CAMPUS CLIMATE AND NON-FACULTY EMPLOYEES WITH DISABILITIES: A QUANTITATIVE ANALYSIS OF PERCEPTIONS

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ABSTRACT

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The employment levels of people with disabilities in higher education significantly lag the percentage of individuals with disabilities in the broader population. Due to a lack of study of campus climate for employees with disabilities, insufficient data are available for campus leaders to understand their perceptions of the campus climate, limiting the ability of leaders to formulate and implement informed plans to improve campus climate.

The purpose of this quantitative study was to examine differences in the perceptions of the campus climate of non-faculty university employees with and without disabilities and to investigate how their perceptions vary when considering gender and racial identities in interaction with their disability status. The goal was to provide a foundation for developing informed policies to improve the campus climate for employees with disabilities, thereby enhancing their recruitment and retention.

Perceptions of campus climate were measured by three subscales constructed for this study using Stone and Colella's (1996) model that conceptualizes the workplace factors that determine the treatment of people with disability. Secondary survey data collected at four higher education institutions in the 2019-2020 academic year (n = 5,971) were used in the ANOVA tests. Across all three measures, employees with disabilities had a less favorable perception of climate than non-disabled employees, but for all groups perceptions were somewhat positive. Gender and racial identity interacted with disability status in relation to one climate measure. For the worker treatment subscale, women without disabilities had a less favorable perception of climate than men without disabilities, with the opposite being found for employees with

disabilities. Unexpectedly, White employees without disabilities had a less favorable perception of climate than people of color without disabilities. Again, the opposite was the case for employees with disabilities.

Based on the results, recommendations were made for campus leadership. The first recommendation was to center diversity policy for people with disabilities, with administrators publicly supporting the success of such policies to demonstrate commitment to them. The second recommendation was to conduct regular local evaluations of climate to allow plans to be tailored to address specific issues at their institution and improve the climate. Lastly, efforts should be made to transform the organization's culture by incorporating the positive climate changes into the institution's norms and values so that they will endure.

I dedicate this work, first and foremost, to our Lord and Savior, the Lord Jesus Christ. It was through the gifts He graciously provided me that I accomplished this—all glory and praise to Him.

Secondly, I dedicate this work to my family. To my wife Shelly, who encouraged and supported me, and to my children Katie, Jon, Amy, and Mike—you are all blessings. Also, to my parents, Jim and Ruth, for your endless love and for instilling in me a desire to learn and grow.

To my grandchildren—Will, Jonah, Hayley, and Emma (and any future additions). You are the future. I hope my accomplishment demonstrates that you can accomplish any goal you set. I cannot wait to see what you achieve—I know you will make Pops proud.

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CHAPTER I. INTRODUCTION

In this chapter, I introduce my quantitative study examining the perceptions of the campus climate of non-faculty university employees (for brevity, throughout the remainder of this paper I use the term either “university employee” or simply “employee” to refer to the employees who were participants in the survey) with disabilities. I include a background of the problem, an explanation of the problem statement, the study's purpose, the theoretical framework that guided the study, and the research questions I seek to answer. Also, I present a discussion of the study's significance, key term definitions, and an enumeration of the study's assumptions, limitations, and delimitations.

Background of Problem

Higher Education and Students with Disabilities

Across the United States, colleges and universities have made great strides in increasing student population diversity (Eckel & King, 2004). In addition to increasing racial, gender, religious, and social class diversity among students, these institutions have increased opportunities for students with disabilities to access higher education. Indeed, the National Center for Education Statistics (2021) reported that 19% of students currently enrolled in higher education institutions have a disability. These institutions now offer support through various services dedicated to disability-related issues, fostering a steady increase in the number of students with disabilities over the past 25 years. However, the successful efforts toward the student population do not extend as widely to promote diversity, inclusion, and employment equity for faculty and staff with disabilities at those institutions (Romero, 2017).

Most higher education institutions in the United States include as a priority in their mission statements or goals to provide a diverse learning environment for their students

(American Association of State Colleges and Universities, n.d.). In its report on advancing diversity and inclusion in higher education, the U.S. Department of Education [DOE] (2016) suggested that colleges and universities interested in promoting diversity on campus must encourage diversity everywhere in the institution, not just in the student population. To this end, ensuring a diverse population of campus leadership, faculty, and staff is critical. The DOE emphasized that it is essential for students to "see themselves reflected in the faculty and curriculum to which they are exposed to create a sense of belonging and inclusiveness" (p. 3). Although not explicitly addressed in the DOE report, it logically follows that if students need to see similar characteristics in faculty, the same principle applies to staff members. Hiring and retaining faculty and staff with disabilities helps create an environment where students with disabilities see themselves reflected in the campus workforce and may help recruit more students with disabilities.

Employment Challenges in a Higher Education Context

Higher education institutions have succeeded in increasing the number of students with disabilities (Grigely, 2017). In contrast, the employment rates for faculty and staff with disabilities appear to be no better than in the general workforce, where the unemployment rate was 5% higher for those with disabilities than those without disabilities (U.S. Department of Labor, Bureau of Labor Statistics, 2018). Given that unemployment rates include only those actively seeking employment, the statistics indicate that those with disabilities are generally far less successful than their counterparts in obtaining and retaining jobs.

Although there are few comprehensive disability-related statistics available in higher education, those available are not encouraging. For example, Kosanic et al. (2018) reported that at the University of California at Berkeley, only 1.5% of full-time faculty members have a

disability. The authors stated that the percentage was "surprisingly low" given the number of people with disabilities in the overall population (para.1). Employment statistics for non-faculty staff in higher education are even more challenging to come by than for faculty members. Those employment estimates that exist for this population show significant shortfalls (Evans et al., 2017). I provide a further discussion of higher education employment levels in Chapter II.

Institutions have made progress in increasing the number of students with disabilities on campus (Postsecondary National Policy Institute, 2018). Considering the DOE recommendation above, it is crucial to understand how university employees with disabilities perceive the campus climate at the institution and what campus-related factors most strongly influence that perception to inform policies that aim to increase their employment on campus.

Benefits of Diversity

People with disabilities constitute a minoritized group, analogous to "ethnicity, gender, or social class" (Anastasiou et al., 2014, p. 4) and "face discrimination and segregation through sensory, attitudinal, cognitive, physical, and economic barriers" (Mitra, 2018, p. 21). Therefore, shared experiences and characteristics exist between people with disability and other minoritized groups. As such, increasing the number of people with disabilities on campus may have similar positive effects on student outcomes as has been found from similar efforts for other minoritized groups.

In recent years, higher education institutions have focused extensively on enhancing diversity on campus. Studies have empirically demonstrated the benefits to be gained by all students that result from learning in an environment that facilitates interaction between individuals with diverse backgrounds. In one such study, antonio (2001) found that students at institutions with higher structural diversity levels showed increased cultural understanding. This

effect is most pronounced for students who have had relatively homogenous friends. antonio also found that a diverse environment enhances the development of leadership skills among all students. Laird (2005) found that students with more experiences with diversity on campus were more likely to score higher on critical thinking ability measures, place a higher value on correcting social injustices, and have higher self-confidence than their peers. Bowman (2013) found that recurring diversity-related interactions by students resulted in "considerable growth" (p. 874) in three of the dependent variables he examined: leadership skills, intellectual engagement level, and intercultural effectiveness for all students, irrespective of race. These diversity-related benefits accrued from interracial interactions and interactions between students across other forms of difference.

Bowman (2013) stated that the benefits of diversity listed above result partly from confronting students with situations or data that contradict their current beliefs and stereotypes through interaction with people whose cultures and backgrounds differ from their own. Bowman explained that examples that do not conform with previously held beliefs could lead to thoughtfully resolving the cognitive dissonance that results from the contradictions. For those experiencing such cognitive dissonance, resolving it leads to modifying previously held convictions. Gurin (1999) summarized the benefits that opportunities to interact with other diverse individuals produce, including "perspective taking, mutuality and reciprocity, acceptance of conflict as a normal part of life, acceptance of difference and capacity to perceive commonality amidst the differences" (p. 40).

Disability can provide interactional benefits like those derived from interracial interaction. Evans et al. (2017) stated that when students interact with faculty with disabilities, they "inherently engage in education as disability becomes not an abstract issue but a living

document" (p. 199), with those faculty providing a counternarrative for those students regarding the roles people with disabilities serve in society. Considering the low participation rates in higher education for those with disabilities (Kosanic et al., 2018), proactive efforts are needed to provide equitable employment opportunities for this group. Increasing employment of faculty and staff with disabilities would be of benefit, of course, to these individuals directly by providing them employment equity and the associated income. But employment also results in other gains, such as increased social contact, improved status, and the ability to be a part of a larger collective purpose (Vornholt et al., 2013). Such benefits alone should be enough to justify a concerted effort to increase employment opportunities, but the benefits extend beyond the individual level in a campus environment. Higher employment levels of staff with disabilities would also benefit the students served by the institution by ensuring that diversity in the form of disability is present across campus (Gurin et al., 2002).

Campus Climate and Policy

McKay et al. (2007) found that employee perceptions of workplace climate influence their retention, with positive evaluations of climate resulting in lower turnover. These authors suggested that plans be tailored to each minoritized group to address their concerns because each may react differently to the workplace climate. Such tailored approaches indicate the need to understand the perceptions of employees with disabilities to formulate plans that work for them and enhance their recruitment and retention.

Similarly, specific to higher education environments, Grigely (2017) recommended that to address the low employment of people with disability on campus, colleges and university leaders should purposefully identify what these employees' specific needs are. He stated that these investigations should be leveraged to inform policies that reflect the needs of employees

with disabilities through a better understanding of their lived experiences on campus (Grigely, 2017).

Although campus climate for students is a widely studied topic, that is not the case for campus climate for faculty and staff members with disabilities. Indeed, studies of faculty and staff with disabilities are nearly non-existent (Evans et al., 2017). Given the scarcity of literature on disability in the higher education workforce, there is a significant need to study this population's campus experiences. The insight gained from such a study can inform policies intended to increase employment rates for people with disabilities and increase the job satisfaction and retention of those already employed.

Problem Statement

The problem is that due to a lack of study of campus climate for university employees with disabilities, insufficient data are available for campus leaders to understand what the perceptions of the campus climate are for these employees: This limits the ability of campus leaders to formulate and implement informed plans to improve the campus climate for this employee population and lead to increased employment and retention, thereby providing benefits to both these individuals and the campus itself.

Statement of the Purpose

The presence of people with disability on campus can positively contribute to the diversity of higher education. Providing equitable employment opportunities for people with disability is a legal and ethical requirement not being met in higher education, given their underrepresentation in those institutions. Creating policies that encourage persons with disabilities to apply for jobs on campus, that facilitate their hiring, and that create a campus

climate that is welcoming and supportive for them to retain them as employees requires an understanding of how this population perceives the campus climate.

The purpose of this study was to understand the perceptions of the campus climate of non-faculty university employees with disabilities and to examine how their gender and racial identities interact with their disability status. Through this study, I intended to provide a foundation based on empirical data for developing informed policies that can improve the campus climate for employees with disabilities, thereby enhancing the recruitment and retention of these individuals.

Conceptual Framework

This study's conceptual framework was Stone and Colella's (1996) Model of Factors Affecting the Treatment of Disabled Individuals in Organizations. In their model, Stone and Colella explained the factors in the workplace that determine the treatment of people with disability. Their framework consists of many individual components, but they fall into three categories: antecedents, psychological, and behavioral. In brief, the framework describes the influence of personal beliefs, disability-related stereotypes, and historical characteristics on the treatment of people with disability, with responses to that treatment providing feedback that can modify subsequent interactions. I address these categories and the framework in more detail in Chapter II.

Climate plays a crucial role in contributing to the treatment of people with disability because it contributes to both the antecedents and the psychological responses of Stone and Colella's model. As such, understanding campus climate is critical to applying Stone and Colella's model in a higher education context in this study. Stone and Colella's (1996) model is not directly a campus climate model, so I needed to supplement it with a model of campus

climate. For this purpose, I chose the Academic Culture and Climate (ACC) model from Peterson and Spencer (1990) because it defines campus climate and culture and the relationship between them, and I wanted to consider how climate changes may be incorporated into culture.

As the title suggests, the ACC model distinguishes between campus culture and climate. Culture consists of the institution's long-held organizational values that generally do not change rapidly. By contrast, campus climate focuses on how members of the organization perceive the present state of various campus dimensions that encompass such items as inclusion and acceptance of diverse groups and individuals, how welcoming the campus is for these groups, and the ways that campus policies support or detract from these features (Hart & Fellabaum, 2008). Adjustments to various elements of the organization more readily influence climate than they do culture. These changes may include modifications in the multiple components that comprise the campus's social environment, policy, and leadership priorities. Given the malleability of campus climate perceptions, understanding the current state of campus climate for employees with disabilities will allow informed changes to be made to improve that climate. Over time, changes to the climate may become incorporated into the campus culture as they become ingrained into the organization, allowing these changes to become a part of the institution's permanent features. In the near term, campus climate changes affect the community's experiences for better or worse.

I present a more comprehensive overview of the conceptual frameworks utilized in this study in Chapter II and their place in the methodology in Chapter III.

Statement of the Question

The research question for this study is: How do university employees with disabilities perceive the campus climate at the institution studied, and do their gender and racial identities

interact with their disability status in forming perceptions of the campus climate? I used this question to determine the methodology used in the study and guide my development of the sub-questions (below) that support answering the research question.

Research Questions

Specifically, I intend to answer the following research questions:

1a. Are there group differences in perceptions of organizational characteristics between employees with differing disability statuses (disabled/non-disabled)?

1b. Are there group differences in perceptions of organizational characteristics between employees with differing genders (women/men/trans-spectrum)?

1c. Are there group differences in perceptions of organizational characteristics between employees with differing racial identities (White, people of color)?

1d. Is there an interaction effect on organizational characteristics perception between the employee groupings by disability status, gender, and racial identity?

2a. Are there group differences in perceptions of worker treatment characteristics between employees with differing disability statuses (disabled/non-disabled)?

2b. Are there group differences in perceptions of worker treatment characteristics between employees with differing genders (women/men/trans-spectrum)?

2c. Are there group differences in perceptions of worker treatment characteristics between employees with differing racial identities (White, people of color)?

2d. Is there an interaction effect on work-life perception between the employee groupings by disability status, gender, and racial identity?

3a. Are there group differences in perceptions of job assignment characteristics between employees with differing disability statuses (disabled/non-disabled)?

3b. Are there group differences in perceptions of job assignment characteristics between employees with differing genders (women/men/trans-spectrum)?

3c. Are there group differences in perceptions of job assignment characteristics between employees with differing racial identities (White, people of color)?

3d. Is there an interaction effect on job assignment perception between the employee groupings by disability status, gender, and racial identity?

4. What is the relationship between Organizational Characteristics, Worker Treatment, and Job Assignment perceptions by disability status, gender, and racial identity?

Significance of the Study

As indicated previously, the employment levels of people with disability in higher education do not align with the percentage they comprise in the broader United States population. Despite the importance of understanding their climate perceptions to enhance employee recruitment and retention rates, few studies exist that examine the perception of climate on campus for employees with disabilities. As a result, little data are available for campus leaders to utilize to understand what factors may contribute to low employment levels of people with disability at their local institutions. Data-driven insight into the perceptions of the campus climate will benefit several groups on campus. These groups include senior university executives, human resources leaders interested in enhancing the employment opportunities of persons with disabilities, and diversity and inclusion officers who seek to ensure equity and opportunity for all. These data will improve the ability of campus leaders to formulate informed plans for improved employment opportunities for persons with disabilities, benefitting these individuals and enhancing the diversity on campus.

Definitions Used

Key terms used in this study are defined as listed below.

Academic Culture and Climate Model (ACC): Proposed by Peterson and Spencer (1990). Defines culture and climate on campus, with culture being the long-term, enduring features of the institution and defines climate as the malleable shorter-term characteristics of a campus environment.

Attitude: As used in the model by Stone and Colella (1996), attitudes are how others in the organization think about persons with disabilities that influence their treatment. Stereotypes regarding the skills, capabilities, educational level, and general characteristics of persons with disabilities often determine attitudes toward them. In the ACC model, feedback from persons with disabilities and educational efforts undertaken by the organization modify attitudes.

Campus Climate: "The current common patterns of important dimensions of organizational life or its members' perceptions of an attitude toward those dimensions" (Peterson & Spencer, 1990, p. 7) at higher education institutions. Campus climate is readily changeable and often characterized by terms like chilly, warm, hostile, and welcoming. Climate experiences are based in part on “group membership and status on campus” (Rankin & Associates, 2014, p. 6).

Campus Culture: Per the ACC Model (Peterson & Spencer, 1990), culture consists of the institution's long-term, enduring social features that change slowly over time. Culture includes the “organizational values communicated through norms, artifacts, and observed in behavioral patterns” (Hogan & Coote, 2014, p. 1,610) at the institution.

Disability: This study utilizes the definition of disability from the Americans with Disabilities Act of 1990 (1991), which stated that disability is "a physical or mental impairment that substantially limits one or more major life activities of such individual" (p. 7).

Diversity: Diversity in the context of this study is a characteristic of groups that encompass demographic differences among members, including both observable factors such as gender, race, ethnicity, age, and non-observable characteristics such as cultural, cognitive, and physical differences between individuals (Roberson, 2006).

Gender: "A person's inner sense of being man, woman, both, or neither. The internal identity may or may not be expressed outwardly, and may or may not correspond to one's physical characteristics" (Rankin and Associates, 2014, p. 1).

*Minoritized: "*groups that are different in race, religious creed, nation of origin, sexuality, and gender and as a result of social constructs have less power or representation compared to other members or groups in society" (Smith, 2016, para. 3).

Person(s) with disabilities: An individual who has "a physical or mental impairment that substantially limits one or more major life activities of such individual. a record of such an impairment. or being regarded as having such an impairment" (Americans with Disabilities Act, 1991, p. 7). The language surrounding disability is often controversial, especially regarding disability-first or person-first conventions (Carey et al., 2020). Although some prefer identity-first language, I chose to use person-first phrasing because it places the person first in the descriptions rather than centering one attribute of that person's identity when referring to them. My choice here does not mean to imply that identity-first terminology is inappropriate. I acknowledge that others, in particular those in the social justice-based communities, may prefer the alternative of disability-first language.

Racial identity: "A socially constructed category about a group of people based on generalized physical features such as skin color, hair type, shape of eyes, physique, etc." (Rankin and Associates, 2014, p. 2).

Social model of disability: envisions disability as an artifact of barriers placed by society that individuals face (Cook & Clement, 2019). In this model, disability is a "social construct that excludes those who do not conform to an imagined status quo" (Cook & Clement, 2019, p. 1).

Trans-spectrum: I adopted the definition used in the Rankin and Associates survey instrument: "An umbrella term referring to those whose gender or gender expression [previously defined] is different from that traditionally associated with their sex assigned at birth." (Rankin and Associates, 2014, p. 2).

University employees: Non-faculty staff, full and part-time. Does not include student employees or independent contractors.

Assumptions, Limitations, Delimitations

Assumptions

I assumed that the survey participants understood the questions presented in the survey, that they were honest in their responses, and the answers provided reflected their actual views. Also, I assumed that the participants were representative of the target population of employees and that the survey instrument was valid and reliable.

The landscape of laws, regulations, and their interpretation as related to the treatment and employment of people with disability, is ever-changing. I assumed that such changes made after the data collection would not have fundamentally altered the expectations of survey participants.

Limitations and Delimitations

Limitations of this study include using a secondary dataset from Rankin and Associates. These pre-existing data reflect the elements of the campus climate that the survey authors deemed relevant, which may or may not match the institutions' priorities or mine. I did not have control over the survey questions asked or the data collection methods used. However, designing and administering a survey and obtaining the number of responses available in the Rankin and Associates dataset was impractical for me given time constraints and limited funding.

The survey data came from two Carnegie classification M1 research institutions, one R1 institution, and a medical school. The small number and the type of institutions included potentially limits the generalizability of results at institutions that are not of the same classification or in the same geographic areas. The aggregation of three institution types in the data provided a broader view of the campus climate than a single institution type would have done, but further limits the generalizability of the results.

The data were collected only once, providing a snapshot of perceptions during the survey administration. Thus, the data cannot provide insight into trends of perception changes over time.

The survey relied on self-identification by participants regarding their disability status. As such, some participants I would classify as disabled based on the definition used in this research may not have identified as having a disability. Conversely, some who identified as having a disability may not meet the definition employed for this study.

The quantitative research design does not allow me to draw conclusions about causality. Although correlations provide insight into and a sense of the relationship between campus climate elements and perceptions of the campus climate by campus community members, it is

not possible to conclude which climate elements were the cause(s) of people having a specific perception.

One delimitation of the study is that I only examined employees' perceptions. Campus climate for people with disability is broader than just this group. For instance, I do not explore the effects of the campus climate on the larger population of students with disability despite their importance to the overall campus climate experience for individuals with disabilities.

Another delimitation is my inclusion of only non-faculty employees in the study. It is likely that faculty, non-faculty, and student employees perceive the campus climate differently. My study was not designed to identify those differences since my interest was specifically in non-faculty employees.

The quantitative design I employed for this study can provide the "what" regarding people's perceptions of the campus climate, but insight into the "whys" of those perceptions is lacking. I intentionally limited my research to the descriptive aspects of the campus climate, reserving an investigation of the "whys" related to these aspects for future research. I chose this approach because there is a lack of knowledge concerning the perceptions of the campus climate of employees with disabilities. Thus, it is a necessary first step to establish these perceptions before investigating "why" these people perceive climate as they do.

Researcher's Perspective

I have worked in the higher education field for over twenty-five years. During that time, I became interested in equity and inclusion in higher education for students and employees on campus. Specifically, I am interested in matters related to people with disability, stemming largely from my background of working with persons with developmental and physical disabilities. During my higher education studies, I coupled that background with an interest in

the occupational and academic experiences of persons with disabilities, an interest that several of my family members share. I have come to recognize that in many contexts, disability seems not to be as widely emphasized in diversity discussions on campus and elsewhere in society as other minority statuses. This lack of emphasis persists despite the underrepresentation of this population in the workforce, both in higher education and in general. Additionally, I recognized that disability encompasses members of all societal groups and that one can become a member of this group at any time in life, which inspired me to conduct this study. Through this study, I seek to raise awareness of issues related to the inclusion of disability in the higher education workforce and identify practical ways to improve conditions for this minoritized group on campus.

Organization of the Study

I organized this dissertation into five chapters. Chapter I provides an overview of the study, including a background of the problem, the problem statement, the purpose of the study, the research questions included, and its significance. I also provide definitions of key terms used in the study and a brief overview of the conceptual framework that guided my study.

Chapter II contains a review of the existing literature on the topic of campus climate and disability. I present the criteria I used to select the literature to be reviewed. I follow that with a synthesis of the literature on the current understanding of the problem. I then discuss the conceptual framework and review the previous research. Lastly, I review and evaluate the literature, list the literature's strengths and weaknesses, and suggest avenues for further research.

Chapter III provides a discussion of the methodology used for the study. In this discussion, I explain who the participants were and the instrumentation I used. I present the

research design, including the research questions, methods I used for data analysis and why, possible sources of bias, and a discussion of my assumptions, limitations, and delimitations.

Chapter IV starts with an overview of the sample characteristics, a discussion of the instrument, validity and reliability investigation, and an explanation of the process I used to create the subscales. Research findings for the three research questions examine group differences by ability, race, and gender. Lastly, I present the correlational analysis I conducted to explore the relationship between the three groups and the subscales.

Chapter V presents a discussion of the results for each research question and how those results relate to the conceptual framework I used and to the literature on the topic. I discuss the limitations of the quantitative study and present implications for practice and for future research, and lastly a conclusion to the study.

CHAPTER II. LITERATURE REVIEW

In Chapter II, I review the literature regarding campus climate related to faculty and staff in higher education institutions and how that literature applies to studying campus climate for university staff with disabilities. The literature review includes how I selected the literature for the review, an overview of the current understanding of the problem, a discussion of the theoretical framework that guides the study, a review of prior study findings, and a review of the methodologies used in those studies.

Criteria for Literature Review

Levy and Ellis (2006) indicated that a quality literature review must include rigorous analysis and substantive literature synthesis. The literature review must also explain the theoretical foundation for the study, provide support for the research problem, and justify that the research study will add to the discipline's body of knowledge. Per Levy and Ellis, the literature review will also frame "the valid research methodologies, approach, goals, and research questions for the proposed study" (p. 183).

Selecting Sources

I followed the recommendations offered by Creswell (2012) in selecting literature for the review. Creswell recommended that peer-reviewed/refereed sources be the primary source of literature, so such articles form the basis of my literature review. Also suggested was using a hierarchy of prioritization when evaluating other sources for inclusion, which included (in descending order of quality) non-refereed journals, books, conference papers, dissertations/theses, and website sources (p. 92). He related the importance of utilizing articles that present primary research conducted by the authors rather than relying exclusively on secondary sources that only reference other primary sources. Lastly, he emphasized the

importance of including in the literature review studies that utilize both qualitative and quantitative methods regardless of the intended method for the proposed research because each can provide different forms of insight.

Evaluating Sources

Creswell (2012) suggested using a three-step process when evaluating sources for relevance. The first step is to assess whether the article's topic is the same as the planned research study. Next, he suggested examining whether the source literature looks at the same population and the same settings as the intended study. The last step is to determine if the literature's problem, purpose, and research questions are similar to the proposed research. Per Creswell, if the answers to all three questions are "yes," the literature is a suitable candidate. However, requiring a "yes" for all the above questions is too limiting for this study. Given the dearth of studies on the proposed topic, it may be unrealistic to expect to find sources that fit all of the above criteria. I modified Creswell's selection criteria to include literature lacking only one of the desired characteristics. As a last evaluation of quality, I looked at the conclusions made by the author. I evaluated the research methods employed to determine whether the study, as conducted, supported the author’s conclusions as suggested by Boote and Beile (2005).

Current Understanding of the Problem

Anderson (2006) wrote that "the experience of disability is relevant to all marginalized groups—for all groups have people with disabilities in them" and "people with disabilities are the world's largest multicultural minority" (p. 367). Although over 20% of people in the United States have some form of disability (Centers for Disease Control and Prevention, 2022), the employment level for people with disability is relatively low in higher education institutions (Kosanic et al., 2018). Perhaps due to the low level of employment, estimated by Kosanic et al.

at less than 2%, few studies of this population were conducted in a higher education setting to help understand their experiences.

The problem is that due to a lack of study of campus climate for university employees with disabilities, insufficient data are available for campus leaders to understand these employees' perceptions of the campus climate; this limits the ability of campus leaders to formulate and implement informed plans to improve the campus climate for this employee population and lead to increased employment and retention, thereby providing benefits to both these individuals and the campus itself.

What is Disability?

