Oaks, Angela P. Psychological and Behavioral Campus Climate Assessment at a Small Midwestern University: Studying Mixed-methodological Practices

Abstract

Campus climate was assessed using a concurrent mixed-methodological approach. The study partially replicated Vaccaro’s (2010) suggestion that positive quantitative campus climate assessment results sit negative qualitative results. The study also used a framework of campus climate assessment including behavioral and psychological climate, adapted from Hurtado, Milem, Clayton-Pedersen and Allen (1999). This research used an online survey. Both behavioral climate and psychological climate domains were measured both by qualitative and quantitative measures. There were four main hypotheses that were tested in SPSS by running Pearson’s r correlations: $H_1$: The psychological climate regarding gender will reveal a negative correlation between qualitative and quantitative results. $H_2$: The psychological climate regarding race will reveal a negative correlation between qualitative and quantitative results. $H_3$: The behavioral climate regarding gender will reveal a negative correlation between qualitative and quantitative results. $H_4$: The behavioral climate regarding race will reveal a negative correlation between qualitative and quantitative results. The first hypothesis was untestable due to a survey error. The remainder three hypotheses were rejected, as the Pearson’s r correlations all tested strongly at the $p < .01$ significance level. This study disconfirms Vaccaro’s (2010) assertions that behind positive quantitative campus climate assessment results yield negative qualitative results.
# Table of Contents

Abstract ........................................................................................................................................... 2

List of Figures .................................................................................................................................. 5

Chapter I: Introduction ...................................................................................................................... 7

Chapter II: Literature Review .......................................................................................................... 10

  The Importance of Diversity and Campus Climate in Higher Education ......................... 10
  Benefits of Diversity in Higher Education ........................................................................... 10
  Caveats Concerning Diversity in Higher Education ............................................................. 12

Social Identity and Diversity ......................................................................................................... 13
  Inter-Group Bias ....................................................................................................................... 13
  Identity Saliency and Psychological Climate ........................................................................... 14

The Campus Climate Framework ................................................................................................. 15
  Dimensions of Campus Climate ............................................................................................... 16

Antecedents of Campus Climate for Minority Groups ............................................................... 17
  Compositional/Structural Diversity ......................................................................................... 19
  Psychological Climate ............................................................................................................. 20
  Behavioral Climate ............................................................................................................... 21

Review of Methodology in Campus Climate Research ............................................................ 22
  Campus Climate Assessments at UW-Stout ........................................................................ 22
  Caveats of Current Campus Climate Assessment ............................................................... 23

Intended Framework: Partially Replicated Method .................................................................... 24
  Limitations of Vaccaro (2010) ............................................................................................... 26

Purpose ........................................................................................................................................... 27
List of Figures

Figure 1: Theoretical Framework Influencing Institutional Context............................................. 18

Figure 2: Quantitative Psychological Racial Climate by Qualitative Psychological Racial Climate
.................................................................................................................................................... 34

Figure 3: Quantitative Behavioral Gender Climate by Qualitative Behavioral Gender Climate . 35

Figure 4: Quantitative Behavioral Racial Climate by Qualitative Behavioral Racial Climate..... 36
Acknowledgements

I would like to thank my thesis committee members Sarah Wood, Joan Menefee, and Mike Mensink for their support throughout this research. I would also like to acknowledge Annemarie Vaccaro for her work in the field of campus climate research. Her research has inspired me to conduct the following research.
Chapter I: Introduction

Campus climate assessments have become mainstream in post-secondary education in the United States. Concerns over campus climate emerged during the 1980’s as an influx of women and racial minorities began enrolling in higher education. This demographic shift of women entering traditionally masculine fields (Hall & Sandler, 1982), combined with preexisting systemic racism and oppression (Feagin, 2006) resulted in an alarming increase of hate crimes and bias incidents within the diverse student body (Hurtado, Griffin, Arellano, & Cuellar, 2008; Michigan Student Study, 2008; Hurtado, Carter, & Kardia, 1998; Worthington, 2008). Similar oppression is not exclusive to race but also other historical minorities. For example, homophobic attitudes, hostility, and harassment on college campuses strengthens the relationship between LGBT-identifying individuals, anxiety, and depression (Woodford et al., 2014). Such perceptions of a negative campus climate induce psychological stressors among minority students, resulting in negative outcomes such as dropping-out, lack of integration, self-doubt, and low self-efficacy in cognitive skills, to name a few (Hall & Sandler, 1982; Cabrera & Nora, 1999; Hurtado & Ponjuan, 2005). Challenges of a newly heterogeneous environment induced a need for assessing campus climate in order to identify and combat such negative outcomes (Hurtado, Carter, & Kardia 1998). University administrators across the nation have become aware of proactive measures of campus climate pioneers, normalizing campus climate assessments. Today, campus climate assessments still serve as proactive responses to such discrimination and historically systemic oppression against minorities (ASHE Higher Education Report, 2015; Hurtado, Milem, Clayton-Pedersen & Allen, 1999). The purpose of this study is to investigate campus climate measurement and methodology by adding to current literature regarding mixed-methodological practices.
In practice, campus climate research uses empirical evidence to gauge perceptions of various climate facets across a diverse student body. University administrators use these results to both mitigate a negative climate and capitalize on the benefits of a positive climate, such as improving learning environments on campus for all students (Hurtado, Griffin, Arellano, & Cuellar, 2008). After an assessment conducted at the University of Wisconsin-Madison (UWM), administrators formulated an eighteen-step campus racial climate initiative (Campus Climate Progress Report- Fall 2016). At the University of Minnesota-Duluth, a Campus Climate Leadership Team revealed undertones of sexism, heterosexism, and genderism from a campus climate survey (Rankin & Associates, 2016). In response, UMD is holding public forums to gain community perceptions on how to combat negative climate in the future. Like UWM and UMD, universities across the nation consider campus climate assessment as an integral step towards sustaining positive learning environments for their students.

Campus climate is commonly evaluated by quantitative and qualitative measurement, typically using survey research. Current literature on campus climate methodology is abundant, yet under a microscope, little attention has been devoted to a diversity of methodological practices such as mixed-methodology (Harper, Hurtado, & Patton, 2007). This literature gap warrants the need to a) contribute to available national campus climate assessment and methodology literature and b) use the obtained data from the survey to investigate potential disconnects between quantitative and qualitative perceptions of campus climate closely. It is important to note that this study prioritizes the investigation of methodology practices, and is separate from the current institutional campus climate practices conducted by the Planning, Assessment, Research and Quality (PARQ) office at UW-Stout. To be more specific, this study does not serve as a secondary campus climate survey conducted at UW-Stout, nor a replacement.
The results obtained will not be utilized to improve the campus climate itself at UW-Stout or provide as a basis for action research.

