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Black students represent about 13% of the students who enroll in higher education and only 27% graduate within four years (NCES, 2021). Given national enrollment rates are declining, (NCES, 2022) higher education leaders face rising pressures to ensure the students who do enroll continue to matriculate toward graduation. Guided by a proposed integrative model of student experiences of embedded context in higher education, this study examined if there are distinct profiles of Black students' perceptions of UNCG's institutional context. Additionally, this study explored whether student characteristics were associated with emergent context profiles and how emergent context profiles were associated with students' sense of belonging to UNCG and persistence toward graduation. Using a person-centered approach, this investigation revealed four distinct context profiles that were characterized by the extent to which students' perceived UNCG's institutional context as culturally engaging and welcoming versus culturally unengaging and discriminatory. Students' college generation status, off-campus employment, living arrangements, and undergraduate year were all significantly associated with their likelihood of being classified in one context profile compared to another. Additionally, context profiles were significantly associated with students' sense of belonging but not their persistence toward graduation. Findings suggest Black students at UNCG are embedded in different types of interpersonal context within the institution, but the majority perceive a positive campus environment with respect to their cultural background. Findings also suggest that although UNCG successfully cultivated a culturally engaging and welcoming context for most Black students, there are specific groups within the Black student population in which additional

institutional efforts are needed. The results provide support for the importance of several

institutional factors that are linked to students' sense of belonging.

BLACK STUDENTS' PERCEPTIONS OF THE INSTITUTIONAL CONTEXT

AND ASSOCIATIONS WITH BELONGING AND PERSISTENCE AT A

SOUTHEASTERN MSI

by

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DEDICATION

This dissertation is dedicated to Black UNCG student alumni who paved a way, current students who are making their way, and future students, for whom I hope, that my work can make it easier for them, to find their way.

APPROVAL PAGE

This dissertation written by Domonique Alexis Edwards has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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CHAPTER I: INTRODUCTION

Black students represent about 13% of the students who enroll in higher education, and only 27% graduate within four years (NCES, 2021). Given national enrollment rates among Black students have been on a downward trend in the past decade (NCES, 2021), higher education leaders face rising pressures to ensure the Black students who do enroll continue to matriculate toward graduation. The University of North Carolina (UNC) System recently implemented a performance-based funding model (UNC System, 2022). The performance-based funding model funds campuses based on specific goals, such as percent increases in undergraduate student success. With a new funding model in mind, identifying how to promote four-year graduation rates is a primary concern among higher education leaders across the UNC System.

Relatedly, the persistence of Black students is a salient area of interest among UNC System leaders because they have lower rates of persistence (UNC System, 2022). The UNC System set a strategic goal to increase the four-year graduation rate of Black students by ten percentage points to 49.1% by 2027. Centering the current investigation on the institutional mechanism that impact Black students' persistence is a promising avenue to provide insight on how UNC System leaders can achieve their goal. To understand Black students' persistence toward graduation in higher education institutions it is also important to understand their sense of belonging. Defined by student's sense of connection to their community (Hurtado & Carter, 1997), sense of belonging has gained popularity among higher education leaders as a lever of overall student success (Gopalan & Brady, 2020). Examining associations between student perceptions of the campus environment with both sense of belonging and persistence can inform an insightful picture of their experiences.

Several factors, including proactive advising (Alvarad, Connerate, et al., 2018; Bisoux, 2018), culturally relevant materials (Fleming, Guo et al., 2004; Hunn, 2014), relationships with peers of similar cultural background (Strayhorn, 2017), student-faculty interactions (Dwyer, 2017; Wood & Williams, 2013) and campus climate (Johnson, Wasserman, Yildirim, & Yonai, 2014) have been linked to student belonging and persistence. A deeper understanding of how a combination of these factors simultaneously influence Black students' belonging and persistence can reveal a clearer direction on the most relevant ways that institutional leaders should intervene.

The University of North Carolina Greensboro (UNCG) is one school in the UNC System that has positioned itself to serve as an example for how public higher education institutions in North Carolina can successfully serve Black students. Examining Black students' perceptions of institutional factors at UNCG can help shed light on how such factors play a role in their experiences of belonging and persistence. In 2015, UNCG became federally recognized as a minority-serving institution (MSI) since over half of the student body identifies as people of color and are eligible for need-based Pell grants. The Institution of Education Sciences at the Department of Education's classification system categorized UNCG as a Black-serving non-historically Black colleges and universities (HBCU), since UNCG's Black students represents at least 25% of the student body. UNCG repeatedly graduates the highest number of Black students among non-HBCUs in the state (Education Trust, 2017). Given UNCG's relatively high Black student graduation rate, exploring Black students' perceptions of this specific institutional context can provide evidence for the specific mechanisms in which higher education leaders should invest resources and effort in support of Black student success. UNCG's institutional context also provides meaningful grounds to explore Black students' sense of belonging. The

cultural diversity present in the university is more similar to that of a HBCU than to most other HWIs. Thus, examining sense of belonging in this context can reveal how non-HBCUs might attempt to replicate the success HBCUs have with fostering students' sense of belonging.