Disability historically was viewed using the medical model that focuses on the individual's impairments (Hogan, 2019). The medical model describes disability from a deficit perspective, considering disability to be a "biological condition inherent to the individual, which reduces her/his quality of life and participation in society in comparison to a 'normal' human functioning" (Trani et al., 2011, p. 146). This model views disability as a defect that needs correcting, which fixes power primarily in the hands of medical professionals who can provide rehabilitation (Dubois & Trani, 2009). Researchers using the medical model look to identify limitations posed by disabling conditions such as blindness, deafness, and mobility issues. Further, they look to determine ways to provide individual accommodations for those individuals' limitations, often based on legal requirements.

In contrast to the medical model, the social model envisions disability as an artifact of societal barriers (Cook & Clement, 2019). These barriers have their roots in society's practices and beliefs (Shigaki et al., 2012). Thus, disability is a "social construct created by a society that excludes those who do not conform to an imagined status quo" (Cook & Clement, 2019, p. 1).

The social model distinguishes impairments, which belong to an individual, and disability, viewed in the model as "an oppression, created by society and imposed upon individuals with impairments" (Shigaki et al., 2012, p. 560). The authors stated that the social model stresses the importance of identifying the social and structural barriers with the intent to modify those barriers so that persons with disabilities can "fully enjoy all human rights and fundamental freedoms" (p. 560). The social model is concerned with the rights of persons with disabilities and endeavors to provide them with justice, choice, and empowerment (Dubois & Trani, 2009).

Other models of disability also exist in the literature, most prominently the critical disability model, mainly based on the precepts of other critical-theory models including critical race theory and critical feminist theory. Critical disability theory seeks to deconstruct the binary distinctions that result in hierarchies of difference between those with disabilities and those without, the goal being to deconstruct the disabled/non-disabled binary (Vehmas & Watson, 2014).

For this study, I employed the social model of disability to investigate the perceptions that employees with disabilities have of the campus climate. This model fits my perspective and experiences with persons with disabilities, but that does not imply that other models would not also be suitable. The social model fits with my preferred lens of social constructionism. Further, it coexists well with the dynamic interaction process between those with disabilities and those without that is incorporated into the Stone and Colella (1996) model that I chose as my conceptual framework.

The Importance of Work

Work is an essential activity in people's lives and is particularly important for those with disabilities (Vornholt et al., 2013). In general, work helps to satisfy the needs for income and it

provides "a number of basic human needs including those for a time structure, a collective purpose, social contact, status, and activity" (p. 463), fostering good mental health and well-being. Work provides not just the income needed for daily life but contributes to the individual's overall well-being. It is a crucial component for building personal identity and fosters the formation of finding meaning in life for all individuals (Nota et al., 2014). Thus, work is of great importance to feelings of self-worth for all individuals. Due to societal barriers, persons with disabilities are often socially isolated in everyday life (Vornholt et al., 2013), so work takes on more significance compared to the general population. Merely having a job is insufficient for people with disabilities to benefit from their employment fully. Instead, the authors stated, "social integration into the group of colleagues and acceptance by the colleagues is an essential pre-condition for the beneficial effects of work to become operative" (Vornholt et al., 2013, p. 464). Further, they asserted that others' acceptance at work is likely the most significant determinant of sustainability for the employment of people with disabilities. The authors noted that despite the importance of acceptance for persons with disabilities, this population of employees has rarely been a focus of study.

Acceptance of employees with disabilities is determined in part by the interactions between colleagues with whom they work and their attitudes and perceptions. The characteristics of the employer and the overall workplace climate also factor into the level of acceptance present. Employers open to diversity in the composition of their workforce, who commit to treating disabled and other employees equally, and who actively support the inclusion of people with disabilities, foster a climate that encourages the retention of current employees (Vornholt et al., 2013). Such policies also result in increased recruitment of additional employees with disabilities. Increased employment and retention of employees with disabilities provide direct

benefits to the employed individuals and can result in an improved organizational climate, including "improved interactions with co-workers, increased overall company morale, and increased overall company productivity" (p. 470).

Employment Levels in Higher Education for People with Disabilities

Higher education institutions, like businesses in general, have low employment levels for people with disabilities, considering the overall number of people in society with one or more disabilities. The employment numbers for people with disabilities in higher education institutions are difficult to find. Still, those available measures show a significant shortfall in employment for people with disabilities (Evans et al., 2017). Brown and Leigh (2018) reported that 3.9% of university staff disclosed some impairment, while 16% of working-age adults have at least one disabling condition. Based on those figures, higher education institutions' employment levels are approximately 25% of their expected levels.

The National Center for Science and Engineering Statistics [NCSES] (2021) provided recent data on doctoral recipients in all fields of study. That report stated that in 2019, 9.1% of all doctoral graduates identified as having a disability. To the extent that those graduates constitute the pool of potential new faculty, their number is significantly less than the 16% level reported by Brown and Leigh (2018) for the general population. Even though non-faculty employees make up between 66 and 75% of university employees (Rogers, 2012), authoritative sources for the level of non-faculty employees with disabilities in higher education settings are not readily available given that this population is rarely studied. See the section "Lack of Study of Climate for Employees" later in this chapter for more detail on study levels for employees on campus.

Lindsay and Fuentes (2022) reported disabled academic staff were significantly underrepresented in Canada, with 6.7% identifying as disabled compared to 20% of the working-age population, and even more underrepresented in the U.K., where only 2% identified as disabled despite the estimated 16% of working-age people. The authors state that less than 6% of Australian academic staff identify as disabled compared to 18% of Australians as a whole.

The underrepresentation of people with disability in employment at higher education institutions poses a social justice issue similar to the underemployment of other minority groups. The lack of job opportunities in higher education limits opportunities for these people to earn a living and detracts from the diversity on campus. This decreased level of diversity may negatively affect other community members, including students who can benefit from interactions with persons with disabilities.

Disability as a Social Construct

The social model of disability envisions disability as a social construct where society builds disabling barriers that people with impairments must overcome. The primary goals of those who follow this model are to spur changes in the political, social, and economic systems that construct disabling barriers and to increase access and inclusion for persons with disabilities across the various facets of society (Olkin, 2002).

Scholars in disability studies argue that disability is not a medical condition related to individuals. Instead, it is a social category equal in importance to other more commonly recognized individual characteristics, such as gender, race, and class (Kudlick, 2003). In this context, it is important to note that people with disability constitute a distinct minoritized group on campus. Indeed, the experiences of persons with disabilities parallel those of other minorities. The goals for remediation that the social model of disability proposes, such as political, social,

and economic system modification, are also important goals for other minoritized groups. Olkin (2002) argued that a minoritized group's primary defining characteristic is not in the number of individuals in that group but rather the "experience of prejudice, stigma, discrimination, and oppression" (p. 134). Olkin also stressed that those negative pressures result in a societal expectation for the underrepresented group to conform to the majority culture.

People with disabilities face pressures to conform to the majority culture as Olkin (2002) described, due, in part, to ableism. Ableism is “the prejudicial reduction of a body to its disability” (Alshammari, 2017, p. 33) which is “invisibly threaded through universities, even when the institution has an overtly inclusive policy” (Merchant et al., 2019, p. 274). Further, Evans et al. (2017) stated that ableism, “like other forms of oppression, operates on multiple levels” (p. 1) and is pervasive because it affects personal interactions and is embedded in institutions at the organizational level.

Recent studies have found evidence that ableism is present in higher education. Dolan (2021) conducted a qualitative study involving 16 professors who had invisible disabilities. The author found ableism embedded into the culture of the institutions, with performance expectations that privilege able-bodied academics. The participants reported that they felt compelled not to reveal their hidden disabilities because they observed that those who did were marginalized.

Brown and Ramlackhan (2021) found a need to conform to ableist standards among the 30 academics who participated in the study. Again, many of the participants indicated a hesitancy to disclose their disabilities for fear of negative repercussions. Additionally, participants stated that higher education institutions are dominated by men, which adds to the negative atmosphere by combining ableism with sexism.

Knight (2017) stated that various "'isms' interrelate, creating a system of oppression that reflects the intersection of multiple forms of discrimination" (p. 68), meaning ableism due to disability status adds to discrimination based on other identities such as race and gender. Thus, ableism influences the attitudes of others in the organization and serves as a factor to determine how people with disabilities are treated in the Stone and Colella (1996) model described in detail later in this chapter.

Differences between Disability and Other Minoritized Groups

People with disability constitute a minoritized group and their experiences parallel those of other minoritized groups in many facets of their everyday lives (McLaughlin et al., 2004). However, some significant differences exist between disability as a minority group and other underrepresented groups. These differences can present additional difficulties for persons with disabilities that are not present for minoritized groups. For instance, for laws related to protecting other minority classes, rarely is there the challenge of whether one is a group member. However, when one has a disability, one's status as a member of that minoritized group is subject to the definition of disability used (Barnartt & Scotch, 2001) and thus can be debated. In addition, employees who request accommodations for a disability are often required to provide medical documentation to their employer which adds another barrier to being recognized as a member of the minoritized group even for those conditions that are readily accepted as constituting a disability (Lindsay & Fuentes, 2022).

Olkin (2002) stated that, in certain respects, persons with disabilities might not benefit from policies and legal rulings that have helped the plight of other underrepresented groups. An example cited by Olkin is the separate but equal doctrine. This formerly common principle of accommodation was declared illegal when applied to race in *Brown v. Board of Education*

(1954) but is alive and well for persons with disabilities. Olkin stated that persons with disabilities often have "separate entrances, separate buses, separate drinking fountains, separate bathrooms, separate classrooms" (p. 134), much like the case was with race-segregated facilities. That such facilities remain for persons with disabilities demonstrates that progress made for other groups has not always translated into similar successes for this group. To that end, work remains to be done to provide them with the same protections as other minoritized identities.

Kudlick (2003) pointed out that disability "cuts across all races, classes, genders, nationalities, and generations" (p. 768) and can suddenly affect anyone at any time. Given the variety of conditions that can lead to disability, one may become a person with a disability temporarily at different points in one's life, and one may develop a permanent condition that leads to disability after spending most of one's life without such conditions (Barnartt & Scotch, 2001). The Covid-19 pandemic resulted in the development of what has informally been called long covid, which consists of a variety of potentially disabling conditions. Examples of these conditions include sensory changes, respiratory difficulties, and organ injury (Hereth et al., 2022). Hereth et al. (2022) stated that long covid is causing a substantial increase in the number of people with disabilities and serves as an example of how disability can affect anyone suddenly and unexpectantly.

Because disability is pervasive, providing the same protections afforded to other minoritized groups is critical. Nevertheless, the treatment of persons with disabilities is often an afterthought, with little academic research focused on this topic (Kudlick, 2003).

Commitment to Diversity for Persons with Disabilities

Envisioning persons with disabilities as members of a minoritized group is essential because it reinforces the need to understand their experiences on campus. Such an understanding

of other minoritized groups has resulted in changes that enhanced campus experiences for those individuals (Hurtado & Ruiz, 2012). A commitment to diversity should be comprehensive and should include an effort to improve the climate for all groups (Hurtado et al., 2012). Understanding the issues and perceptions of all underrepresented groups, including employees with disabilities, is needed to provide such a commitment to diversity. Although there are many similarities between people with disability and other minoritized people, their experiences differ from other minoritized groups (Olkin, 2002). Thus, one cannot assume that how other minoritized individuals experience the campus climate applies to persons with disabilities. Likewise, one cannot assume that the policies created to improve other minoritized groups' conditions will necessarily benefit people with disability. Hence, decision-makers require data on the experiences of persons with disabilities and how they perceive their treatment on campus. Analyzing these data will provide insight into their unique experiences, identifying ways to enhance the campus climate.

Lack of Study of Climate for Employees

The perception of the campus climate for students in higher education institutions has been a widely studied topic in recent years. Initially, many of these studies were reactive, often conducted in response to specific incidents on campus. These incidents made clear the need to assess climate and diversity-related issues in those institutions (Hurtado et al., 2008). These assessments provided valuable evidence-based data to campus administrators, which in part engendered a desire to conduct additional proactive climate perception surveys. As a part of this process, researchers widened the focus of these assessments to provide vital information on "significant issues affecting women, racial/ethnic minorities, disabled students, and LGBT students" (p. 204). These data inform administrators on the campus climate for members of these

groups and the broader campus and guide their attention to where problem areas exist on campuses. They also guide decisions regarding creating or changing policies and programs to address areas of concern or further enhance those that are positive.

There are far fewer research studies on the perceptions of campus climate for faculty than studies conducted related to students. Research involving employees other than faculty on campus is quite rare (Evans et al., 2017), resulting in a lack of critical data for planning and policymaking purposes related to this campus constituency. Faculty perceptions often serve as a representation of staff perceptions on campus, which may obscure differences in staff perceptions as a distinct class of employees. Hart and Fellabaum (2008) addressed this issue and stated that staff, in particular, are very likely to be excluded from climate studies. To the authors, this is problematic because it leaves out a large segment of the campus population. Also, because many staff members have low-paying jobs such as clerical, custodial, and groundskeeping positions, the lack of attention to this group's needs can lead to a classist campus climate. Echoing this sentiment, Mayhew et al. (2006) also indicated that very few studies include staff.

If employees on campus are less likely to be studied as a whole, it follows that studying employees with disabilities as a group would be an even more infrequent event. To fully understand the campus climate, it is necessary to include the experiences of as broad a cross-section as possible of campus constituencies, including faculty, staff, and students (Mayhew et al., 2006). Further, it should consist of campus communities "based on race, gender, disability, and field of study" (p. 64). Despite the recognition in 2006 of the importance of non-faculty employees and disability as factors in campus climate assessments, to date, there have been very few studies conducted that focus on this group of employees, with exceptions being Friedman (1993), Mayhew et al. (2006), Shigaki et al. (2012), and Snyder et al. (2010).

Conceptual Framework

Choosing a robust conceptual or theoretical framework is crucial to a well-designed and meaningful study that can effectively provide findings that inform decision-making regarding policy and practice (Maxwell, 2004). Jones et al. (2014) stated that in addition to facilitating the development of valuable results, the chosen framework "influences how the researcher will approach and design the study and influences how the researcher will approach the topic under study in more abstract terms" (p. 22). The authors further stated that the framework provides the perspective that the researcher will apply in the study. At the same time, it situates that perspective in the existing literature and links the phenomenon under investigation to theory.

Grant and Osanloo (2016) stated that one's chosen framework "serves as the guide on which to build and support your study, and also provides the structure to define how you will philosophically, epistemologically, methodologically, and analytically approach research" (p. 14). The authors stated that the framework provides the study with the necessary theoretical underpinnings for its rationale, problem and purpose statements, research questions, and significance, thus providing a solid foundation for the study. Lastly, the framework guides the researcher in choosing the research methods employed and the approach used to analyze the results.

Model of Factors Affecting the Treatment of Disabled Individuals in Organizations

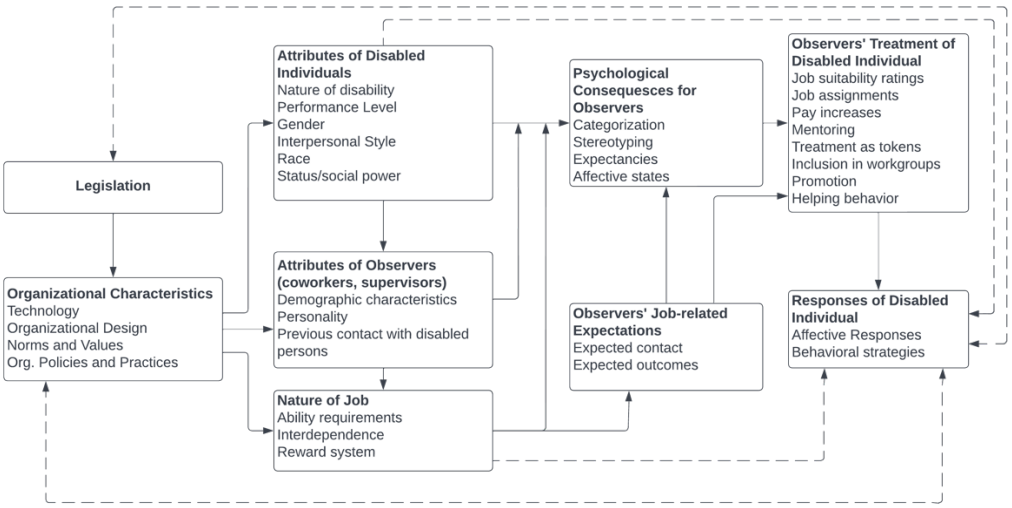
The conceptual framework I chose to guide this study was Stone and Colella's (1996) Model of Factors Affecting the Treatment of Disabled Individuals in Organizations. Stone and Colella proposed this framework to explain what factors were significant in treating persons with disabilities in organizations and how these factors interact. Researchers widely employ this framework in private sector studies, but few have applied it in a higher education environment.

Although Snyder et al. (2010) and Nota et al. (2014) used this framework in their studies of the higher education environment, I conducted an extensive search and did not locate any studies that specifically use this framework to investigate the campus climate for people with disabilities as is being done in this study.

Snyder et al. (2016) summarized the Stone and Colella (1996) framework by describing it as a comprehensive model of factors that work together to determine the treatment of persons with disabilities. Beatty et al. (2019) described this model as "the most comprehensive framework focusing on the factors affecting the treatment of persons with disabilities in the workplace" (p. 120). As a comprehensive model, it has many parts (see Figure 1). However, conceptually, the model consists of only three separate groups of factors: antecedents, psychological responses, and affective/behavioral responses. There are, of course, interrelationships between these categories of factors that make the model more complicated. I describe each of these factor groups below.

Figure 1

Model of Factors Affecting the Treatment of Disabled Individuals



Note: Adapted from Stone and Colella (1996)

Antecedents

Antecedents in the model primarily influence how observers (in this context, meaning those in the organization without disabilities) treat persons with disabilities. There are six antecedent categories included in the model. The first is disability and fair labor practice legislation, which is a significant contributing factor because it "shapes the social and legal parameters of required behavior" (Beatty et al., 2019, p. 122). Legal requirements set the parameters for what is permissible in terms of the treatment of employees. Legal statutes create a set of expectations for the treatment of employees for all organizations, and they carry the force of law to compel organizations to meet those expectations. Even with these legal protections that set a minimum standard preventing overt discrimination, more subtle forms of discrimination may occur, resulting in negative consequences for the individual similar to those stemming from behaviors prohibited by law (p. 121).

The second antecedent in the model is the unique individual characteristics of the organization. Beatty et al. (2018), in their review of studies utilizing the framework, found this to be the most studied antecedent, with 32 of the 92 studies explicitly analyzing this antecedent. This antecedent includes organizational culture, level of technology, human resources practices for recruiting employees, socialization norms among employees, performance evaluation processes, and accommodations made for persons with disabilities. This antecedent includes a large part of what constitutes the campus climate in the present study, with organizational culture being a prominent factor in the Organizational Characteristics subscale.

The third antecedent in the model consists of the specific attributes of the persons with disabilities themselves, including the nature of their disability, their level of job performance,

interpersonal style, and other potentially marginalizing personal characteristics such as race, gender, and socioeconomic power.

The attributes of the observers comprise the fourth antecedent. They include their demographic characteristics, personalities, and level of contact with persons with disabilities, which can introduce preconceived notions about them. The nature of the job is the fifth antecedent. It includes such factors as the ability requirements to perform tasks required by the job, the level of interdependence between coworkers for the job, and the reward systems in place. The sixth and final antecedent includes the observers' job-related expectations, which consist of their expected level of contact with persons with disabilities at work and their desired outcomes for those performing the job.

Psychological Responses

In the model, observers' psychological consequences mediate the antecedents and the observers' treatment of persons with disabilities. Stone and Colella (1996) stated the model assumes that the following sequence of events influences these psychological consequences. Individuals automatically perform a categorization process to assign persons with disabilities to a disability category type, such as physically disabled or mentally disabled. Based on this categorization, individuals apply their stereotypes to the person with disabilities, which leads to perceptions about the traits of the person with disabilities, including preconceived notions about abilities and personality characteristics. Further, individuals use stereotypes to set their expectations for how a person with disabilities will perform assigned job duties. Lastly, stereotypes influence how they interact with the person with disabilities.

Affective and Behavioral Responses

In Stone and Colella's (1996) model, the affective and behavioral responses category includes the observers' treatment of persons with disabilities and the subsequent response by those with disabilities to that treatment. The first factor, the observers' treatment of persons with disabilities, is the primary dependent variable in this model. This treatment of people with disabilities includes excluding them from social activities and workgroups, viewing them as tokens, assessing what jobs are suitable for them, deciding what tasks to assign, and determining their pay levels. It also includes what training and mentoring opportunities others offer to persons with disabilities.

The second factor is the response of the person with disabilities to that treatment. In the model, the responses of persons with disabilities, directly and indirectly, influence the observers' treatment. Affective responses include feeling and expressing disappointment, anger, resentment, or frustration. Behavioral responses may include avoidance measures like concealment of disabilities, withdrawing from situations, and decreasing job performance, or proactive measures such as actively communicating information about their disabilities or even taking legal action where the situation warrants it. The model suggests that these responses by persons with disabilities provide direct personal feedback to the observer, affecting observers' near-term future treatment of them.

The model also includes a feedback loop from the responses to the psychological consequences for observers, which provides a more long-term mediation of treatment. Feedback from the person with disabilities regarding their treatment can, over time, be the impetus for observers to modify their process of categorizing and stereotyping persons with disabilities. Recategorizing and modifying stereotypes can result in long-term changes in treating persons

with disabilities. Therefore, the model is dynamic, with the treatment of persons with disabilities by others in a state of perpetual flux. Per the model, their treatment is subject to change as the fundamental factors included in the model are modified.

Suitability for Higher Education

As mentioned earlier, researchers have not widely employed the framework proposed by Stone and Colella (1996) in the higher education environment. Given the comprehensive nature of the model for treating persons with disabilities, I believe the absence of such studies does not indicate that the model is unsuitable for use in higher education. Instead, it appears that the employment of persons with disabilities in higher education is an understudied subject that has limited the opportunity to apply the model in this environment.

Academic Culture and Climate

In Stone and Colella's (1996) framework, a critical factor in treating persons with disabilities is the unique individual characteristics of that organization. Changes in the organization's characteristics affect how others treat persons with disabilities. As a result, these changes influence how they view their organization. While not explicitly targeted to private business environments, Stone and Colella's model has been studied primarily in that context rather than in a higher education one. Although nothing precludes its application in a higher education context, examining the role of climate and culture in higher education and how these concepts fit with Stone and Colella's model is helpful.

Understanding the meaning of campus climate is necessary to apply it appropriately in Stone and Colella's (1996) framework so I needed to also use a model of campus climate to supplement the Stone and Colella framework to situate it in a higher education environment. Rankin and Reason (2008) offered a model of the campus climate that they refer to as the

Transformational Tapestry Model. Rankin and Associates routinely use this model to analyze the results of their campus climate surveys (Rankin & Associates, 2014). Although this model would be appropriate to use in this dissertation study, I wanted to look at the Rankin and Associates survey data in a new way, and thus chose to use a different model of campus climate. To this end, I utilized a conceptual model from Peterson and Spencer (1990) offered a conceptual framework that defined campus culture and climate and how they are related. In their model, climate is the dominant feature of the campus environment as it pertains to Stone and Colella's model elements.

Social Environment of Higher Education

The social environment in higher education, defined here as the social interaction of all campus members, consists of two distinct but related components – climate and culture (Peterson & Spencer, 1990). Peterson and Spencer presented definitions of academic culture and climate. They made an essential distinction between the two in their model called the Academic Climate and Culture model [ACC]. The authors defined culture as "the deeply embedded patterns of organizational behavior and the shared values, assumptions, beliefs, or ideologies that members have about their organization or its work" (p. 6). On the other hand, climate is "the current common patterns of important dimensions of organizational life or its members' perceptions of an attitude toward those dimensions" (p. 7). Thus, the climate is focused more on how organizational members perceive the current situation, while culture is concerned with "deeply held meanings, beliefs, and values" (p. 7). Rankin and Reason (2008) further clarified the definition of climate by stating it is "the current attitudes, behaviors, and standards and practices of employees and students of an institution," and specifically the "attitudes, behaviors, and

standards/practices that concern the access for, inclusion of, and level of respect for individual and group needs, abilities, and potential" (p. 264).

In Peterson and Spencer's (1990) model, culture and climate are separate but deeply intertwined concepts. Together, they provide organizational distinctiveness and identity, conveying how one organization is distinct from other similar organizations. Culture is an enduring quality of organizations and changes only slowly over time. By contrast, climate is a much more dynamic organizational quality and can change rapidly. The authors argued that culture and climate provide a "mechanism for attracting, selecting, and socializing new members" (p. 7), with the perceptions of the combination of culture and climate determining the evaluations of organizational members at the institution.

Because climate is more malleable than culture, climate changes serve as the primary avenue for altering perceptions. Positive changes to climate can result in improvements in attracting, selecting, and socializing community members. In Stone and Colella's (1996) model, the campus climate is a significant component of the antecedent referred to as the organization's unique individual characteristics. Given the dynamic nature of the model, changes in the campus climate can affect community members' psychological responses. These changes filter down to the model's affective and behavioral responses layer. Thus, the model implies that improvements in the campus climate improve the experiences and perceptions of persons with disabilities on campus.

I contend one must first understand the climate’s current state before contemplating needed changes. A quantitative descriptive study of the perceptions of the campus climate can provide data to assist administrators in understanding the state of the campus climate, allowing them to address areas of concern and enhance those already favorable areas.

Primary Elements of Climate

In the ACC model, there are three primary features of climate. The first two features underlie the justification for utilizing a quantitative study to examine the campus climate. The first element Peterson and Spencer (1990) presented was that the primary emphasis of climate is on "common participant views of a wide array of organizational phenomena that allow for comparison among groups or over time" (p. 8). These organizational phenomena include the institution's policies and procedures, how those are implemented, and how welcoming and inclusive the organization is perceived. Although the present study does not include longitudinal data, Peterson and Spencer stated that a quantitative survey method is commonly used in climate studies to perform group comparisons. The data collected can provide insight into the perceptions of the campus climate by various employee groups, including employees with disabilities.

The second element of climate in the ACC model is that climate is "focused on current patterns of beliefs and behaviors" (Peterson & Spencer, 1990, p.8) of the organizational phenomena described above. Again, a quantitative survey method is valuable for providing meaningful measures of current perceptions of broad groups of people, given that it includes many more participants than is typical in a qualitative study.

The final characteristic of climate in the ACC model is that it is "often ephemeral or malleable" (Peterson & Spencer, 1990, p. 8). This characteristic does not come directly into play in the current study, except that it provides a baseline understanding of the present climate. This baseline serves as a comparison data point for future studies on climate that may assess the effectiveness of policies and actions taken due to the climate-related findings from this study.

Climate and the Social Model of Disability

As described by the ACC (1990) model above, the characteristics of the campus climate are congruent with the social model of disability that I chose as a lens in this study. As discussed in this chapter, the social model envisions disability as a "social construct created by a society that excludes those who do not conform to an imagined status quo" (Cook & Clement, 2019, p. 1). Cook and Clement further suggested that the construction of what disability means and who is disabled is rooted in society's beliefs, attitudes, and expectations. These beliefs, attitudes, and expectations and their influence on the treatment of employees with disabilities under the theoretical framework by Stone and Colella (1996) will be discussed in more detail in the section below, particularly in the section on employer attitudes and actions. The ACC model envisions climate as a changeable campus feature determined by the patterns of campus members' beliefs and behaviors. According to the ACC model, changes in beliefs and concomitant changes in behavior result in campus climate changes. These same changes can also modify how those on campus imagine disability in keeping with the social model of disability.