This study will be a partial replication inspired by Annemarie Vaccaro’s (2010) findings on a discrepancy between quantitative and qualitative perceptions of campus climate. In more detail, the following study aims to measure two campus climate sub-domains, psychological climate and behavioral climate. Psychological climate, or psychological perceptions and feelings (Hurtado, Griffin, Arellano, & Cuellar, 2008), are assessed as well as behavioral climate, referring to level of integration among social identity groups (Hurtado, Griffin, Arellano, & Cuellar, 2008). Breaking campus-climate down into these sub-categories reduces the risk of oversimplifying experiences of the students (Maramba & Museus, 2011).
Chapter II: Literature Review

The following chapter provides as an in-depth literature analysis regarding campus climate.

The Importance of Diversity and Campus Climate in Higher Education

Lack of support and the presence of hostile campus climates towards minority groups exist today, long after the 1980’s demographic shift. Recent 2013 data reported 781 total hate crimes, primarily directed at racial minorities and LGBT students (NCES, 2016). These crimes mostly came in the form of vandalism, purposeful intimidation, and physical assault (NCES, 2016). This data becomes more overwhelming when considering the number of bias incidents reported, along with the incidents that go unreported. Without deliberate concealment of unreported incidents, hostility and bias are often covert. For example, Milan Chatterjee, former president of University of California-Los Angeles’ (UCLA) Graduate Student Association, left his university because of alleged anti-Israeli sentiments on campus. Chatterjee described the campus climate at UCLA as hostile and unsafe, allowing bullying and harassment towards Israeli students (Jewish Telegraphic Agency, 2016). Chatterjee did not detail specific occurrences, a choice which highlights the implicit and underlying nature of this hostility. Whether this discrimination remains a systemic problem is still being debated. However, the importance of diversification in higher education is evident. Creating an environment that both encourages inclusivity and spreads awareness of the benefits of diversity is expected of higher education administrators (Karkouti, 2016).

Benefits of diversity in higher education. Diversity literature gained judicial attention in the United States Supreme Court. Cases Gratz et al vs Bollinger and Grutter et al. vs Bollinger stressed the importance the diversity benefits in higher education. Such benefits, empirically
supported by Dey (1997), are so explicit that the U.S. Supreme Court ruled that diversity should be of interest to all higher education institutions, as the benefits are fact, not theory (Chang, Milem, & Antonio, 2011). The initial benefits outlined in Dey’s work explained that exposing students to cultural and racial diversity, students are exposed to differences within and between groups, alongside democratic and learning outcomes (Dey, 1997; Gurin, Dey, Hurtado, & Gurin, 2002). These educational benefits have evolved into one of the four primary categories: structural or compositional referring to demographic diversity, curricular referring to a diverse way of learning in the classroom, and interactional referring to cross-racial or cross-cultural interactions (Denson & Chang, 2009). Since the Bollinger decision, more research has been devoted to understanding diversity outcomes in education.

Since Dey’s essays, additional research has been devoted to understanding diversity and its role in higher education. Diversity has a profound impact on learning outcomes and various kinds of cognitive skill development in higher education (Gurin, Dey, Hurtado, & Gurin, 2002). This relationship exists for not only historical minorities, but also white students at predominantly white institutions (PWI’s) (Antonio et al., 2004; Jaspal, 2015). Gurin, Dey, Hurtado, and Gurin (2002) hypothesize that diversity correlates with cognitive growth from a psychological standpoint. Interacting with people dissimilar to oneself allows individuals to experience contradiction, unfamiliarity, and discrepancy (Ruble, 1994). Antonio (2004) supports Ruble by demonstrating how the presence of minorities and their opinions increase cognitive skill development for majorities in a homogenous group. Specific cognitive skills such as critical thinking, cognitive development, problem solving, among others are strengthened by positive diversity experiences and interracial contact (Gurin, 1999; Pascarella, Palmer, Moye, & Pierson, 2001; Chang, Denson, Saenz, & Misa, 2006). Longitudinal studies also support the presence of
cognitive skill development because of diverse learning environments in higher education (Pascarella, Martin, Hanson, Troilan, Gillig, & Blaich, 2014).

Diversity has also proven a predictor of post-graduation success. Interacting with students of different social identities enhances appreciation for diverse experiences a desirable quality for ninety-four percent of potential employers reported in an individual study (Wells, Fox, Cordova-Cobo, 2016). A positive campus racial climate is also found to increase graduate students’ understanding of diversity benefits (Ward & Zarate, 2015). Astin (1990) discovered that women’s success in post-secondary education influences participation in graduate studies and career development. Women have self-reported that they attend post-secondary education primarily to enhance their intellectual and occupational achievements (Astin, 1990). Psychological well-being among minority students is also a promising reward of diversity. General sense of belonging is correlated with student retention and welcoming diverse climates (Freeman, Anderman, & Jensen, 2007).

**Caveats concerning diversity in higher education.** Existing diversity benefits do not automatically rid higher education of the need to improve institutional efforts towards combatting discrimination. For example, with the presence of in-group bias and systematic sexism, educational experiences for women are still less than ideal. Robnett (2016) found that 61% of women in science, technology, engineering, and math (STEM) fields (all predominantly male fields) recalled at least one act of gender bias in the past year. The demographic breakdown demonstrated that the frequency of bias incidents was largest for women in their undergraduate career (Robnett, 2016). Immediate and long-term impacts of diverse environments on the aspirational academic environment are transparent.
Social Identity and Diversity

From a social-psychological perspective, campuses with strong compositional diversity warrant campus climate assessments because of the complex nature of interpersonal relations. The psycho-social reorganization of diversifying campuses justify the psychological and behavioral climate assessments in this study. Starting from the bottom, understanding this complexity starts with examining social identity theory. Tajfel’s (1982) *social identity theory* refers to the psychological process surrounding an individual and their membership to social groups, including intergroup relations. The theory defines a group as three or more people who share common characteristics or virtues that distinguish the group from others, and shape their individual identity around the perceived group (Tajfel, 1982). The presence of multiple social identity groups (different races, ethnicities, cultures, etc.) creates diversity.