Before diving into a discussion of the theoretical and empirical work that guided the current investigation, a discussion about the sociohistorical context in which UNCG is situated is provided. The sociohistorical context of UNCG is important because this broader context informs the institutional context in which students are embedded.

UNCG (formerly the Woman's College) was established in 1891 as an outcome of advocacy for the education of White women. Although UNCG was founded with a mission to serve a subset of those who had been denied access to higher education, the first Black women, JoAnne Smart and Bettye Ann Davis Tillman, were not permitted to attend UNCG until over sixty years after the institution's establishment. Even after the 1954 Brown v Board of Education ruling in 1954 established legal access, the reality was that access to most historically White institutions (HWI), including UNCG, continued to be an ongoing issue for Black students, because institutions resisted desegregation. JoAnne Smart stated, "We were admitted, not fully accepted" (Stasio & Terry, 2018). Smart's quote draws attention to UNCG's exclusionary past. Smart also pointed out the important role student-led organizations played in modeling acceptance of racial diversity on campus. Student advocacy for social change played an impactful role on and off campuses across the country. HWIs responded to growing pressures from students and legislation concerning diversity in several ways. One approach included strategic efforts to diversify the student body. At UNCG, these strategies also included a transition from gendered to co-educational institutions in 1963. The transition to coeducation was a unique challenge for the university considering the intersectional nature of students

experience on campus. UNCG alumni Charles Cole shared that he felt his identity as a male was often more difficult to navigate compared to his identity as an African American (UNCG Centennial Oral History Project, 1991). Cole's remarks highlight the ongoing challenges the campus juggled with respect to a diversifying student body.

The 1970s Black Power movement carried the momentum of change in the 1950s and 1960s promoting cultural pride and the creation of cultural institutions on HWI campuses to serve the interest of African Americans. Along with other cultural movements (e.g., women's movement) the ideology of social advocates during this time continued to influence student protest and programming efforts on campuses across the country. On UNCG's campus, Black students established student organizations such as the Neo-Black Society to promote equality on campus. Amongst their many efforts to support the needs of Black students, the Neo-Black Society initiated the celebration of JoAnne Smart and Bettye Ann Davis Tillman's legacies on campus. Several other efforts to promote and celebrate the cultural communities of Black students on campus were implemented by UNCG's Office of Intercultural Engagement (formerly Office of Multicultural Affairs), NAACP, the African Student Union, and other student organizations.

Following social advocacy at the local and national levels, higher education enrollment of Black student increased, and graduation rates nearly doubled from the 1970s to 1980s (Cross & Slater, 1999). This growth led to a new institution type referred to as minority serving institutions (MSIs). There are several types of MSIs including Hispanic-serving institutions (HSIs), Tribal Colleges and Universities (TCUs), Asian American Native American Pacific Islander Serving Institutions (AANAPISI), and HBCUs. The fastest growing MSIs are institutions that were HWIs, but overtime expanded in the percentage of minority students they

served (John & Stage, 2014). Generally, this type of evolution was the result of a combination of the geography of the institution and parallel gains in institutional access. For example, UNCG is located in Guilford County, which has one of the largest Black populations in North Carolina and is in close proximity to two other counties that have the largest Black populations in the state. Guildford county has a rich history and was a central place of advocacy during the abolitionist and civil rights movement. Collectively, UNCG's unique place and history allowed the institution to grow to serve the largest non-HBCU Black student population in the state.

Along the backdrop of gains in Black student higher education access, racial hostility, such as police brutality, gained national attention. Unsurprisingly, the national climate of racial hostility had implications for higher education environments (Williams et al., 2021). UNCG engaged with such issues following a series of student protest and campus-wide forums concerning the ways in which racial hostility manifested on campus (UNCG, 2015). Along with a wave of other universities reckoning with their racially discriminatory past, in 2016, UNCG removed the name of North Carolina Governor Charles B. Aycock from a prominent campus building. The newly named building, *UNCG Auditorium*, host an exhibit of Governor Aycock's legacy, which includes a contrast of both advocacy for public education and white supremist beliefs (UNCG, 2018). This effort was promoted to improve campus climate and demonstrate the campus valued the culturally diverse student body. Although there have been efforts to engage issues of diversity throughout UNCG's history, the consequences of a history of state sanctioned racism linger throughout the country and within the institution.