Review of Previous Research

Few researchers have assessed the perceptions of the campus climate of employees in higher education institutions, and far fewer have focused on the perceptions of employees with disabilities. Thus, the research I reviewed in this section included those that looked at the campus climate for employees at a broader level or investigated other minoritized groups' experiences. Understanding how these closely related groups experience the campus climate provides insight into the experiences of employees with disabilities.

Acceptance of Disability

As previously mentioned, the ACC (1990) conceptual framework proposes a category of the campus climate termed the perceived climate. This category is primarily concerned with the perceptions of how an organization should function compared to how it does function. Those perceptions "may be accurate or inaccurate, but they represent reality from the perspective of participants" (Peterson & Spencer, 1990, p. 12). Any disconnect between the perceptions of the organization's intended functioning and how it works can lead to problems with the climate at an institution (Mayhew et al., 2006).

An example of this type of disconnect is where a difference exists between the institution's stated goal of encouraging and supporting a diverse environment and how campus members treat those in diverse groups. Any such disconnects can negatively affect the campus climate. Valuing diversity and differences among campus members is a commonly held value at higher education institutions (American Association of State Colleges and Universities, n.d.). A cursory review of most higher education institutions' values statements will find references to such terms as welcoming, inclusion, diversity, equity, or similar concepts. Hence, the organization should function to value all forms of diversity, but that goal is not always achieved for employees with disabilities.

Social integration or acceptance of a person by others was suggested by Vornholt et al. (2013) as the "most important factor for people's well-being within a social context" (p. 464), so a mismatch between the stated goals for diversity and inclusion and the actions of the members of the community concerning integration and acceptance likely results in negative impressions of the campus climate.

In this study, I contend that the difference between how an organization should function and how it does function is the space where the opportunity for improvement exists in Stone and Colella's (1996) model. Organizational climate, which is readily malleable in the ACC (1990) model, affects those without disabilities' psychological responses and influences their treatment of employees with disabilities in the organization. This treatment, per the framework, then affects employees' perceptions of people with disabilities.

Prior studies have identified issues in higher education institutions where, despite having an objective to enhance diversity, the actions that result from these objectives often do not directly benefit persons with disabilities. For example, Shigaki et al. (2012) studied various potential issues for employees with disabilities at a higher education institution using descriptive statistics and Pearson chi-square methods. They found that many employees with disabilities felt that the campus environment was unwelcoming for them or was outright hostile. Findings included employees not feeling accepted at work (13%), with many experiencing discrimination (26%) and harassment (20%) due to their disability. Employees also believed that their institution often was ineffective in addressing these incidents. Given these outcomes, the organization's expected and actual functioning were incongruent, leading employees with disabilities to view the campus climate unfavorably. The authors recommended more research to collect and analyze data to help better understand the climate for employees with disabilities. This understanding will help identify ways to "promote a welcoming and inclusive campus that ultimately supports work success for persons with a disability" (Shigaki et al., 2012, p. 569). Through the present study, I intend, in part, to provide the data necessary to meet this need.

Similarly, Friedman (1993) performed a qualitative study using a semi-structured interview to conduct an in-depth assessment of the experiences of employees with disabilities at

seven SUNY campuses. The authors interviewed 27 employees with disabilities, with the largest class of employees included being those "whose disabilities became evident after the time of their appointment" (p. 12). A significant finding was that these employees felt others on campus had negative attitudes toward them due to their disability. They often felt misunderstood, stereotyped, and isolated from others rather than being accepted and included. As was the case in the study by Shigaki et al. (2012), there was a distinct lack of acceptance of these employees, leading to negative perceptions of the campus environment. The current SUNY vision and mission for diversity include a commitment to equal access, emphasizing holistic integration of "all aspects of human difference" (The State University of New York, n.d., para. 1), including disability. Although I have been unable to find the complete SUNY mission statement from the time of Friedman's (1993) study, a memorandum at SUNY (McCoy & Dupee, 2017) stated that in 1992 the institution's president created a task force to study diversity on campus. The task force "affirmed the college's commitment to diversity, identified barriers to creating a sense of community on campus, recommended specific activities, and suggested ways the college could measure campus climate" (p. 2). To the extent that this institution's commitment to diversity is representative of SUNY's mission at that time, it appears not to have translated to how those SUNY universities functioned as perceived by their employees with disabilities.

Merchant et al. (2019) used interviews of staff with disabilities in United Kingdom universities to investigate their workplace experience and what barriers these employees face due to their disabilities. The participants reported issues with prejudicial stereotyping of employees with disabilities which affected the perception of what disabled employees were capable of doing. Also noted were physical barriers that made negotiating the physical spaces difficult. Participants stated they were required to do extra work due to their disability which their non-

disabled counterparts need not do. Additionally, participants indicated that they felt like misfits and did not feel welcome or adequately represented in the workplace. The authors attributed the issues these employees faced to “ableism based on the ideal of ‘individual’ excellence” (p. 273) that resulted in the barriers that the employees faced. Ableism negatively impacted these employees' perceptions of their work climate and stood in the way of creating an inclusive work environment.

The present study aims to illuminate how employees with disabilities perceive the campus climate. By understanding these perceptions, campus leaders will have data to assist them in aligning their organization's goals and actions to improve the campus environment for employees with disabilities. Putting this in terms of the conceptual framework, identifying those areas where there is a disconnect between the intended and actual functioning of the climate on campus will allow for positive modifications of the Stone and Colella (1996) model's organizational culture antecedent. Such modifications may result in an improvement of the perceived climate for employees with disabilities.

Campus Climate for Employees

As stated previously, employment levels for faculty and staff with disabilities in higher education are significantly lower than the level of disability in the broader population (Kosanic et al., 2018). Given the underrepresentation of faculty and staff with disabilities in higher education, it is not surprising that employees feel isolated, contributing to a negative psychological or felt climate for these individuals. Where social group inequality is present, members of underrepresented groups such as women and racial/ethnic minorities tend to experience professional isolation (Allan & Madden, 2006) and increased and unwanted scrutiny,

which can be relieved by equalizing the representation among social groups (Zimmerman et al., 2016).

Indeed, in an interview-based qualitative study of employees with disabilities at a large university, Friedman (1993) found that many employees with disabilities felt a sense of isolation and expressed the belief that others on campus who do not have a disability need a "change in attitude" (p. 15). In Friedman's study, employees with disabilities believed that many of their colleagues misunderstood their disability and thought others held stereotypical beliefs about their disabilities. These beliefs affected perceptions about them personally and as coworkers and influenced their treatment of employees with disabilities as expected under Stone and Colella's (1996) framework. Misconceptions about employees with disabilities being less productive, less capable, and having a high absenteeism rate persist even though these are inaccurate stereotypes that do not reflect the conclusions of those who have studied this subject (Williams-Whitt & Taras, 2010). These misperceptions can lead to negative impressions of employees with disabilities, affect how other employees interact with them, and influence the behaviors of employees with disabilities. For example, employees with disabilities may be hesitant to take sick leave when ill out of concern that doing so will engender negative impressions of them with others at work and reinforce negative stereotypes.

Similarly, in a quantitative study using ANOVA, Snyder et al. (2010) reported that employees with disabilities in the higher education setting they studied experienced higher levels of procedural injustice, along with overt and subtle discrimination, resulting in part from stereotypes of persons with disabilities held by their counterparts without disabilities. These perceptions affect the expectations that others have for employees with disabilities in terms of job performance and how they interact personally with employees with disabilities. In the Stone

and Colella (1996) model, these misconceptions and stereotypes influence observers' psychological consequences. Significantly, Snyder et al. (2010) found that improved organizational and supervisory support moderated adverse effects in the work environment, lending support for positive organizational culture changes and leading to an enhanced work climate, as suggested by Stone and Colella in their model.

Employee Climate Perception Comparisons

In my first three research questions, I investigated the differences in climate perceptions between employees with disabilities and their fellow employees without a disability. Jones (2014) stressed the importance of leaders understanding the differences in perceptions of persons with disabilities and their counterparts without disabilities if the goal is to employ and retain employees with disabilities. In this regard, Jones (2014) stated that the study of employees' work experiences with disabilities was quite limited. As a result, there is little in the way of data to help understand the perceptions of employees with disabilities regarding either the workplace itself or of their management despite what Jones stated was "growing evidence of the importance of subjective measures including that work-related measures such as job satisfaction and commitment are correlated with objective outcomes such as quits and workplace performance" (p. 83). I found little in the extant literature, except for Jones' study conducted in the United Kingdom, to indicate any significant study of this employee population's perceptions since that time.

In a quantitative study of data obtained from over 22,000 British employees, Jones (2016) found via ANOVA analysis that significantly more negative perceptions of climate were held by employees with disabilities than their counterparts. Firstly, these negative impressions included the organization's management and their perceived treatment of employees with disabilities.

These employees also held negative impressions of job-specific factors such as general job satisfaction, the extent to which employees with disabilities can influence their assigned tasks, how they are permitted to carry out such tasks, and how committed they feel to their organization. These findings are consistent with an earlier study by Snyder et al. (2010) conducted at a large U.S. university where employees with disabilities held a more negative perception of the workplace than others due to overt and subtle discrimination. I anticipated that the present study would find similar differences between employees with disabilities and their fellow employees without disabilities.

Perceived support by the organization and supervisory personnel "showed promise" (Snyder et al., 2010, p. 5) in improving the perceptions of climate by employees with disabilities. These findings fit with the antecedents that Stone and Colella (1996) included in their model, which suggested that the organization's norms affect the treatment of employees with disabilities, ultimately influencing the perception of workplace climate by employees with disabilities. Therefore, understanding where the organization falls short in supporting employees with disabilities is key to determining how to address those shortcomings.

In a quantitative, survey-based study of more than 400 staff members at a large public university, Mayhew et al. (2006) used multiple regression to investigate the factors contributing to a positive campus climate for diversity utilizing Peterson and Spencer's ACC (1990) model. The authors reported that perceptions of the campus climate differed significantly based on gender and race, with women and racial minorities perceiving a more negative campus climate than their counterparts. In the present study, I examine whether employees with disabilities as a minoritized group perceive the campus climate more negatively than their coworkers without disabilities. Mayhew et al. (2006) stated that "historically marginalized groups adopt a more

critical view of issues related to diversity than people from more traditional social identity groups" (p. 84). I expect the present study will confirm this assertion regarding employees with disabilities.

Effect of Race and Gender on Perceptions of Campus Climate

In their model, Stone and Colella (1996) stated that in addition to the nature of their disability, the race and gender of employees with disabilities are key elements that affect how others in the organization treat them. Numerous studies on perceptions of the campus climate for students have found that racial minorities have less favorable perceptions of the campus climate. Although they did not focus specifically on non-faculty employees as I do in my study, the results of those studies point to issues that non-faculty employees of color with disabilities face.

Ancis et al. (2000), in a study involving nearly 600 undergraduate students, found that African American students reported less equitable treatment and "significantly more racism than their counterparts who are not African American" (p. 183). Reid and Radhakrishnan (2003) examined the perceptions of campus climate of 920 undergraduate students at a large midwestern university. Using a one-way ANOVA, the authors found that students of color had a significantly less favorable perception than did White students. More recently, Telles and Mitchell (2018) provided a brief overview of campus climate issues since the 1980s that included a discussion on intersectionality, specifically, how having multiple minoritized identities may influence campus experiences. In their study, Telles and Mitchell analyzed responses from 45,000 undergraduate students and found that Whites felt more valued on campus, felt they belonged more, and were more comfortable than Black students with the climate on campus. Similarly, Ncube et al. (2018), in a study involving nearly 35,000 undergraduate students, found African American

students more dissatisfied with the campus climate and had a lesser sense of belonging than their White counterparts.

Studies of campus climate and gender have found that women and trans-spectrum campus members have a less favorable perception of the campus climate as well. Campbell-Wheatley et al. (2015), in their study of approximately 900 university faculty members using MANOVA, found that faculty members who were women felt less respected and had more negative climate experiences than did men. These experiences affected their recruitment and retention negatively.

Discrimination against women in the workplace continues despite legal prohibitions, though there have been some substantial gains in providing employment equity for women (Turk, 2016). Mayhew et al. (2006) stated that women "are more critical of their institutions as having achieved a positive climate for diversity" (p. 84). Hurtado et al. (1998, as cited in Mayhew et al., 2006) stated, "who you are and where you are positioned in an institution will affect how you experience and view the institution" (p. 84), so women being positioned lower in the organization may result in more negative perceptions of the climate.

Thompson et al. (2021) analyzed data from a survey of approximately 1,850 undergraduate students. Their ANOVA results indicated a significant effect of gender identity on perceptions of the campus climate, with gender diverse (equivalent to the trans-spectrum group in the present study) having a less favorable perception than their cisgender counterparts.

In addition, Rankin and Associates (2014), in their analysis of data from the University of California system of universities from an earlier version of the survey used here, found people of color, women, and trans-spectrum respondents were less comfortable with the campus climate than Whites and men.

The Rankin and Associates (2014) results and those of the other studies mentioned in this section suggest that race and gender may combine with disability status to determine an individual's perception of the campus climate as Stone and Colella (1996) posited. As such, in this study I analyzed the influence of these identities in conjunction with disability status.

Employer Attitudes and Actions

Dunn (2014) defined attitudes as "global evaluations of a person, an object, or an issue that are positive, negative, or ambivalent" (p. 58) and distinguished attitudes as being different from beliefs, which are "facts or opinions referring to someone or something" (p. 58). In this definition, beliefs are a part of what determines attitudes and often stem from personal feelings that are subject to the influence of stereotypes and biases. Ableism is a prejudice that reduces the disabled person to their disability (Alshammari, 2017) which operates on multiple levels at both the interpersonal and organizational levels (Evans et al., 2017). As ingrained in organizational policy and interpersonal relationships, attitudes toward employees with disabilities resulting from prejudices like ableism are likely to affect this population negatively (Merchant, 2019). Dunn stated that understanding the attitudes of individuals is vital. By identifying these attitudes, predicting future actions by that individual is possible due to the concept of attitude-behavior consistency, which describes the consistent link between beliefs, feelings, and activities. To the extent that attitudes predict behavior, the attitudes of those in an organization regarding a disability should provide insight into their interactions and treatment of employees with disabilities. So, where stereotypes exist, whether based on ableism or originating from other sources, negative behaviors toward people with disabilities can be expected (Dunn, 2014).

The attitudes employers have toward employees with disabilities factor into three of the antecedents in Stone and Colella's (1996) model. Attitudes affect the organizational culture,

including human resources recruiting practices, socialization norms, performance evaluation, and accommodations made for employees with disabilities (antecedent two). They are also part of the employer's attributes, such as their personalities and level of previous contact with persons with disabilities (antecedent four). Lastly, attitudes influence employers' job-related expectations, including job-related outcomes (antecedent six). Research has indicated that employers' attitudes and actions significantly affect the perception of employees with disabilities by others in the organization (Nota et al., 2014). Stone and Colella's model suggests that modifying these attitudes and actions can directly improve how employees with disabilities view the organization's climate.

Nota et al. (2014) examined employer attitudes toward disabled people in a quantitative study of 80 employers. Half of the employers had prior experience hiring employees with disabilities and the remainder had no such exposure. The researchers used two different methods to present candidates with disabilities to prospective employers. The introduction of candidates in the first group emphasized their disability as something that may cause difficulty, while the second focused on their strengths as employees. The authors found that the type of disability (sensory or psychological) significantly influenced employer attitudes, with employers viewing the latter category of employees with disabilities less favorably. Notably, in light of Stone and Colella's (1996) model, previous experience hiring employees with disabilities was not a significant factor in this study. However, in that case, the researchers posited that the limited interaction between the managers and employees with disabilities resulted in them having less personal knowledge of the employees' capabilities than anticipated. The study provided support for addressing the negative stereotypes associated with categories of disability. A more positive attitude may result from modifying other employees' stereotypical beliefs toward employees with

disabilities. In terms of the Stone and Colella model, this positive attitude shift can result in positive changes to the psychological responses and the treatment of employees with disabilities by other employees, resulting in more favorable climate evaluations.

Stereotypes regarding employees with disabilities held by employers and coworkers affect others' attitudes and actions in the organization (Snyder et al., 2010). Stereotypes regarding the capabilities and job outcomes of employees with disabilities lead to negative perceptions of these workers. They have led to lower hiring rates, lesser pay, and fewer promotions, along with more subtle forms of discrimination in a study conducted at a large university (Snyder et al., 2010).

Similarly, a qualitative study by Lengnick-Hall et al. (2008) found stereotypes and misconceptions by employers to be key reasons why employees with disabilities are underemployed in the non-education employment market. The authors interviewed various executives to determine why they did not hire persons with disabilities more frequently, with the results reflecting several of the antecedent categories of Stone and Colella's (1996) model in the findings. The researchers identified that lower employment levels resulted from employers' concerns that there would be adverse reactions to employees with disabilities in the workplace by customers and coworkers. Employers also expressed concerns about the cost of accommodations needed to employ people with disabilities. These factors align with the model's second antecedent, which includes socialization norms and organizational culture. In this example, stereotypes regarding employees with disabilities and their perceived lack of qualifications or ability to do the required work were firmly entrenched norms in the culture. These erroneous beliefs adversely affected both current employees with disabilities and potential future employees.

Lengnick-Hall et al.'s (2008) study also touched on Stone and Colella's (1996) antecedent six regarding expected job outcomes. Executives indicated that they perceived that persons with disabilities often lacked appropriate qualifications for the job and were considered less productive than their counterparts without a disability. The authors examined these stereotypes in the extant literature and found that the participating executives held perceptions unsupported by the studies that examined them. The authors concluded that there were no demonstrable job performance or productivity differences between persons with disabilities and others, that costs of accommodations for them are minimal, and that almost no research supports the presence of adverse reactions to the employment of persons with disabilities from either coworkers or customers. In their conclusion, the authors suggested several strategies for improving the perception of persons with disabilities by others. These strategies included educational efforts to help dispel negative stereotypes regarding capabilities and to convey the benefits of having persons with disabilities in the workforce. The invalidation of stereotypes resulting from these efforts will change the psychological factors described in the Stone and Colella model as mediating influences on the treatment of employees with disabilities. Significantly for my study, those changes can help to create a culture of disability inclusiveness and positive modifications of the treatment of employees with disabilities, resulting in improved evaluations of climate by employees with disabilities (Snyder et al., 2010).

Evaluation of the Literature

As discussed in this chapter, many studies examine the campus climate for students, but studies focusing on university employees are much less numerous. Further, very few studies focus on the campus climate for employees with disabilities. The lack of study is a significant

weakness of the literature base and meant that it was difficult to make comparisons between my study and others.

Given the lack of comparable studies, I had little choice but to evaluate the methodologies used for other studied populations, such as faculty and students, to provide insight into what constitutes acceptable strategies for studying the campus climate for employees with disabilities. Ideally, there would have been more studies on non-faculty employees with disabilities available to compare and contrast my results with to allow me to evaluate my findings in light of other studies. Thus, the lack of similar studies constitutes a weakness in the present literature.

Review of Methodologies

In large part, previous studies on the campus climate have used quantitative survey methods to collect demographic information and data regarding campus community members' perceptions of the institution's climate (Hart & Fellabaum, 2008). Many studies using a quantitative methodology utilized dependent variables such as the overall perception of the campus climate, with independent variables such as race, gender, age, role at the university, and a wide variety of other individual characteristics depending on what the researchers were interested in examining. A lesser number of campus climate studies utilized a qualitative method, for example, personal interviews, to assess community members' perceptions. For my study, I chose to use a quantitative approach to include the perceptions of the campus climate of a wide variety of employees.

Literature Strengths and Weaknesses

One strength of the literature is that the campus climate is a widely studied topic, especially concerning students and, to a lesser extent, faculty. The attention paid to the campus

climate in these studies provides a collective understanding of what climate is and how these populations as a group experience climate. It also provides some insight into what factors on campus are likely to influence perceptions of climate, including numerous studies on how underrepresented students experience the campus climate.

I reviewed literature related to the two well-accepted models I used to guide my study. Peterson and Spencer's ACC (1990) model explains the relationship between culture and climate and supplements the model by Stone and Colella (1996), which is robust and widely applied in studies, albeit not in a higher education setting.

Another strength of the literature is the wide adoption of the social model of disability in the literature. The medical model of disability has been supplanted by the social and, to a lesser but ever-increasing extent, the critical disability perspectives, in part due to the World Health Organization’s determination that the medical model was both insufficient and oppressive (Hogan, 2019). The social disability model, which focuses on social constructivism, pairs well with the concepts in the ACC and Stone and Colella (1996) models, in which climate is also a socially constructed element. The widespread use of the social model of disability in the literature has confirmed that this is an appropriate lens for me to use in the present study.

Although there are some significant strengths in the literature, there are also some weaknesses. Most notable among those weaknesses is the dearth of studies on the current topic. Studies of climate for employees in a higher education setting are somewhat limited (Mayhew et al., 2006), and the study of employees with disabilities in higher education is nearly absent in the literature. This significant gap in the literature presented a challenge in the review process for me, but it also helped illuminate the present study's importance and necessity.

Another weakness of the literature is that there is little in the way of definitive numbers on the extent of disability employment levels in a higher education context or elsewhere. I believe this is due in part to the nature of disability. Individuals are often hesitant to disclose their disabilities to their employers, and the sensitive nature of this information makes it unlikely that employers will volunteer such data outside of that required by law. However, the lack of specific data on employee disability levels does not detract from the importance of studying this population. Although exact employment rates are unknown, the literature consensus is that persons with disabilities are significantly underrepresented in the higher education workforce. Not knowing the actual levels makes it more difficult to assess whether employment levels for people with disabilities are improving.

A last weakness in the literature is that there is little study of employees with disabilities in higher education using the theoretical frameworks I chose to guide this study. It would have been helpful to have other prior studies to draw upon, but the lack of study points to why the present one is needed. Although the dearth of existing studies made my task of selecting a theoretical framework challenging, it also allowed me to leverage the model I chose in a way that had not previously been used in higher education.

In summary, there are significant gaps in the literature, most prominently the lack of study of employees with disabilities in higher education and, as a result, the lack of literature utilizing the frameworks I chose to guide this study. The only saturation point I found in the literature is studies of the campus climate as it applies to students, a very widely studied topic. These studies are tangentially related to the present study, but the differences between the student population and employees with disabilities regarding how each experiences climate and the primary determining factors for each group are significant.

Avenues for Further Inquiry

The most significant opportunity I see for further inquiry into the subject of employee-related perceptions of the campus climate is the study method used. Most studies have used a quantitative methodology. However, such studies cannot provide the rich detail that a qualitative study of the experiences of the campus climate by employees could, nor are they capable of delivering the nuanced view that a qualitative study or even a mixed methods study could. I carefully considered which method to use for the present research. I decided that because there has been nearly no study of the campus climate for employees with disabilities, a quantitative approach provides a good starting point for understanding where the issues are for this group of employees. That knowledge can inform subsequent studies that may implement a mixed-methods or qualitative approach.

CHAPTER III. METHODOLOGY

Research Design

The research design used for my study of university employees' perceptions of campus climate was a quantitative, inferential study based on a campus climate survey instrument administered to employees at four higher education institutions. For this study, I grouped the survey respondents into twelve groups using the demographic categories of disability status (disabled/non-disabled), gender (women/men/trans-spectrum), and racial identity (White/people of color). I used these groupings to perform a 2 (disability status) x 3 (gender) x 2 (racial identity) analysis of variance (ANOVA) on the data. I utilized the ANOVA output to examine what between-group differences exist for each group and then analyzed if any interaction effects were present between these groups. I conducted the ANOVA test first for group differences in organizational characteristics perceptions, a second ANOVA for worker treatment perceptions, and a third for job assignment perceptions. I performed a correlational analysis to investigate the relationship between the perceptions of the campus climate and disability status, gender, and racial identity.

Participants

My quantitative study utilized a secondary dataset collected via a survey by Rankin and Associates during the 2019-2020 academic year. The population from which the sample was obtained for this survey included all currently employed staff members at four institutions. Two of these institutions were larger master's granting (Carnegie M1 classification) institutions, one a very high research activity doctoral granting (Carnegie R1 classification) institution, and one was a medical school. The mix of institution types in the data may cause issues with generalizing the results of this study. Since I was interested in the campus climate in a broad sense and not in a

particular institution classification, I opted to use the data from all four institutions to include as many participants as I could in my analysis. The identities of the institutions were not disclosed to me. Participants voluntarily responded to the survey.

Survey Size and Demographics

Across all campuses, the total population of staff members at the time the survey was administered was approximately 27,000. A total of 5,971 staff (22.3% response rate) participated in the survey. Of the respondents, 73% (n = 4,357) were professional staff and 26.5% (n = 1,583) were classified/hourly staff. 64.8% of all respondents identified as women (n = 3,872), and 31.1% (n = 1,856) identified as men, with 2.6% identifying as trans-spectrum (n = 153). People of color made up 28.3% (n = 1,689) of respondents, and 68.3% (n = 4,077) identified as White. 13.8% (n = 822) of respondents indicated that they had some form of disability (physical, learning, or mental health/psychological condition), with the remaining 85.4% (n = 5,098) indicating that they had no disabilities.

Survey Instrumentation and Administration

Rankin and Associates developed and offered the survey instrument to measure perceptions of the campus climate to colleges and universities. Versions of this survey instrument, the Rankin and Associates Campus Climate Assessment survey, have been widely used across the United States to assess the campus climate at over 225 individual sites since 2000 (Rankin & Associates, 2022). The final form of the survey is the product of collaboration with the studied institutions and Rankin and Associates (Rankin & Associates, 2014). This survey version was offered only in English and was administered during the 2019-2020 academic year.

Survey Content

The survey instrument contained five distinct sections (personal experiences, workplace climate, demographic information, perception of the campus climate, and institutional actions).

I used the demographic data to categorize respondents into groups by disability status (disabled/non-disabled). Employees with disabilities include those with multiple identities, not just their disability status. As I discussed in Chapter II, race and gender have been found to influence the perception of the campus climate. Further, Stone and Colella (1996) posited that race and gender influence how others in the organization treat employees with disabilities. Thus, I chose to include race and gender as independent variables to see what effect they may have on employees with disabilities' perceptions of the campus climate. I utilized independent variables of gender (women/men/trans-spectrum), and racial identity (White, people of color) to examine the interaction of these identities with disability status. Rankin and Associates provided only non-faculty employee data to me.

I used questions from the workplace climate section of the survey to create the three subscales used in my study: Worker Treatment, Organizational Characteristics, and Job Assignment. The process I used to identify and select related questions for each subscale is described briefly later in this chapter and in more depth in Chapter IV.

