 2000 study, relationships were built within the organization from which Human Resource (HR) data was provided. Nevertheless, a limitation of the results of James's 2000 study was that supervisory performance ratings were included, whereas I requested employees to self-report their performance ratings.

Although the survey covered a broad range of topics related to work experience, social networks, and demographics, the research would have benefited from a field study, providing outside perspectives from individuals associated with the industry for this study. During the preliminary survey launch, feedback was received from participants, and adjustments were made to ensure the questions asked were concise. Some messages that were received through Qualtrics (XM) included concerns about entering the completion code for payment, while others reported errors that prevented participants from proceeding through the survey due to required input issues. The biggest limitation of the survey was that it attempted to extend a study that was conducted two decades ago, at a time when hybrid work arrangements were not as prevalent as they are today due to the COVID-19 pandemic. Future studies should aim to cover other types of work arrangements, including hybrid ones.

The pilot run was allotted for improvements before publishing the final survey in Qualtrics (XM). By pursuing alternative approaches, scholars might augment an all-encompassing comprehension of the intricate relationship among psychosocial support, human capital, social capital, and professional achievement, considering a range of demographic variables. A few suggestions to improve the future survey study are generating an age range versus age text to allow participants to input the exact range. This improvement will help with PLS-SEM scaling and structure the results for a more accessible output. Also, the age range creates comfort and provides privacy for the respondent.

The survey limited gender selection to female and male. Future survey improvements would include other options to add inclusivity around participants who identify outside of the traditional male and female binary categories. Regarding race and ethnicity, some participants may have found the categories provided for this dissertation limited. Therefore, future surveys can include others; please specify as an option. As it relates to job positions and job levels, an industry summary should be considered. Some industries classify employees differently, which could make it complicated for a participant to respond to this survey question. Finally, telecommuting, remote work, and work-from-home options should have included a hybrid option, as some of the feedback from the trial run included messages about not having options to select hybrid. Again, pretesting the survey with a small group to review potential issues can assist with clarification and improve the overall quality of the study.

5.2.b Limitation: Control Variables

Control variables were considered for this study and were tested based on historical data that supported the findings. Replicating James's (2000) approach to controlling tenure, age, performance rating, and staff positions proved significant in this study. In the initial PLS-SEM

run, I identified items to remove, ran the full model using the PLS algorithm**,** *and* reran the model and the final bootstrap.

Table 5.2.a:

Control Variable Items Removed

Control Variable	Career Related Support
Items Removed	Q15_1 Q15_2

Control variable relationships that were significant: Performance Rating --> Career Attainment, Tenure --> Career Attainment.

An additional note about the control variables selected for this research effort is that several of them were found to have high values for kurtosis, indicating that these variables might be problematic because their being non-normally distributed. High kurtosis values were noted for position type (vice presidents), race (Asian/Pacific Islander, Hispanic, and American Indian), and performance rating. Replication of this research study in the future might address these by attempting to transform these variables and then re-analyzing the model. For now, these items are highlighted as a measurement limitation as a result of how respondents were represented in this particular sample.

5.2.c Limitation: Sample Size

Pooling for US managers, presidents, vice presidents, and directors in the financial services industry restricted the data to a small number of respondents compared to data from other countries and sectors. The study's primary constraint was the time it took to receive finished data. In theory, leaders in the finance industry may have associated the questions

with gatekeeping. Leaders at the levels used for this study may have busy schedules, making obtaining high-level executives for research purposes in the finance sector more challenging.

Another factor to consider was the possibility of homogeneity in the finance sector related to professional backgrounds, educational backgrounds, and career routes, which would reduce the sample's variety. Results that predominantly represent the experiences of a particular subset of people within the company may not have external validity. Race, in correlation to education and management level, can also limit the sampling size so that more data can be collected for one race over another.

Overall**,** these limitations may be considered for future research design enhancements to improve the validity and reliability of this study. Furthermore, acknowledging these lessons learned and limitations enhances the possibility of publishing this study in a top journal.

5.3 Future Research

An area for future research is considering race as a mediating variable, as James (2000) attempted in a previous study. Then, consider adding value around telecommuting and examining those relationships. Another possibility is removing the levels of management due to people of color being underrepresented in TMP. Consider examining how technology contributes to developing human capital, social capital, and psychosocial support in today's workplace. Examine how digital platforms and virtual networks affect career paths.

Future research should analyze the effects of DEI policies inside organizations on career advancement and social capital. Examine how these regulations lessen obstacles to gender, race, and type of employment. I will consider expanding the study to macro-level analyses that consider more extensive economic variables and industry-specific trends. Later studies will identify how industry traits and financial circumstances affect the connections among

professional achievement, human capital, social capital, and psychosocial support. Pursuing these future advances will add to a more thorough comprehension of the intricate relationships identified for career attainment. Future considerations include carefully assessing the research questions using strict sampling procedures and being aware of possible sample size limitations. Furthermore, utilizing preexisting datasets or mixed-methods approaches may provide additional insights and strengthen the study's overall robustness.

Benefits of This Study

Organizations will benefit from the insights provided by this study to influence career advancement within their human resources departments significantly. Understanding the importance of psychosocial support, human capital, and social capital can help organizations develop tailored strategies to promote career development and remove barriers to progression. This study can help organizations address systemic inequalities and promote workplace diversity, equity, and inclusion. By recognizing the influence of race, gender, and work type on career attainment, organizations can implement targeted interventions to create more inclusive work environments. Organizations can use the findings to prioritize investments in supportive environments that make employee work-life balance, mentorship, and professional development opportunities a priority. By considering this study, firms can improve job satisfaction, retention rates, and employee performance. The study's insights can inform strategic talent management practices, enabling organizations to identify high-potential employees and provide tailored development opportunities to support their career growth. Organizations can optimize their talent pool by fostering a continuous learning and advancement culture and aligning talent management initiatives with factors driving career attainment.

Understanding the implications of remote work on career advancement can help organizations develop effective strategies for managing and supporting remote employees' career progression, ensuring equal opportunities are enforced for professional growth. The study contributes to academic understanding of the factors influencing career attainment, particularly psychosocial support, human capital, and social capital. Future research can build upon these findings to further explore and refine career development and organizational behavior theories. Researchers can use the insights from this study to design future studies that investigate factors impacting career attainment in different organizational contexts or explore additional moderators and mediators of these relationships. Introducing evidence-based practices for organizations can contribute to a deeper understanding of how to break down the barriers that prevent career advancement.

Overall, this study provides actionable insights for both organizations and academia, facilitating improvements in career development opportunities, diversity and inclusion efforts, talent management practices, and remote work strategies.

5.4 Conclusion

The results of this study reveal strengths and limitations in assessing career attainment within a unique framework. This study illuminates for practitioners the factors that influence career attainment with a particular attention paid to how these relationships exist for people of color. Notably, I found significant direct effects between Performance Rating and Career Attainment, Tenure and Career Attainment, and Work Type and Career Attainment. In addition to these direct effects, I noted two important moderating effects that may help HR managers and other practitioners capitalize on the roles that work type and gender play with Career Attainment. My study found that Gender moderates the relationship between Human Capital and Career

Attainment. It stands to reason that if the relationship between Human Capital and Career Attainment is stronger for women that we can design future research to understand why this phenomenon is occurring. This future research might lead to best practices in HR training and programs for onboarding employees, identifying opportunities for promotion and succession planning. Similarly, the observation that Work Type moderates the relationship between Human Capital and Career Attainment opens the door for future research into best practices that might be used by practitioners to engage employees who work from home in ways that strengthens their Human Capital and ultimately affects Career Attainment.