The historical legacies of higher education institutions produce different environments for students to navigate (Campbell et al., 2019). Considering the evolution of UNCG's mission, a diversification of the student body, attempts to reckon with the past of racial exclusion, and its

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unique geographical location, there are likely differences in how the institution engages and welcomes Black students on campus based on students' cultural background and meaning making processes. The current study aims to examine if there are different ways Black students perceive UNCG as culturally engaging and welcoming, if students' identities inform the extent to which they find UNCG is culturally engaging and welcoming, and how differences in perceptions are associated with students' sense of belonging and persistence.

CHAPTER II: THEORETICAL PERSPECTIVE

An interdisciplinary and integrative theoretical model provides a helpful lens to understand Black students experiences within a higher education context. This section highlights perspectives from the higher education and human development literatures to describe the foundation upon which a proposed integrative model of student experiences within embedded context in higher education emerges. Additionally, an overview of the model is provided including an explanation of the core constructs within the model and an illustration of how they inform student experiences.

A Higher Education Theoretical Perspective of Students

Museus (2014) proposed the culturally engaging campus environment (CECE) model, as tool for understanding outcomes among students of all cultural backgrounds. This higher education framework acknowledged the importance of accounting for the diverse experiences students have in campus environments. Centering the diverse ways that students view campus environments is critical to explore the experiences of Black students, because they often attend institutions that were not initially designed to engage students with their cultural backgrounds. Given the historical legacies of most HWIs, Black students have received mixed messages about the value of their presence on campus (Chavous, et al., 2004; Clark & Mitchell, 2018). Thus, it is important to leverage a framework that highlights the role institutional factors play on the extent to which all students feel their cultural communities are engaged and welcomed on campus. Unlike more widely cited frameworks of student outcomes in higher education, such as Tinto's model of student departure (1975, 1993), the CECE model's approach to understanding student outcomes places more attention on the role of institutional factors rather than emphasizing the role individual level factors play in shaping student outcomes. Tinto's models emphasized

individual factors and cultural assimilation, and were developed to explain student retention without consideration of the unique experiences of racially minoritized students.

Museus's (2014) CECE framed questions about student success for all students and focused on the significance of institutional factors. By doing so, the CECE model addressed the shortcomings of mainstream models like Tinto's. The CECE model suggested the more culturally engaging the campus environment, the more likely students would succeed. The CECE model recognized the influence of "external influences" on student outcomes. Such influences included students' financial situation, student employment, and student family influences. The CECE model viewed such factors as potential positive influences on student outcomes. Museus (2014) suggested financial support can promote persistence. Furthermore, Museus acknowledged family influences, such as encouragement and support, can also promote positive student outcomes.

The CECE model also suggested "precollege inputs" play a role in student outcomes. Precollege inputs represent student characteristics such as their demographic background and academic orientation (i.e., academic preparedness and academic self-efficacy). The model referred to students' academic orientation as students' initial academic disposition, since they are seen as characteristics that students possess when they arrive on campus. The model suggested students whose initial academic disposition is characterized by higher preparedness are in a more advantageous position to achieve success. Precollege inputs are mediated through environmental factors and student's sense of belonging.

Sense of belonging within the CECE model is informed by Hurtado and Carter's (1997) work on student experiences of belonging and campus racial climate. Hurtado and Carter (1997) described belonging as students' psychological sense of connection to their community. The

emphasis on community in their conceptualization of belonging reflected the importance placed on membership to a community on campus rather than integration to a single dominant culture.

The CECE model suggested that sense of belonging is cultivated by the presence of nine key indicators, which fall into two categories: 1) cultural relevance and 2) cultural responsiveness. Cultural relevance represents student perceptions of the extent to which there are people and opportunities within the campus environment with which they can culturally relate. The indicators of cultural relevance include cultural familiarity, culturally relevant knowledge, cultural community service, cross-cultural engagement, and cultural validation. Cultural familiarity refers to students' access to people on campus who share their cultural background. Culturally relevant knowledge refers to students' opportunity to engage in learning about their culture and community. Cultural community service refers to students' opportunity to engage in advocacy work specifically for their community. Cross-cultural engagement represents the availability of opportunities to engage with individuals from diverse cultural backgrounds (Museus, 2014).