Validity and Reliability

Validity is "the extent to which an instrument measures what it purports to measure" (Kimberlin & Winterstein, 2008, p. 2278), while reliability is a measure of how consistently an instrument measures what it is intended to measure, that is, how close the measured score is to the true score. As these authors pointed out, a precondition of validity is that the survey instrument is reliable, but a survey instrument may be reliable but not valid.

Rankin and Associates, the company that developed the survey, employed a rigorous process to ensure that the survey as administered was valid and reliable. The survey was created and reviewed by experts, piloted, and modified multiple times to ensure that the questions and answer choices provided resulted in consistent, valid, and reliable responses (Rankin & Associates, 2014).

With respect to the 2014 study, a predecessor of the survey I used, Rankin and Associates stated they based questions and the answer choices provided on reviews of literature and other climate-related surveys to ensure content validity. The authors acknowledged that a lack of reliable data to evaluate the correlations between item responses and known exclusionary conduct prevented a proper evaluation of construct validity (Rankin & Associates, 2014).

For earlier versions of the survey, the authors reported that there were statistically significant positive relationships between "the responses to questions about overall campus climate for various groups… and those that rate overall campus climate on various scales" (Rankin & Associates, 2014, p. 17). The authors further stated that the "consistency of these results suggests that the survey data were internally reliable" (p. 17). It should be noted that disability was not among the variables examined in this reliability analysis.

Because reliability values were not published as a part of the survey, I calculated Cronbach's alpha for the organizational characteristics, worker treatment, and job assignment subscales used as dependent variables in the study. Cronbach's alpha is routinely used to evaluate the reliability of subscales (Field, 2013). Given that I constructed the subscales instead of being part of the delivered survey, I also needed to assess the validity of my subscales. Factor analysis was used to identify structurally sound factors. The process I used for factor analysis is extensively covered in Chapter IV.

Research Questions

In this study, I utilized ANOVA to analyze employee perceptions of the campus climate at the surveyed institutions to investigate my research questions. I calculated ANOVAs to examine whether there are group differences in university employees' climate perceptions based on disability status, race, and gender. I also examined whether there is an interaction effect between disability status, gender, and racial identity as measured by each of the subscales, which are described in detail later in this chapter.

I used the following research questions to assess the perceptions of the campus climate as measured by the Organizational Characteristics subscale.

1a. Are there group differences in perceptions of organizational characteristics between employees with differing disability statuses (disabled/non-disabled)?

1b. Are there group differences in perceptions of organizational characteristics between employees with differing genders (women/men/trans-spectrum)?

1c. Are there group differences in perceptions of organizational characteristics between employees with differing racial identities (White, people of color)?

1d. Is there an interaction effect on organizational characteristics perception between the employee groupings by disability status, gender, and racial identity?

My second set of questions examined whether there are group differences in university employees' work-life perceptions based on disability status, race, and gender. I also examined whether there is an interaction effect between disability status, gender, and racial identity on work-life perceptions, as measured by the Worker Treatment subscale. Again, the Worker Treatment subscale is described in detail later in this chapter.

I used the following research questions to assess the perceptions of the campus climate as measured by the Worker Treatment subscale.

2a. Are there group differences in perceptions of worker treatment characteristics between employees with differing disability statuses (disabled/non-disabled)?

2b. Are there group differences in perceptions of worker treatment characteristics between employees with differing genders (women/men/trans-spectrum)?

2c. Are there group differences in perceptions of worker treatment characteristics between employees with differing racial identities (White, people of color)?

2d. Is there an interaction effect on worker treatment perception between the employee groupings by disability status, gender, and racial identity?

My third set of questions examined whether there are group differences in university employees' perceptions of job-related climate by disability status, race, and gender. As with the first two questions, I examined whether there is an interaction effect between disability status, gender, and racial identity on the perceptions of the campus climate as measured by the Job Assignment subscale, as described in detail later in this chapter. The research questions for this were the following:

3a. Are there group differences in perceptions of job assignment characteristics between employees with differing disability statuses (disabled/non-disabled)?

3b. Are there group differences in perceptions of job assignment characteristics between employees with differing genders (women/men/trans-spectrum)?

3c. Are there group differences in perceptions of job assignment characteristics between employees with differing racial identities (White, people of color)?

3d. Is there an interaction effect on job assignment perception between the employee groupings by disability status, gender, and racial identity?

Lastly, I examined whether there is a correlation between the perceptions of the campus climate by subscale for these groups. The research question for this was:

4. What is the relationship between Organizational Characteristics, Worker Treatment, and Job Assignment perceptions by disability status, gender, and racial identity?

Data Analysis Procedures

Because my study focused on university employees, in my analysis I used data only for those whose primary position at the university was as a non-faculty employee. To investigate my research questions, I selected three independent quantitative, categorical variables to use in the study: disability status, gender, and racial identity of the respondents. I use disability status as one of my independent variables because the campus climate for employees with disabilities is the topic of my study. I also chose gender and race as independent variables to determine whether those possibly marginalizing attributes interact with disability status, as Stone and Colella (1996) suggested may be the case. Given the large number of possible answers in the survey for gender (seven) and race (thirteen), I needed to reduce the number of categories represented by each variable. Collapsing these categories down was required to ensure that I had enough respondents in each category to meet the assumptions for the ANOVA calculations, and to make the results reasonable to interpret.

Based on discussions about my research design with Rankin and Associates representatives, the data they delivered to me included a dichotomous variable for disability status (disabled, non-disabled). Likewise, they included a three-category independent variable for gender (women/men/trans-spectrum) by collapsing the gender responses for those who

identified as other than woman or man into the trans-spectrum group. Lastly, they provided me with a collapsed variable for racial identity (person of color/White).

The first three sets of research questions were each evaluated using factorial ANOVAs (Disability Status x Gender x Racial Identity). For Research Question 1, I used the subscale Organizational Characteristics as the dependent variable. For Research Question 2, the dependent variable was the Worker Treatment subscale. Lastly, for Research Question 3, the Job Assignment subscale was used.

For Research Question 4, I calculated Pearson's correlation coefficients for each of the subscales grouped by the independent variables of disability status (disabled, non-disabled), gender (women, men, trans-spectrum), and racial identity (people of color, White).

Subscale Development

The survey defined no subscales to examine my research questions related to the campus climate. Thus, I needed to construct subscales to use. To do so, I utilized the categories in the Stone and Colella (1996) model to guide the selection of questions to incorporate into my three subscales relating to the perceptions of the campus climate.

I created three subscales to evaluate perceptions of different aspects of campus climate. I included in my factor analysis questions from the workplace climate survey section for possible inclusion in my subscales. These questions used a Likert scale with the following choices: 1 (strongly agree), 2 (agree), 3 (neither agree nor disagree), 4 (disagree), and 5 (strongly disagree). I classified each question by categories from the model to aid in the process of factor analysis that I used to assess the validity of the scales. These categorizations helped me decide on the appropriateness of the questions that loaded to each factor to ensure that the subscales

represented logically grouped questions that fit the model categories. (See Appendix D for the survey questions and their model categories).

Organizational Characteristics Subscale

The nine questions incorporated into the Organizational Characteristics (OC) subscale were primarily ones that were related to the organizational norms and values model category (e.g., "[Location] provides adequate resources to help me manage work-life balance"). The remainder of the questions for this subscale were related to the policies and practices category (e.g., "Retirement benefits are competitive"). As described in Chapter II, an organization's norms and values affect the treatment of employees with disabilities, which then influences the perception of workplace climate by employees with disabilities. Identifying how employees perceive these norms and values will help campus leaders understand what factors on their campus influence their employees' climate perceptions.

Worker Treatment Subscale

As mentioned above, I created a second subscale, Worker Treatment (WT), to measure the perceptions of the campus climate related to work-life issues. This subscale was comprised of 17 questions related to the Stone and Colella (1996) model categories of helping, inclusion, mentoring, promotion, and training. These elements are part of the larger category in the model called Observers' Treatment of Disabled Individuals. As outlined in Chapter II, the Stone and Colella model proposes that a feedback loop exists that incorporates the treatment of employees with disabilities and their responses. Depending on the organization and the individuals involved, this feedback can lead to either improvement or degradation of perceptions by those employees. Identifying how employees perceive these elements related to work-life perception will facilitate

the ability to incorporate positive changes into the feedback loop, which can result in an improvement for employees with disabilities.

Job Assignment Subscale

The Job Assignment subscale consisted of six questions I categorized as directly related to the job assignments model category and the tasks and expectations that exist for the position (e.g., "Pressured by work requirements that occur outside of my normally scheduled hours").

Three additional questions in this subscale are related to the concepts of psychological, affective, and behavioral responses in the Stone and Colella (1996) model. In the model, psychological responses relate to preconceived notions or stereotypes about the capabilities that individuals have about people with disabilities. Affective and behavioral responses include assessing what jobs are suitable and deciding what tasks to assign based on their disability status. These three questions assess the level to which others in the organization prejudge abilities based on the respondent's identity/background.

Please refer to Appendix A for a complete list of survey questions related to each subscale and Appendix D for question/model category/subscale assignment details. Table 1 summarizes the research questions, including the independent and dependent variables and the data analysis method employed for each question.

Table 1

Research Questions, Variables, and Data Analysis Method

Research Question	Independent Variables	Dependent Variables	Data Analysis Method
1a. Are there group differences in perceptions of organizational characteristics between employees with differing disability statuses?	Disability status (disabled, non-disabled)	Organizational Characteristics subscale	ANOVA
1b. Are there group differences in perceptions of organizational characteristics between employees with differing genders?	Gender (women, men, trans-spectrum)	Organizational Characteristics subscale	ANOVA
1c. Are there group differences in perceptions of organizational characteristics between employees with differing racial identities?	Racial Identity (people of color, White)	Organizational Characteristics subscale	ANOVA
1d. Is there an interaction effect on organizational characteristics perception between the employee groupings by disability status, gender, and racial identity?	Disability status Gender Racial Identity	Organizational Characteristics subscale	ANOVA

Research Question	Independent Variables	Dependent Variables	Data Analysis Method
2a. Are there group differences in perceptions of worker treatment characteristics between employees with differing disability statuses?	Disability status (disabled, non-disabled)	Worker Treatment subscale	ANOVA
2b. Are there group differences in perceptions of worker treatment characteristics between employees with differing genders?	Gender (women, men, trans-spectrum)	Worker Treatment subscale	ANOVA
2c. Are there group differences in perceptions of worker treatment characteristics between employees with differing racial identities?	Racial Identity (people of color, White)	Worker Treatment subscale	ANOVA
2d. Is there an interaction effect on worker treatment perception between the employee groupings by disability status, gender, and racial identity?	Disability status Gender Racial Identity .	Worker Treatment subscale	ANOVA
3a. Are there group differences in perceptions of job assignment characteristics between	Disability status (disabled, non-disabled)	Job Assignment subscale	ANOVA

Research Question	Independent Variables	Dependent Variables	Data Analysis Method
employees with differing disability statuses?			
3b. Are there group differences in perceptions of job assignment characteristics between employees with differing genders?	Gender (women, men, trans-spectrum)	Job Assignment subscale	ANOVA
3c. Are there group differences in perceptions of job assignment characteristics between employees with differing racial identities?	Racial Identity (people of color, White)	Job Assignment subscale	ANOVA
3d. Is there an interaction effect on job assignment perception between the employee groupings by disability status, gender, and racial identity?	Disability status Gender Racial Identity	Job Assignment subscale	ANOVA
4. What is the relationship between Organizational Characteristics, Worker Treatment, and Job Assignment perceptions by disability status, gender, and racial identity?	Disability status Gender Racial Identity	Organizational Characteristics subscale; Worker Treatment subscale; Job Assignment subscale	Pearson correlation

Rationale for Chosen Methodology

Few studies have been conducted on the perceptions of the campus climate for employees with disabilities. Because little is known about these perceptions, a goal for my research is to provide data to inform decisions by campus leadership regarding changes that might be needed to make campuses more welcoming and inclusive of employees with disabilities. Persons with disabilities are under-employed in higher education institutions (Evans et al., 2017). Peterson and Spencer (1990) presented a conceptual framework for campus climate, which posited that together campus culture and climate are vital features of the environment that influence "attracting, selecting, and socializing new members" (p. 7). Further, the authors stated that in contrast to culture, the climate is a more readily changed element of the campus environment.

The ACC (1990) model divides climate into three distinct categories: objective climate, psychological climate, and perceived climate. Each of these categories represents different ways that research studies can evaluate climate. This study focuses on the perceived climate because perceived climate characteristics fit best with my goal to provide insight for positive change.

The first category, objective climate, pertains to those behaviors and activities on campus that an observer can see, typically without interaction with those observed. As such, this category relies on the researcher's observation and recording of these actions. Although it can provide insight into the campus climate, the conclusions drawn from these observations result from the individual researcher's interpretation and perspective and are potentially not representative of those observed. As a result, I chose not to focus on the objective climate because such observation would not reveal the subjects' authentic experiences and my biases may influence my observations.

The second category, psychological climate, is called the felt climate and measures how participants think about the organizational climate and their work. This category fits with this study's intended objectives to the extent that it provides a good measure of what participants think about the climate on campus. Still, this category fits less well with using a strictly quantitative study methodology because such studies do not explore the various feelings that persons with disabilities may have. Peterson and Spencer (1990) state that using surveys to evaluate the psychological climate on campus is possible, but it takes specialized survey instruments explicitly designed for this purpose. Such surveys should be augmented with mixed-methods techniques such as interviews to provide a complete picture.

The final category is the perceived climate, which focuses on "how organizational life actually does function and how it should function" (Peterson & Spencer, 1990, p. 12) and is the category I chose to focus on for the study. This study is concerned with how employees with disabilities perceive the campus climate. Peterson and Spencer (1990) stated that such perceptions represent the lived reality of climate for the participants and provide insight into perceptions on "institutional patterns and behaviors" (p. 12) in areas such as institutional goals, governance and decision-making, and workplace dynamics. As Stone and Colella's (1996) model describes, the organization's characteristics fit with these institutional patterns and behaviors. Thus, I used the perceived climate category and data collected from the campus climate survey to inform the analysis of the current state of the campus climate for this employee group.

Understanding the current climate conditions for employees with disabilities is a necessary precursor to making changes to improve those conditions. By providing this needed understanding through studies like this, policies can be developed to implement any changes required to improve the climate for this population of employees. Of particular interest in the

ACC (1990) model are the current beliefs of members of the entire campus community because the psychological or felt climate is a crucial determinant of the overall campus climate.

I chose a quantitative survey design for this research for two primary reasons. First, such a design is particularly well-suited to obtain a broad perspective on the views of a population. A large study with many respondents is advantageous because it enhances the ability to generalize the results (USC Libraries, n.d.). A large dataset increases the chances that there will be a substantial enough sample size of the target population and has a favorable impact on both statistical power and significance (Field, 2013). The survey that served as my quantitative study data source provided a large sample size from across four campuses.

Secondly, quantitative studies lend themselves well to replication and comparison because they employ well-established standards (USC Libraries, n.d.). Very few studies have been conducted on the perceptions of the campus climate of employees with disabilities, so further attempts to replicate my findings would be of value. I believe that utilizing a method that enhances the ability to replicate was an important consideration when choosing a research design.

For my analysis, I chose to use ANOVA, a linear statistical model that allows the examination of the difference in means of more than two groups (Field, 2013). Through this examination, I intended to focus on the perceptions of employees with disabilities compared to those without disabilities and to examine whether race or gender interacts with their disability status in determining their perceptions of climate. Presenting data on these little-studied perceptions can inform decision-makers on what areas may require a focused effort to improve the experiences of employees with disabilities on campus.

Possible Bias

Bias in this study could be introduced in two primary ways related to the analysis techniques utilized: violation of assumptions of the statistical test and the presence of outliers. For the former, the assumptions for ANOVA are that the data are normally distributed, variances are equal, and the respondents are independent (Field, 2013). These assumptions were evaluated in Chapter IV for all three research questions to ensure bias is not introduced via violating assumptions.

The second common source of bias related to statistical techniques is the presence of outliers. I examined the data as a part of the analysis to identify any significant outliers and removed them as needed before running any statistical calculations. Using a Likert scale generally limits the number of outliers in the data, which I found to be the case with my data.

Given the large sample size and the favorable response rates previously described, I believe the sample was sufficiently representative of the population, thus minimizing systemic bias. In addition, the participants were not selected explicitly for inclusion in the study, which limits sampling bias. Due to the large sample size, there is a greater probability of increased statistical power and practical significance being found.

Assumptions

In this study, I made the following assumptions about the participants and the survey instrument:

1. The survey was reliable and valid, and the variables were accurately measured.
2. The survey data accurately reflect the respondents' answers.
3. The participants in the survey were representative of the target population of staff employees at the institutions surveyed.

4. The participants correctly understood the survey questions and answer choices and responded with accurate answers to the survey questions.

Limitations and Delimitations

My research design calls for using a secondary dataset which provides convenience because it eliminates the need to develop and administer a survey of my own. I can analyze the data more quickly, allowing the results to be used for timely decision support. On the other hand, when using existing data, I am limited by having no ability to ask specific questions I am interested in exploring. Further, I cannot change the data collection method used to ensure that the groups I am interested in studying are adequately represented.

Quantitative studies have potentially significant limitations that need to be kept in mind. In this case, the study was conducted at two Carnegie M1 (larger master's program) classification universities, one R1 (very high research activity doctoral university) classification, and one medical school. Results obtained from these institutions may not be representative of institutions located in other states or those of different Carnegie classifications, which could limit generalization to other sites. In addition, the sample for the study was not random. Voluntary participation by respondents means that the sample may not be representative of the site's population, let alone other institutions. The study design utilized a one-time survey to collect data for analysis. Such snapshot data collection methods cannot provide detail regarding how the campus climate is changing over time and whether it is trending positively or negatively, limiting the level of decision support that can be provided.

Further, participants' assessments of the campus climate may also be influenced by recent significant episodes (positive or negative) that can affect their perception of the campus climate at the time of the survey. Thus, the results may not reflect the more steady-state status of the

campus climate at the institutions studied. For example, if a high-profile incident occurs during the data collection phase, responses collected before the incident may differ significantly from responses collected afterward. The survey data used in my study were collected in the 2019-2020 academic year, encompassing the beginning of a global pandemic. The pandemic may have influenced perceptions given the unprecedented changes made on most campuses at that time. In addition, the survey may have also been open when there was national outrage and widespread protests due to a murder committed of a Black man by a White police officer in Minneapolis, MN. Each of these events may have affected perceptions of the campus population over time, resulting in a mix of pre- and post-incident perceptions that could be different. Even in the absence of such nationally publicized events, incidents of more local nature may have occurred during survey administration that would influence evaluations of the campus climate by participants. Because I do not know what institutions were included in the survey, I cannot determine if such local events happened.

The survey relies on voluntary self-identification of disability status. There can be many reasons why an individual with some form of disability may or may not want to self-identify, so some employees with disabilities may not have been identified (Lindsay et al., 2019; Zilvinskis, 2020). Also, individual participants may not define disability in the same way that the survey authors or I do, resulting in participants classifying themselves in ways I did not expect. These self-identification issues, combined with no opportunity for follow-up, may have resulted in respondents being incorrectly categorized for disability status and may have skewed the results.

I used a dichotomous variable for disability status (disabled, non-disabled) rather than retaining all the values that were available to indicate disability type. Billis and Mills (2022) stated that this is a common practice in quantitative methods to allow for sufficient sample size,

but it is not without drawbacks. The authors explained that differences in disability types and severities present different barriers for the individual. The authors further contended that “every individual with a disability has their own set of unique experiences and challenges that are not always accounted for when conducting quantitative research” (p. 3). In this study, combining all disabled employees into a single category allowed me to use ANOVA for analysis to derive a general measure of climate perceptions for the group. At the same time, I lost the ability to gain a more nuanced understanding by looking at all the categories of disability available in the survey.

Lastly, although quantitative results can provide an understanding of the current perceptions of the campus climate, the data may not be conducive to understanding the "whys" of that perception, making practical recommendations difficult. Indeed, in the case of the survey I used, there is little attempt to identify the "whys" of participants' perceptions of the campus climate.

Timeframe

The survey used in this study was conducted in 2019-2020, so the data reflect the state of the campus climate then. The perceptions of the campus climate continually change as current events unfold. Thus, data collected in the past will not reflect all issues related to the current state of perception. This limitation is inherent in using survey data because it takes time to collect and process it, so the data will likely not be a perfect reflection of current conditions. This limitation is moderated by the inclusion of questions that relate to structural elements of the workplace that persist over time. More transitory incidents may dramatically influence the perceptions of the campus climate, while structural factors will remain crucial influences on climate perceptions. Understanding the perceptions that result from these factors at the time of collection will provide

insight into the perceptions of employees with disabilities, even if the specifics of those perceptions may have changed somewhat in the interim.

Chapter Summary

In this chapter, I discussed the quantitative research design of my study, why I chose that design, and what research questions I used to investigate the perceptions of the campus climate for employees with disabilities. Because every research design has its strengths and weaknesses, I discussed the potential limitations of my design. One of the limitations I mentioned was the inability to choose a data collection strategy, which is inherent in using a secondary dataset. Unfortunately, there was an issue with the underrepresentation of one of the groups in the gender category which required a modification to two of the ANOVA questions, as will be discussed in Chapter IV. I recognized that this could be an issue with my design. Still, I determined that the benefits of using the secondary dataset, given its basis in a proven survey instrument and the large sample size, made it a suitable data source for my study.

CHAPTER IV. RESULTS

In this study, I examined the perceptions of the campus climate for non-faculty employees with disabilities utilizing data from the Rankin and Associates Campus Climate Survey 2020. I compared employee perceptions of the campus climate using three independent variables – disability status, gender, and racial identity. Using Statistical Package for Social Sciences (SPSS), I investigated whether group differences in perceptions of the campus climate existed within those three groups using subscales I created to measure campus climate perceptions. These subscales are described in greater detail later in this chapter. I also used Pearson's correlation to explore the relationships between the independent variable groups and the subscales.

Participants and Sample

To answer my research questions, I analyzed a secondary dataset collected by Rankin and Associates at four higher education institutions during the 2019-2020 academic year. Two of these institutions were M1 Carnegie classification institutions, one was an R1 classification, and one was a medical school. Rankin and Associates invited all administrators, faculty, staff, and students at the surveyed institutions to participate. The survey was primarily administered online, though a paper option was available for those who preferred that medium. The survey was available only in English.

A total of 5,971 employees voluntarily participated in the survey. Of those, 28.3% (n = 1,689) identified as a person of color and 68.3% (n = 4,077) as White, with 3.4% (n = 205) not answering the racial identity question. Women made up 64.8% (n = 3,872) of participants, 31.1% (n = 1,856) identified as men, 2.6% (n = 153) identified as trans-spectrum, and 1.5% (n = 90) were missing a gender identification. Lastly, for disability status, 85.4% (n=5,098) identified as

non-disabled, 13.8% (n = 822) as having at least one disability, with 0.9% (n = 51) missing answers for disability status. Table 2 presents the percentage and n values for the independent variables by disability status.

Table 2

Independent Variable Group Percentage and n Values

Status	Women	*n*	Men	*n*	Trans	*n*	White	*n*	People of Color	*n*
Non-disabled	86.9%	3,333	87.3%	1,610	60.3%	91	86.1%	3,481	87.1%	1,457
Disabled	13.1%	501	12.7%	235	39.7%	60	13.9%	563	12.9%	216

The complete survey covered both topics germane to my study and others outside the study's scope. I reviewed the survey instrument and requested only data from Rankin and Associates for those sections that were relevant to my research questions.

Instrument

I utilized the Rankin and Associates Campus Climate Survey 2020 for my study. I reviewed the survey to identify questions closely related to my topic. I selected multi-part questions from both section 51 and section 53 and three questions from section 120. I included 48 possible questions in my analysis (see Appendix A for details on these questions that related to the campus climate).

Rankin and Associates collapsed several response choices into single groups when they shared the data with me. The variable used for gender responses had three possible values: woman, man, and trans-spectrum (collapsing those who identified as other than woman or man into this group). The racial identity variable was a dichotomous variable with values of either White or person of color. Lastly, the disability status variable was a dichotomous variable to indicate whether the respondent identified as having one or more disabilities or not.

All the climate evaluation questions I selected for inclusion in the dependent variable subscales utilized a Likert scale with possible values of one through five. The scale used the following designations for all included questions: 1 (strongly agree), 2 (agree), 3 (neither agree nor disagree), 4 (disagree), and 5 (strongly disagree). Most of the questions were positively worded so that "strongly agree" was the most favorable evaluation and "strongly disagree" was the least favorable evaluation (e.g., "I have job security"). Nine questions were worded so that the scale was reversed so that choice 5 was the most positive response and choice 1 was the most negative response (e.g., "I perform more work than colleagues with similar performance

expectations"). Modifying some questions such that the meaning of the scale is reversed is a recommended practice in surveys to ensure that respondents do not simply select a single value for items (Qasem & Gul, 2014). The answers for such reverse-coded questions need to be inverted to create a consistent meaning for all questions and permit later reliability analysis. I re-coded each of these variables into a new one and inverted the values as follows: 5=1, 4=2, 3=3, 2=4, 1=5 (see Appendix B for all re-coded questions). I used these inverted variables in place of the original versions in my statistical tests.

Subscale Validity

In my analysis, I utilized three subscales that I created using factor analysis. I called these subscales Organizational Characteristics, Worker Treatment, and Job Assignment, based on their congruence with elements from the Stone and Colella (1996) model was the study's conceptual framework.

Factor analysis is a statistical technique that examines intercorrelations among many variables with the intent to create a smaller number of subscales comprised of related variables from the initial set (Pallant, 2010). Pallant presented several guidelines for assessing whether a dataset is suitable for use with factor analysis. First, the sample size should be at least 300. My dataset satisfies this condition, having over 5,000 respondents. Second, Pallant stated that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy should be .6 or higher and Bartlett's Test of Sphericity, which tests the significance of the correlations in the matrix, should be significant ($p < .05$). In my factor analysis, these guidelines were met. The KMO value was .94, indicating that the strength of the relationship between the variables was high, and Bartlett's test was significant (χ^2 (1,128) = 121,809, $p < .001$).

I conducted an initial exploratory factor analysis that returned a seven-factor model. I examined both the screeplot and the eigenvalues and identified four possible factors from that model as being suitable for inclusion in the model. All four were above or equal to the elbow on the screeplot, which Pallant (2010) suggested as criteria for inclusion. I subsequently ran the factor analysis limited to four factors. That factor analysis resulted in groupings that were not a satisfactory match to the conceptual framework categories of the Stone and Colella (1996) model due to how the items split across the four factors. Lastly, I limited the factor analysis to three factors. This three-factor model, in which all elements loaded at greater than .30, aligned with the Stone and Colella (1996) model categories and thereby fit well conceptually: Worker Treatment (17 questions), Job Assignment (9 questions), and Organizational Characteristics (9 questions). The first factor, Worker Treatment, was robust, with an eigenvalue of 14.6, accounting for 30.3% of the variance in the data. The second factor, Job Assignment, had an eigenvalue of 2.8, accounting for 5.8% of the variance in the data. The final factor, organizational characteristics, had an eigenvalue of 2.5, accounting for 5.1% of the data variance. In total, the three factors explain 41.2% of the variance in the data. See Appendix C for factor loadings, communalities of items from this factor analysis, eigenvalues, and percentages of variance explained.