REFERENCES

Adamovic, M., & Leibbrandt, A. (2023). Is there a glass ceiling for ethnic minorities to enter leadership positions? Evidence from a field experiment with over 12,000 job applications. *The Leadership quarterly*, *34*(2), 101655. http://doi.org/10.1016/j.leaqua.2022.101655.

Ali, M. S., & Jalal, H. (2018). Higher Education as a Predictor of Employment: *The World of Work Perspective*. Bulletin of Education and Research, 40(2), 79–.

A Report on the glass ceiling initiative. (1991). U.S. Department of Labor.

Ahearn, K. K., Ferris, G. R., Hochwarter, W. A., Douglas, C., & Ammeter, A. P. (2004). Leader Political Skill and Team Performance. Journal of Management, 30(3), 309–327. https://doi.org/10.1016/j.jm.2003.01.004.

Asfaw, A. (2022). Racial and Ethnic Disparities in Teleworking due to COVID-19 pandemic in the United States: A Mediation Analysis. *International Journal of environment research and public health*, 19(8), 4680. https://doi.org/10.3390/ijerph19084680.

Baldi, S., & McBrier, D.B. (1997). Do the determinants of promotion differ for Blacks and Whites? Evidence from the U.S. Labor Market. *Work and Occupations*, 24(4), 478-497.

Becker, G. (1964). *Human Capital*. University of Chicago Press, Chicago, IL.

Becker, G. S. (1975). *Human Capital*. University of Chicago Press, Chicago, IL.ecker, G. S. (Gary S., Becker, G. S., Becker, G. S., & Becker, G. S. (Gary S. (1993). *Human Capital : A theoretical and empirical analysis, with special reference to education* (3rd ed.). The University of Chicago Press.

Bonet, R., Cappelli, P., & Hamori, N. (2020). Gender differences in speed of advancement: An

Empirical examination of top executives in the Fortune 100 firms. *Strategic Management Journal, 41*(4), 708-737. http://doi.org/10.1002/smj.3125.

Branch, E. & Kasztelnik, K. (2023). Challenges, barriers, and the underrepresentation of Black Women in Sustainable Global World Environment. Business Ethics and Leadership, 7(2), 18-34.

Breland, J. W., Treadway, D. C., Duke, A. B., & Adams, G. L. (2007). The Interactive Effect of Leader-Member Exchange and Political Skill on Subjective Career Success. *Journal of Leadership & Organizational Studies*, 13(3), 1–14 https://doi.org/10.1177/10717919070130030101.

Bureau, U. S. C. (2022). The number of people primarily working from home tripled between 2019 and 2021. Census. gov. Retrieved April 4, 2023.

Burt , R. S. 1992. Structural Holes: *The Social Structure of Competition*. University Press, Cambridge, MA.

Catalyst. 2017. Women in S & P 500 companies by race/ ethnicity and level. Retrieved from https://www. catalyst.org/knowledge/women-sp-500-companies race ethnicity-and-level.

Census Bureau: Number of People Primarily Working from Home Tripled Between 2019, 2021. (2022). *Targeted News Service.*

Center for Talent Innovation (2019). Being black in corporate America: An intersectional exploration. http://www.talentinnovation.org.

Chekwa, C. (2018). Don't be left out fostering networking opportunities to reduce workplace isolation among ethnic employees in remote settings. *Journal of Competitiveness Studies*, 26(3-4), p. 217.

Chen, Y., Weziak-Bialowolska, D., Lee, M. T., Bialowolski, P., Cowden, R. G., McNeely, E., &

VanderWeele, T. J. (2023). Working from home and subsequent work outcomes: Pre-pandemic evidence. *PloS one, 18*(4), e0283788-e0283788. http://doi.org/10.1371/journal.pone.0283788.

Cohen, S. (1997, May). On becoming virtual. *Training & Development, 51*(5), 30+. https://link.gale.com/apps/doc/A20766510/ITBC?u=char69915&sid=bookmark-ITBC&xid=0a178f4e.

Coleman, J.S. 1986, Social theory social research, and a theory of action. Amer.J. Soc. 91 1309-1335.

Davidson, M. (1997). The black and ethnic minority woman manager: Cracking the concrete ceiling.

de Laat, K. (2023). Remote Work and Post-Bureaucracy: Unintended Consequences of Work Design for Gender Inequality. *ILR Review, 76*(1), 135-159. https://doi.org/10.1177/00197939221076134

DeVaro, J., Ghosh, S., & Zoghi, C. (2018). Job characteristics and labor market discrimination in Promotions. *Industrial Relations (Berkeley), 57*(3), 389–434. https://doi.org/10.1111/irel.12211.

Elman, & O'rand, A. M. (2004). The race is to the swift: Socioeconomic origins, adult education, and wage attainment. *The American Journal of Sociology, 110*(1), 123–160. https://doi.org/10.1086/386273.

Essed, P. 1991. Understanding Everyday Racism. Sage Publications, Newbury Park, CA.

Fang, D., Kang, S. K., & Kaplan, S. (2022). We need to make sure telecommuting does not exacerbate gender disparity. The Lancet (British Edition), 400(10355), 795–797. https://doi.org/10.1016/S0140-6736(22)01211-9.

Ford, D. L., L. Wells. 1985 Upward mobility factors among black public administrators: The role of mentors. Centerboard: J. *Center for Human Relations 3*(1) 33-48.

Fortune 500 Boards Still Decades Away from Representation Parallel to the Presence of Women and Minorities in the US Population: Alliance for Board Diversity (ABD) and Deloitte report shows women and minorities continue to make progress in board representation, with over 40% diversity nearly quadrupling since 2010. (2021). PR Newswire Association LLC.

Freeman, R. 1976. *The Overeducated American.* Academic Press, New York.

Gong, B., Tobias, P., & Young-Bristol, J. (2023). Leveraging resources to improve supervisors. Vision in the remote workplace. Management Research Review, 46(6), 777-789.

Gould, S. (1979). Characteristics of career planners in upwardly mobile occupations. *Academy of Management Journal, pp. 22*, 539 –550.

Granovetter, M. 1973. The strength of weak ties. Amer. J. Soc. 6 1360-1380

Greco, L. M., & Kraimer, M. L. (2020). Goal setting in the Career Management Process: An Identity Theory Perspective. *Journal of Applied Psychology*, *105*(1), 40–57. https://doi.org/10/1037/ap10000424.

Greenhaus, J. H. (1987). Career management. Chicago, IL: Dryden Press.

Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of Race on Organizational Experiences, Job Performance Evaluations, and Career Outcomes. *The Academy of Management Journal*, *33*(1), 64–86. https://doi.org/10.2307/256352.

Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research, 109*, 101-110.

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook (p. 197).* Springer Nature.

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics, 1*(3), 100027.

Harris, C. M., Brown, L. W. & Pattie, M. W. (2021). You are drafted: the role of employee and manager human capital on employee career advancement. Journal of Organizational Effectiveness: People and Performance, 9(3), 506-523.