**Inter-group bias.** Albeit important to foster, diversity comes with challenges as social paradigms shift. This helps explain how inter-group tension evolves, which also applies to when individuals join traditionally homogenous environments, i.e. higher education institutions. For example, *in-group bias*, or the favoring of the group that an individual identifies with, leads to stereotyping out-groups as a mechanism to maintain self-esteem among the in-group (Rubin & Hewstone, 2004). This is often known as the “us” and “them” complex, also known as in-group versus out-group, that occurs when multiple social identity groups are present in a shared environment (Fiske, 2000). A false perception of superiority over the out-group emerges because of the existence of an in-group (Hornsey, 2003), which tends to evolve into discrimination and hostile behaviors towards out-groups (Hogg & Turner, 1985; Fiske, 2000; Burke, 2006; Cuhadar & Dayton, 2011). Inter-group conflict can be either underlying or covert, which may moderate diversity climate outcomes at universities (Burke, 2006) necessitating purposive investigation of
the interactions among different social identity groups. These biases intensify when controversial binaries such as race, socioeconomic status (Newheiser et al., 2014), and gender (Lindeman & Sundvik, 1995) exist. The presence of intergroup conflict among diverse populations calls for behavioral climate assessment to monitor the frequency of interactions between separate homogenous social identity groups. When inter-group conflict among races, genders, or other minority/majority dichotomies are defused, everyone benefits. Having an environment receptive to diversity and creates a welcoming campus climate, benefitting both individuals and the student body as a whole (Campbell-Whatley, Lee, Toms, & Wang, 2012).

**Identity saliency and psychological climate.** Alongside inter-group relations, the frequency with which individuals think about their social identities shapes how individuals perceive campus climate. A variety of factors influence psychological climate that differ based on individual characteristics, such as personality or upbringing. Another variable that demonstrates the complexities of psychological climate is identity saliency. Identity saliency, or frequency of a student’s consciousness regarding their social identity, (Cameron, 2004) vary across diverse student bodies. The more an individual’s social identity comes to mind, the more likely the individual’s social identity will influence their psychological state (Hurtado, Alvarado, & Guillermo-Wann, 2015). For example, a person of color may have a high identity salience regarding their race or ethnicity at a predominantly white institution. This frequent reminder of the individual’s social identity increases how often individuals think about race in relation to their environment (Cameron, 2004; Hurtado, Alvarado, & Guillermo-Wann, 2015). This ultimately influences the individual’s perceptions of campus climate. This realistic example reflects research comparing social identity saliency levels between race, age, gender, parent’s education, and income. Race scored the highest in identity saliency at this primarily white
On average, non-white individuals ranked race as the most important influence on identity (Hurtado, Alvarado, & Guillermo-Wann, 2015). While identity saliency is one variable that can influence the psychological climate of an individual, other variables consist of the student’s sense of belonging and integration on campus, feelings of validation from faculty in class, and general satisfaction with diversity initiatives on campus (Hurtado & Guillermo-Wann, 2013). The complexity of the psychological climate is evidently a sensitive domain; therefore it is a meaningful outcome to investigate.

**The Campus Climate Framework**

Campus climate assessments are broadly used at U.S. institutions, yet it is still hard to find consensus about how to define climate. Hart and Fellabaum (2008) argue that this lack of consensus has led to questionable scientific validity in this area of research (Worthington, 2008). Most campus climate assessments do not directly contribute to generalizable knowledge because they are conducted on an institutional-level, and the research does not make it to peer review (Hart & Fellabaum, 2008). When research isn’t publicly available, it may be harder to close gaps in literature. Nonetheless, this disconnect is pronounced when comparing definitions of campus climate among certain consultant groups and academic professionals. One common definition denotes campus climate as the “current attitudes, behaviors and standards of faculty, staff, administrators and students concerning the level of respect for individual needs, abilities and potential” (as cited by University of California-Berkely, 2016, p. 1). This is a common and encompassing definition, but it is not universal.

Many academic campus climate researchers derive their definition of campus climate through sociological and psychological theories. For example, modern campus climate pioneers define *campus racial climate* through the lens of the community’s behaviors and standards
This definition provides the current commonly used framework for campus climate assessment, based on 30 years of research of minority groups in higher education. The complex framework for assessing diversity climate includes perceptions from both the university’s internal and external communities, comprising input from administrators, faculty, and students (Hurtado, Griffin, Arellano, & Cuellar, 2008). Theoretically based on sociological research regarding systematic and historical oppression, campus racial climate research applies to other social identity groups that have experienced varying degrees of oppression.

**Dimensions of campus climate.** Due to its multi-faceted nature, campus climate is investigated both uni and multi-dimensionally. As an example of a unidimensional climate domain, the measurement of climate specific to a woman’s experience is defined as *chilly climate* (Hall & Sandler, 1982). Chilly climate refers to a classroom environment in which women are treated negatively in comparison to men, resulting in an unfavorable learning setting (Hall & Sandler, 1982). The unidimensional chilly climate is measured by the perceptions of women regarding the climate for women on campus. Once other social identity groups added to the mixture of campus climate, measurement gets more complex. For example, a researcher can assess campus climate perceptions of race, ethnicity, and sexual orientation, among other identities. These dimensions have their own sub-groups, and whether a person is Hispanic, Asian, Caucasian and so on, will alter perceptions of campus climate. The multi-dimensional approach to assessing campus climate suggests perceived negative campus climate is found at all intersections of different social identity groups. This includes but is not exclusive to all racial minorities, students of non-heterosexual sexual orientation, students that are transgender or non-binary, and students of disability status (Hurtado, Carter, & Kardia, 1998). In addition,
lesbian/gay/bisexual/transgender (LGBT), religious, low socioeconomic status, uninsured, politically conservative identity groups, and non-English speakers, have reported experiencing negative campus climates (Dhaliwal, Crane, Valley, & Lowenstein, 2013). Whether the negative climates of these social identity groups are the result of a systemic or historic oppression is unknown, but, the comfort of the students is always important to investigate.

**Antecedents of Campus Climate for Minority Groups**

An institution’s context is key to assessing diversity climate. The institution’s history, policies, culture, among other variables gives a snapshot into how diverse individuals may flourish or experience challenges on campus. The abundance of campus climate assessments conducted at higher education institutions are geared toward multiculturally inclusive criteria, such as much of Hurtado’s work. Grieger (1996) suggests that multicultural inclusivity criteria include a) faculty, staff, and students of diverse populations, b) having policies, statements, and overall systematic design that declare commitment to diversity issues visible to the public, c) behaviors that align the institutions claims of diversity commitment, and d) reinforcing culturally competent behavior and attitudes at the institutions. Figure 1 displays the theoretical
Figure 1. Theoretical framework influencing institutional context. (Hurtado, Milem, Clayton-Pedersen & Allen, 1999)

framework used in the overwhelming majority of racial diversity climate assessments, strongly resembling Grieger’s (1996) model. This study will also use this theoretical framework applied to various social identity groups. The institutional context consists of two main categories influencing the climate: policy contexts and socio-historical contexts (Hurtado, Milem, Clayton-Pedersen & Allen, 1999; Milem, Chang, & Antonio, 2005). Policy context consists of an institution’s historical legacy of diversity inclusion, eventually influencing psychological climate. A realistic example of this would be implementing a safe space policy for LGBT individuals, decreasing perceived hostility on campus. The socio-historical context category consists of compositional diversity, eventually influencing behavioral domains. As a theoretical example, urban colleges are more compositionally diverse, leading to cross-racial working environments that yield cognitive benefits among students (Lizzio & Wilson, 2006). These four elements lead to the gestalt of the institutional context and eventually, campus climate. Presumably, some contextual elements are more feasibly measured than others, leading to the variety and depth of diversity climate assessment.