Using SPSS, I created three new subscales to represent the Worker Treatment, Job Assignment, and Organizational Characteristics elements of the Stone and Colella (1996) conceptual model. To create the subscales, I summed the Likert scale responses for each question included in the subscale. I then calculated descriptive measures for each subscale, shown in Table 3. As mentioned previously, the Likert scale ranged from 1 to 5. As shown in Table 3, the minimum score for each subscale was equal to the number of questions included in that scale,

and the maximum was equal to the number of questions times 5. Because the survey included negatively worded questions and I inverted the values for those responses, I assumed those minimums and maximums accurately reflected the highly positive or negative perceptions of those participants rather than being the result of them choosing a particular value for all responses without considering the questions themselves.

Table 3

Subscale Descriptive Statistics

Subscale	No. of Items	Min	Max	*M*	*SD*	*N*
Worker Treatment	17	17.00	85.00	41.99	11.96	5,043
Job Assignment	9	9.00	45.00	23.89	6.29	4,981
Organizational Characteristics	9	9.00	45.00	23.61	5.25	5,093

Subscale Reliability

In addition to assessing the validity of my subscales, I also needed to ensure that each subscale was reliable, meaning that the items were internally consistent and measured the same construct. Cronbach's alpha is most commonly used to evaluate the reliability of a scale (Field, 2013). Cronbach's alpha measures the "intercorrelation of items and estimates the proportion of the variance in all the items that is accounted for by a common factor" (Vogt & Johnson, 2016, p. 71). Values for Cronbach's alpha range from 0 to 1, with a recommended minimum value of .7 (Vogt, 2016). Using the three scales I created, I calculated Cronbach's alpha in SPSS. The Cronbach's alpha for the Worker Treatment subscale was .93, for Job Assignment, .81, and for Organizational Characteristics, .80. The Cronbach alpha values for all three subscales suggest that the items included in each have high internal consistency. Further, the SPSS results indicate that Cronbach's alpha would not increase for any subscale by removing items from the scale.

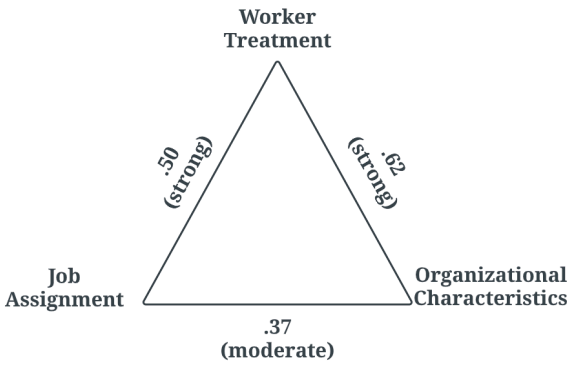
Subscale Correlations

After conducting factor analysis to ensure the subscales were both valid and reliable, I ran a Pearson's correlation to examine the relationship between each of the three subscales. Before running the correlations, I reviewed histogram graphs and line plots for each subscale to ensure there were no violations of the assumptions of normality and linearity that are required for calculating correlations.

Results of the Pearson correlation indicated that there was a strong positive relationship between Worker Treatment and Job Assignment ($r(4{,}795) = .50$, $p < .001$) and between Worker Treatment and Organizational Characteristics ($r(5{,}081) = .62$, $p < .001$). Lastly, there was a moderately strong positive correlation between Organizational Characteristics and Job Assignment ($r(4{,}861) = .37$, $p < .001$). As Figure 2 displays, positive correlational relationships exist among the three subscales. These positive correlations imply that although the subscales measure different aspects of the campus climate, each tends to measure the campus climate similarly.

Figure 2

Correlational Relationship between Subscales



Note: All relationships significant at $p < .001$

Group Differences in Organizational Characteristics

Research Question 1 was a four-part question that utilized the Organizational Characteristics subscale to measure group differences in the perception of campus climate. Specifically, Research Question 1 examined whether group differences exist in the perception of the campus climate as measured by the Organizational Characteristics subscale for disability status, gender, and racial identity, as well as whether there are any interaction effects between these groups on Organizational Characteristics.

I used a factorial three-way ANOVA to examine group differences in perceptions of the Organizational Characteristics of the climate. Three assumptions need to be met before using ANOVA tests. Specifically, the scores should be normal within each group, the data should be independent, and the variances must be equal (Field, 2013). I examined the data related to the Organizational Characteristics subscale to ensure that my sample did not violate these assumptions.

To examine normality, I reviewed the histogram plots generated in SPSS for the Organizational Characteristics subscale. It was approximately normal, with a slightly negative skew ($M = 23.61$, $Mdn = 24.00$). The Kolmogorov-Smirnov test was significant ($p < .001$), indicating that the sample was not normal. In the case of large sample sizes, as in this case, however, Field (2013) stated that "as the sample sizes get larger, the assumption of normality matters less because the sampling distribution will be normal" (p. 184). I, therefore, concluded that the assumption of normality was met.

The demographic characteristics used to place participants into the independent categorical groups of disability status, gender, and racial identity ensured that there was no overlap of individuals within each category. Further, the data collection via online survey limited

any chance of participants influencing others' responses, satisfying the assumption of independence as Pallant (2010) indicated was necessary for valid group comparisons.

The last ANOVA assumption I evaluated for the Organizational Characteristics subscale was to ensure homogeneity of variance. The value for Levene's test was significant ($F(11, 5{,}210) = 2.17$, $p = .013$), indicating that equality of variance could not be assumed.

When I examined the data further, it appeared that the trans-spectrum group's inclusion in the gender category, given its small size compared to the other two groups, may have been a factor in the variances being unequal. I reran Levene's test for the Organizational Characteristics subscales, this time using the binary gender variable (women, men) instead of the original gender variable (women, men, trans-spectrum) to see if that affected the equality of the variances. Levene's test for the revised subscale was not significant for the Organizational Characteristics subscale *(*$F(7, 5{,}085) = 1.81$, $p = .081$), allowing me to conclude that equality of variance could be assumed when trans-spectrum respondents were removed.

Given this unanticipated result, I needed to change my research question related to the Organizational Characteristics subscale. Instead of a gender variable that included trans-spectrum individuals, I needed to delete trans-spectrum participants to obtain a binary gender variable that would let me conduct a valid ANOVA test for the Organizational Characteristics subscale. I intended to be inclusive in my study, so this change was not ideal and not what I preferred. For my study, I chose to use a secondary dataset that comprehensively covered the campus climate for employees. As I explained in Chapter III, that dataset had many advantages, including being collected via a widely used and accepted survey instrument in higher education. In addition, it provided me with a large sample size that would have been difficult to reach if I

had chosen to collect data myself. The drawback of using a secondary dataset is that I could not design the data collection procedures to prevent not having enough trans-spectrum participants.

Because my focus in this study is on disability status, I determined that it was best to proceed with using a binary gender variable given that the other option was not to investigate group differences for this subscale. To examine trans-spectrum employees' perceptions of the climate related to organization characteristics, I recommend future research using a different study design or data collection method. Because the trans-spectrum group was removed, please see Table 4 which presents percentage and *n* values for the independent variables using the gender binary variable rather than the three-value gender category shown in Table 2.

Table 4

Independent Variable Group Percentage and n Values – Binary Gender

	Women	*n*	Men	*n*	White	*n*	People of Color	*n*
Non-disabled	86.9%	3,333	87.3%	1,610	86.1%	3,481	87.1%	1,457
Disabled	13.1%	501	12.7%	235	13.9%	563	12.9%	216

Because the assumptions for using ANOVA were satisfied, I conducted a factorial three-way ANOVA to explore the differences between disability status (disabled, non-disabled), gender (women, men), and racial identity (person of color, White) on the Organizational Characteristics subscale. The four sub-questions for Research Question 1 are listed below, along with the ANOVA test results.

1a. Are there group differences in perceptions of organizational characteristics between employees with differing disability statuses (disabled/non-disabled)?

The ANOVA yielded a main effect for disability status, $F(1, 5{,}085) = 34.84$, $p < .001$, however the effect size was small (partial eta squared = .007). Respondents who identified as

having one or more disabilities (M = 24.80, SD = 5.57, 95% C.I. = [24.42, 24.91]) had a less favorable perception of the campus climate as measured by the Organizational Characteristics subscale than those without a disability (M = 23.44, SD = 5.18, 95% C.I. = [23.17, 23.53]).

1b. Are there group differences in perceptions of organizational characteristics between employees with differing genders (women/men)?

The ANOVA showed a main effect for gender with a small effect size, $F(1, 5{,}085) = 14.20$, $p < .001$ (partial eta squared = .003). Women (M = 23.95, SD = 5.11, 95% C.I. = [23.66, 24.23]) rated climate as measured by the Organizational Characteristics subscale less favorably than men (M = 22.93, SD = 5.48, 95% C.I. = [22.50, 23.36]).

1c. Are there group differences in perceptions of organizational characteristics between employees with differing racial identities (White, person of color)?

A main effect was present for racial identity $F(1, 5{,}085) = 7.02$, p =.008, with a small effect size (partial eta squared = .001). People of color (M = 24.03, SD = 5.41, 95% C.I. = [23.59, 24.48]) ranked climate as measured by the Organizational Characteristics subscale less favorably than Whites (M = 23.45, SD = 5.18).

1d. Is there an interaction effect on Organizational Characteristics perception between the employee groupings by disability status, gender, and racial identity?

There were no significant interaction effects among the three independent variables on Organizational Characteristics.

See Table 5 for a summary of the ANOVA results including the small partial eta squared values that could indicate that the differences identified may not be meaningful and Table 6 for the descriptive statistics for the Organizational Characteristics subscale.

Table 5

Organizational Characteristics ANOVA

Variable	*MS*	*F*(1, 5,085)	*p*	η^2
Disability status	945.68	34.84	<.001[a]	.007
Gender (binary)	385.32	14.20	<.001[a]	.003
Racial Identity	190.48	7.02	.008[a]	.001
Disability*Gender	13.67	0.50	.478	.000
Disability*Race	28.76	1.06	.303	.000
Gender*Race	72.27	2.66	.103	.000
Disability*Gender*Race	10.62	0.39	.532	.000

Note. [a] = indicates significance.

Table 6

Organizational Characteristics Descriptive Statistics

Disability	Gender	Racial ID	*M*	*SD*	95% CI	*N*
No	Men	White	22.67	5.31	[22.35, 22.99]	1,024
		People of Color	22.83	5.44	[22.35, 23.32]	443
	Women	White	23.59	4.98	[23.37, 23.82]	2,096
		People of Color	24.26	5.24	[23.94, 24.63]	872
	Total		23.44	5.18	[23.17, 23.53]	4,435
Yes	Men	White	24.31	6.13	[23.50, 25.14]	155
		People of Color	24.69	6.18	[23.28, 26.11]	52
	Women	White	24.53	5.23	[23.96, 26.10]	320
		People of Color	26.09	5.28	[25.21, 26.99]	131
	Total		24.80	5.57	[24.42, 24.91]	658
Total			23.62	5.25	[23.59, 23.87]	5,093

Group Differences in Worker Treatment

Research Question 2 was again a four-part question that utilized the Worker Treatment subscale to measure differences in the perception of the campus climate. Specifically, Research Question 2 examined whether group differences exist in the perceptions of the campus climate as measured by the Worker Treatment subscale for disability status, gender, and racial identity as well as whether there are any interaction effects between these groups on Worker Treatment.

I used a factorial three-way ANOVA to examine group differences to answer these research questions. As was the case for Organizational Characteristics, I needed to ensure that the assumptions of normality, independence, and homogeneity of variance were met for the Worker Treatment subscale.

The SPSS histogram plots once again were approximately normal, with a slightly positive skew (M = 42.02, Mdn = 41.00), and the Kolmogorov-Smirnov test was significant ($p < .001$). For the same reasons as for the Organizational Characteristics subscale, I concluded that the normality assumption was met.

For the assumption of independence for the Worker Treatment subscale, I concluded that this was met for the same reasons outlined in the previous section.

As was the case for the Organizational Characteristics subscale, the initial Levene's test for equality of variance for Worker Treatment was significant ($F(11, 5{,}154) = 3.01$, $p < .001$). Finding significance for Levene's test meant that for this subscale I could not use the gender variable that includes trans-spectrum individuals. When I substituted the binary gender variable in place of the three-value one, I found a non-significant value for Levene's test ($F(7, 5{,}035) = 1.97$, $p = .056$), allowing me to conclude that equal variances could be assumed using that variable. For the same reasons I stated for the Organizational Characteristics subscale, I

determined it was better to modify the question than to miss the opportunity to explore perceptions of the campus climate using the Worker Treatment subscale. Again, future research is required with a different study design to explore the perceptions of the campus climate for trans-spectrum employees related to worker treatment issues.

Because the assumptions for ANOVA were met, I conducted a three-way factorial ANOVA to explore the differences between disability status (disabled, non-disabled), gender (women, men), and racial identity (person of color, White) on the Worker Treatment subscale. The four sub-questions for Research Question 2 are listed below, along with the ANOVA test results.

2a: Are there group differences in perceptions of worker treatment characteristics between employees with differing disability statuses (disabled/non-disabled)?

The ANOVA returned a main effect for disability status $F(1, 5{,}035) = 63.61$, $p < .001$, however the effect size was small (partial eta squared = .012). Respondents who identified as having one or more disabilities ($M = 45.34$, $SD = 12.75$, 95% C.I. = [44.21, 46.47]) had a less favorable perception of the campus climate as measured by the Worker Treatment subscale than those without a disability ($M = 41.54$, $SD = 12.8$, 95% C.I. = 41.13, 41.95]).

2b: Are there group differences in perceptions of worker treatment characteristics between employees with differing genders (women/men)?

There was no significant main effect for gender ($F(1, 5{,}035) = 0.16$, $p = .686$), indicating that women and men did not have significantly different perceptions of the campus climate based on the Worker Treatment subscale.

2c: Are there group differences in perceptions of worker treatment characteristics between employees with differing racial identities (White, people of color)?

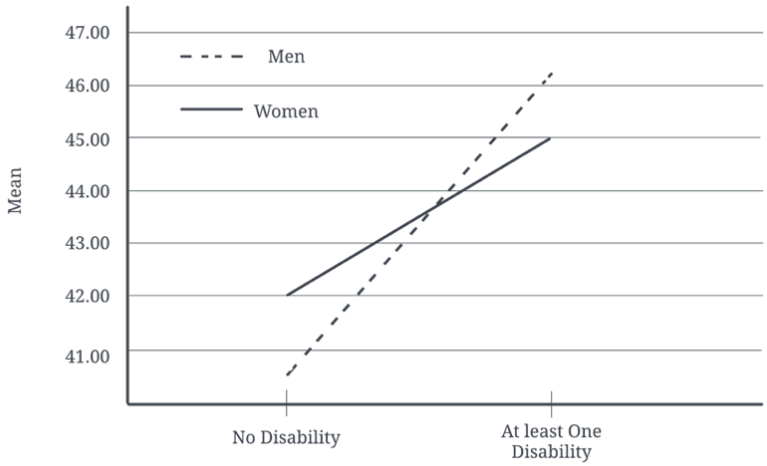
There was no significant main effect for racial identity ($F(1, 5{,}035) = 2.58$, $p = .108$), indicating that people of color and White people did not have significantly different perceptions of the campus climate based on the Worker Treatment subscale.

2d: Is there an interaction effect in perceptions of worker treatment between the employee groupings by disability status, gender, and racial identity?

There was a small but statistically significant interaction between disability and gender, $F(1, 5{,}035) = 4.66$, $p = .031$, with a small effect size (partial eta squared = .001). Specifically, women without disabilities ($M = 41.97$, $SD = 11.65$, 95% C.I. = [41.50, 42.44]) had a less favorable perception of climate as measured by the Worker Treatment subscale than men ($M = 40.64$, $SD = 11.97$, 95% C.I. = 39.97, 41.31]). In contrast, men with disabilities ($M = 46.13$, $SD = 13.37$, 95% C.I. = [44.24, 48.02]) had a less favorable perception than women with disabilities ($M = 44.98$, $SD = 12.46$, 95% C.I. = [43.76, 46.20]). See Figure 3 for a graphical representation of this interaction effect with the axes' ranges limited to focus on the area where the lines intersect.

Figure 3

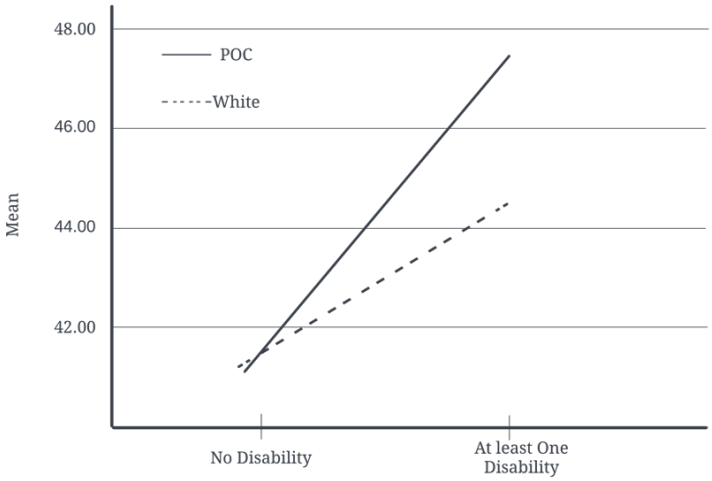
Interaction Effect of Ability and Binary Gender on Worker Treatment



I also found a small, statistically significant interaction existed between disability and racial identity $F(1, 5{,}035) = 5.01$, $p = .024$, however the effect size was small (partial eta squared = .001. People of color without disabilities ($M = 41.39$, $SD = 12.13$, 95% C.I. = [40.70, 42.08]) had a more favorable perception of climate as measured by the Worker Treatment subscale than White respondents without disabilities ($M = 41.60$, $SD = 11.62$, 95% C.I. = [41.15, 42.05]). In contrast, people of color with disabilities had a less favorable impression of climate as measured by the Worker Treatment subscale ($M = 47.11$, $SD = 12.84$, 95% C.I. = [45.18, 49.04]) than did White people with disabilities ($M = 44.66$, $SD = 12.66$, 95% C.I. = [45.50, 47.82]) (see Figure 4 for a graphical representation of the interaction effect with the axes' ranges limited to focus on the area where the lines intersect).

Figure 4

Interaction Effect of Ability and Racial Identities on Worker Treatment



There were no significant interaction effects for gender and racial identity nor for disability and gender and racial identity.

See Table 7 for the interaction effect F-statistic results, a summary of the ANOVA results. Note the small partial eta squared values, which could indicate that the differences identified may not be meaningful. Table 8 shows the descriptive statistics for the Worker Treatment subscale.

Table 7

Worker Treatment ANOVA

Variable	*MS*	*F*(1, 5,035)	*p*	η^2
Disability status	8,978.0	63.61	<.001[a]	.012
Gender (binary)	23.1	0.16	.686	.000
Racial Identity	364.4	2.58	.108	.001
Disability*Gender	658.2	4.67	.031[a]	.001
Disability*Race	719.3	5.01	.024[a]	.001
Gender*Race	73.3	0.52	.471	.000
Disability*Gender*Race	7.9	0.06	.813	.000

Note. [a] = indicates significance.

Table 8

Worker Treatment Descriptive Statistics

Disability	Gender	Racial ID	*M*	*SD*	95% CI	*N*
No	Men	White	40.93	11.90	[40.20, 41.67]	1,009
		People of Color	39.95	12.11	[38.83, 41.08]	428
	Women	White	41.92	11.47	[41.41, 42.42]	2,089
		People of Color	42.10	12.08	[41.31, 42.89]	870
	Total		41.54	11.76	[40.81, 41.64]	4,396
Yes	Men	White	45.60	13.04	[43.69, 47.52]	148
		People of Color	47.67	14.28	[47.67, 47.52]	51
	Women	White	44.23	12.47	[42.93, 45.53]	321
		People of Color	46.89	12.26	[44.82, 48.96]	127
	Total		45.34	12.75	[44.97, 47.23]	647
Total			42.02	11.96	[42.00, 42.66]	5,043

Group Differences in Job Assignment

Research Question 3 followed the same four-part question pattern as the previous two question sets, except this time using the Job Assignment subscale to measure the perception of the campus climate. Specifically, Research Question 3 examined whether there are group differences in the perceptions of the campus climate as measured by the Job Assignment subscale for disability status, gender, and racial identity, as well as whether there are any interaction effects between these groups on Job Assignment.

I used a factorial three-way ANOVA to examine group differences and interaction effects to answer these research questions. As with the other two subscales, I began by ensuring that the ANOVA assumptions of normality, independence, and homogeneity of variance were met for the Job Assignment subscale.

The SPSS histogram plots once again were approximately normal, with almost no skew (M = 23.89, Mdn = 24.00), but again the Kolmogorov-Smirnov test was significant ($p < .001$). Given the large sample size, I determined this was not an issue. For the same reasons as the previous two subscales, I also determined the independence assumption was met.

Unlike the previous two subscales, Levene's test for the Job Assignment subscale was not significant ($F(11, 4{,}969) = 0.85$, $p = .593$) using the three-value gender variable, indicating that equal variances can be assumed for this subscale while retaining the original gender variable.

To answer this set of research questions, I conducted a factorial three-way ANOVA to explore the differences between disability status (disabled, non-disabled), gender (women, men, trans-spectrum), and racial identity (person of color, White) on the Job Assignment subscale.

3a: Are there group differences in perceptions of job assignment characteristics between employees with differing disability statuses (disabled/non-disabled)?

There was a main effect for disability status on Job Assignment evaluations $F(1, 4{,}969) = 9.84$, $p = .002$, however the effect size was small (partial eta squared = .002). Respondents with one or more disabilities ($M = 25.39$, $SD = 6.33$, 95% C.I. = [24.79, 25.99]) had a less favorable perception of the campus climate as measured by the Worker Treatment subscale than those without a disability ($M = 23.66$, $SD = 6.25$, 95% C.I. = [23.44, 23.88]).

3b: Are there group differences in perceptions of job assignment characteristics between employees with differing genders (women/men/trans-spectrum)?

There was no significant main effect for gender on Job Assignment ($F(1, 4{,}969) = 0.02$, $p = .998$), indicating no meaningful differences in the perceptions of the campus climate were present between women, men, and trans-spectrum groups.

3c: Are there group differences in perceptions of job assignment characteristics between employees with differing racial identities (White, people of color)?

There was a significant main effect for racial identity on Job Assignment evaluations, $F(1, 4{,}969) = 7.00$, $p = .008$, with a small effect size (partial eta squared = .001). Respondents who identified as a person of color ($M = 24.53$, $SD = 6.45$, 95% C.I. = [23.98, 25.08]) had a less favorable perception of the campus climate as measured by the Job Assignment subscale than those who identified as White ($M = 23.62$, $SD = 6.19$, 95% C.I. = [23.29, 23.95]).

3d: Is there an interaction effect on Job Assignment perception between the employee groupings by disability status, gender, and racial identity?

There were no significant interaction effects for any of the independent variables. See Table 9 for the interaction effect F-statistic including the small partial eta squared values that could indicate that the differences identified may not be meaningful, and other ANOVA results and Table 10 for the descriptive statistics for the Job Assignment subscale.

Table 9

Job Assignment ANOVA

Variable	*MS*	*F*(1,4969)	*p*	η^2
Disability status	384.5	9.84	.002[a]	.002
Gender	0.8	0.00	.998	.000
Racial Identity	273.3	7.00	.008[a]	.001
Disability* Gender	43.7	1.12	.327	.000
Disability*Race	3.4	0.09	.769	.000
Gender*Race	8.0	0.21	.814	.000
Disability*Gender*Race	0.8	0.02	.980	.000

Note. [a] = indicates significance.

Table 10

Job Assignment Subscale Descriptive Statistics

Disability	Gender	Racial ID	*M*	*SD*	95% CI	*N*
No	Women	White	23.51	6.17	[23.24, 23.78]	2,000
		People of Color	24.39	6.51	[23.97, 24.82]	834
	Men	White	23.09	6.08	[22.97, 23.48]	978
		People of Color	24.12	6.27	[23.52, 24.73]	413
	Trans	White	23.75	6.68	[22.07, 25.44]	53
		People of Color	25.23	7.04	[22.83, 27.63]	26
	Total		23.66	6.25	[23.51, 24.53]	4,304
Yes	Women	White	25.08	6.38	[24.39, 25.78]	310
		People of Color	26.09	6.21	[24.97, 27.22]	118
	Men	White	25.41	6.12	[24.42, 26.40]	154
		People of Color	26.53	6.84	[24.78, 28.28]	49
	Trans	White	23.97	6.48	[21.87, 26.07]	34
		People of Color	26.08	6.15	[22.55, 29.62]	12
	Total		25.39	6.33	[24.73, 26.32]	677
Total			23.89	6.29	[23.81, 24.16]	4,981

ANOVA Summary

The significant results for each ANOVA all had a very small effect size associated with them, as indicated by low partial eta squared values for their F statistics. Large sample sizes, such as in this study, result in high statistical power. High power facilitates the detection of small differences between groups in an ANOVA that would not be detected in a smaller sample size. It thereby reduces the probability of Type II errors where a false null hypothesis (e.g., that there is no difference in means between groups) is accepted despite it being false (Vogt, 2016). Although the mean differences between groups in this study were not large, the power derived from the sample size allowed the small differences present in the means to be detected.

My ANOVA calculations indicated a statistically significant difference in the evaluations of the campus climate for employees by disability status. For each of the three scales I used to evaluate the campus climate, employees with disabilities have a less favorable perception of the campus climate than those without disabilities. Due to issues with the vastly unequal sample size for the trans-spectrum gender group, I needed to analyze the Organizational Characteristics and Worker Treatment using a binary (women, men) variable instead of using the three gender categories as I had planned. The Job Assignment subscale met the assumptions for equality of variance for ANOVA. Therefore, I used the three categories of gender (women, men, trans-spectrum) variable for analyzing this subscale.

Only the Organizational Characteristics climate measure showed a difference between women and men, with a significantly lower evaluation of climate by women than men. No significant racial group differences existed for assessments of climate based on the Worker Treatment subscale. However, for the Job Assignment and Organizational Characteristics subscales, people of color had a lower perception of the campus climate than White people.

Disability was found to interact with both gender and racial identity only for the Worker Treatment subscale. See Table 11 for a summary of these results.

Table 11

ANOVA Results Summary

Research Question	Organizational Characteristics	Worker Treatment	Job Assignment
1. Group differences by disability status?	Yes	Yes	Yes
2. Group differences by gender?	Yes[a]	No[a]	No[b]
3. Group differences by racial identity?	Yes	No	Yes
4. Interaction effect?			
Disability*Gender	No	Yes	No
Disability*Racial Identity	No	Yes	No
Gender*Racial identity	No	No	No
Disability*Gender*Racial identity	No	No	No

[a] Indicates binary gender (women, men) used.