Cultural responsiveness represents the extent to which the institution embeds mechanisms that structurally consider and respond to students' cultural identities (Museus, 2014). The indicators of cultural responsiveness include collectivist orientations, humanized environments, proactive philosophies, and holistic support. Collectivist cultural orientations represent spaces that prioritize teamwork and collaboration as opposed to individualistic approaches. Culturally validating environments refer to campus agents who acknowledge and respect the cultural values of students. Humanized educational environments represent the presence of institutional agents who care about and demonstrate their care through relationships with students. Proactive philosophy is the extent to which institutions put forth extra effort to ensure students have the

information and support they need to be successful. Lastly, holistic support represents the institutional availability of personnel that are skilled to be responsive to students' needs.

Collectively, the nine CECE indicators reflect the extent to which the campus environment is culturally engaging. The CECE model suggests the more engaging the campus environment is, the more likely students will have a sense of belonging and in turn persist toward graduation. The CECE model assumes "the greater the extent to which students encounter campus environments that are characterized by the CECE indicators, the less likely they are to encounter…negative pressures" (Museus, 2014, p. 217). Considering the CECE model's assumption regarding the negative experiences students may have with respect to their campus environment, the model does not include an explanation for what it means if they experience mechanisms in the environment that simultaneously value and insult their cultural background. This limitation of the CECE model draws out the strength of utilizing an interdisciplinary perspective to better understand the complexity of students' experiences. Thus, integrating theories from human development, which bring attention to the different ways Black students might simultaneously experience both positive and negative encounters, is a logical direction.

A Human Development Theoretical Perspective of Student Success

Spencer (1995) offered the phenomenological variant of ecological systems theory (PVEST), which is a culturally relevant tool to explain the complexities of development across the lifespan. The framework acknowledges the racial context of developmental processes and in turn explains the role both challenging and supportive experiences can have on developmental outcomes. PVEST is useful in exploring the implications of institutional context on student belonging and persistence because it helps form a developmental perspective on how the nine culturally engaging campus environment indicators outlined in Museus's CECE model mediate

the relationship between institutional context and student outcomes. To explain the developmental nature of the relationship between institutional context and student outcomes, it is relevant to discuss the Bronfenbrenner and Morris (2006) Person-Process-Context-Time (PPCT) model, which is incorporated as part of the ecological perspective PVEST endorses.

The Process component of the PPCT model represents proximal processes, which are described as increasingly more complex interactions over time between a person and elements of their environment (Bronfenbrenner, 1999). For students this could be increasingly complex interactions (e.g., conversations) with institutional agents (e.g., students or faculty) that over time build opportunities for students to gain a deeper awareness of characteristics (e.g., background, interest, values, goals) they share with others on campus. In turn, those interactions can foster their sense of belonging in several ways, including increasing their exposure to positive environmental feedback about their cultural community. Similarly, increasingly complex interactions with institutional agents that over time enhance students' knowledge of how to access relevant resources may boost their campus navigational skills. In turn, they are better positioned to persist toward graduation.

The Person component represents individual characteristics including one's developmental competences at a given point, as well as social position factors (e.g., race and gender). Person characteristics can influence the nature of proximal processes including eliciting them and responding to them. Students' developmental competences (i.e., social cognition skills) shape proximal processes enabling them to interact with institutional agents in ways they find meaningful. Additionally, the opportunity to engage in proximal processes vary among a gender diverse student body based on how institutional agents view their ability to engage them. Institutional agents at UNCG, are likely more familiar and have more resources in place (e.g.,

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cisgender women-centered student organizations) to engage cisgender women given the institution's sociohistorical context.

The Context component represents the environment in which proximal processes occur. PVEST suggests a racialized contexts elevates the salience of student's racial identities and thus the need for interactions to foster their racial identity development. From this perspective, the nine CECE indicators are important factors that can create interpersonal context that fosters students' identity development and in turn associated outcomes (e.g., belonging). The PPCT model also highlights the presence of embedded contexts, including the microsystem, mesosystem, exosystem, and macrosystem. The microsystem is the immediate context in which proximal processes occur. In the current investigation, such processes include interpersonal interactions with institutional agents. The mesosystem involves the connections between microsystems such as home and campus settings. The exosystem includes the connections between systems and those that do not directly include the individual, such as the local government. The macrosystem refers to social structures that holds each of the other systems, such as cultural, legal, and economic systems. Lastly, the Time component represents several time factors including the continuity of developmental process, and environmental time such as past, present, and future.