Higher education institutions are not monolithic. Instead, the institutions are products of context. The context should be treated as a set of variables that influence compositional diversity as well as diversity outcomes and campus climate. Predominantly white universities have a history of intentionally excluding the enrollment of students of color, or limiting their access (Thelin, 1985). Dated research around the influx of minorities entering higher education is important to consider, because such negative standards, along with lack of commitment to racial integration, undermining affirmative action, and failing to establish diversity initiatives all
predict a negative historical context (Hurtado 1992). Legacies of racially exclusive practices may be why racism is still seen in higher education today. In a singular test for implicit biases, Glock and Karbach (2015) showed the existence of prejudice towards racial minorities among teachers. Such instances of implicit bias much like Glock and Karbach’s (2015) findings influence psychological climate feelings of coldness, lack of appreciation, or negligence derived from faculty. This example illuminates the strong influence that an institution’s context has on diversity climate, keeping in mind that faculty behaviors are only a small slice of institutional context. The composition of student demography, or the compositional diversity contextual element from Figure 1, also influences diversity outcomes. For example, large universities and universities located in urban areas are likely to achieve favorable diversity outcomes because they tend to have a more diverse student body (Hu & Kuh, 2003). Students at liberal arts universities, often regardless of the size, engage in cross-racial interaction and activities more frequently than other types of universities because of the liberal arts’ purposive emphasis on diversity exposure (Umbach & Kuh, 2006).

**Compositional/structural diversity.** Compositional diversity, often referred to as structural diversity, is a quantifiable contextual element. Due to its quantifiable nature, it is easily accessible to higher education administrators. This element refers to the mere presence of a diverse set of social identities of people enrolled at an institution (Hurtado, Griffin, Arellano, & Cuellar, 2008; Hurtado, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012). In other words, having a diverse student body creates a compositionally diverse institution. This can consist of the number of women, racial minorities, LGBT students, students of disability, or other social identity. In this regard, compositional diversity is satisfied if there are a wide variety of social identities. Satisfying compositional diversity is the first step to achieving a diverse institutional
context. Compositional diversity is foundational, but is just the beginning of fostering a diverse institutional environment. Compositional diversity is commonly misconceived as the golden predictor of positive diversity outcomes while on the contrary, research suggests that solely numerical representation of marginalized groups does not improve diversity climate (Cabrera & Nora, 1999). Compositional diversity consistently fails to increase cognitive gain, retention rates, or increase in GPA, based on freshman samples (Herzog, 2010). This suggests that diversity initiatives should extend beyond achieving compositional diversity in order to obtain positive learning outcomes among the student population. Solely satisfying compositional diversity has been frequently exploited as a diversity benchmark at academic institutions, but other institutions have moved towards a more complex approach to achieving a positive diversity climate.

**Psychological climate.** Campus climate assessment is also concerned with the psychological perceptions of students on diversity climate. Learning how students feel and perceive their campus environment on a psychological level is a step above simply meeting the minimum compositional requirements. This approach assesses the feelings of students on diversity regarding hostility, racial climate, and discrimination (Hurtado, Griffin, Arellano, & Cuellar, 2008). These feelings are measured through survey research typically assessing perceptions as opposed to observed behaviors. Psychological dimension assessments have made apparent institutional problems such as interpersonal racial issues, commitment to affirmative action plans, lack of academic support for racial minorities, segregation, and more (Hurtado, 1992). Through self-report, psychological climate probes the needs and desires of students on campus. For example, psychological climate analyses have yielded themes of institutional negligence. In a qualitative analysis, both white and black students reported frustration with failure to meet institutional diversity values, frustration with lack of racial dialogues on campus,
and frustration with social life on-campus (Solórzano, Ceja, & Yosso, 2000). Targeting these specific themes regarding psychological perceptions can be used to pinpoint, and later hopefully resolve, diversity issues on campus.

**Behavioral climate.** Behavioral dimension assessments measure frequency of interactions between separate homogenous social identity groups. Behavioral climate assessments ask how often women interact with men, for example. The benefits of having a compositionally diverse institution are contingent on whether a positive behavioral dimension is achieved (Hurtado, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012). Initially coined by Hurtado, Griffin, Arellano and Cuellar (2008), the behavioral dimension of diversity is assessed mainly between different racial groups. Alongside psychological climate assessments, behavioral climate assessments identify diversity issues on campus that compositional diversity approaches fail to achieve. Both positive and negative behavioral outcomes of diversity climate are identified in this process. Level of engagement, positive interaction/friendliness, discrimination, tenseness, among other behavioral climate outcomes are assessed across social identity groups (Griffin, Cunningham, & Mwangi, 2016).

The absence of conflict creates opportunity for positive relations. Behavior assessments intend to measure interracial friendships and cross-racial interactions. Interracial friendships, measured by a student's closest network of friends, have demonstrated positive outcomes such as decreasing preference of one's social identity (Levin, van Laar, & Sidanius, 2003), increasing a student's goals and aspirations, and increasing intellectual self-confidence (Antonio, 2004). Interestingly, mere frequent interracial *interactions* predict stronger benefits when compared to interracial *friendships* (Bowman & Park, 2015). These interactions, often in the classroom, such as collaborative learning environments consisting of diverse social identities yield cognitive
learning achievements among individuals (Lizzio & Wilson, 2006). Curşeu and Pluut, (2013) reported that team performance is boosted a socially diverse team makeup. Merely having positive interactions between races in the classroom and on-campus has a profound effect on student outcomes, bolstering the need for positive inter-group relations in higher education institutions. Diverse groups should not only be present, but they should also interact. Behavioral climate assessments directly measure the existence of these interactions.

**Review of Methodology in Campus Climate Research**

The following paragraphs discuss both historical and current trends regarding campus climate assessments.