Herren Lee, A. (2022). Diversity matters, disclosure works, and the sec can do more: Remarks at the council of institutional investors fall 2020 conference. In *United States Securities and Exchange Commission https://www. sec. gov/news/speech/lee-cii-2020-conference-20200922. Accessed: June 1st.*

Hoxhaj, R., & Miti, F. (2023). The impact of COVID-19 on work from home of ethnic groups in the USA: evidence from time -use data. *International journal of manpower.* https://doi.org/10.1108/IJM-12-2022-0596

Humberd, B.K., & Rouse, E. D. (2016). Seeing You in Me and Me in You: Personal Identification in The Phases of Mentoring Relationships. The Academy of Management Review, 41(3), 432-455. http://doi.org/10.5465/amr.2013.0203.

Hurley, A. E., & Giannantonio, C. M. (1999). Career attainment for women and minorities: the interactive effects of age, gender, and race. Women in Management Review (Bradford et al. : 1992), 14(1), 4–13. https://doi.org/10.1108/09649429910255447.

Hymowitz, C., & Schellhardt, T. D. (1986). The corporate woman (A special report): Cover—the glass ceiling: Why women cannot seem to break the invisible barrier that blocks them from top jobs. *Wall Street Journal*, March 24.

James, E.H. (2000). Race-Related Differences in Promotions and Support: Underlying Effects of Human and Social Capital. Organization science (Providence, R.I.), 11(5), 493–508. https://doi.org/10.1287/orsc.11.5.493.15202.

Judge, T.A., Klinger, R.L. & Simon, L.S. (2010). "Time is on my side: time, general mental. Ability, human capital, and extrinsic career success", Journal of Applied Psychology, Vol. 97 No. 1, pp. 92-107.

Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz Jr, R. D. (1995). An empirical investigation Of the predictors of executive career success. Personnel Psychology, 48(3), 485-519.

Kanter, R. M. (1993). Men and women of the corporation (1993 ed.). BasicBooks.

Koopman, J., Lanaj, K., Lee, Y. E., Alterman, V., Bradley, C., & Stoverink, A. C. (2023). Walking on Eggshells: A Self-Control Perspective on Workplace Political Correctness. Journal of Applied Psychology, 108(3), 425–445. https://doi.org/10.1037/apl0001025.

Kram, K. (1985). Improving the mentoring process. *Training and Development Journal, 39*(4), 40–.1988, *Mentoring at Work: Developmental Relationships in Organizational Life*, University Press of America, New York.

Kulik, C. T. (2019). The Glass Ceiling in Organizations, *Business and Management Review* https://doi.org/10.1093/acrefore/9780190224851.013.41.

Lado, A. A. & Wilson, M. C. (1994). Human Resource Systems and Sustained Competitive Advantage: A competency-based perspective. *The Academy of Management Review*, 19(4), 699-727.

Ladson-Billings, G. (1996). Silences as weapons: Challenges of a black professor teaching white students. Theory into practice, 35(2), 79-85. https://doi.org/10.1080/00405849609543706

Lakshmi V, Nigam R, Mishra S. Telecommuting-A key driver to work-life balance and productivity. IOSR *Journal of Business and Management. 2017; 19*(01):20-3.

Landing-Billings, G. (1996). Silences as weapons: Challenges of a Black professor teaching white students. Theory into practice, 35(2), 70-85. https://doi.org/10.1080/00405849609543706.

Leana, C.R. III, and Van Buren, H.J. (1999). "Organizational social capital and employment practices", Academy of Management Review, Vol. 24 No. 3, pp. 538-555.

London, M. (1983). Toward a theory of career motivation. Academy of Management Review, pp. 8, 620 – 630. http://dx.doi.org/10.5465/amr.1983 .4284664.

Mahdawi, A. (2019). Men now avoid women at work – another sign we are being punished for #Me Too. Support the Guadian. Retrieved from https://www.theguardian.com/lifeandstyle/2019/aug/29/men-women-workplace-study-. harassment-Harvard-MeToo.

Maume, D. J. (2004). Is the glass ceiling a unique form of inequality? Evidence from a random-effects model of managerial attainment, *Work and Occupations*, 31(2), 250–274. https://doi.org/10.1177/0730888404263908.

Mawdsley, J. K., Paolella, L., & Durand, R. (2023). A rivalry-based theory of gender diversity. *Strategic Management Journal*, *44*(5), 1254-1292. https://doi.org/10.1002/smj.3466.

McCue, K. (1996*). Promotions and Wages Growth. Journal of labor economics, 14*(2), 175-209. http://doi.org/10.1086/209808.

McGirt, E. (2017). The Black Ceiling: Why African American women are not making it to the top. In Corporate America. Fortune. Retrieved from https://finance.yahoo.com/news/Black-. ceiling-why-african-american-103035213.html?fr=sycsrp_catchall.

Measuring Racial and Ethnic Diversity for the 2020 Census. (2021). In. Washington: Newstex. *A Report on the glass ceiling initiative* (1991). U.S. Department of Labor.

Mejia, J., Manotas, E. C., & Quintero, S. (2022). Analysis of the Social Capital in a Technological System of a Smart City Using a PLS-SEM Model. *Sustainability, 14*(18), 11238. https://doi.org/10.3390/su141811238.

Metz, I., Stamper, C. L., & Ng, E. (2022). Feeling included and excluded in organizations: The Role of human and social capital. *Journal of Business Research*, *142*, 122–137. https://doi.org/10.1016/j.jbusres.2021.12.045.

Murphy, K. M., F. Welch. 1989. Wage premiums for college graduates: Recent growth and possible explanations. Education Researcher 18 17-27.

O'Brien, S. A. (2016). Silicon Valley engineer, 'We are in a precarious moment with race relations. *CNN Money*.

O'Brien, S.A. (2020). Silicon Valley can no longer 'tinker around the edges' to fix its diversity problem. *CNN Wire Service.*

Patton, L. D. (2016). Disrupting post-secondary prose: Toward a critical race theory of higher education. Urban Education, 51(3), 315–342 https://doi.org/10.1177/0042085915602542.

Randel, A. E., Gavin, B. M., Gibson, C. B. & Batts, S. I. (2021). Increasing career advancement opportunities through sponsorship: An identify-based model with an illustrative application to cross-race mentorship of African Americans. *Group & Organization Management, 46*(1), 105–142. http://doi.org/10.1177/1059601120978003.

Rosenbaum, J. E. 1979. Tournament mobility: Career patterns in a corporation. *Administrative, Science. Quart. 24*(2) 220-241, 1984. Career Mobility in a Corporate Hierarchy, Academic Press, San Deigo, CA.

Sarstedt, M., Diamantopoulos, A., Salzberger, T., & Baumgartner, P. (2016). Selecting single items to measure doubly concrete constructs: A cautionary tale. *Journal of Business Research, 69*(8), 3159-3167. https://doi.org/https://doi.org/10.1016/j.jbusres.2015.12.004

Saurage-Altenloh, S., & Randall, P. M. (2022). Relationship between sponsorship and Remote employee engagement after controlling for the effect of gender, education, and mentorship. *Journal of Strategic and International Studies*, p. 80.

Schipani, C. A. & Dworkin, T. M. (2019). The need for mentors in promoting gender-diverse leadership in the # MeToo Era. George Washington Law Review, 87(5), 1272–1298.