The additional strength PVEST offers the current line of inquiry is that it raises the importance of centering a phenomenological perspective to explain student experiences. King and Baxter Magolda (1999) explained students transition from less complex to more complex meaning making processes as they gain more experiences and social and cognitive maturity across their lifespan. In turn, students grow in their capacity to use a combination of personal and relational models of knowing, which is informed by their developing sense of self. Thus,

students' meaning making provides an insightful avenue to understand their reality in the way they experience it. Students' meaning making is heavily influenced by the social feedback in their environment (Spencer, 2006). The higher education environment consists of several institutional agents (e.g., students, faculty, and staff), facilities (e.g., classrooms, offices, libraries, health centers, resource centers, dormitories, food halls), and regulations (e.g., laws, policies, code of conduct, curriculum, syllabi) that can all provide different types of feedback to students. Considering the variation in feedback that students are exposed to on campus, they develop unique meaning making processes and perspectives on the extent to which a given factor is supportive or challenging. Taken together, accounting for students' phenomenological perspective helps make sense of how they can be embedded within different interpersonal contexts, characterized by a combination of both positive and negative dynamics.

Spencer et al. (1997) explained that the core components of PVEST included net vulnerability level, net stress engagement, reactive coping methods, emergent identities, and stage-specific coping outcomes. Net vulnerability level refers to individuals' combination of potential risk and protective factors. The balance and perceived existence of potential risk and protective factors creates an individual's net vulnerability level. Potential risk and protective factors can change across developmental periods and context. What may be perceived as a protective factor during one period may not be perceived as such in another period.

Net stress engagement is the level of stress students encounter. This component represents the balance between challenges and supports (Spencer, 2006). The difference between net vulnerability and net stress engagement is that the latter requires a response from the individual because it is directly experienced (Spencer, 2006). Net stress creates a context for potential ways students may respond. Reactive coping processes are the response to net stress.

Swanson et al. (2003) explained that coping responses that result in desirable feelings of one's esteem are replicated and in turn become pattered responses or identities. These are referred to as emergent identities. Emergent identities represent how students view themselves within a particular context.

Merging the contributions of PVEST and the CECE model together is a promising path toward a more robust framework to explain Black students' experiences in higher education.

Toward an Integrative Model of Student Experiences of Embedded Context in Higher Education

The goal of the integrative model of student experiences of embedded context in higher education is to combine theory and research from education and human development to provide a framework that explains student success with consideration of the role context plays in shaping those outcomes. Identity development is one of the most salient developmental processes for many students in socially stratified higher education institutions; thus, the proposed model highlights the connection between contextual factors, identity development processes, identity-related outcomes, and educational institutional outcomes. Consistent with ecological systems theories, the proposed model acknowledges several layers of context that individuals experience directly or indirectly. Specifically, the proposed model includes three layers of institutional context: interpersonal, organizational, and sociopolitical.

The outermost layer of context is the sociopolitical context. The sociopolitical context includes national history, events, laws, and policies in which educational institutions are situated. Spencer (2006) highlighted how the sociopolitical context surrounding the Brown v. Board of Education shaped policies that changed the educational environment for many students. For many students of color, the policy provided new opportunities and resources to pursue higher

education. National events are also a component of the sociopolitical context. As discussed earlier, national coverage of police brutality influences the national rational climate which in turn impacts the racial climate on college campuses. Collectively, the sociopolitical context influences the organizational context by defining many of the parameters in which the institution can operate.

The organizational context represents the organization's values, mission, policies, historical climate, and structural climate. The historical climate, which is similar to Hurtado et al.'s (2012) model for diverse learning environments, refers to the extent to which an organization has engaged in inclusive or exclusive practices in the past. An organization's unique history with diversity influences its current climate by way of maintaining historical patterns of inclusion or exclusion (Hurtado et al., 1998). HWIs have a long history of excluding racially minoritized populations; thus, it is important that they evaluate how existing campus policies and practices, which were designed for serving a homogenous student body, continue to privilege some groups over others, and then take action to make changes to policies and practices. One example, Hurtado et al. (1998) pointed out concerned fraternity and sorority groups. At HWIs, these organizations were able to establish houses and other resources in which White students continue to benefit from. In contrast, newer Black fraternities and sororities may not have the means to have a house or centrally located place to organize their activities.