**Campus climate assessments at UW-Stout.** The University of Wisconsin-Stout closely monitors campus climate on a regular basis. The most recent surveys were conducted in 2017 (yet to be made publicly available), 2014, and 2011. The latter two surveys captured an array of perceptions regarding general campus climate, safety, sexual harassment, campus diversity efforts, classroom climate, tuition satisfaction, access to college, among a myriad of other satisfaction facets. Casting such a wide net is an efficient way to evaluate factors of student satisfaction and comfort on campus. This common method, however, is not immune to limitations such as overlooking rich, in-depth, and specific information. Measuring the climate for marginalized identities is undeniably complicated as shown by the previously discussed frameworks, warranting methodological approaches that isolate key issues such as behavioral and psychological climate. This justifies the specific differences between the following survey and the previous measures used at UW-Stout, as the two may seem deceptively similar. The proposed study does not aim to override or replace the current practices used at the university, but instead offers a different methodological standpoint that will add to measurement literature
not exclusive to UW-Stout. The main priority is to investigate if measuring behavioral and psychological domains using concurrent mixed methodology survey research will identify more extreme discrepancies between quantitative and qualitative methods. It is true that students at UW-Stout will have access to the results of this survey; however, the researcher does not intend to stimulate change or action based on the results.

**Caveats of current campus climate assessment.** Campus climate assessment has been criticized for being so persistently practiced despite the field’s lack of attention to psychometric validity and quality (Worthington, 2008). Worthington (2008) recognizes that due to intricacies such as defining campus climate and the complexities of institutional frameworks, researchers struggle to find a comprehensive approach to campus climate assessments, explaining the lack of available information regarding psychometric properties of the assessments. Given these difficulties, researchers in the field use several measures to evaluate campus climate.

Conducting mixed-methodological research allows for a blend of psychological climate assessments. Examining psychological and behavioral climate is complicated enough because each climate is heavily influenced by institutional context. These domains are sensitive topics, and such sensitivity demands saturated, rich data. Assessments of this nature call for the use of qualitative research methods in order to capture said rich data as opposed to purely quantitative measures (Creswell, 2009). Quantitative methods are susceptible to missing information due to oversimplified aggregate data, making it difficult for researchers to ascertain unique experiences from the students (Maramba & Museus, 2011), which is not a favorable attribute when analyzing campus climate research. Using quantitative research methods to assign numerical value to the data is another quick and easy way to conduct survey research in a generalizable fashion (Creswell, 2009). Still, with only one method of gathering data, important information may be
overlooked (Cuellar & Johnson-Ahorlu, 2016). For example, only using quantitative or only using qualitative measures. The proposed study assesses psychological climate of various racial minority groups and their intersections using a holistic mixed-methodological design.

Though the saliency of mixed-methodological designs in diversity assessments is rising, the movement is still young. In the years 1992-2007, a meta-analysis regarding campus racial climate assessments depended primarily on either quantitative or qualitative research methods. Only two out of thirty-five studies used a mixed-methodological approach (Harper, Hurtado, & Patton, 2007). Out of the studies that did not use a mixed-methods approach, quantitative methods dominated the list. As climate research shifts from mere quantitative compositional analyses, psychological and behavioral assessments are higher in demand. Methodological approaches should reflect this shift, warranting mixed-methods or qualitative analyses. Much like Vaccaro (2010), other climate assessments have reaped benefits from mixed-methodological designs. A mixed-methods diversity climate assessment at a primarily Hispanic institution obtained contradictory results. In this study, Cuellar and Johnson-Ahorlu (2016) noted discrimination among Asian students with quantitative measurement, yet the qualitative results from focus groups did not match. Hispanic students in the same assessment noted a positive climate per quantitative results, while thematic analyses from focus groups yielded negative outcomes such as discrimination (Cuellar & Johnson-Ahorlu, 2016).

**Intended Framework: Partially Replicated Method**

Qualitative research conducted by Vaccaro (2010) addressed differences in perceptions regarding diversity climate at a predominantly white university. Specifically, Vaccaro assessed differences of opinions across binary genders (men and women), and how their qualitative answers differ from their quantitative answers. The analysis was conducted through a feminist
lens during its critique and thematic analysis (Vaccaro, 2010). The research exposed a stark contrast in attitudes between men and women regarding hostility and sexism on campus. Most men reported the absence of hostility towards women, and argued that diversity was talked about too much. Women, on the contrary, argued that sexism against women exists on their campus, and diversity issues are not discussed enough (Vaccaro, 2010). As best practices are changing in campus climate measurement, there is still a lack of documentation of how gender influences perceptions (Maramba, 2008), further justifying the inclusion of gender in the current study.

In Vaccaro’s work, though the institution is primarily white, the population who responded were mostly international students (Vaccaro, 2010). Incorporating international students into the data collection resulted in an over-representation of international student responses. The author used a concurrent mixed-methodological design to conduct the survey. Quantitative questions assessed overall diversity climate in this study. The quantitative section was developed locally by both the University’s climate committee and an assessment office. Open ended questions were left at the end of the survey for the qualitative component of this design. The mixed-methodological design provided a quantitative analysis for benchmarking, and provided the qualitative open ended questions for an in-depth analysis of perceptions and attitudes on this campus.

The qualitative analysis found striking differences between diversity climate attitudes among men and women. Women on average reported a negative diversity climate in regards to women and racial minorities (Vaccaro, 2010). Vaccaro found that women generally thought that there wasn’t enough discussion about diversity at their university. Women also reported the perception of gender inequality on campus. For example, women in the survey reported feeling dismissed by their counterparts in the workplace in terms of unequal pay and promotion
Women also reported hostility from men in the classroom, and being passively dismissed by faculty (Vaccaro, 2010). Women in this survey overtly stated that themes of sexism amongst peers and faculty exist at the university.

The men’s perceptions differed drastically from those of the women’s. Many men claimed that diversity issues were overrepresented at this university, and there were too many diversity initiatives and discussions. Some men stated that their college experience would be more satisfying if diversity issues were ignored (Vaccaro, 2010). Others reported more hostile opinions. Patterns of hostility towards women, races other than their own, hostility towards liberal bias, and lack of appreciation for diversity issues were displayed in the qualitative analyses (Vaccaro, 2010). Given these analyses, males seem to be passionate about mitigating the possibility of a positive climate for diversity regarding both gender and racial minorities.

**Limitations of Vaccaro (2010).** Vaccaro’s work has limitations that should be addressed. First, there is a feminist and liberal bias that the author possesses. The author openly addresses this concern regarding the bias, suggesting that the strong feminist lens may have introduced error into interpretations of qualitative thematic analyses. This bias could heavily influence the interpretation of results, and thereby influence the integrity of the discussion section of the publication. Vaccaro suggested that this limitation was methodologically accounted for by conducting the thematic analysis with a team of coders with diverse attitudes and beliefs. However, the methodology for operationally defining “diverse attitudes and beliefs” was not addressed explicitly, nor the selection for the coders.