Seibert, S. E., Kraimer, M. L., Holtom, B. C., & Pierotti, A. J. (2013). Even the best-laid plans sometimes go askew: Career self-management processes, career shocks, and the decision to pursue graduate education. *Journal of Applied Psychology, 98*, 169 –182. http://dx.doi.org/10.1037/ a0030882.

Sheaffer, Z., Levy, S., & Navot, E. (2018). Fears, discrimination, and perceived workplace promotion. Baltic Journal of Management, 13(1), 2–19. https://doi.org/10.1108/BJM-05-2017-0165.

Silver, R. A. (2013). Diversity in executive healthcare leadership: Does it matter? Perspectives and implications for access to care by people of color ProQuest Dissertations Publishing.

Smith, A. N., Watkins, M. B., Ladge, J. J., & Carlton, P. (2019). Making the invisible visible: Paradoxical effects of intersectional invisibility on the career experiences of executive Black women. *Academy of Management Journal, 62*(6), 1705-1734.

Stratone, M.-E., Vătămănescu, E.-M., Treapăt, L.-M., Rusu, M., & Vidu, C.-M. (2022). Contrasting Traditional and Virtual Teams within the Context of COVID-19 Pandemic: From Team Culture towards Objectives Achievement. *Sustainability (Basel, Switzerland), 14*(8), 4558. https://doi.org/10.3390/su14084558.

Swigart, K.L., Anantharaman, A., Williamson, J. A., & Grandey, A. A. (2020). Working While Liberal/Conservative: A Review of Political Ideology in Organizations. *Journal of Management, 46*(6), 1063–1091. http://doi.org/10.1177/0149206320909419.

Tajfel, H. (1979). Individuals and groups in social psychology*. *British Journal of Social and Clinical Psychology, 18*(2), 183–190. https://doi.org/10/1111/j.2044-8260.1979.tb00324.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), The social psychology of intergroup relations (pp. 33– 47). Monterey, CA: Brooks/Cole.

Thomas, D. A. 1990. The impact of race on managers' experience of developmental relationships (mentoring and sponsorship): An intra-organizational study. J. Organ. Behavior 2 479-492.

Tsui, A.S. and Gutek, B.A. (1984), "A role set analysis of gender differences in performance, affective relationships, and career success of industrial middle managers", *Academy of Management Journal*, Vol. 27, pp. 619-36.

U.S. Department of Labor. (1991). *The glass ceiling initiative*, a report. Washington, DC: U.S. Government Printing Office.

U.S. Glass Ceiling Commission. (1995). A solid investment: Making full use of the nation's human capital *(final report of the Commission)* http://digital commons.ilr.cornell.edu/key_workplace/120/. Washington, DC: U.S. Government Printing Office.

Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. In B. M. Staw (Ed.), Research in organizational behavior (pp. 209 –264). Greenwich, CT: JAI.

Veum, J.R. 1995. Sources of training and their impact on wages. Indus. Labor Relations Rev. 48 812-826.

Vidyasagar, S., & Hatti, P. (Eds.). (2018). Leadership and Role Modelling Understanding Workplace Dynamics (1st ed. 2018.). Springer International Publishing. https://doi.org/10.1007/978-3-319-69056-8.

APPENDIX A: TABLES AND FIGURES

Table 1:

Hypotheses

Main Effects	
H1	Psychosocial Support is positively associated with Career Attainment.
H2	Human Capital is positively associated with Career Attainment.
H3	Social Capital is positively associated with Career Attainment.
Moderating Effects	
H4	Gender moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is stronger among women.
H5	Gender moderates the relationship between Human Capital and Career Attainment such that the relationship is stronger for women.
H6	Gender moderates the relationship between Social Capital and Career Attainment such that the relationship is stronger for women.
H7	Work Type moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is stronger for remote workers.
H8	Work Type moderates the relationship between Human Capital and Career Attainment such that the relationship is stronger for remote workers.
H9	Work Type moderates the relationship between Social Capital and Career Attainment such that the relationship is stronger for remote workers.
H10	Race moderates the relationship between Psychosocial Support and Career Attainment such that the relationship is weaker for people of color.
H11	Race moderates the relationship between Human Capital and Career Attainment such that the relationship is weaker among people of color.
H12	Race moderates the relationship between Social Capital and Career Attainment such that the relationship is weaker for people of color.

Table 2:

Scales and Measures

Variable	Measure
Survey Measures	**Likert Scale**
Psychosocial Support	5-point
Human Capital	6-point 5-point
Social Capital	4-point
Work Type	5-point
Gender	Self-reported measure
Race	Self-reported measure
Promotion rate	Self-reported measure
Control Variables	**Control Measures**
Tenure	Self-reported measure
Staff position	Self-reported measure
Age	Self-reported measure
Performance rating	5-point
Career-related support	5-point
Level of management	4-point

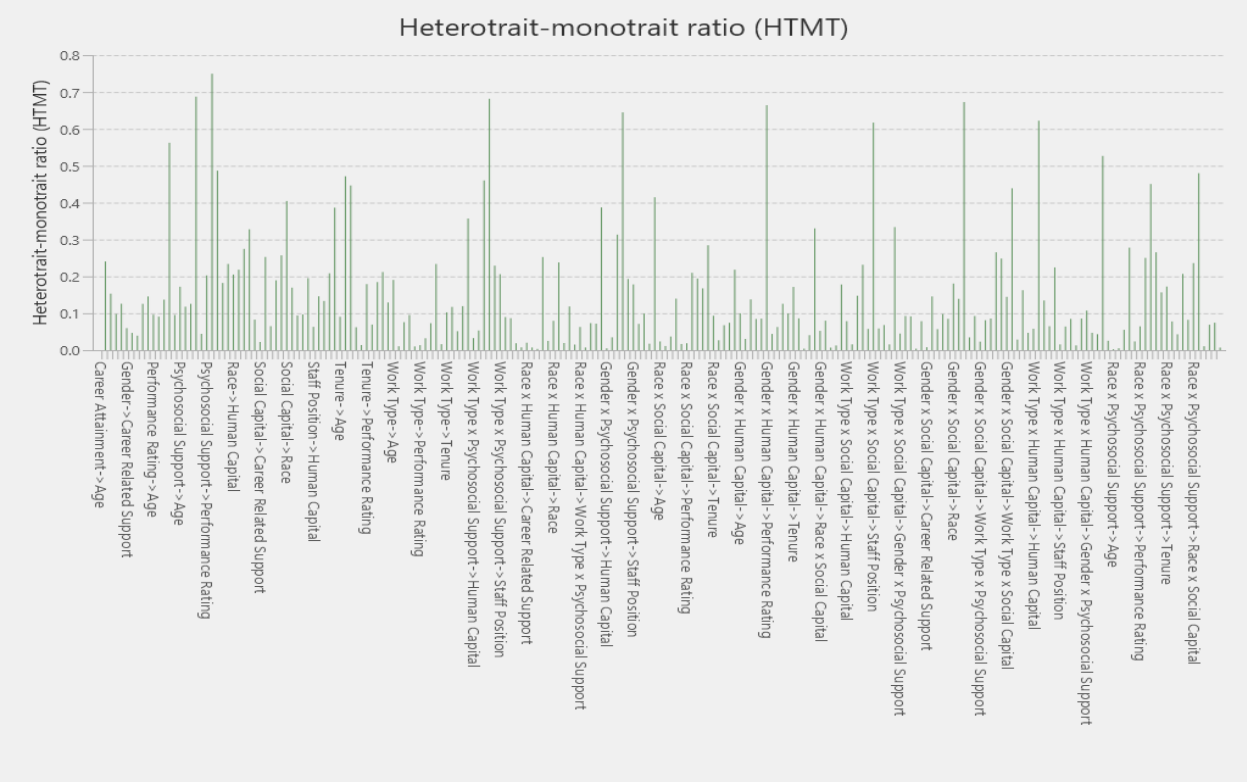
Correlation Analysis:

	1	2	3	4	5	6	7	8	9	10	11
1. Age											
2. Career Attainment	0.241**										
3. Career Related Support	-0.166**	-0.120*									
4. Gender	.126*	0.060	-0.024								
5. Human Capital	0.039	0.126*	0.126*	-0.096							
6. Performance Rating	0.093	0.136*	0.431**	0.091	0.159**						
7. Psychosocial Support	0.111	0.135*	0.537**	0.007	0.174**	0.627**					
8. Race	-.251**	-0.116*	0.021	0.064	0.038	-0.084	-0.117*				
9. Social Capital	0.083	0.022	0.228**	-0.065	0.189**	0.240**	0.358**	-0.04			
10. Staff Position	-0.049	-0.102	-0.053	-0.048	-0.137*	-0.098	-0.100	-0.090	-0.081		
11. Tenure	.471**	0.447**	-0.013	-0.014	0.179**	0.073	0.174**	-0.09	0.129*	-0.176**	
12. Work Type	-0.011	0.076	-0.087	0.010	-0.014	0.013	0.007	-0.05	0.016	0.062	-0.117*

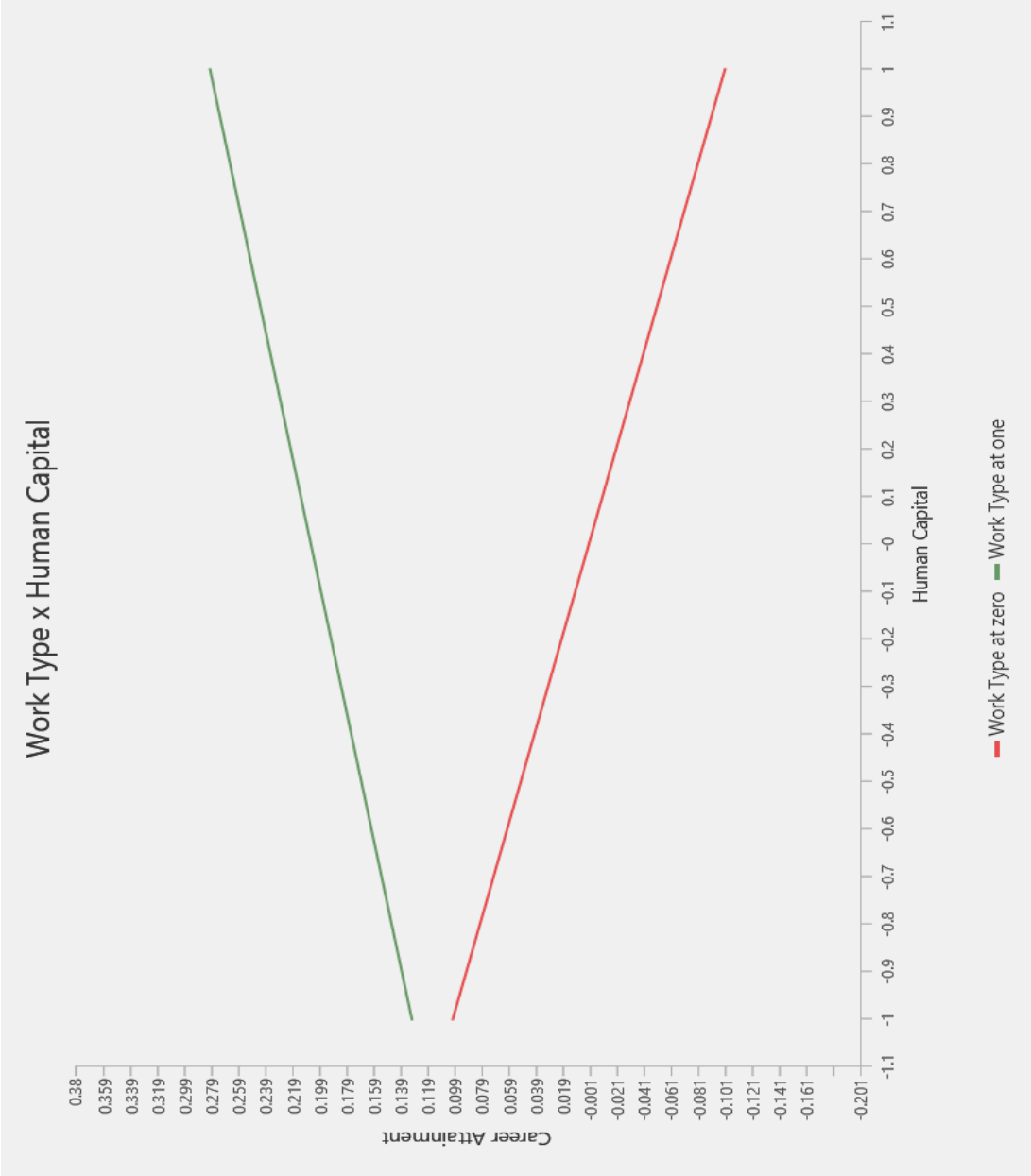
HTMT-Matrix:

	Age_1	Career Attainment_2	Career Related Support_3	Gender_4	Human Capital_5	Performance Rating_6	Psychosocial Support_7	Race_8	Social Capital_9	Staff Position_10	Tenure_11	Work Type_12	Work Type x Psychosocial Support_13	Work Type x Human Capital_14	Gender x Psychosocial Support_15	Race x Social Capital_16	Gender x Human Capital_17	Work Type x Social Capital_18	Gender x Social Capital_19	Work Type x Human Capital_20
1																				
2	0.241																			
3	0.153	0.098																		
4	0.126	0.06	0.047																	
5	0.039	0.126	0.146	0.096																
6	0.091	0.137	0.562	0.095	0.172															
7	0.118	0.126	0.687	0.044	0.203	0.75														
8	0.487	0.182	0.234	0.205	0.218	0.275	0.33													
9	0.083	0.022	0.253	0.065	0.189	0.257	0.4	0.17												
10	0.094	0.097	0.195	0.063	0.146	0.133	0.21	0.386	0.09											
11	0.471	0.447	0.062	0.014	0.179	0.069	0.19	0.212	0.13	0.19										
12	0.011	0.076	0.095	0.01	0.014	0.032	0.07	0.234	0.02	0.103	0.117									
13	0.051	0.119	0.357	0.033	0.053	0.46	0.68	0.229	0.21	0.09	0.087	0.02								
14	0.008	0.02	0.007	0.003	0.252	0.025	0.08	0.238	0.02	0.119	0.015	0.06	0.007							
15	0.073	0.072	0.387	0.005	0.035	0.313	0.65	0.193	0.18	0.071	0.099	0.02	0.415	0.024						
16	0.011	0.037	0.14	0.017	0.019	0.21	0.19	0.168	0.28	0.093	0.027	0.07	0.074	0.218	0.1					
17	0.03	0.138	0.085	0.086	0.664	0.044	0.06	0.126	0.1	0.171	0.086	0	0.041	0.33	0.05	0.08				
18	0.007	0.013	0.178	0.079	0.016	0.148	0.23	0.058	0.62	0.059	0.068	0.02	0.334	0.045	0.09	0.092	0.004			
19	0.079	0.008	0.146	0.057	0.098	0.085	0.18	0.139	0.67	0.035	0.093	0.02	0.081	0.086	0.27	0.248	0.145	0.439		
20	0.029	0.163	0.047	0.058	0.622	0.135	0.07	0.224	0.02	0.064	0.085	0.01	0.086	0.107	0.05	0.043	0.527	0.026	0.003	
21	0.005	0.055	0.278	0.024	0.065	0.25	0.45	0.265	0.16	0.172	0.078	0.04	0.207	0.082	0.24	0.48	0.011	0.069	0.074	0.007