The structural component of campus climate, also similar with components of Hurtado et al.'s (2012) model for diverse learning environments, refers to the structural characteristics of the campus, particularly the demographic composition of the campus. The campus racial distribution influences social dynamics on campus such that HWIs, in which White students remain the majority, run the risk of manifesting tokenism, fewer cross-cultural experiences, and

communicating implicitly that diversity is not valued (Hurtado et al., 1998). Several

investigations have found more racially diverse campuses increase the frequency of cross-

cultural interactions between students, which in turn promotes positive educational outcomes

(Hurtado et al., 2003). In addition to racial composition, the integrative model of student

experiences within embedded context in higher education recognizes other structural

characteristics, such as organizational size, selectivity, public/private status, and

location/geography (i.e., place) as relevant components of the structural dimension. The

organizational context informs the interpersonal context by defining expectations for the nature

of interpersonal interactions. Organizations that value the cultural backgrounds of all students

will impose expectations for institutional agents to represent and interact in a way that reflects

such values.

The next layer of context is the interpersonal context. The interpersonal context includes

psychological climate for diverse cultural communities, which refers to students' perceptions of

how institutional agents' treat members of their own cultural communities and members of other

cultural communities. This layer of context is similar to Hurtado et al.'s (2012) psychological

dimension of climate within their model for diverse learning environments, which refers to

students' perceptions of group relations and racial conflict (Hurtado et al., 1998). Perceptions of

racial discrimination is a key indicator of psychological climate (Hurtado et al., 1998),

particularly when assessing the perceptions of campus climate among racially minoritized

student populations. At HWIs it is not unusual for Black students to experience stereotyping,

tokenism, microaggressions, and other forms of racism within the campus environment (Han,

Dean, & Okoroji, 2018). Student perceptions of discrimination and prejudice negatively

influence their sense of belonging (Hurtado & Carter, 1997) and persistence (Nora & Cabrera,

1996). The proposed model highlights the importance of acknowledging such potential mistreatment within and across cultural communities on campus as part of students' interpersonal context.

The interpersonal context also includes the extent to which students perceive their interactions with institutional agents as culturally relevant and responsive. This element of the interpersonal context is similar to Hurtado et al.'s (2012) behavioral dimension of climate within their model for diverse learning environments, which refers to students' social interactions on campus. As articulated earlier, the cultural relevance indicators are cultural familiarity, cultural relevant knowledge, cultural community service, cross-cultural engagement, and cultural validation. The cultural responsiveness indicators are collectivist orientations, humanized environments, proactive philosophies, and holistic support. Each of these indicators are theorized to be positively associated with students' sense of belonging and in turn their persistence (Museus, 2014).

Collectively, students' perceptions of the interpersonal context may include both positive and negative characteristics. Each factor can contribute to students' net stress as a supportive or challenging factor. For example, if students interact with institutional agents who validate their identities, then they are likely to experience the interaction as a support. On the other hand, if students interact with institutional agents who communicate low expectations for them because of their cultural background, then they are likely to experience the interaction as a challenge. As the interpersonal context is the context in which students receive the most direct feedback, it is the layer of context that has the most direct influence on identity development.

Identity development processes consist of concepts derived from PVEST including net vulnerability, net stress, and reactive coping. Identity development processes represent the

factors that influence how students' identity and related understandings of themselves form. It includes an accumulation of lifetime experiences that inform their cognitive and psychosocial development, the nature of their vulnerability within a context, the stressors and protective factors they face, and how they respond to their experiences. Students' net vulnerability can include the extent to which their financial situation, family college generational status, housing status, employment status, undergraduate year, and other demographic characteristics (e.g., gender) may place them at risk or protection for challenges associated with higher education. In other words, all of these factors have the potential to mitigate or exacerbate students' overall vulnerability in higher education.

While net vulnerability is about the potential risks or protections students have, net stress represents the actual challenges and supportive factors students confront. Prior research has found that experiences of racial discrimination on college campuses are a common challenge among Black college students (Banks, 2010; Swim et al., 2003). Although discrimination may be a significant challenge that students confront, students also can experience institutional agents that are supportive. Student-faculty relationships (Beasley, 2021), specific programming, targeted academic advising, mentorship, and resources on campus (Allen et al., 1991) can all function as supportive factors that mitigate stressors of discrimination. The balance of all challenging and supportive factors students experience reflects their net stress level.

In response to their net stress, students react to cope with their experiences, which is referred to as reactive coping. Qualitative and quantitative investigations have found that Black students engage in a wide range of reactive coping strategies, including but not limited to remaining silent, speaking out, resistance through open defiance, confronting people, code-switching, support seeking, and prayer (Danoff-Burg et al., 2004). Through interactions with

institutional agents, students may learn strategies for coping that are adaptive within the higher education context. Without such interactions, students may resort to coping strategies that might have been adaptive in other contexts (e.g., high school environment), but may not benefit them in their college environment.