[b] Indicates three category gender (women, men, trans-spectrum) used.

Correlational Relationships by Identity

Research question 4 was: What is the relationship between Organizational Characteristics, Worker Treatment, and Job Assignment perceptions by disability status, gender, and racial identity?

To answer this question, I examined histograms and line plots to ensure that there were no violations of the assumptions of normality and linearity, as is required for correlational analysis. I then used SPSS to calculate Pearson's correlation coefficients for each of the subscales grouped by the independent variables of disability status (disabled, non-disabled),

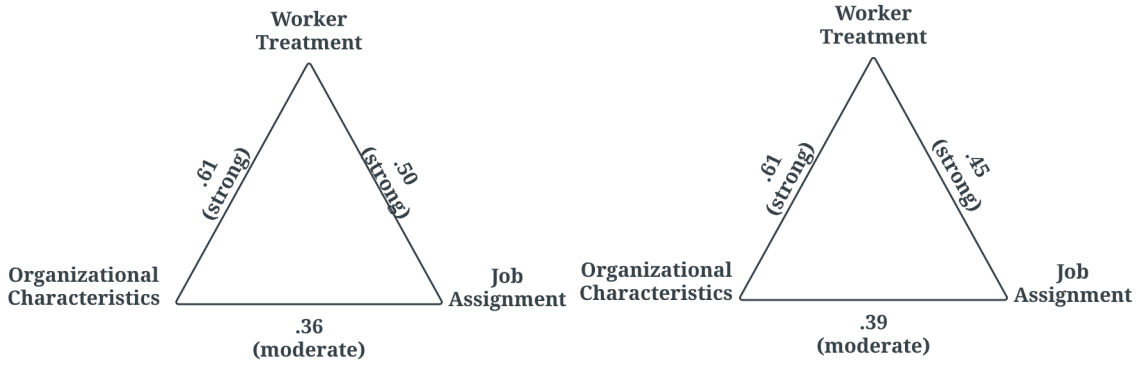
gender (women, men, trans-spectrum), and racial identity (person of color, White). I then examined the resulting correlation values with the other within-group values using Fisher's *r* to *z* transformation to determine which, if any, of the within-group values were meaningfully different from one another.

Subscale Correlations by Disability Status

The results of the Fisher's *r* to *z* transformation for the correlation coefficients showed no significant differences between disability status and any of the three subscale pairs. That lack of significance indicates no meaningful differences exist in relationships with those subscales between disability status groups. The correlations by disability status are displayed graphically in Figure 5.

Figure 5

Subscale Correlation Coefficients by Disability Status



Note: All correlations are significant at p < .001

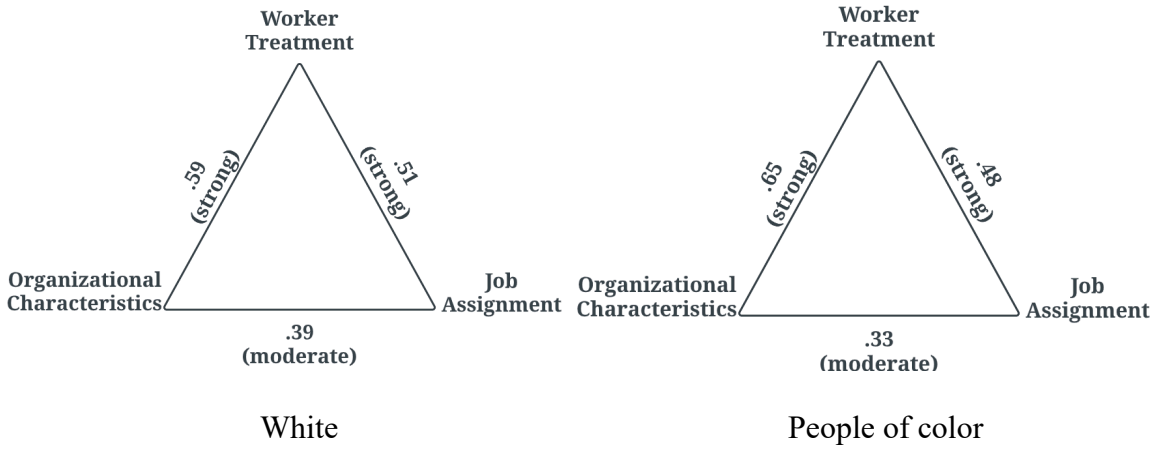
Subscale Correlations by Racial Identity

Statistically significant differences between the two racial identity groups exist for two of the three subscale pairs based on Fisher's r to z transformation values for the correlation coefficients. There was a difference in the relationship between the Worker Treatment and

Organizational Characteristics subscales ($z = 3.12$, $p < .001$), with people of color ($r = .65$) having a stronger relationship than Whites ($r = .59$). Both correlations were strong. Likewise, there was a statistically significant difference in the relationship between the Organizational Characteristics and Job Assignment subscales for racial identity ($z = 2.16$, $p = .020$). Here, the correlation was stronger for White people ($r = .39$) than for people of color ($r = .33$). These correlations were both moderately strong. The correlations for people of color and White people are shown graphically in Figure 6.

Figure 6

Subscale Correlation Coefficients by Racial Identity



White People of color

Note: All correlations are significant at $p < .001$

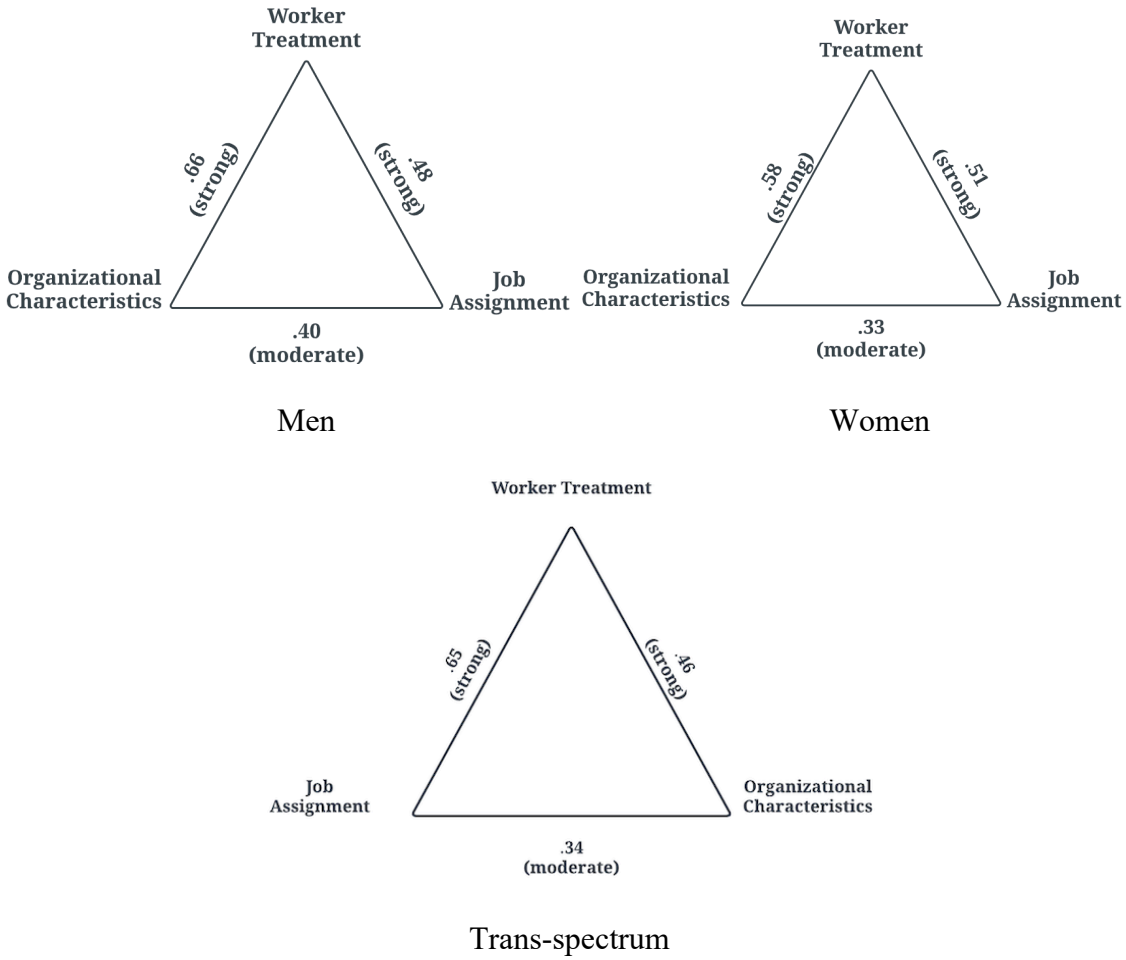
Subscale Correlations by Gender

In examining the significance of correlational value differences among the gender groups using Fisher's r to z transformation, I found significant differences between women and men in two subscale pairs. For the Worker Treatment and Organizational Characteristics subscale pair, men ($r = .66$) had a stronger correlation compared to women ($r = .58$), $z = 4.27$, $p < .001$. Both correlations were strong. Similarly, men ($r = .40$) had a stronger relationship with the Organizational Characteristics and Job Assignment subscale pair than did women ($r = .33$), $z =$

2.98, $p < .001$. Both correlations were moderately strong. There were no statistically significant differences between trans-spectrum respondents and either women or men. Examining the coefficient values before the Fisher transformation calculations, I expected to see a significant difference between trans-spectrum and men. However, it appears that the trans-spectrum group's small sample size was not sufficiently large to permit a statistical comparison. See Figure 7 for a graphical depiction of the gender group correlations.

Figure 7

Subscale Correlation Coefficients by Gender



Note: All correlations are significant at $p < .001$

Chapter Summary

In this study, I examined perceptions of the campus climate for non-faculty employees with disabilities. From the questions included in the survey, I created three subscales (Organizational Characteristics, Worker Treatment, and Job Assignment) to be used to make comparisons of the perception of the campus climate for the respondents.

Using ANOVA, I found that across all three measures of the campus climate, those who identify as having a disability rated the campus climate less favorably than those with no disabilities. I found group differences by racial identity for two of the three subscales (Job Assignment and Organizational Characteristics), with people of color rating the campus climate less favorably than White people. For gender, group differences only existed for one measure of the campus climate (Organizational Characteristics), with women rating the campus climate less favorably than men.

Lastly, I examined the relationship between Organizational Characteristics, Worker Treatment, and Job Assignment perception by disability status, gender, and racial identity by examining the correlations of the independent variables to the three subscale pairs. No differences were identified in the relationship to the subscale pairs by disability status, so employees with disabilities and those without had consistent relationships with the subscales. The relationship with two of the subscales pairs was different for employees of color and White employees, however, and the relationship between those two subscales also was different between women and men.

In each case where group differences exist, the effect sizes were very small. Given the large sample size, the resulting statistical power likely resulted in identifying small differences

but the small effect size could also indicate that a meaningful difference does not exist. Given that possibility, in Chapter V I suggest additional study of these differences.

See Table 12 for a summary of the results of all research questions.

Table 12

Summary of Results

Research Question	Results
1a. Are there group differences in perceptions of organizational characteristics between employees with differing disability statuses?	Differences were present between employees with disabilities (*M*=24.80) and those without (*M*=23.44).
1b. Are there group differences in perceptions of organizational characteristics between employees with differing genders?	Differences were present between women employees (*M*=23.95) and men (*M*=22.93).
1c. Are there group differences in perceptions of organizational characteristics between employees with differing racial identities?	Differences were present between employees who identified as a person of color (*M*=24.03) and those who identified as White (*M*=23.45).
1d. Is there an interaction effect on organizational characteristics perception between the employee groupings by disability status, gender, and racial identity?	No interaction effects were present among any of the independent variables.
2a. Are there group differences in perceptions of worker treatment characteristics between employees with differing disability statuses?	Differences were present between employees with disabilities (*M*=45.34) and those without (*M*=41.54).
2b. Are there group differences in perceptions of worker treatment characteristics between employees with differing genders?	No differences were present by gender (women, men).
2c. Are there group differences in perceptions of worker treatment characteristics between employees with differing racial identities?	No differences were present by racial identity (women, men).
2d. Is there an interaction effect on worker treatment perception between the employee groupings by disability status, gender, and racial identity?	An interaction effect was found between disability status and gender (binary):

Research Question	Results
	• Women without disabilities (*M*=41.97). Men without disabilities (*M*=40.64). • Men with disabilities (*M*=46.13). Women with disabilities (*M*=44.98). An interaction was found between disability status and racial identity. • People of color without disabilities (*M*=41.39) • White people without disabilities (*M*=41.60)
3a. Are there group differences in perceptions of job assignment characteristics between employees with differing disability statuses (disabled/non-disabled)?	Differences were present between employees with disabilities (*M*=25.39) and those without (*M*=23.66).
3b. Are there group differences in perceptions of job assignment characteristics between employees with differing genders (women/men/trans-spectrum)?	No differences were present by gender (women/men/trans-spectrum).
3c. Are there group differences in perceptions of job assignment characteristics between employees with differing racial identities (White, people of color)?	Differences were present between employees who identify as a person of color (*M*=24.53) and those who identify as White (*M*=23.62).
3d. Is there an interaction effect on job assignment perception between the employee groupings by disability status, gender, and racial identity?	No interaction effects were present among any of the independent variables.

Research Question	Results

4. What is the relationship between Organizational Characteristics, Worker Treatment, and Job Assignment perception by disability status, gender, and racial identity?	Differences in independent variable correlation by subscale pair:
	• Worker Treatment/Organizational Characteristics
	  ○ By race
	  ○ By gender (women, men)
	• Worker Treatment/Job Assignment
	  ○ None present
	• Organizational Characteristics/Job Assignment
	  ○ By race
	  ○ By gender (women, men)

CHAPTER V. DISCUSSION

In this chapter, I discuss the findings presented in Chapter IV for each research question and relate them to the conceptual framework and the literature from Chapter II. I also provide implications and suggest areas for future research.

Because few studies exist that examine differences in the perceptions of the campus climate for university employees with disabilities in higher education institutions, there are little data that can be used to understand these employees' perceptions. The purpose of my study was to examine the differences in the perception of the campus climate of university employees with disabilities and those without disabilities and to examine how their gender and racial identities interact with their disability status. Through this study, I intended to provide a foundation based on empirical data for developing informed policies that can improve the campus climate for employees with disabilities, thereby enhancing the recruitment and retention of these individuals.

The measures I used were custom subscales I created from the Rankin and Associates Campus Climate Survey 2020. By these measures, I found group differences in climate perception for employees with disabilities compared to those without disabilities. My subscales were representative of some categories present in Stone and Colella's (1996) conceptual model but were not comprehensive measures of the campus climate. In addition, the survey was administered at a limited number of sites and may reflect local conditions accurately but may not represent the situation at other locations. Given these caveats, I advise using some caution in generalizing these results. Still, they should serve as a good starting point for planning local assessments which can provide data more directly applicable to those institutions.

Research Questions

I utilized disability status (disabled, non-disabled), gender (women, men, trans-spectrum), and racial identity (person of color, White) to examine within-group differences in the perception of the campus climate and if there is any interaction effect between those variables on the perception of the campus climate as measured by three climate-related subscales (Organizational Characteristics, Worker Treatment, and Job Assignment). The following research questions guided my study.

1a. Are there group differences in perceptions of organizational characteristics between employees with differing disability statuses (disabled/non-disabled)?

1b. Are there group differences in perceptions of organizational characteristics between employees with differing genders (women/men)?

1c. Are there group differences in perceptions of organizational characteristics between employees with differing racial identities (White, people of color)?

1d. Is there an interaction effect on organizational characteristics perception between the employee groupings by disability status, gender, and racial identity?

2a: Are there group differences in perceptions of worker treatment characteristics between employees with differing disability statuses (disabled/non-disabled)?

2b: Are there group differences in perceptions of worker treatment characteristics between employees with differing genders (women/men)?

2c: Are there group differences in perceptions of worker treatment characteristics between employees with differing racial identities (White, people of color)?

2d: Is there an interaction effect on worker treatment perception between the employee groupings by disability status, gender, and racial identity?

3a: Are there group differences in perceptions of job assignment characteristics between employees with differing disability statuses (disabled/non-disabled)?

3b: Are there group differences in perceptions of job assignment characteristics between employees with differing genders (women/men/transgender)?

3c: Are there group differences in perceptions of job assignment characteristics between employees with differing racial identities (White, people of color)?

3d: Is there an interaction effect on job assignment perception between the employee groupings by disability status, gender, and racial identity?

4. What is the relationship between Organizational Characteristics, Worker Treatment, and Job Assignment perceptions by disability status, gender, and racial identity?

Please see Table 11 for a summary of the ANOVA results and Table 12 for an overall summary by research question.

Group Differences in Organizational Characteristics

Research Question 1 was a four-part question that utilized the Organizational Characteristics subscale to measure the perception of the campus climate. For this question, I examined whether group differences exist in the perception of the campus climate as measured by the Organizational Characteristics subscale for disability status, gender, and racial identity, as well as whether there are any interaction effects between these groups on Organizational Characteristics. Results from the ANOVA test revealed significant differences based on disability status, with employees with disabilities having a less favorable perception than those without disabilities. Differences also existed by gender, with women having a less favorable perception than men, and by race, with people of color rating climate less favorably than Whites. I did not find any interaction effects between the independent variables. Of note, the partial eta

squared values were all very small, which could indicate that the differences identified may not be meaningful. The statistical power provided by my large sample size provides the potential to identify small but real differences. For the purposes of my analysis, I assumed that differences in the perception of the campus climate were small but do exist and were identified via the high statistical power. The small effect sizes I found do, however, emphasize the need for further study.

The Organizational Characteristics subscale incorporated questions related to organization-wide policies and practices. These included health, vacation, retirement, and childcare benefits, FMLA leave policy, and salaries. This subscale was not comprehensive enough to encompass all the elements in the like-named Stone and Colella (1996) model category; however, the nine questions it included touched upon two of its four subcategories. As a group, the questions serve as a partial representation of the organizational characteristics category. The included elements are a part of the organizational norms and practices category in Stone and Colella's (1996) model. In that model, the authors suggested that these norms are antecedents that influence the way observers treat employees with disabilities, with that treatment ultimately influencing the perception of workplace climate by those with disabilities.

Attitudes represent how others in the organization think about and treat persons with disabilities. Attitudes of the organization, however, are not solely a product of individuals in the organization. Instead, the policies, procedures, and implementation of those policies represent the organization's attitudes, which influence the attitudes of its members. More specifically, attitudes affect the organization's culture and give rise to recruiting and hiring practices, socialization norms among staff members, and accommodations made for employees with disability (Stone & Colella, 1996).

Importantly for organizations that value a diverse work environment, the Stone and Colella (1996) model suggests that these policies and procedures influence the types of people who work in the organization and those who apply to work there. Although I do not know the identity of the institutions where the survey data were collected, I assume those institutions have policies intended to value a diverse workforce and treat all employees fairly, as is widespread practice (American Association of State Colleges and Universities, n.d.). Vornholt et al. (2013) suggested that a mismatch between stated diversity goals and the actions of community members related to acceptance is likely to result in negative impressions of climate. In my study, employees with disabilities had a less favorable perception of the campus climate than non-disabled employees as measured by the Organizational Characteristics subscale, though the difference was small. This difference indicates there may be some level of disconnect between the intent of organizational policies and practices and their implementation though the small magnitude of difference implies that there are likely no major issues with these policies. The results for people of color and women provide more evidence to substantiate that such a disconnect may exist for minoritized groups on campus.

Given the influence of organizational policies on the individuals who desire to work at that organization, when there is dissatisfaction with the policies and procedures among employees with disabilities (or other minoritized groups), their employment levels can be expected to be depressed. Supporting this contention, a study by Schur et al. (2009) of private businesses found higher turnover, less willingness to work hard, and less loyalty to the organization among employees with disabilities.

Although in my study employees with disabilities had an overall positive perception of the campus climate, I found their perceptions to be less favorable than those without disabilities

indicating that they may have a greater level of dissatisfaction with organizational policies. I did not have the data to evaluate whether people with disabilities applied at a lower rate than others, nor if employees with disabilities were more likely to leave the university. The percentage of employees with disabilities in the sample was 13.8%. By contrast, more than 20% of the general population of the United States has one or more disabilities (Centers for Disease Control and Prevention, 2022). Further study is needed to determine if employees with disabilities are more likely to leave and why.

As outlined in Chapter II, Stone and Colella's (1996) model incorporates the concept of a feedback loop where the factors included in the model determine the treatment employees with disabilities receive. Employees' responses to that treatment, negative or positive, can feed back through the model (see Figure 1) and influence their subsequent treatment. The key to this process is ensuring that this feedback is received and acted on to improve the treatment. My findings of dissatisfaction with climate indicate that room for improvement exists. This finding calls for local leaders to examine where their organizational policies and procedures may fall short of their intended goal and make plans for implementing positive changes.

Group Differences in Worker Treatment

Research Question 2 was the next four-part question. This time I utilized the Worker Treatment subscale to examine if group differences exist in the perception of the campus climate by disability status, gender (binary), and racial identity and whether interaction effects were present between these groups on Worker Treatment.

In contrast to the Organizational Characteristics subscale, which focused on macro-level aspects of the organization, the Worker Treatment subscale focused more on the micro or local aspects. Nearly half of the questions in the subscale were related to the level of support offered

by supervisors. Perceptions of fairness of supervisors in providing career guidance, development, and training, conducting performance evaluations, and setting job expectations were included. This subscale also contained questions that assessed the administration of work schedules and leave requests.

Results from the ANOVA test found a significant main effect based on disability status, where employees with disabilities had a less favorable perception than those without disabilities though the perceptions of both disabled and non-disabled employees were positive. I found no main effect present for either gender or race. Interaction effects were, however, present between disability status and gender and between disability status and racial identity. As with the Organizational Characteristics subscale, the partial eta squared values were all very small, which could indicate that the differences identified may not be meaningful. For the purposes of my analysis, I assumed that differences in the perception of the campus climate were small but do exist and were identified via the high statistical power.

The Stone and Colella (1996) model includes the race and gender of the employee with disabilities in the antecedents that combine to influence how others in the organization treat them. The interaction effects of gender and racial identity for this subscale are therefore consistent with the model's expectation. Although the mean differences of the interaction effects were not large, given the large sample size and the associated power it provides, these effects are not likely to be statistical artifacts.

Women have historically faced discrimination in the workplace. Despite legal prohibitions against gender discrimination and substantial gains in leveling the field for women in the workplace, gender discrimination remains an issue (Turk, 2016). Mayhew et al. (2006) stated that women "are more critical of their institutions as having achieved a positive climate for

diversity" (p. 84). Hurtado et al. (1998, as cited in Mayhew et al., 2006) stated, "who you are and where you are positioned in an institution will affect how you experience and view the institution" (p. 84). Because women are subject to more discrimination than men and often hold less privileged positions than men, I expected them to have a less favorable impression of the campus climate than men.

Further, being a part of a minoritized group can lead to feelings of isolation and an unfavorable climate perception (Allan & Madden, 2006; Zimmerman et al., 2016). My finding that women without disabilities have a less favorable perception of work-related climate than men conforms to that expectation. By contrast, the results indicated that when gender interacts with disability status, men with disabilities have a less favorable perception than women with disabilities, which is a result I did not anticipate.

Because this interaction effect was unexpected, I looked to the literature for possible explanations. Based on that research, it seems likely that this effect is related to how societal norms and expectations influence disabled men's views of their masculinity. Disability is often associated with a lack of independence and helplessness, while masculinity, on the other hand, has associations with autonomy and power (Shuttleworth et al., 2012). I speculate that the presence of disability for men leads to self-consciousness and heightened sensitivity to their treatment by others, where men attribute negative interactions to their disability. Having less privilege than other men, coupled with the effects of ableism related to their disability, may lead to a significantly less favorable perception of climate than their counterparts without disabilities. The change in perception is substantial enough that men with disabilities surpass females with disabilities in their negative perceptions. Stone and Colella (1996) stated:

> Characteristics associated with disabilities (e.g., lack of physical strength or endurance) are likely to be inconsistent with the male prototype (i.e., men are strong, powerful, energetic) but are less likely to be inconsistent with the female prototype (e.g., women are physically weak, dependent, helpless). (p. 367)

Thus, the interaction effect I found comports with the model's suppositions related to gender with disability changing perceptions more for men than women.

A similar situation exists with the interaction of racial identity and disability on Worker Treatment. Again, the Stone and Colella (1996) model anticipates a difference based on racial identity. Further, as was the case for gender, differences in climate perception by racial identity group are consistent with the literature on the topic (Hurtado et al., 1998; Allan & Madden, 2006; Zimmerman et al., 2016). Literature related to race and the campus climate generally suggests that people of color would likely have a less favorable impression than White people (Ancis & Sedlacek, 2000; Reid & Radhakrishnan, 2003). Thus, I anticipated that people of color would have a less favorable perception regardless of disability status. People of color with disabilities have two minoritized identities that expose them to possible discrimination through both ableism and racism. Knight (2017) stated that various "'isms' interrelate, creating a system of oppression that reflects the intersection of multiple forms of discrimination" (p. 68). The interaction effect I found suggests that both vectors likely are in play for people of color with disabilities who had a less favorable perception of climate than Whites.

What is less clear, however, is why non-disabled people of color in this survey had a more favorable impression of climate than non-disabled Whites. The difference between the groups was small but statistically significant. I believe more study of this interaction is warranted to identify why this effect might be present and the survey dataset I used in this study could

prove helpful in such an investigation. That topic, however, is beyond the scope of this study and would require an extensive literature review to investigate what factors contribute to this effect. As such, I leave that investigation for future research.

As mentioned above, a primary component of the Worker Treatment subscale is supervisory supporting behaviors. Although I do not know the identity of the institutions surveyed, again, I believe it is a safe assumption that each has policies governing the fair treatment of employees and officially encouraging diversity in the workforce. Organizational policies, however, are only as effective as those charged with implementing them. Supervisors are the people in the organization who put the policies into action (Mathews, 1998). As such, they significantly impact the experiences of those who work for them (Gates, 1993).

Employees' perceptions of the organization are influenced by how institutional policies and procedures are interpreted and implemented in Stone and Colella's (1996) model. The authors stated that "the way in which these policies are implemented at unit or workgroup levels may have the most profound effect on the treatment of disabled individuals" (p. 374). The Worker Treatment subscale included the perception of employees with disabilities related to the organization's policies themselves (e.g., "[Location] is supportive of flexible work schedules"). It also assessed how those policies are implemented by supervisory employees (e.g., "My supervisor is supportive of flexible work schedules"). Again, the less favorable climate impressions of employees with disabilities in the Worker Treatment subscale, although remaining positive overall, imply that some issues may exist in applying policies, and these issues may negatively impact climate evaluations of employees with disabilities.