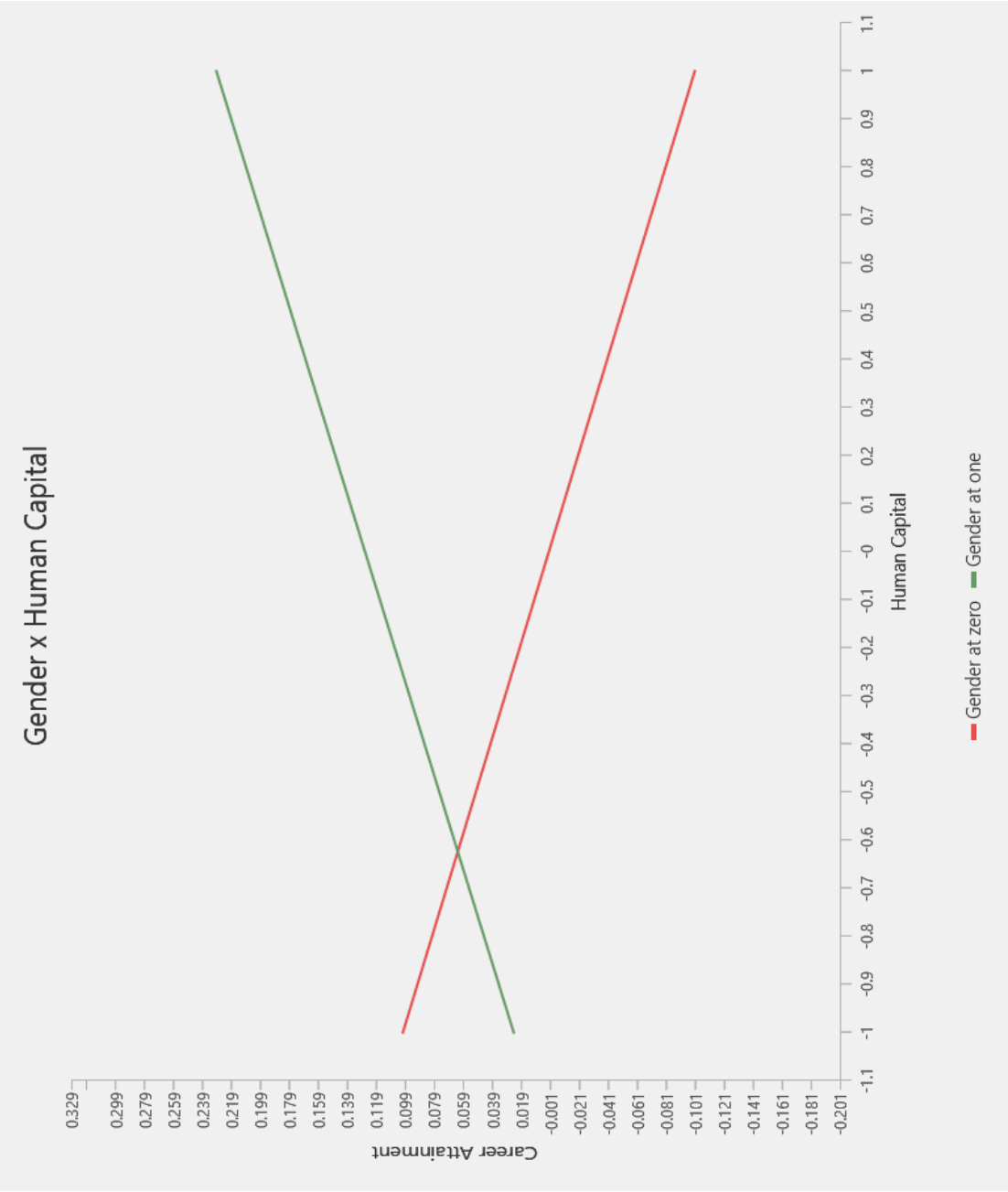
Heterotrait-Monotrait ratio (HTMT) Chart



Slope Analysis Work Type x Human Capital → Career Attainment



Slope Analysis Gender x Human Capital → Career Attainment



APPENDIX B: RECRUITMENT

Email Template for Recruitment

Email Template:
Dear_____

My name is Tashika Hamilton, and I am a late-stage doctoral student at The University of North Carolina, Charlotte. Under the guidance of Faculty Advisor Dr. Reginald Silver, I am conducting research on telecommuting and its effects on opportunities in career attainment. This study examines the relationship between psychosocial support and career attainment, human capital and career attainment, social capital and career attainment, and the moderating impacts of gender, work type, and race on people of color in corporate America. Your engagement in this survey will contribute to the completion of my doctoral dissertation and the overall body of work on career attainment.

My survey is anonymous, and includes questions about your firm, your perceptions in working there, your reactions to promotions, promotion level from a firm standpoint, and self-. identification questions related to ethnicity and cultural identification. Some basic demographics related questions, your tenure within the firm, and firm characteristics are also included in the survey. You will receive $2 for participation. To earn $2, you must complete all questions in the survey, and you must have read through and thoughtfully answered each question. Failure to do so may result in no payment.

Would you be willing to spend 20 minutes of your time to participate in our research?

If so, please click the link below which will take you to our survey provider Qualtrics. The survey also contains some important information regarding your consent to participate. You will need to review and approve the consent form/information before proceeding.

https://qualtricsxmmzh478rms.qualtrics.com/jfe/form/SV_9FEOleTZvxZHNwW

In any event, THANK YOU!

Warm regards,
Tashika Hamilton
Thamil35@uncc.edu

APPENDIX C: IRB APPROVAL

To: Tashika Hamilton

University of North Carolina at Charlotte

From: Office of Research Protections and Integrity

Approval Date: 26-Jan-2024
RE: Notice of Determination of Exemption
Exemption Category: 2
Study #: IRB-24-0335

Study Title: Hammer to The Glass Ceiling: The Effects of Telecommuting on Opportunities for Career Attainment

This submission has been reviewed by the Office of Research Protections and Integrity (ORPI) and was determined to meet the Exempt category cited above under 45 CFR 46.104(d). This determination has no expiration or end date and is not subject to an annual continuing review. However, you are required to obtain approval for all changes to any aspect of this study before the changes can be implemented and to comply with the Investigator Responsibilities detailed below.