The next component of the model is identity-related outcomes. This component represents the patterns of coping students engaged in to affirm their esteem. In other words, how students see themselves and make sense of their coping experiences shape their emergent identities. In an academic context, emergent academic identities are a salient identity that takes shape. Academic identification has been described as the connection students make between self and the academic domain (Steele, 1992). The concept is rooted in motivation frameworks, which explain that individuals aim to promote their self-concept. To do so, students link their understanding of themselves with life domains that enhance their self-concept. For example, some students evaluate themselves with respect to their school performance to the extent their school performance affirms their identity. Other students may evaluate themselves based on other life domains (e.g., social, family, cultural). Academic dis-identification represents individuals who disassociate self-evaluations from the academic domain (Steele, 1992). Steele argued academic dis-identification can be the function of repeated mistreatment in the academic context (e.g., racial stereotypes pertaining to academics) that result in students dis-identifying with the domain to protect their self-esteem. Thus, the feedback students receive from institutional agents about themselves, and their cultural community, can inform their net stress, reactive coping, and in turn their identity within the institution. In instances where Black students are consistently exposed to threats to their self-esteem from institutional agents, they may dis-identify with the college domain and feel like they do not belong.
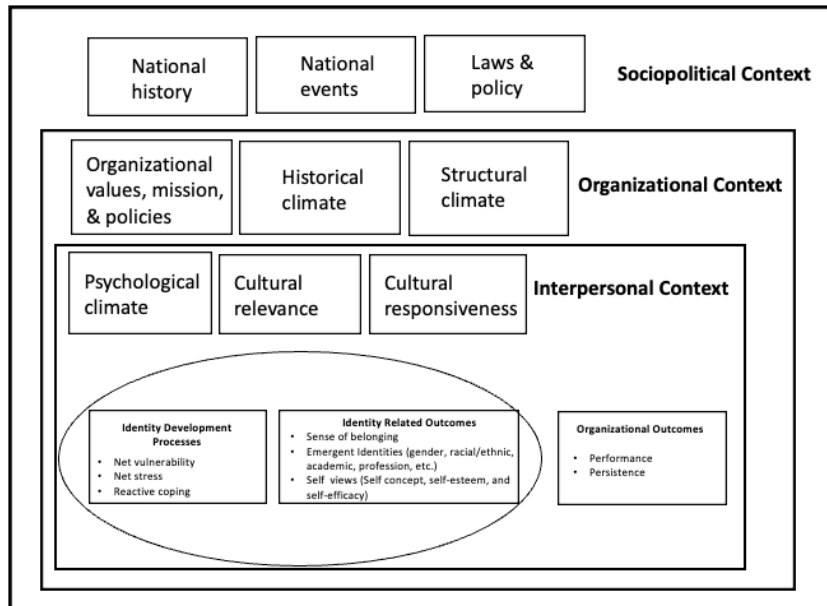
Sense of belonging is another identity related process recognized in the integrative model of student experiences within embedded context in higher education. As discussed earlier, Hurtado & Carter (1997) described sense of belonging as students' psychological sense of connection to their community. Students' sense of belonging is a reflection of how they view the campus environment and the extent to which they believe their cultural identities are valued within the environment. If the net stress they experience with respect to their campus environment is positive, they will be more likely to establish a sense of belonging on campus.

The last component of the integrative model of student experiences within embedded context in higher education is the organizational outcomes which consist of student commitment, performance, and persistence. This component of the model represents the student outcomes that have implications for the organization's ability to function and continue to exist. Student commitment, performance, and persistence are directly influenced by factors within the interpersonal context (i.e., psychological climate, cultural relevance, cultural responsiveness). The interpersonal context also indirectly influences commitment, performance, and persistence through identity related outcomes. When students identify with the campus environment they show higher commitment (Strauss & Valkwein, 2004). When students experience a culturally engaging and welcoming campus environment (i.e., positive interpersonal context), they are more likely to perform well academically and persist toward graduation (Muesus, 2014). Furthermore, when students feel a sense of belonging as the result of experiencing a culturally engaging and welcoming campus environment, they are more likely to perform well academically and persist toward graduation (Muesus, 2014).

This proposed model (See figure 1) informs the aim of the current study, which is to examine the interpersonal context component of the model. More specifically the study aims to

understand how Black students' perceive the interpersonal context at a southeastern MSI, how demographic characteristics that frame their net vulnerability relate to their perceptions, and how such perceptions influence their sense of belonging and persistence toward graduation.