Another limitation is the misrepresentation of demographics specific to the university. Though the institution had a predominantly white student population, the responses mostly came from international students (Vaccaro, 2010). If the majority of the respondents are non-white
international students, but the majority of the population intended to be studied are white students, results may not accurately match the demographics, therefore skewing results. This may be a result of self-report bias, and/or a result of improper sampling methods. To account for this potential limitation, international students will be excluded from taking the survey in order to increase the odds of accurate representation from student sample to population.

**Purpose**

The purpose of this research is to conduct both psychological and behavioral climate assessments regarding race and gender at the UW-Stout, partially replicating Vaccarro’s work. Vaccaro used a concurrent mixed-methodological design as a framework to measure the psychological climate. This framework is supported as a viable and feasible means of assessing campus climate. For this, Vaccaro’s framework will be used and replicated in this study on the psychological dimension of campus climate. This research will attempt to account for previously described limitations. The same questions addressing psychological campus climate will be used in Vaccaro’s research, with the adjustment of the theming process correcting for coder interpretation bias. Given the literature review and the overview of campus climate methodology, I propose the following hypotheses:

- $H_1$: The psychological climate regarding gender will reveal a negative correlation between qualitative and quantitative results.
- $H_2$: The psychological climate regarding race will reveal a negative correlation between qualitative and quantitative results.
- $H_3$: The behavioral climate regarding gender will reveal a negative correlation between qualitative and quantitative results.
• $H_4$: The behavioral climate regarding race will reveal a negative correlation between qualitative and quantitative results.
Chapter III: Methodology

Similar to Vaccaro (2010), the study contained a mixed-methodological quasi-experimental design. The nature of the method observed a concurrent model, first consisting of quantitative close-ended questions, followed by a series of qualitative open-ended questions that precisely mirrored the quantitative questions in regards to question content.

Participants

Both undergraduate and graduate students were invited to take an online Qualtrics survey. People of all social identities were welcome to take the survey. The survey will include questions tailored to psychological and behavioral climate dimensions regarding race and gender. Race and gender were picked for convenience and closer replication of Vaccaro’s methodology. As stated, one of Vaccaro’s limitations was that her sample yielded an overrepresentation of international students, potentially skewing results. In case this overrepresentation were to occur in this research and international students needed to be screened out of the data, this survey asked students if they were international students or non-international students. After analyzing the demographics section of this research, no overrepresentation was found, so international students were included in the overall analysis of results.

Recruitment

Both psychological and behavioral domains were measured using Qualtrics, an online survey-tool. An anonymous online survey link generated from Qualtrics was distributed onto SONA System (UW-Stout’s psychology participant pool) to obtain a convenience sample. In efforts to obtain a diverse sample, the principal investigator (PI) e-mailed several student organization presidents to distribute the survey to the president’s organization members. The Involvement Center at the UW-Stout defines the following student organizations under the
“Cultural & Identity” umbrella: Latinos Unidos, Saudi Students Organization, Chinese Student Association, Black Student Union, Gender & Sexuality Alliance, Native American Student Organization, Hmong Stout Student Organization, Veterans Club, and International Relations Club. The survey was open for a time period of eight days.

**Recruitment of thematic analysis coders.** The PI, who served as an independent coder and a coding manager, recruited two students to serve as independent coders. Any academic standing (year in school, undergraduate or graduate) will be accepted. The PI will use a straightforward screening process to select the two coders. Both the faculty advisor and the principal investigator shoulder-tapped students within the psychology department and asked for their participation. Both coders were shown a copy of the implied consent document, and signed a participation agreement.

**Implied consent/pre-survey precautions.** This research has been categorized as Institutional Review Board exempt by the Institutional Review Board at UW-Stout. Before the survey, each participant was reminded of the voluntary nature of the study. Along with stating that the research is anonymous and that the participant may exit at any time with no consequence, they were briefed on the purpose of the research. This section of the implied consent document emphasized the following points: a) this is academic research done independently by a student, and is not conducted on the behalf of the University of Wisconsin-Stout’s Institutional Research Office (PARQ), b) the study’s purpose is to better understand methodology, c) the results of this study will not be used to for action research.

**Survey.** The survey is composed of a mixed-methodological quasi-experimental research design. The nature of the method followed a concurrent model, which consisted of quantitative close-ended questions, followed by a series of qualitative open-ended questions that precisely
mirrored the quantitative questions in regards to question content. The survey was taken online on either a computer, laptop, cellular device, or tablet. All human subjects were guaranteed anonymity to ensure the participants felt comfortable sharing opinions, and also to decrease the likelihood of social desirability error. Prior to the survey was an implied consent document. The quantitative section of the survey contained questions developed to assess both psychological climate and behavioral climate domains. An example question for the psychological climate survey section is as follows: “Do you feel a sense of belongingness at your university?”. An example question for the behavioral climate survey section is as follows: “I feel that all genders are treated equally at my university. “ (Appendix A). The quantitative psychological climate dimension represented level of agreement with statements. These questions were held on a 5 point Likert-type scale. Behavioral dimension quantitative questions contained two of the same scale format as the psychological assessment, asking for levels of agreement on a 5-point Likert-type scale representing levels of frequency. Qualitative question prompts were offered to the same participant in the same Qualtrics survey immediately after each appropriate quantitative section (Appendix B). A demographic information section followed the question blocks as the last series of questions on the survey (Appendix C). The demographic section asked for race/ethnicity, gender identity, age, year in school, and if the participants were international students.
Chapter IV: Results

A total of 81 individuals participated in the study. One response was deemed invalid because there were zero completed responses. This one response was discarded, leaving the survey with 80 total valid responses. Because the survey was distributed both on a participant pool and through an e-mail, there is no way to accurately assess response rate. Cis-female identifying participants accounted for 57.50% (n = 46) of the sample, cis-males accounted for 33.75% (n = 27) of the population, and 8.75% identified as not listed (n = 7). This shows a slight overrepresentation of cis-females versus cis-males. There were zero participants that indicated that they identified as transgender or nonbinary. Regarding race, Caucasian individuals made up 88.75% of the sample (n = 71), followed by Hispanic at 3.75% (n = 3), Middle Eastern at 2.5% (n = 2), Native American at 2.5% (n = 2), and 6.25% not listed (n = 5). Among the not listed category were two participants that indicated that they identified as Asian. Regarding sexual orientation, 93.75% of participants identified off the LGB spectrum (n = 75), while 6.25% identified on the LGB spectrum (n = 5). The average age of the sample was 20.91 (SD = 4.47), range: 18-41. Breaking down into age groups, 78.75% (n = 63) of participants were 18-21 years old, followed by 7.5% (n = 6) in the 22-25 age range, and 11% (n = 9) in the 25 and above age range. The majority of the sample were freshman (52.50%, n = 42), followed by sophomores (23.75%, n = 19), then juniors (12.50%, n = 10), then seniors (10%, n = 8), and one graduate student (1.25%). A total of four participants were international students (5%), and the rest were non-international students (95%, n = 76).