Your approved consent forms (if applicable) and other approved documents are available online at Submission Page.

Investigator's Responsibilities:

1. Use only the approved versions of study materials (e.g., recruitment scripts, consent forms, data collection materials, etc.).
2. Amendments **must** be submitted for review and the amendment approved before implementing the amendment. This includes changes to study procedures, study materials, study personnel, etc. 3.
    a. Researchers must adhere to all site-specific requirements mandated by the study site (e.g., face mask, access requirements and/or restrictions, etc.).
3. Data security procedures must follow procedures as described in the protocol and in accordance with OneIT Guidelines for Data Handling.
4. Promptly notify the IRB office (uncc-irb@charlotte.edu) of any adverse events or unanticipated risks to participants or others.
5. Five years (5) following this approval/determination, you must complete the Administrative Check-in form via Niner Research to provide a study status update.
6. Failure to submit Administrative Check-in will result in a process hold on future submissions until the administrative check-in is complete.
7. Be aware that this study is included in the Post-Approval Monitoring program and may be selected for post-review monitoring at some point in the future.
8. Reply to the ORPI post-review monitoring and administrative check-ins that will be conducted periodically to update ORPI as to the status of the study.
9. Complete the Closure eform via Niner Research once the study is complete.

APPENDIX D: CONSENT FORM

UNC CHARLOTTE

Belk College of Business

Belk College of Business

9201 University City Boulevard, Charlotte, NC 28223-0001

Consent to Participate in a Research Study

Title of the Project: HAMMER TO THE GLASS CEILING: THE EFFECTS OF TELECOMMUTING ON OPPORTUNITIES CAREER ATTAINMENT

Principal Investigator: Tashika Hamilton (UNCC)

Faculty Advisor: Dr. Reginald Silver (UNCC)

My name is Tashika Hamilton, and I am a late-stage doctoral student at The University of North Carolina, Charlotte. Under the guidance of Faculty Advisor Dr. Reginald Silver, I am conducting research on telecommuting and its effects on opportunities in career attainment. This study examines the relationship between psychosocial support and career attainment, human capital and career attainment, social capital and career attainment, and the moderating impacts of gender, work type, and race on people of color in corporate America. Your engagement in this survey will contribute to the completion of my doctoral dissertation and the overall body of work on career attainment.

The purpose of this study is to examine the relationship between psychosocial support and career attainment, human capital and career attainment, social capital and career attainment, and the moderating impacts of gender, work type, and race on people of color in corporate America.

You are invited to participate in a research study. Participation in this research study is voluntary. The information provided is to help you decide whether to participate. If you have any questions, please ask.

Key information about this study:

- All responses are completely anonymous.
- This survey contains no identifiable information that will be shared, and all information is strictly confidential for the purpose of this study.
- You must be 18 years or older to participate.
- Questions will also include race, gender, and work type (in-person or Work from home).
    - The questions are not sensitive or overly personal.

- The survey will take approximately 20 minutes to complete.
- Your participation is voluntary.
- All survey data will be used exclusively for academic research only.
- The data collected from this survey will not be sold.
- There are no known adverse consequences associated with either choosing or forgoing participation in this research study.
- We do not believe that you will experience any risk from participating in this study.
- You will receive $3 for participation. To earn $3, you must complete all questions in the survey, and you must have read through and thoughtfully answered each question. Failure to do so may result in no payment.

If you have any questions about participating in the study, please contact:
Principal Investigator, Tashika Hamilton by email at thamil35@uncc.edu
Faculty advisor Reginald Silver by email at rsilver5@uncc.edu
Additional questions or concerns about your rights as a participant in this study can be directed to the offices of research protections and integrity at (704) 687-1871 or uncc-irb@uncc.edu.

Anonymous Participation Consent:
Proceeding with the survey indicates you understand the information provided in the previous screen.

Would you like to participate in this study, and do you consent for the research to use your data as a part of this study and in future academic research?
Please choose "Yes" to proceed. Choosing "no" will exit you from the survey.

Yes _____

No _____

Additional relevant details:

- All responses will remain anonymous.
- Participants will receive the agreed upon payment amount through Qualtrics.

APPENDIX E: QUALTRICS SURVEY QUESTIONS

Q1 What is your Age?

_____

Q2 What is your Gender?

- Male (1)
- Female (2)

Q3 What is your Race/Ethnicity?

- White (1)
- Black or African American (2)
- Native American or American Indian (3)
- Asian/Pacific Islander (4)
- Hispanic or Latino (5)
- Other (6)

Q4 What is your highest level of education?

- high school or equivalent (1)
- some college (2)
- bachelor's or associate degree (3)
- some graduate courses (4)
- master's degree (5)
- doctorate or professional degree (6)

Q5 Do you work in the finance industry?

- ○ Yes (1)
- ○ No (2)

Q6 How many years of service do you have in your organization?

_____

Q7 Please indicate the number of promotions you have had since joining this organization (Promotion includes an increase in job responsibilities and or salary/merit increases).

_____

Q8 Are you a Full-time employee?

- ○ Yes (1)
- ○ No (2)

Q9 Select one position that fits your current job classification.

- ○ Line Manager (1)
- ○ Staff (2)

Q10 What is your level of employment?

- ○ Manager (1)
- ○ Director (2)
- ○ Vice President (3)
- ○ President (4)

Q11 To what extent have you participated in work-related training programs since joining this firm?

- ○ not at all (1)
- ○ some (2)
- ○ partially participated (3)
- ○ a good amount (4)
- ○ a great deal (5)

Q12 Please identify people (list as many "first names) in your organization with whom you interact most frequently for job or task-related purposes (advice network) and social purposes (friendship network). Identify the race/ethnicity of your network member.

	First Name Only	Identify the Race/ethnicity of your network member
	Please input-then click dropdown (1)	

Network member 1 (1)		▼ same as survey respondent (1 ... different (2)
Network member 2 (2)		▼ same as survey respondent (1 ... different (2)
Network member 3 (3)		▼ same as survey respondent (1 ... different (2)
Network member 4 (4)		▼ same as survey respondent (1 ... different (2)
Network member 5 (5)		▼ same as survey respondent (1 ... different (2)
Network member 6 (6)		▼ same as survey respondent (1 ... different (2)
Network member 7 (7)		▼ same as survey respondent (1 ... different (2)
Network member 8 (8)		▼ same as survey respondent (1 ... different (2)

Q13 How close are you to the following network member listed above (Use previous question as a reference)?