Snyder et al. (2010) found that improved organizational and supervisory support moderated adverse effects in the work environment. This moderation suggests that efforts made

to implement positive changes to elements included in the Worker Treatment subscale can improve the perception of the campus climate. Based on the content of the questions in this subscale, it is incumbent upon supervisory personnel to ensure that they are equitably applying the organization's policies, listening to, and valuing employees' opinions, and including employees equally in advancement opportunities. By doing so, they may enhance the climate for all employees. Please see Appendix A for a complete list of the questions related to this subscale for other areas of opportunity to make improvements.

Group Differences in Job Assignment

The last of the four-part questions, Research Question 3, used the Job Assignment subscale to determine if group differences exist in the perception of the campus climate for disability status, gender, and racial identity and whether interaction effects were present between these groups on Job Assignment. Unlike the first two research questions, the gender variable had three possible values for this question: woman, man, or trans-spectrum.

The ANOVA test results showed a main effect based on disability status, with employees with disabilities having a less favorable perception than those without disabilities. Like the Organizational Characteristics subscale, a main effect was also present for racial identity, with people of color rating climate less favorably than Whites, but no main effect was present for gender. No interaction effects were present between disability status, gender, or racial identity on Job Assignment. As with the prior two subscales, the partial eta squared values were all very small which could indicate that the differences identified may not be meaningful. For the purposes of my analysis, I assumed that differences in the perception of the campus climate were small but do exist and were identified via the high statistical power. In contrast to the prior two subscales, the questions in the Job Assignment subscale related to aspects of the person's job

workload and the expectations others had of their ability to perform their job based on identity. One example of the latter is, “I think that my supervisor/manager prejudges my abilities based on their perception of my identity/background.”

The questions related to the prejudging of abilities in this subscale reflect the posited influence of stereotyping in the conceptual model from Stone and Colella (1996). Per the model, stereotypes result in the development of preconceived notions about the abilities and personality characteristics of those with disabilities. The stereotypes about disabled individuals lead to expectations about their capabilities, assigned tasks, and pay levels. The cumulative effect of these stereotypes determines how others treat employees with disabilities and influences how employees with disabilities perceive their workplace climate.

The perception of the campus climate by employees with disabilities as measured by the Job Assignment subscale was overall positive but less favorable than non-disabled employees. The less favorable perception of the campus climate by employees with disabilities is consistent with a qualitative study by Friedman (1993). In that study, employees with disabilities felt stereotyped, misunderstood, and isolated. The lack of acceptance was cited as a factor in the negative climate perceptions of these employees. Similarly, Shigaki et al. (2012) found that many employees with disabilities perceived the campus as unwelcoming or even hostile, which the authors stated emphasizes the need for policies that promote disability inclusion and awareness. Such strong and effective policies may serve as a method for changing stereotypes that others in the organization have regarding their co-workers with disabilities.

The Stone and Colella (1996) model suggested that creating an environment where negative stereotypes are replaced with a recognition of everyone’s unique capabilities can modify the treatment of employees with disabilities. Thus, identifying methods to eliminate

stereotypes of employees with disabilities is an essential step in efforts to improve climate perceptions. Further, Vornholt et al. (2013) asserted that others' acceptance at work is likely the most significant determinant of sustainability for the employment of people with disabilities, indicating that employees with disabilities may be less likely to look elsewhere for a job. So, successful efforts to reduce stereotypes should increase the acceptance of employees with disabilities, as Dunn (2014) suggested due to the concept of attitude-behavior consistency. The result may be an improved work climate and better retention of employees with disabilities.

Additional components included in the Job Assignment subscale were the extent that employees had influence in determining their tasks and responsibilities and how fairly supervisors applied expectations for the job. Examples of these questions include assessments such as whether employees agree that they feel "burdened by work responsibilities beyond those of their colleagues with similar performance expectations" and that they "perform more work than colleagues with similar performance expectations" (see Appendix A for a list of the questions related to this subscale). In a study of private businesses in the United Kingdom by Jones (2016), employees with disabilities reported little influence over their assigned tasks and how they accomplished them. They also had significantly more negative perceptions of climate than their non-disabled counterparts. Based on the job-expectation-related questions included in the Job Assignment subscale, similar factors may be in play in the surveyed higher education institutions for employees with disabilities. Perceived inequities in their job expectations, coupled with an inability to align expectations for their job with those in place for others, can influence perceptions of the campus climate. I found small differences in the perception of the campus climate based on the Job Assignment subscale between disabled employees and non-disabled employees, though for both groups, the perceptions were positive. Ensuring that job

expectations are consistent for all employees is one way to improve the campus climate for everyone, not just employees with disabilities.

Correlation Differences by Identity

As presented in Chapter 4, I found statistically different correlation values between subscale pairs and employee groups based on racial identity and gender but did not find any differences based on disability status. Although I found differences in the strength of the relationships between racial and gender groups, it is important to note that values for all the individual groups aligned with the overall values in Figure 2 and had the same positive direction.

As shown in Table 13, based on Fisher's *r* to *z* transformation, none of the correlations for any individual groups and the Worker Treatment/Job Assignment subscale significantly differed from the overall correlation. For the Organizational Characteristics/Job Assignment subscale pair, there was only a significant difference for women, where the relationship was somewhat less strong but still moderate. The Worker Treatment/Organizational Characteristics subscale pair had three groups significantly different from the overall correlation. People of color and men had a somewhat stronger relationship with this pair than the overall value, while White respondents had a slightly less strong relationship. All correlations remained in the same strength classification regardless of difference and were in the same direction, so those differences do not imply a dramatic relationship change.

Table 13

Correlation Coefficients Summary

Subscale Pair	Overall	Disabled	Non-Disabled	People of Color	White	Women	Men	Trans-Spectrum
WT/OC	.62	.61	.61	**.65**	**.59**	.58	**.66**	.65
WT/JA	.50	.45	.50	.48	.51	.51	.48	.46
OC/JA	.37	.39	.36	.33	.39	**.33**	.40	.34

Note: bolded = significantly different from overall correlation, $p < .05$

Importantly for this study, there was no significant difference in the relationship between disability status groups and all three subscale pairs based on the Fisher's *r* to *z* transformation. That lack of difference in correlation implies that although the three subscales encompass different measures of the campus climate, each is measuring climate consistently for the disability status groups. Rankin and Associates (2014) stated that there were statistically significant positive relationships between "the responses to questions about overall campus climate for various groups… and those that rate overall campus climate on various scales" (p. 17). The authors stated that the "consistency of these results suggests that the survey data were internally reliable" (p. 17). Thus, the consistencies I found with the relationships also imply reliability here. Further, that consistency suggests the relationship between the subscales used in this study relates positively to the overall campus climate, as Rankin and Associates (2014) found in their results.

Limitations

Identity Conflation

One of the limitations of this study is related to the wording of several questions that may have introduced variability in what was measured. In particular, the Job Assignment subscale

included questions that required the respondent to determine what identity or identities resulted in the treatment they received (e.g., “I think that my supervisor/manager prejudges my abilities based on their perception of my identity/background”). Because the question was not specific to disability, gender, race, or any other possible identities of the respondent, it is not possible to know how respondents evaluated those questions. Some may have based their answer on what they believe is their dominant identity, while others may have answered by considering their identities in combination. This uncertain interpretation may negatively affect reliability because what was measured may not be what was intended. However, I conducted a reliability analysis and the resulting Cronbach’s alpha value for the Job Assignment subscale (.81) suggests high internal consistency. Thus, this subscale does not appear to have identifiable issues with mismeasurement. For this study, I assumed that those who are members of one or more minoritized groups answered considering all such identities. It would have been preferable to have questions specific to individual identities or characteristics rather than using a question that is open to interpretation and, thus, more difficult to interpret afterward.

Group Statistics and the Individual

Another limitation related to my study design is its evaluation of perceptions at the group level. I wanted to provide a broad perspective on the campus climate for employees with disability. As a result, I designed my study to examine group differences and interaction effects. Although it is helpful to understand the perceptions as groups of people experience them, individual experiences can get lost in the process because those who have experiences far removed from that of the group may go unnoticed.

Group Evaluations of Climate

One key takeaway from my study is that employees with disabilities had less favorable impressions of the campus climate on all three subscales used to measure that perception. It is important to note, however, that although the evaluations for employees with disabilities were less favorable than those with no disabilities: for both groups, the mean values represented perceptions that were better than a neutral evaluation. For example, the range for the Organizational Characteristics and Job Assignment subscales was from a minimum (most favorable) value of 9 and a maximum (least favorable) value of 45. A neutral assessment for these subscales would be a 27 for someone who chose the "neither agree nor disagree" choice on the survey for each question. The mean for employees without disabilities was 23.44 (OC) and 23.66 (JA), and the means for employees with disabilities at 24.80 (OC) and 25.39 (JA), so in both cases, they were more favorable than a neutral value of 27.

Again, for the Worker Treatment subscale, perceptions were better than neutral for both disability status groups. This subscale had a range of 17 (most favorable) to 85 (least favorable), with a neutral evaluation for all questions scoring 51. The mean was less favorable for employees with disabilities (42.02) than those without disabilities (41.54), but both means were better than a neutral value of 51.

This relatively positive perception was present for all employee groups in this study regardless of their membership in minoritized groups. Perceptions of the campus climate were more favorable than neutral for women, people of color, and the various combinations of those identities. It was a welcome finding that, overall, none of these groups as a whole had negative perceptions of the campus climate. I believe some caution is warranted with this finding, however. One possible reason for this result is that those who had negative experiences due to

climate-related issues based on their identities may have left the organization, or perhaps those people may have been hesitant to participate in the survey. As a result, the ratings would be higher based on those who remain. I suggest future research be conducted to examine this possibility.

Individual Evaluations of Climate

The relatively positive experiences of the groups discussed above, of course, do not indicate that everyone perceives climate favorably. For the Organizational Characteristics subscale, 2.5% (n = 236) of all respondents had a perception that was, on average, negative or strongly negative. For Worker Treatment, 3.1% (n = 171) had such perceptions, and for Job Assignment it was 3.6% (n = 184) of respondents.

Looking at the evaluations for employees with disabilities specifically, 5% (n = 37) of the group had negative or strongly negative perceptions of the campus climate for the Organizational Characteristics subscale. For the Worker Treatment subscale group, 5.4% (n = 40) had negative or strongly negative perceptions. For the Job Assignment subscale, the percentage was 5.6% (n = 40). Four participants rated the Organizational Characteristics subscale as negatively as possible, as did three for the Job Assignment subscale and one for the Worker Treatment subscale. Those evaluations indicate profoundly negative experiences for individuals that should not be discounted or ignored just because the group did not share that same evaluation.

Lack of Nuance and Detailed Insight

The study design I chose met my goal of assessing the general perceptions of the campus climate and identifying group differences in those perceptions. This design does not lend itself well to providing a nuanced understanding of climate perception and instead draws conclusions based on group generalizations. Further, creating subscales representing a broad cross-section of

campus climate elements is helpful for measuring perceptions. Still, at the same time, it loses some of the detail that analyzing the responses to individual questions could provide.

For example, a large number of negative responses to the question "My supervisor provides adequate support for me to manage work-life balance" may indicate a significant organizational problem. However, when that question is blended into a subscale, its magnitude may be lost if other aspects included were mostly favorable. Although the factor analysis I performed should limit this type of issue, it may be worthwhile to follow up this study with one that examines questions individually to identify if there are any such issues.

Nuance is also lacking due to the study's design with respect to the collapsed variables for disability status. As discussed in Chapter III, collapsing responses into dichotomous variables loses the detail present in the data that would allow for more granular insight into the different experiences of the members of the subgroups. In this study, the ANOVA statistical test I used meant it was impractical to use all the possible values for disability type. A different research design would be needed to facilitate analysis by these subgroups, and I recommend such studies be conducted to augment the results of this study with more nuanced detail.

Implications for Practice

The results of my study were encouraging, given the generally positive perception of climate across the minoritized groups I included in the analysis. At the same time, my results also indicated that room for improvement exists for all three minoritized groups I analyzed (disability status, gender, and racial identity). Indeed, the climate perceptions of employees with disabilities lagged those of non-disabled employees across all three measures of climate used in this study. In this section, I offer implications for practice that can be considered to accomplish climate improvements.

Centering Diversity Policy for People with Disability

As I mentioned previously in this chapter, the acceptance of employees with disabilities is determined in part by the attitudes and perceptions of their colleagues. In my study, the Worker Treatment subscale served as a measure of these interactions. The characteristics of the employer and the overall workplace climate also factor into the level of acceptance present in the organization, which I assessed with the Organizational Characteristics subscale. For both subscales, the perceptions of employees with disabilities were less favorable than their non-disabled counterparts though both groups had an overall favorable perception.

Employers open to diversity in the composition of their workforce, who commit to treating disabled and other employees equally, and who actively support the inclusion of people with disabilities, foster a climate that encourages the retention of current employees (Vornholt et al., 2013). Those factors should also contribute to the successful recruitment of new employees with disabilities. Further, Stone and Colella (1996) stated that although organizations may have appropriate policies, those policies may not have the intended result. In part, the authors attribute that shortfall to inadequate efforts by leaders to define and convey the intent of those goals. They also wrote that senior leadership might not be perceived as genuinely committed to the goals, leading to decreased efforts to meet them by others in the organization.

The relatively favorable group perceptions of Organizational Characteristics and Worker Treatment in my study do not point to any readily identifiable major problems at the studied institutions. At the same time, as I mentioned in the previous limitations section, the experience of the group as a whole does not represent those employees who had much more negative impressions of the campus climate, and there were some 5% of respondents with very negative perceptions. I did not have the data to determine whether these negative perceptions were based

on problems the respondents identified with the policies themselves or that perhaps the policies were appropriate but were not implemented and supported effectively.

The implication here is that campus leaders need to ensure that the appropriate policies are in place and, equally as important, that they actively support and promote them. It should be made clear to everyone in the organization that leadership is fully supportive of these policies. Stone and Colella (YEAR) offered helpful recommendations in this regard. In addition to senior leadership publicly supporting the policies, the authors suggested that leaders actively seek out managers who embrace these policies. Lastly, they noted that making changes in the evaluation processes to reward successes in implementing these policies helps reinforce their importance and shows that the organization places tangible value on a commitment to those policies.

Local Evaluations of Climate

My present study provides some insight into the climate perceptions of employees with disabilities. At the studied institutions, the perceptions of the campus climate were generally favorable at a group level across all three subscales. At the same time, I found that minoritized groups, including employees with disabilities, had less favorable impressions of the campus climate than did majoritized employees. As I mentioned previously, evaluations of the campus climate are readily changeable based on local conditions and incidents and are also influenced by national events. Thus, even in the case of the institutions studied, perceptions may have changed since the time of the data collection.

This study is just a starting point for practical application. Although it points to possible issues with the campus climate at a group level and even more so for approximately 5% of the respondents with quite negative perceptions, it lacks specificity for individual campus locations. Generalizing these results is problematic given that the perceptions of campus climate are

necessarily dependent on local conditions. Leaders need to know what issues are present in their organization so that policies can be tailored to local conditions (Hurtado et al., 2008). Regular assessments can identify problem areas and allow plans to be implemented as needed to address them. Each subsequent climate assessment can then be used to measure the success level of those plans to enable further refinement, continued improvement, and identification of any possible new issues. These local surveys become a conduit for the feedback described in Stone and Colella's (1996) model that can result in improved treatment for employees with disabilities on campus.

Changing Organizational Culture

Peterson and Spencer's (1990) Academic Culture and Climate model defined culture as the institution's long-term, enduring features and defined climate as the malleable, shorter-term characteristics of a campus environment. As described in the preceding section, surveys are an effective method of identifying climate issues. Based on the problems identified through those surveys, leaders can formulate plans to address the concerns that are negatively influencing climate.

Ideally, however, the goal should be to engrain these improvements into the culture so they become permanent features of the institution. To that end, Stone and Colella (1996) stated that a method to accomplish culture change is to work to change the organization's norms and values. The authors noted that this process is essential to promote "flexibility and respect for the dignity of individuals" (p. 376). As a part of that effort, they suggested allowing managers to put in place "alternative work strategies including flextime, telecommuting, part-time work, job reassignment, or flexible leave policies" (p. 376).

Many of the suggestions Stone and Colella (1996) made have become more commonplace in a post-Covid-19 world. As noted previously, I found relatively positive perceptions of the campus climate based on all three of the subscales I evaluated. To the extent that institutions find similar positive perceptions, an opportunity exists to make them permanent features, incorporating them as norms and values of the organization and thus becoming a part of its culture. Accomplishing that would not just affect employees with disabilities, but all employees would benefit (Stone & Colella, 1996).

Implications for Practice Summary

To reiterate what I wrote in Chapter II, I contend that the difference between how an organization should function and how it does function is the space where the opportunity for improvement exists. Campus leaders can use this study as a motivating factor to investigate the campus climate at their institutions and identify how their organization is functioning for employees with disabilities. Leaders can examine the results of those studies to determine where disconnects exist between their organizations' intended and actual functioning. That knowledge can then be used to inform planning to make improvements to incorporate positive changes into the culture of their institution. By centering diversity policy through their public, proactive support and ensuring the rewards system reinforces successes in meeting those policy goals, leaders have the opportunity to enhance the campus climate for all employees, not just those with disabilities.

Implications for Future Research

I utilized a quantitative method using a secondary dataset that included a large sample for my study. That sample allowed me to obtain a “big picture” view. I believe this approach was appropriate to provide some foundational understanding of the climate experiences of employees

with disabilities. Still, as with any topic of interest, multiple study methods may be chosen. Each method has its own set of drawbacks or limitations and my study was no exception. Below I offer suggestions for future studies that would complement the method used here to better understand the campus climate for employees with disabilities.

Mixed Methods Inquiry

A drawback of doing a study based solely on a secondary dataset is that there is no way to follow up on unexpected findings. Indeed, in this study, the interaction effects that I found were not what I anticipated, nor was my finding that people of color had a more favorable perception of climate than White respondents. Because I had no way to follow up with participants on these results, I was left to infer, based on additional literature searches, what might be responsible for the presence of those interaction effects. Based on that literature, I believe my conclusion regarding the identified interaction effect between disability status and gender is plausible. The interaction effect was interesting enough, however, that I think it deserves additional investigation.

I suggest future researchers consider using a mixed-methods approach to explore this interaction. The quantitative part of the mixed methods study can be used to confirm the presence of interaction effects found here and may result in other unexpected results. The qualitative portion of the study could then be used to explore the reasons behind unanticipated results through interviews with selected employees. That investigation can provide more robust insight into the topics than I could through speculation based only on quantitative results, review of previous research, and theory.

Qualitative Inquiry by Disability Type

A qualitative method approach may be effective in investigating the perceptions of employees with different disability types. As mentioned previously, the distinctions between disability types were lost in creating dichotomous variables for my ANOVA analysis. It would be informative to investigate what differences may exist in climate perception between subgroups and explore why those differences are present. That insight would enhance the results of this study and may lead to additional implications for practice.

Gender-Inclusive Research

As mentioned in Chapter IV, I could not use the three-value gender variable (women, men, trans-spectrum) due to issues with equality of variance. The difference in variance was due to the size of the trans-spectrum group, which was too small to allow its inclusion in the ANOVA tests for two of the three subscales. I intended to be as inclusive as was practical in my study and planned to include the trans-spectrum group in those analyses. But, satisfying the assumption of equality of variance in ANOVA calculations is critical to performing a valid test. Therefore, those two research questions had to be modified to use a binary gender variable instead. Future research on employees with disabilities should be conducted using a design that permits the inclusion of trans-spectrum employees because that population was not adequately studied here. Options include a qualitative study focused on this population or a mixed methods approach, similar to the above suggestion for investigating interaction effects. Also, a quantitative study using ANOVA could be used as long as the sample sizes of each group were equalized through random selection from the larger groups. Doing so would require careful design to ensure that the population included in the analysis remains representative of the population.

Individual Evaluations of Climate

As described in the limitations section of this chapter, evaluating climate perceptions at the group level, as I did, has its place in providing decision-makers with actionable information. However, what can easily get lost in that process are the individuals whose experiences differ greatly from the group. In the survey data I used, a small number of participants had very negative perceptions of the campus climate. The group's slightly better than a neutral perception of the campus climate is not the personal experience of those employees. Yet, by just looking at the group's experiences through ANOVA calculations and mean scores, the lived experiences of this small subset of employees go unnoticed.

Seeing the number of respondents with extremely negative or positive climate perceptions made me want to know more about their experiences. For instance, do those with highly negative perceptions of climate feel trapped in their positions which accentuates their negative feelings? Perhaps they are nearing retirement and feel they cannot leave their position. Perhaps they need to remain in the area due to family reasons. Or maybe they feel that they would have difficulty finding other employment due to their minoritized identities.

Understanding the experiences of this subset of employees would provide a better sense of the campus climate in total, but that was not possible with the research design I used. To that end, I suggest that a qualitative method be used to interview some of these employees whose experiences significantly differ and delve into what makes their experiences overwhelmingly negative (or positive). Quantitative methods can provide the broad brush by which the picture of the campus climate can be painted, but that painting is not complete without the detail of those whose experiences are vastly different. Those details are most easily obtained via qualitative study designs.

Conclusion

My study of the perceptions of the campus climate of employees with disabilities found that those with disabilities rated climate less favorably than those without disabilities across three broad climate measures. This result was moderated by the finding that despite the less favorable rating for this group, their perception was still more favorable than neutral. I also found that gender and racial identity interacted with disability status to determine the perception of campus climate for the Worker Treatment subscale. The interactions I found were unexpected but intriguing. When gender interacted with disability status on the Worker Treatment subscale, men with disabilities had a less favorable impression of climate than women with disabilities, despite the opposite being true for their non-disabled counterparts. This result calls for more research to understand the outcomes better. Similarly, the interaction between racial identity and disability warrants more investigation to better understand that dynamic. Please refer to Appendix E for a summary of the research question results.

Although the differences in means found in my study were not dramatic and the effect sizes were small, these results add to the sparse body of knowledge concerning the perceptions of the campus climate and employees with disabilities in higher education, a topic that has not been extensively studied. The results here are unlikely to be widely generalizable; however, they may serve as a stimulus to encourage leaders in higher education to conduct studies at their institutions to understand what issues need to be addressed.

Higher education institutions value diversity (American Association of State Colleges and Universities, n.d.) but do not employ persons with disabilities at a level that matches the rate of disability in the overall population (Kosanic et al., 2018). By better understanding how these employees perceive the campus climate and what factors are significant to that perception, plans

can be implemented to improve the employment levels of people with disabilities. Doing so will provide employment equity for them and demonstrate that campus leaders desire to extend the organization's commitment to diversity to employees with disabilities.

REFERENCES

Allan, E. J., & Madden, M. (2006). Chilly classrooms for female undergraduate students: A question of method? *The Journal of Higher Education*, 77(4), 684-711. https://doi.org/10.1353/jhe.2006.0028

Alshammari, S. (2017). A hybridized academic identity: Negotiating a disability within academia's discourse of ableism. In S. Kerschbaum, L. Eisenman & J. Jones (Eds.), *Negotiating disability* (pp. 25). University of Michigan Press. https://doi.org/10.3998/mpub.9426902.6

American Association of State Colleges and Universities. (n.d.). *Diversity in Higher Education Remains a National Priority*. Retrieved from https://www.aascu.org/DiversityAd/

Americans with Disabilities Act of 1990. (1991). Pub. L. No. 101-336, § 2, 104 Stat. 328. Retrieved August 9, 2019, from http://www.ada.gov/pubs/ada.htm.

Anastasiou, D., Kauffman, J. M., & Michail, D. (2014). Disability in multicultural theory: Conceptual and social justice issues. *Journal of Disability Policy Studies*, 27(1), 3-12. https://doi.org/10.1177/1044207314558595

Ancis, J. R., Sedlacek, W. E., & Mohr, J. J. (2000). Student perceptions of campus cultural climate by race. *Journal of Counseling and Development*, 78(2), 180-185. https://doi.org/10.1002/j.1556-6676.2000.tb02576.x

Anderson, R. C. (2006). Teaching (with) disability: Pedagogies of lived experience. *The Review of Education, Pedagogy, and Cultural Studies*, 28:3-4, 367-379. https://doi.org/10.1080/10714410600873258

antonio, a. l. (2001). The role of interracial interaction in the development of leadership skills and cultural knowledge and understanding. *Research in Higher Education*, 42(5), 593-617. https://doi.org/10.1023/A:1011054427581

Barnartt, S., & Scotch, R. (2001). *Disability protests: Contentious politics, 1970-1999*. Gallaudet University Press.

Beatty, J. E., Baldridge, D. C., Boehm, S. A., Kulkarni, M., & Colella, A. J. (2019). On the treatment of persons with disabilities in organizations: A review and research agenda. *Human Resource Management*, 58(2), 119-137. https://doi.org/10.1002/hrm.21940

Bills, K. L., & Mills, B. (2022). Limitations When Conducting Quantitative Disability Research. *Journal of Research Initiatives*, 6(2), 10.

Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15. https://doi.org/10.3102/0013189X034006003

Brown, N., & Leigh, J. (2018). Ableism in academia: Where are the disabled and ill academics? *Disability & Society*, 33(6), 985-989. https://doi.org/10.1080/09687599.2018.1455627

Brown, N., & Ramlackhan, K. (2021). Exploring experiences of ableism in academia: A constructivist inquiry. *Higher Education*, 83(6), 1225-1239. https://doi.org/10.1007/s10734-021-00739-y

Brown v. Board of Education, 347 U.S. 483 (1954).

Bowman, N. A. (2013). How much diversity is enough? The curvilinear relationship between college diversity interactions and first-year student outcomes. *Research in Higher Education*, 54(8), 874–894. https://doi.org/10.1007/s11162-013-9300-0

Campbell-Whatley, G. D., Wang, C., Toms, O., & Williams, N. (2015). Factors affecting campus climate: Creating a welcoming environment. *New Waves*. 18(2), 40.

Carey, A. C., Block, P., & Scotch, R. K. (2020). *Allies and obstacles: Disability activism and parents of children with disabilities*. Temple University Press.

Centers for Disease Control and Prevention. (2022). Retrieved from https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html

Cook, S., & Clement, K. (2019). Navigating the hidden void: The unique challenges of accommodating library employees with invisible disabilities. *The Journal of Academic Librarianship*. 45(5), 102007. https://doi.org/10.1016/j.acalib.2019.02.010

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Merrill-Prentice Hall.

Dolan, V. L. B. (2021). ' . but if you tell anyone, I'll deny we ever met:' the experiences of academics with invisible disabilities in the neoliberal university. *International Journal of Qualitative Studies in Education*. https://doi.org/10.1080/09518398.2021.1885075

Dubois, J. L., & Trani, J. F. (2009). Extending the capability paradigm to address the complexity of disability. *ALTER-European Journal of Disability Research/Revue Européenne de Recherche sur le Handicap*, *3*(3), 192-218. https://doi.org/10.1016/j.alter.2009.04.003

Dunn, D. (2014). *The social psychology of disability*. Oxford University Press.

Eckel, P. D., & King, J. E. (2004). *An overview of higher education in the United States: Diversity, access, and the role of the marketplace*. American Council on Education.