The qualitative, open-ended results were exported from the online Qualtrics survey tool into Microsoft Excel to prepare for coding. All data were cleaned and prepared. There were 40 total missing responses from the qualitative section. The principal investigator distributed two
copies of the qualitative data to a team of two independent coders. The principal investigator and the two other independent coders coded each item to fit on a corresponding Likert-type scale, all from 1-5. The team of coders discussed and settled on key logic prior to their individual coding sessions. The logic is as follows: responses that clearly indicated “yes” and “often” were automatically coded into a four on the Likert-type scale. Responses that clearly indicated “no” and “rarely” were automatically coded into a two on the Likert-type scale. Once all three coders had completed coding each item, the principal investigator held a discrepancy meeting to settle disagreements between items. The initial coder agreement (pre-discrepancy meeting) was at a high of 78%. After one discrepancy meeting, the team achieved coder agreement of 100%.

The quantitative results were exported from the online Qualtrics survey tool into SPSS, a statistical analysis software. The qualitative recoding data were placed in as variables alongside the quantitative results. All items were recoded to reflect corresponding satisfaction and frequency scales from “strong dissatisfaction” to “strong satisfaction”, and from “not at all” to “very frequently”. Composites were made to create following variables: quantitative gender climate, qualitative gender climate, quantitative racial climate, qualitative racial climate, qualitative psychological racial climate, quantitative psychological racial climate, quantitative behavioral gender climate, qualitative behavioral gender climate, quantitative behavioral racial climate, and qualitative behavioral racial climate.

To test the proposed hypotheses, correlations between several of the domains were conducted. The first hypothesis proposed that the psychological climate regarding gender would reveal a negative correlation between qualitative and quantitative results. The principal investigator failed to assess the first hypothesis due to a faulty survey question. The open-ended survey question regarding the psychological gender climate was supposed to ask, “Are you
generally satisfied with the campus climate at your university regarding gender?”. The survey question was accidentally entered in as “Are you generally satisfied with the campus climate at your university?”. Due to this faulty question, these items were not considered in any analyses, and psychological gender climate was left impossible to assess.

Hypothesis two proposed that the psychological climate regarding race would reveal a negative correlation between qualitative and quantitative results. A Pearson correlation yielded a strong correlation between qualitative psychological racial climate and quantitative psychological racial climate, $r(73) = .683, p < .01$, rejecting the second hypothesis. Figure 2 below is a scatterplot to represent this correlation.

Figure 2. Quantitative psychological racial climate by qualitative psychological racial climate.

Hypothesis three proposed that the behavioral climate regarding gender would reveal a negative correlation between qualitative and quantitative results. A Pearson correlation yielded a
strong correlation between quantitative behavioral gender climate and qualitative behavioral gender climate, \( r(70) = .736, p < .01 \), rejecting the third hypothesis. Figure 3 below is a scatterplot to represent this correlation.

![Figure 3](image)

*Figure 3. Quantitative behavioral gender climate by qualitative behavioral gender climate.*

Hypothesis four proposed that the behavioral climate regarding race would reveal a negative correlation between qualitative and quantitative results. A Pearson correlation yielded a strong correlation between quantitative behavioral racial climate and qualitative behavioral racial climate, \( r(72) = .534, p < .01 \), rejecting the fourth hypothesis. Figure 4 below is a scatterplot to represent this correlation.
Figure 4. Quantitative behavioral racial climate by qualitative behavioral racial climate.
Chapter V: Discussion

To the principal investigator’s surprise, all three tested hypotheses were rejected in this study. Each qualitative and quantitative dichotomy (psychological racial climate, behavioral gender climate, and behavioral racial climate) displayed strong significant correlations. With the rejection of these hypotheses, this study fails to confirm Vaccaro’s (2010) assumption that behind quantitative results lay undiscovered perceptions that can be portrayed more appropriately through qualitative inquiry.

Implications

Though the hypotheses were rejected, this creative approach to campus climate assessment research has some important implications. The rejection of these hypotheses supports existing research that both psychological and behavioral domains can be appropriately assessed through both quantitative and qualitative methodologies (Hurtado, Milem, Clayton-Pedersen & Allen, 1999). This research also appropriately successfully applied Hurtado et al’s framework to assessing gender climate, a framework that was initially created to assess campus racial climate only. The findings of this study also challenge Vaccaro (2010), with results suggesting that quantitative inquiry may be sufficient by itself when assessing campus climate through survey research. Of course, this study is only one example of strongly correlating quantitative and qualitative results with statistical significance. One potential explanation for this finding is that the principal investigator did not conduct a thematic analysis, leaving out potentially critical themes from interpretation. This lack of qualitative interpretation may inadvertently silence the opinions of respondents who felt passionately about behavioral and psychological climate issues on campus. From this same angle, this research only goes so far to quantify opinions, and does
not ascribe importance to any specific climate domain. Further attention should be devoted to this creative methodological challenge.

**Limitations**

There are a few general limitations that survey research possesses. Due to the sensitive nature of this topic, participants may be subject to self-report bias. For example, a respondent might feel uncomfortable admitting that they attend a university that they perceive has an institutional sexism problem, or vice versa. The respondent might also fear that their answers may be used against them, even though the consent form had stated that their contribution is anonymous.

**Sample size.** Though the study yielded enough participants to gain statistical power to appropriately conduct correlations, the sample was still relatively small (n = 80). Data collection was only open for eight days, and should have been left open for a longer period of time. Survey participation may have been stymied because of the high amount of survey research conducted at this specific university, most likely contributing to survey fatigue. The researcher would have done well to use a more purposive sampling method for certain social identity groups. For example, none of the respondents identified as Black/African American. Other racial groups, such as Hispanic/Latino, Native American, and Middle Eastern were appropriately represented in the sample. Part of this distribution is a result of conducting research at a PWI, but with a longer data collection period, efforts to recruit a larger sample may yield more favorable results.

**Psychometric caveats.** Due to the nature of campus climate assessment, this study did not use a pre-validated measure. The measure used in this study was developed by the principal investigator, designed to tailor to the individual and local needs of the university. Because of the use of a localized measure, time restraints, and scope of feasibility for the research timeline,
reliability coefficients and validation processes were not conducted prior to the use of the measure. For future directions of research, this localized measure could be checked for internal consistency, and should be improved upon until it reaches at least a coefficient of $\alpha = .80$.