	1= distant (1)	2= somewhat close (2)	3= close (3)	4= very close (4)
How close are you with network member 1 (1)	☐	☐	☐	☐
How close are you with network member 2 (2)	☐	☐	☐	☐
How close are you with network member 3 (3)	☐	☐	☐	☐
How close are you with network member 4 (4)	☐	☐	☐	☐
How close are you with network member 5 (5)	☐	☐	☐	☐
How close are you with network member 6 (6)	☐	☐	☐	☐
How close are you with network member 7 (7)	☐	☐	☐	☐
How close are you with network member 8 (8)	☐	☐	☐	☐

Q14 Psychosocial Support

Please select a response to each question

	1=no support at all (1)	2=some support (2)	3=partial support (3)	4=a good amount of support was received (4)	5=a great deal of support (5)
To what extent does this network member provide you with trust? (1)	○	○	○	○	○
To what extent does this network member provide you with respect? (2)	○	○	○	○	○
To what extent does this network member provide emotional support? (3)	○	○	○	○	○
To what extent does this network member provide affirmation of ideas? (4)	○	○	○	○	○

Q15 Career-related Support

	Please select a response to each question				
	1=no support at all (1)	2=some support (2)	3=partial support (3)	4=a good amount of support was received (4)	5=a great deal of support (5)

To what extent does this network member provide you with career direction? (1)	○	○	○	○	○
To what extent does this network member provide you with guidance? (2)	○	○	○	○	○
To what extent does this network member provide you with resources to do your job? (3)	○	○	○	○	○
To what extent does this network member help you learn the ropes? (4)	○	○	○	○	○

Q16 Performance Rating

	Please select a response to each question				
	1=not effective (did not meet expectations) (1)	2=somewhat effective (somewhat met expectations) (2)	3=effective (meets or met expectations) (3)	4=very effective (exceeded expectations) (4)	5=exceptionally effective (over exceeded expectations) (5)

To what extent are you meeting customer needs? (1)	○	○	○	○	○
To what extent are you maximizing quality? (2)	○	○	○	○	○
To what extent are your people skills met? (3)	○	○	○	○	○
To what extent have you shown integrity and teamwork? (4)	○	○	○	○	○

Q17 Do you work in an office (in-person)or do you work from home (remote, telecommute/WFH)?

- ○ In-Person (1)
- ○ Work From Home/Remote Worker (2)

Q18 At any time in the last 4 weeks, did you work from home for pay?

- ○ Yes (1)
- ○ No (2)

Q19 In-Person or Remote/WFH Psychosocial Support

	Please select a response to each question

	1=very small extent (1)	2=some extent (2)	3=partial support (3)	4=a good amount of support was received (4)	5=very great extent (5)
I feel that the needs of team members are taken into consideration. (1)	○	○	○	○	○
I feel surrounded by people who share my values (2)	○	○	○	○	○
Team spirit can be easily developed within an in-person or remote work environment (3)	○	○	○	○	○
While working in-person or remote members are aware of the goals and objectives of the organization (4)	○	○	○	○	○
It is very important to have face-to-face/online meetings to create the culture of the team. (5)	○	○	○	○	○

Q20 Completion Question

○ Please add this completion code CZ3HBM23 as proof of completion of this survey.

End of Block: Consent Form Default Question Block

APPENDIX F: VARIABLE MAPPING

Q1_Age	What is your Age?
Q2_F/Q2_M	What is your Gender?
Q3	What is your Race/Ethnicity?
Q4	What is your highest level of education?
Q5	Do you work in the finance industry?
Q6_Tenure	How many years of service do you have in your organization?
Q7_PR	Please indicate the number of promotions you've had since joining this organization (Promotion includes an increase in job responsibilities and or salary/merit increases).
Q8	Are you a Full-time employee?
Q9_LM/Q9_Staff	Select one position that fits your current job classification.
Q10	What is your level of employment?
Q11_HC	To what extent have you participated in work-related training programs since joining this firm?
Q12_NCount	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 1 - Please input-then click dropdown
Q12_1_2_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 2 - Please input-then click dropdown
Q12_1_3_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 3 - Please input-then click dropdown

Q12_1_4_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 4 - Please input-then click dropdown
Q12_1_5_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 5 - Please input-then click dropdown
Q12_1_6_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 6 - Please input-then click dropdown
Q12_1_7_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 7 - Please input-then click dropdown
Q12_1_8_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - First Name Only - Network member 8 - Please input-then click dropdown
Q12_2_1	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 1
Q12_2_2	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 2
Q12_2_3	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 3
Q12_2_4	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 4
Q12_2_5	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 5
Q12_2_6	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 6

Q12_2_7	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 7
Q12_2_8	Please identify people (list as many “first names) in your organization with whom you interact mo... - Identify the Race/ethnicity of your network member - Network member 8
Q13_SocCap	Calculated by computing the average of survey items Q13_1 through Q13_8 (SocCap/Text)
Q13_1_ SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 1
Q13_1_ Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 1 - Text
Q13_2_ SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 2
Q13_2_ Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 2 - Text
Q13_3_SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 3
Q13_3_ Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 3 - Text
Q13_4_SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 4
Q13_4_ Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 4 - Text
Q13_5_SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 5

Q13_5_ Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 5 - Text
Q13_6_SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 6
Q13_6_ Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 6 - Text
Q13_7_SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 7
Q13_7_Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 7-Text
Q13_8_SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 8
Q13_8_Text SocCap	How close are you to the following network member listed above (Use previous question as a reference)? - How close are you with network member 8 - Text
Q14_PSY1	Psychosocial Support - Please select a response to each question - To what extent does this network member provide you with trust?
Q14_PSY2	Psychosocial Support - Please select a response to each question - To what extent does this network member provide you with respect?
Q14_PSY3	Psychosocial Support - Please select a response to each question - To what extent does this network member provide emotional support?
Q14_PSY4	Psychosocial Support - Please select a response to each question - To what extent does this network member provide affirmation of ideas?
Q15_CR1	Career-related Support - Please select a response to each question - To what extent does this network member provide you with career direction?

Q15_CR2	Career-related Support - Please select a response to each question - To what extent does this network member provide you with guidance?
Q15_CR3	Career-related Support - Please select a response to each question - To what extent does this network member provide you with resources to do your job?
Q15_CR4	Career-related Support - Please select a response to each question - To what extent does this network member help you learn the ropes?
Q16_PR1	Performance Rating - Please select a response to each question - To what extent are you meeting customer needs?
Q16_PR2	Performance Rating - Please select a response to each question - To what extent are you maximizing quality?
Q16_PR3	Performance Rating - Please select a response to each question - To what extent are your people skills met?
Q16_PR4	Performance Rating - Please select a response to each question - To what extent have you shown integrity and teamwork?
Q17_WT	Do you work in an office (in-person)or do you work from home (remote, telecommute/WFH)?
Q18	At any time in the last 4 weeks, did you work from home for pay?
Q19_PSY1	In-Person or Remote/WFH Psychosocial Support - Please select a response to each question - I feel that the needs of team members are taken into consideration.
Q19_PSY2	In-Person or Remote/WFH Psychosocial Support - Please select a response to each question - I feel surrounded by people who share my values
Q19_PSY3	In-Person or Remote/WFH Psychosocial Support - Please select a response to each question - Team spirit can be easily developed within an in-person or remote work environment
Q19_PSY4	In-Person or Remote/WFH Psychosocial Support - Please select a response to each question - While working in-person or remote members are aware of the goals and objectives of the organization
Q19_PSY5	In-Person or Remote/WFH Psychosocial Support - Please select a response to each question - It is very important to have face-to-face/online meetings to create the culture of the team.

Q20	Completion Code

APPENDIX G: LATENT VARIABLE CORRELATION MAPPING

Latent Variables	Correlations
Age	1
Career Attainment	2
Career Related Support	3
Gender	4
Human Capital	5
Performance Rating	6
Psychosocial Support	7
Race	8
Social Capital	9
Staff Position	10
Tenure	11
Work Type	12
Race x Human Capital	13
Work Type x Psychosocial Support	14