Evans, N. J., Broido, E. M., Brown, K. R., & Wilke, A. K. (2017). *Disability in higher education: A social justice approach*. Jossey-Bass.

Field, A. (2013). Discovering statistics using IBM SPSS statistics (Fourth ed.). Sage.

Friedman, S. (1993). Accommodation issues in the workplace for people with disabilities: A needs assessment in an educational setting. *Disability, Handicap & Society*, 8(1), 3-23. https://doi.org/10.1080/02674649366780011

Gates, L. B. (1993). The role of the supervisor in successful adjustment to work with a disabling condition: Issues for disability policy and practice. *Journal of Occupational Rehabilitation*, 3(4), 179-190. https://doi.org/10.1007/BF01097428

Grant, C., & Osanloo, A. (2016). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". *Administrative Issues Journal: Connecting Education, Practice, and Research*, 4(2), 7. https://doi.org/10.5929/2014.4.2.9

Grigely, J. (2017, June 27). *The neglected demographic: Faculty members with disabilities*. Retrieved from https://www.chronicle.com

Gurin, P. (1999). Selections from the compelling need for diversity in higher education, expert reports in defense of the University of Michigan. *Equity & Excellence*, 32(2), 36-62. https://doi.org/10.1080/1066568990320207

Gurin, P., Dey, E., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330-366. https://doi.org/10.17763/haer.72.3.01151786u134n051

Hart, J., & Fellabaum, J. (2008). Analyzing campus climate studies: Seeking to define and understand. *Journal of Diversity in Higher Education*, 1(4), 222-234. https://doi.org/10.1037/a0013627

Hereth, B., Tubig, P., Sorrels, A., Muldoon, A., Hills, K., & Evans, N. G. (2022). Long covid and disability: A brave new world. *BMJ* (Online), 378 https://doi.org/10.1136/bmj-2021-069868

Hogan, A. J. (2019). Moving away from the "Medical model": The development and revision of the world health Organization's classification of disability. *Bulletin of the History of Medicine*, 93(2), 241-269. https://doi.org/10.1353/bhm.2019.0028

Hogan, S. J., & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, 67(8), 1609-1621. https://doi.org/10.1016/j.jbusres.2013.09.007

Hurtado, S., Alvarez, C. L., Guillermo-Wann, C., Cuellar, M., & Arellano, L. (2012). A model for diverse learning environments: The scholarship on creating and assessing conditions for student success. *Higher education: Handbook of theory and research* (pp. 41-122). Springer Netherlands. https://doi.org/10.1007/978-94-007-2950-6_2

Hurtado, S., Griffin, K. A., Arellano, L., & Cuellar, M. (2008). Assessing the value of climate assessments: Progress and future directions. *Journal of Diversity in Higher Education*, 1(4), 204-221. https://doi.org/10.1037/a0014009

Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., and Allen, W. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education* 21(3): 279-302. https://doi.org/10.1353/rhe.1998.0003

Hurtado, S., & Ruiz, A. (2012). The climate for underrepresented groups and diversity on campus. *American Academy of Political and Social Science* 634(1), 190–206.

Jones, M. K. (2016). Disability and perceptions of work and management. *British Journal of Industrial Relations*, 54(1), 83-113. https://doi.org/10.1111/bjir.12043

Jones, S. R., Torres, V., & Arminio, J. (2014). *Negotiating the complexities of qualitative research in higher education: Fundamental elements and issues*. 2nd ed. Routledge.

Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-System Pharmacy*, 65(23), 2276-2284. https://doi.org/10.2146/ajhp070364

Knight, A. (2017). Feminism, disability, and the democratic classroom. In Stephanie L. Kerschbaum, Laura T. Eisenman & James M. Jones (Eds.), *Negotiating disability* (pp. 57). University of Michigan Press. https://doi.org/10.3998/mpub.9426902.8

Kosanic, A., Hansen, N., Zimmerman-Janschitz, S., & Choulnard, V. (2018, October 02). *Researchers with disabilities in the academic system*. Retrieved from http://news.aag.org/2018/09/researchers-with-disabilities-in-the-academic-system/

Kudlick, C. J. (2003). Disability history: Why we need another "other". *The American Historical Review*, 108(3), 763-793. https://doi.org/10.1086/529597

Laird, T. F. N. (2005). College students' experiences with diversity and their effects on academic self-confidence, social agency, and disposition toward critical thinking. *Research in Higher Education*, 46(4), 365-387. https://doi.org/10.1007/s11162-005-2966-1

Lengnick-Hall, M. L., Gaunt, P. M., & Kulkarni, M. (2008). Overlooked and underutilized: People with disabilities are an untapped human resource. *Human Resource Management*, 47(2), 255-273. https://doi.org/10.1002/hrm.20211

Levy, Y., & Ellis, T. J. (2006). A systems approach to conduct an effective literature review in support of information systems research. *Informing Science: The International Journal of an Emerging Transdiscipline*, 9, 181-213. https://doi.org/10.28945/479

Lindsay, S., & Fuentes, K. (2022). It Is Time to Address Ableism in Academia: A Systematic Review of the Experiences and Impact of Ableism among Faculty and Staff. *Disabilities*, 2(2), 178-203.

Lindsay, S., Cagliostro, E., Leck, J., Shen, W., & Stinson, J. (2019). Disability disclosure and workplace accommodations among youth with disabilities. *Disability and Rehabilitation*, 41(16), 1914-1924. https://doi.org/10.1080/09638288.2018.1451926

Mathews, A. (1998). Diversity: A principle of human resource management. *Public Personnel Management*, 27(2), 175-185. https://doi.org/10.1177/009102609802700205

Maxwell, J. (2004). *Qualitative research design: An interactive approach* (2nd ed.). Sage.

Mayhew, M. J., Grunwald, H. E., & Dey, E. L. (2006). Breaking the silence: Achieving a positive campus climate for diversity from the staff perspective. *Research in Higher Education*, 47(1), 63-88. 63-88. doi:10.1007/s11162-004-8152-z

McCoy, C. & Dupee, D. (2016, November 2). *Jefferson Community College Diversity Plan* [Memorandum]. Jefferson Community College. https://system.suny.edu/media/suny/content/assets/documents/diversity/reports/Jefferson.pdf

McKay, P. F., Avery, D. R., Tonidandel, S., Morris, M. A., Hernandez, M., & Hebl, M. R. (2007). Racial differences in employee retention: Are diversity climate perceptions the key? *Personnel Psychology*, 60(1), 35-62. https://doi.org/10.1111/j.1744-6570.2007.00064.x

McLaughlin, M. E., Bell, M. P., & Stringer, D. Y. (2004). Stigma and acceptance of persons with disabilities: Understudied aspects of workforce diversity. *Group & Organization Management*, 29(3), 302-333. https://doi.org/10.1177/1059601103257410

Merchant, W., Read, S., D'Evelyn, S., Miles, C., & Williams, V. (2019). The insider view: Tackling disabling practices in higher education institutions. *Higher Education*, 80(2), 273-287. https://doi.org/10.1007/s10734-019-00479-0

Mitra, S. (2018). *Disability*, *Health and Human Development*, Palgrave MacMillan. https://doi.org/10.1057/978-1-137-53638-9

National Center for Education Statistics. (2017). *Students with Disabilities*. Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=60

National Center for Science and Engineering Statistics. (2021). *Women, Minorities and Persons with Disabilities in Science and Engineering*. Retrieved from https://ncses.nsf.gov/pubs/nsf21321/report#

Ncube, T., Jacobson, W., Whitfield, T., & McNamara, C. (2018). The effect of student perception of campus climate for diversity and inclusion on overall university experience: A Race/Ethnicity comparison study. *Evaluating campus climate at US research universities* (pp. 185-207). Springer International Publishing. https://doi.org/10.1007/978-3-319-94836-2_9

Nota, L., Santilli, S., Ginevra, M. C., & Soresi, S. (2014). Employer attitudes towards the work inclusion of people with disability. *Journal of Applied Research in Intellectual Disabilities*, 27(6), 511-520. https://doi.org/10.1111/jar.12081

Olkin, R. (2002). Could you hold the door for me? Including disability in diversity. *Cultural Diversity & Ethnic Minority Psychology*. 8. 130-137. https://doi.org/10.1037/1099-9809.8.2.130

Pallant, J. (2010). *SPSS survival manual* (Fourth ed.). McGraw Hill.

Peterson, M. W., & Spencer, M. G. (1990). Understanding academic culture and climate. In W. G. Tierney (Ed.), *Assessing academic climates and cultures. New directions for institutional research* (No. 68, pp. 3–18). Jossey-Bass.

Postsecondary National Policy Institute. (2018). *Students with Disabilities in Higher Education Factsheet*. Retrieved from https://pnpi.org/students-with-disabilities-in-higher-education/

Qasem, M. A. N., & Gul, S. B. A. (2014). Effect of items direction (positive or negative) on the factorial construction and criterion related validity in Likert scale. *Khazar Journal of Humanities and Social Sciences,* 17(3) https://doi.org/10.5782/2223-2621.2014.17.3.77

Rankin and Associates (2014). University of California System: Campus climate project final report. Retrieved from http://campusclimate.ucop.edu/_common/files/pdf-climate/ucsystem-full-report.pdf

Rankin and Associates (2022). *Clients | Rankin and Associates Consulting*. Retrieved from https://rankin-consulting.com/clients

Rankin, S., & Reason, R. (2008). Transformational tapestry model: A comprehensive approach to transforming campus climate. *Journal of Diversity in Higher Education*, 1(4), 262-274. https://doi.org/10.1037/a0014018

Reid, L. D., & Radhakrishnan, P. (2003). Race matters: The relation between race and general campus climate. *Cultural Diversity & Ethnic Minority Psychology*, 9(3), 263-275. https://doi.org/10.1037/1099-9809.9.3.263

Roberson, Q. M. (2006). Disentangling the meanings of diversity and inclusion in organizations. *Group & Organization Management*, 31(2), 212-236. https://doi.org/10.1177/1059601104273064

Rogers, J. (2012). *3 to 1: That's the best ratio of tenure-track faculty to administrators, a study concludes*. Retrieved from https://www.chronicle.com/article/3-to-1-thats-the-best-ratio-of-tenure-track-faculty-to-administrators-a-study-concludes

Romero Jr, A. (2017). *Best practices for recruiting and retaining diverse faculty for institutions of higher education*. Retrieved from https://academicworks.cuny.edu/bb_pubs/158/

Schur, L., Kruse, D., Blasi, J., & Blanck, P. (2009). Is disability disabling in all workplaces? Workplace disparities and corporate culture. *Industrial Relations: A Journal of Economy and Society*, 48(3), 381-410. https://doi.org/10.1111/j.1468-232X.2009.00565.x

Shigaki, C. L., Anderson, K. M., Howald, C. L., Henson, L., & Gregg, B. E. (2012). Disability on campus: A perspective from faculty and staff. *Work*, 42(4), 559-571. https://doi.org/10.3233/WOR-2012-1409

Shuttleworth, R., Wedgwood, N., & Wilson, N. J. (2012). The dilemma of disabled masculinity. *Men and masculinities*, 15(2), 174-194.

Smith, I. E. (2016). *Minority vs. Minoritized*. Retrieved from https://www.theodysseyonline.com/minority-vs-minoritize

Snyder, L. A., Carmichael, J. S., Blackwell, L. V., Cleveland, J. N., & Thornton, G. C. (2010). Perceptions of discrimination and justice among employees with disabilities. *Employee Responsibilities and Rights Journal*, 22(1), 5-19. https://doi.org/10.1007/s10672-009-9107-5

Stone, D. L., & Colella, A. (1996). A model of factors affecting the treatment of disabled individuals in organizations. *Academy of Management Review*, 21(2), 352-401. https://doi.org/10.2307/258666

Telles, A. B., & Mitchell, T. D. (2018). Much discussion, not much change: Perceptions of campus climate continue to differ along racial lines. *Evaluating campus climate at US research universities* (pp. 395-408). Springer International Publishing. https://doi.org/10.1007/978-3-319-94836-2_18

The State University of New York. (n.d.). Diversity and mission. Retrieved from www.suny.edu/diversity/vision--mission/

Thompson, A. E., Shortreed, R. L., Moore, E. A., & Carey-Butler, S. R. (2021). Gender diverse college students' perceptions of climate and discriminatory experiences. *Journal of LGBT Youth*, 18(2), 155-187. https://doi.org/10.1080/19361653.2019.1694460

Trani, J., Bakhshi, P., Bellanca, N., Biggeri, M., & Marchetta, F. (2011). Disabilities through the capability approach lens: Implications for public policies. *Alter - European Journal of Disability Research, Revue Européen De Recherche Sur Le Handicap*, 5(3), 143-157. https://doi.org/10.1016/j.alter.2011.04.001

Turk, K. (2016). Conclusion: Illusions of sex equality. *Equality on Trial* (pp. 203–208). University of Pennsylvania Press. https://doi.org/10.9783/9780812292831-009

U.S. Department of Education, Office of Planning, Evaluation and Policy Development and Office of the Under Secretary. (2016). *Advancing diversity and inclusion in higher education*. Washington, D.C. http://www2.ed.gov/rschstat/research/pubs/advancing-diversityinclusion.pdf

U.S. Department of Labor, Bureau of Labor Statistics. (2018, June 21). *Persons with a disability: Labor force characteristics - 2017 [Press release].* Retrieved from https://www.bls.gov/news.release/pdf/disabl.pdf

USC Libraries. (n.d.). *Organizing Your Social Sciences Research Paper – Quantitative Methods*. Retrieved from https://libguides.usc.edu/writingguide/quantitative

Vehmas, S., & Watson, N. (2014). Moral wrongs, disadvantages, and disability: a critique of critical disability studies. *Disability & Society*, 29(4), 638-650. https://doi.org/10.1080/09687599.2013.831751

Vogt, W. P., & Johnson, B. (2016). *The Sage dictionary of statistics & methodology: A nontechnical guide for the social sciences* (Fifth ed.). Sage.

Vornholt, K., Uitdewilligen, S., & Nijhuis, F. J. (2013). Factors affecting the acceptance of people with disabilities at work: A literature review. *Journal of Occupational Rehabilitation*, 23(4), 463-475. https://doi.org/10.1007/s10926-013-9426-0

Williams-Whitt, K., & Taras, D. (2010). Disability and the performance paradox: Can social capital bridge the divide? *British Journal of Industrial Relations*, 48(3), 534-559. https://doi.org/10.1111/j.1467-8543.2009.00738.x

Zimmerman, C., Carter-Sowell, A., & Xu, X. (2016). Examining workplace ostracism experiences in academia: Understanding how differences in the faculty ranks influence inclusive climates on campus. *Frontiers in Psychology*, 7, 753-753. https://doi.org/10.3389/fpsyg.2016.00753

Zilvinskis, J., Barber, R. E., Brozinsky, J. L., & Hochberg, S. R. (2020). Measuring the differential effects of behaviors of academic advisors for students with disabilities. *NACADA Journal*, 40(2), 15-32. https://doi.org/10.12930/NACADA-19-25

APPENDIX A. FACTOR ANALYSIS

Factor analysis item number/question table

Item Number	Survey Question Number	Subscale	Question Text
1	51_A_1	WT	I have supervisors who give me job/career advice or guidance when I need it.
2	51_A_2	WT	I have colleagues/coworkers who give me job/career advice or guidance when I need it.
3	51_A_3	WT	I am included in opportunities that will help my career as much as others in similar positions.
4	51_A_4	WT	The performance evaluation process is clear.
5	51_A_5	WT	The performance evaluation process is productive
6	51_A_6	WT	My supervisor provides adequate support for me to manage work-life balance.
7	51_A_7	n/a	My union supports my position.
8	51_A_8	JA	I am able to complete my assigned duties during scheduled hours
9	51_A_11	JA	I am given a reasonable time frame to complete assigned responsibilities.
10	51_A_15	OC	[Location] provides adequate resources to help me manage work-life balance.
11	53_A_1	WT	[Location] provides me with resources to pursue training/professional development opportunities
12	53_A_2	WT	My supervisor provides me with resources to pursue training/professional development opportunities.
13	53_A_3	OC	[Location] is supportive of taking extended leave (e.g., medical, parental).
14	53_A_4	WT	My supervisor is supportive of my taking leave (e.g., vacation, parental, personal, medical).
15	53_A_6	OC	[Location] policies (e.g., FMLA) are fairly applied.

Item Number	Survey Question Number	Subscale	Question Text
16	53_A_7	OC	[Location] is supportive of flexible work schedules.
17	53_A_8	WT	My supervisor is supportive of flexible work schedules.
18	53_A_9	OC	Staff salaries are competitive.
19	53_A_10	OC	Vacation and personal time benefits are competitive.
20	53_A_11	OC	Health insurance benefits are competitive.
21	53_A_12	OC	Childcare benefits are competitive.
22	53_A_13	OC	Retirement benefits are competitive.
23	53_A_14	WT	Staff opinions are valued on [Location] committees.
24	53_A_15	WT	Staff opinions are valued by [Location] faculty and administration.
25	53_A_16	WT	Clear expectations of my responsibilities exist.
26	53_A_17	WT	Clear procedures exist on how I can advance at [Location].
27	53_A_18	WT	Positive about my career opportunities at [Location].
28	53_A_19	WT	I would recommend [Location] as good place to work.
29	53_A_20	WT	I have job security as a staff member at [Location]
30	120_A_1	n/a	[Topic: I feel valued by coworkers in my work unit.
31	120_A_2	n/a	I feel valued by coworkers outside my work unit.
32	120_A_3	n/a	I feel valued by my supervisor/manager.
33	120_A_4	n/a	I feel valued by my senior level unit leadership.
34	120_A_5	n/a	I feel valued by [Location] students.
35	120_A_6	n/a	I feel valued by [Location] faculty.
36	120_A_7	n/a	I feel valued by [Location] senior administrator
37	120_A_11	n/a	I believe that my department encourages discussion about difficult topics.
38	120_A_12	n/a	I feel that my skills are valued.
39	120_A_13	n/a	I feel that my work is valued.
40	51_A_9_Inverted	JA	My workload has increased without additional compensation due to other staff departures
41	51_A_10_Inverted	JA	Pressured by work requirements that occur outside

Item Number	Survey Question Number	Subscale	Question Text
			of my normally scheduled hours.
42	51_A_12_Inverted	JA	Burdened by work responsibilities beyond those of my colleagues with similar performance expectations
43	51_A_13_Inverted	JA	I perform more work than colleagues with similar performance expectations
44	51_A_14_Inverted	n/a	A hierarchy exists within staff positions that allows some voices to be valued more than others.
45	53_A_5_Inverted	n/a	Staff in my work unit who use family accommodation policies (e.g., FMLA) are disadvantaged in promotion or eval
46	120_A_8_Inverted	JA	I think that coworkers in my work unit prejudge my abilities based on their perception of my identity/background.
47	120_A_9_Inverted	JA	I think that my supervisor/manager prejudges my abilities based on their perception of my identity/background.
48	120_A_10_Inverted	JA	I think that faculty prejudge my abilities based on their perception of my identity/background.

***Note*:** OC = Organizational Characteristics subscale; WT = Worker Treatment subscale; JA = Job Assignment subscale

APPENDIX B. VARIABLE RECODING

Re-coded variables

Original Name	New Name	Question Text
51_A_9	51_A_9_Inverted	My workload has increased without additional compensation due to other staff departures
51_A_10	51_A_10_Inverted	Pressured by work requirements that occur outside of my normally scheduled hours.
51_A_12	51_A_12_Inverted	Burdened by work responsibilities beyond those of my colleagues with similar performance expectations
51_A_13	51_A_13_Inverted	I perform more work than colleagues with similar performance
51_A_14	51_A_14_Inverted	A hierarchy exists within staff positions that allows some voices to be valued more than others.
53_A_5	53_A_5_Inverted	Staff in my work unit who use family accommodation policies (e.g., FMLA) are disadvantaged in promotion or eval.
120_A_8	120_A_8_Inverted	I think that coworkers in my work unit prejudge my abilities based on their perception of my identity/background.
120_A_9	120_A_9_Inverted	I think that my supervisor/manager prejudges my abilities based on their perception of my identity/background.
120_A_10	120_A_10_Inverted	I think that faculty prejudge my abilities based on their perception of my identity/background.

APPENDIX C. FACTOR LOADINGS

Oblimin-rotated Factor Loadings

Item	*M*	*SD*	Factor 1 Loading	Factor 2 Loading	Factor 3 Loading	Communality
1	2.30	1.18	0.856			0.641
2	2.09	0.98	0.669			0.375
3	2.46	1.16	0.789			0.623
4	2.46	1.13	0.637			0.413
5	2.87	1.18	0.660			0.456
6	2.02	1.08	0.603			0.517
7	2.88	0.90				0..076
8	2.50	1.20		0.461		0.312
9	2.27	0.97		0.448		0.389
10	2.79	1.03			0.577	0.439
11	2.36	1.02	**0.416**		0.318	0.383
12	2.37	1.09	0.707			0.501
13	2.38	0.96			0.434	0.345
14	1.89	0.88	0.540			0.382
15	2.68	0.82			0.414	0.285
16	2.53	1.07			0.348	0.306
17	2.21	1.11	0.461			0.305
18	3.53	1.14			0.471	0.302
19	2.27	1.01			0.598	0.355
20	2.10	0.90			0.599	0.344
21	3.05	0.82			0.650	0.368
22	2.35	0.92	0.346		**0.503**	0.401
23	2.89	0.97	0.312		**0.503**	0.537
24	3.06	1.03	0.348		**0.411**	0.509
25	2.39	1.04	0.591			0.464
26	3.40	1.11	0.507			0.454

Item	*M*	*SD*	Factor 1 Loading	Factor 2 Loading	Factor 3 Loading	Communality
27	2.92	1.13	0.596			0.571
28	2.28	0.96	**0.502**		0.341	0.575
29	2.33	1.02	0.420			0.264
30	1.80	0.88	0.665			0.415
31	2.14	0.90	0.372			0.259
32	1.92	1.05	0.844			0.661
33	2.43	1.20	0.679			0.538
34	2.50	0.87				0.170
35	2.66	0.93	0.309		**0.352**	0.290
36	2.89	1.04	0.380		**0.430**	0.440
37	2.75	1.14	0.585			0.425
38	2.25	1.05	0.768			0.647
39	2.21	1.02	0.754			0.643
40	3.24	1.23		0.568		0.367
41	2.78	1.17		0.689		0.479
42	2.66	1.09		0.734		0.567
43	2.98	1.11		0.663		0.461
44	3.53	1.18	0.309	**0.344**		0.319
45	2.50	0.94				0.136
46	2.50	1.08		0.551		0.349
47	2.38	1.09	0.314	**0.538**		0.453
48	2.69	1.03		0.493		0.266
Eigenvalue			14.561	2.770	2.445	
% of variance explained			30.34	5.77	5.10	
Cumulative variance explained			30.34	36.11	41.20	

Note: Boldface indicates highest factor loadings for items that loaded on more than one factor.

APPENDIX D. CATEGORY MAPPING

Question to Stone/Colella (1996) Category Mapping

Question Number	Model Category	Subscale Assignment
51_A_1	Mentoring	Worker Treatment
51_A_2	Mentoring	Worker Treatment
51_A_3	Inclusion	Worker Treatment
51_A_4	Promotion	Worker Treatment
51_A_5	Promotion	Worker Treatment
51_A_6	Helping	Worker Treatment
51_A_8	Job Assignment	Job Assignment
51_A_9_Inverted	Job Assignment	Job Assignment
51_A_10_Inverted	Job Assignment	Job Assignment
51_A_11	Job Assignment	Job Assignment
51_A_12_Inverted	Job Assignment	Job Assignment
51_A_13_Inverted	Job Assignment	Job Assignment
51_A_15	Norms and Values	Organizational Characteristics
53_A_1	Training	Worker Treatment
53_A_2	Training	Worker Treatment
53_A_3	Norms and Values	Organizational Characteristics
53_A_4	Helping	Worker Treatment
53_A_6	Norms and Values	Organizational Characteristics
53_A_7	Norms and Values	Organizational Characteristics
53_A_8	Helping	Worker Treatment
53_A_9	Organizational Policies and Practices	Organizational Characteristics
53_A_10	Organizational Policies and Practices	Organizational Characteristics
53_A_11	Organizational Policies and Practices	Organizational Characteristics

Question Number	Model Category	Subscale Assignment
53_A_12	Organizational Policies and Practices	Organizational Characteristics
53_A_13	Organizational Policies and Practices	Organizational Characteristics
53_A_14	Inclusion	Worker Treatment
53_A_15	Inclusion	Worker Treatment
53_A_16	Job Suitability	Worker Treatment
53_A_17	Promotion	Worker Treatment
53_A_18	Promotion	Worker Treatment
53_A_19	General	Worker Treatment
53_A_20	Job suitability	Worker Treatment
120_A_8_Inverted	Inclusion	Job Assignment
120_A_9_Inverted	Inclusion	Job Assignment
120_A_10_Inverted	Inclusion	Job Assignment

APPENDIX E. SUMMARY OF RESEARCH RESULTS

Research Question Summary

Research Question	Worker Treatment[a]	Job Assignment[b]	Organizational Characteristics[a]
1. Group differences by disability status?	Disabled had less favorable perception.	Disabled had less favorable perception.	Disabled had less favorable perception.
2. Group differences by gender?	None	None	Women had less favorable perception.
3. Group differences by racial identity?	None	People of color had less favorable perception.	People of color had less favorable perception.
4. Interaction effect?			
Disability*Gender	Non-disabled women had less favorable perception than men. Disabled men had less favorable perception than women.	None	None
Disability*Racial Identity	Non-disabled White people had less favorable	None	None

Research Question	Worker Treatment[a]	Job Assignment[b]	Organizational Characteristics[a]
	perception than people of color. Disabled people of color had less favorable perception than White people.		
Gender*Racial identity	None	None	None
Disability*Gender*Racial identity	None	None	None

[a] Indicates gender binary (women, men) used.

[b] Indicates three category gender (women, men, trans-spectrum) used.

APPENDIX F. IRB APPROVAL

BGSU
BOWLING GREEN STATE UNIVERSITY

Office of Research Compliance

Institutional Review Board

DATE:	April 13, 2022
TO:	Mark Heider
FROM:	Bowling Green State University Institutional Review Board
PROJECT TITLE:	[1895046-1] Campus Climate and Employees with Disabilities in Higher Education: A Quantitative Analysis of Perceptions
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF EXEMPT STATUS
DECISION DATE:	April 9, 2022
REVIEW CATEGORY:	Exemption category # 4

Thank you for your submission of New Project materials for this project. The Bowling Green State University Institutional Review Board has determined this project is exempt from IRB review according to federal regulations AND that the proposed research has met the principles outlined in the Belmont Report. You may now begin the research activities.

As an Exempt review, changes may be made to the study without IRB approval. However, amendments or modifications to Exempt studies that *substantively changes or alters* the criteria used to make the initial Exempt determination must be submitted to the IRB for approval.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact the Institutional Review Board at 419-372-7716 or irb@bgsu.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Institutional Review Board's records.