Another limitation of this measure is that the items themselves may have been faulty. For example, the open-ended questions could have been more straightforward. The principal investigator and the two independent coders all agreed that a concerning number of the open-ended responses did not correspond appropriately with the item, as if the participants did not fully understand the nature of the question. A more specific example of a faulty item is the open-ended survey question “Are you generally satisfied with the campus climate at your university?” located on Appendix A. This question was a typo that should have been written “Are you generally satisfied with the campus climate regarding gender at your university?” The typo, seemingly small, resulted in the principal investigator throwing away the entire question. This question directly related to the first hypothesis of the study, and without this question, hypothesis one could not be analyzed. For future directions, a more in-depth survey writing process or perhaps an entire item analysis may provide useful to thoroughly check for measure errors.

Though the principal investigator tried to be transparent by providing definitions for certain words, some of the terminology may have surpassed the recommended 10th grade reading level for survey instruments. For example, it became apparent that in the demographics section, a small section of respondents were unfamiliar with the terms “cisgender” and “transgender”. This became apparent during the qualitative coding analysis of gender identity, when the principal investigator and coders noticed that 8.75% of the respondents identified as “not listed”. Within the not listed category were individuals that wrote “male”, “regular male”, and “male Walmart gift card”. To prevent this kind of miscommunication, or perhaps even mockery, a more
transparent list of definitions should be used for future research. Another alternative option is to use a simplified, standard demographic section that does not commit to the nuance of gender identity.

**Historical variable.** In a preliminary screening of qualitative themes, the principal investigator and the coding team noticed that over three individuals referred to a recent local tragedy which may have influenced results, at least minimally. On October 31st, 2016, a student at the University of Wisconsin-Stout had been beaten and murdered a few blocks away from campus. This event resulted in an obvious impact on the student body, as approximately 1,000 individuals gathered for a vigil after the death (Fox 9 News, 2016). The event provoked controversy regarding the intent of the assault and eventual murder, raising questions on whether or not this act constituted as a hate crime, as the victim was a Saudi Arabian international student. Though the trial is still ongoing, and to this date the unfortunate event has ruled out a hate crime, some of the students at the university associate the student’s death with racism. This historical event occurred about five months prior to data collection of this survey, so it is important to be cognizant of the potential impact of the unfortunate historical event.

**Directions for Future Research**

In addition to addressing the obvious limitations, campus climate researchers should continue testing assumptions and frameworks. There is an abundance of qualitative data left to explore for the principal investigator. In order to maximize the use of this qualitative data, a formal thematic analysis should be conducted to gather themes and patterns within the responses. The addition of a formal thematic analysis may provide as a more precise replica of Vaccaro’s (2010) research which found underlying tones of sexism and hostility. Without this type of qualitative analysis, this current study is only a partial replication of Vaccaro’s work. This data is
available for further analyses and will be stored with the principal investigator until the
Institutional Review Board exemption status expires in March of 2022. Researchers may also be
interested in applying the methodologies used in this study to investigate the campus climate for
other existing social identity groups. The climate for transgender students, nonbinary students,
genderqueer students, and international students, among other minority groups may also benefit
from this triangulated approach to assessing campus climate.
References


Appendix A: Psychological Climate Items

Below are definitions for terms used throughout the survey.
**Discrimination:** the unjust or prejudicial treatment of different categories of people or things, especially on the grounds of race, age, or sex.
**Climate (in respect to campus):** the current attitudes, behaviors and standards of faculty, staff, administrators and students concerning the level of respect for individual needs, abilities and potential.

**Psychological Climate Dimension Questionnaire**

**Close-ended Quantitative Section**
*Before you is a 5 point Likert-type scale indicating the following: 1 = strongly disagree, 2 = slightly disagree, 3 = neither, 4 = slightly agree, and 5 = strongly agree. Please answer each question carefully, paying attention to the key/operative words in each statement.*

+I am generally satisfied with the campus racial climate at my university.
+I am generally satisfied with the campus climate for women at my university.
+My university values backgrounds of all kinds.

**Open Ended Qualitative Section**
*Before you is an open-ended section that asks questions similar to the previous scale. Please answer as honest as possible. There is not maximum character limit. Your answers are anonymous and will not be used against you.*

Are you generally satisfied with the campus racial climate at your university?
Do you feel a sense of belongingness at your university?
Are you generally satisfied with the campus climate at your university?
Does your university value backgrounds of all kinds?
Appendix B: Behavioral Climate Items

Behavioral Climate Dimension Questionnaire

**Close-ended Quantitative Section**

- Before you is a 5 point Likert-type scale indicating the following: 1 = strongly disagree, 2 = slightly disagree, 3 = neither, 4 = slightly agree, and 5 = strongly agree.

1. I feel that all genders are treated equally at my university.
2. I feel that my university is welcoming to students of color.

- Before you is a 5 point Likert-type scale indicating the following: 1 = not at all, 2 = rarely, 3 = moderately, 4 = frequently, and 5 = very frequently. Please indicate the frequency that the following statements occur, using this scale.

- Students experiencing gender-based harassment
- Students experiencing racial discrimination or bias
- Students experiencing racially motivated harassment
- Students experiencing gender-based discrimination or bias
- Students interacting with other students of diverse identities?
- Students talking about diversity

**Open Ended Qualitative Section**

*Before you is an open-ended section that asks questions similar to the previous scale. Please answer as honest as possible. There is not maximum character limit. Your answers are anonymous and will not be used against you.*

- Do you feel that all genders are treated equally at your university?
- Do you feel that your university is welcoming to students of color?
- How often do you feel that students experience gender-based harassment?
- How often do you feel that students experience racial discrimination or bias?
- How often do you feel that students experience racially motivated harassment?
- How often do you feel that students experience gender-based discrimination or bias?
- How often do students interact with other students of diverse identities?
- How often do students talk about diversity?
Appendix C: Demographic Items

Demographic Information

*When answering these questions, please select the most appropriate option. You may fill in an alternative option if applicable.*

What is your race/ethnicity? (select all that apply)
- Asian
- Black/African American
- Caucasian
- Hispanic or latino/a
- Middle eastern
- Native American
- Not listed (alternative option)

What is your gender identity?
- Cis-Male
- Cis-Female
- Non-binary or genderqueer
- Trans-Male
- Trans-Female
- Not listed (alternative option)

Are you on the LGB spectrum?
- Yes
- No

What is your age? (fill-in)

What is your academic classification?
- Freshman
- Sophomore
- Junior
- Senior (4+ years)
- Graduate

Thank you for participating in this survey. Please contact the principal investigator Angela Oaks at oaksa7545@my.uwstout.edu for any questions, comments, or concerns.