Figure 1. Illustration of the Integrative Model for Student Experiences of Embedded Context in Higher Education

National history

National events

Laws & policy

Sociopolitical Context

Organizational values, mission, & policies

Historical climate

Structural climate

Organizational Context

Psychological climate

Cultural relevance

Cultural responsiveness

Interpersonal Context

Identity Development Processes
- Net vulnerability
- Net stress
- Reactive coping

Identity Related Outcomes
- Sense of belonging
- Emergent Identities (gender, racial/ethnic, academic, profession, etc.)
- Self views (Self concept, self-esteem, and self-efficacy)

Organizational Outcomes
- Performance
- Persistence

CHAPTER III: LITERATURE REVIEW

Student experiences in higher education are inextricably linked to the institutional contexts in which they occur. In the U.S., Black students experience of campus environments are unique given the racially stratified structure of U.S. institutions. Guided by the proposed integrative model of student experiences within embedded context in higher education, one path to understand Black students' experiences of campus environments is to examine factors within an institution's interpersonal context. More specifically, examining the campus psychological climate, cultural relevance, and cultural responsiveness can provide insight in understanding the implications of institutional factors for student outcomes. The following section provides a review of the empirical literature that informs the current study.

Psychological Campus Climate, Persistence, and Belonging

Perceptions of Psychological Campus Climate

Given the increasingly diverse student bodies at HWIs around the country (NCES, 2021), there has been increased interest in understanding the experience of these students, particularly with regard to their perceptions of campus climate. Consistent with the proposed model of student experiences of embedded context in higher education, researchers investigating climate perceptions among Black students have primarily operationalized psychological campus climate by assessing students' perceptions of prejudice or discrimination on campus (Hurtado, 1992; Cabrera et al., 1999). Thus, the current investigation primarily focused on research that considered the discrimination/prejudice aspect of psychological climate.

Racially minoritized students have more negative perceptions of the campus climate compared to White students (Ancis, et al., 2000; Museus et al., 2008; Strayhorn, 2013) and Black students tend to have more negative perceptions than other racially minoritized groups (Cress,

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2008; Hussain & Jones, 2021; Johnson et al., 2007; Leath & Chavous, 2018; Museus et al., 2008; Park et al., 2020; Telles & Mitchell, 2018). Ancis et al. found racially minoritized students' perceptions were characterized by more conflict, stereotypes, and institutional agents who perpetuated mistreatment. More recently, in a qualitative study of Black students attending a HWI, Thelamour et al. (2019) found students' narratives of campus climate were characterized by negative stereotypes, experiences of subtle forms of discrimination like microaggressions, and campus insensitivity to how the hostile national racial climate manifested on campus. Park et al. (2020) found that compared to White and other racially minoritized students, Black students majoring in STEM fields were more likely to report that professors made them feel uncomfortable, that they heard derogatory remarks from professors, that they received a bad grade, or that they felt discouraged by a professor for speaking out, all because of their racial background. Park et al. also found that women majoring in STEM fields reported more frequent experiences of discrimination compared to men. Leath & Chavous (2018) found Black women in STEM reported more mistrust and tension (i.e., norms related to race such as racialized access to campus privileges), racial stigma consciousness (i.e., expectations to experience racial stereotypes), classroom racial inferiorization (i.e., experiences of microaggressions), and ethnic threat (i.e., students' feelings of incompatibility between their cultural background and the institution) compared to other women of color and White women. Researchers that took an intersectional approach found that Black men students tended to report the highest perceptions of a negative campus climate compared to any other group (Cress, 2008). Given the nature of how minoritized students experience campus climates, researchers have explored how their perceptions of campus climate relate to their sense of belonging and persistence outcomes.

Associations with Persistence. Early studies examining campus climates characterized by prejudice and discrimination found an association between students' campus climate perception and their persistence (Cabrera et al. 1999). Cabrera et al. found that Black students' reports of prejudice and discrimination indirectly influenced whether or not they persisted toward graduation (i.e., re-enrolled the following semester) through parental encouragement, institutional commitment, and academic performance. Johnson et al. (2014) also conducted a path analysis and revealed that for racially minoritized students, reports of racism on campus were associated with more negative views of the campus environment, which were associated with their institutional commitment, and in turn their persistence. Collectively, these studies suggest there are several mediating factors in the associations between campus climate perceptions and persistence. While several studies identified indirect relationships, Strayhorn (2013) revealed a direct relationship between students' perceptions of the campus climate and persistence. Specifically, Strayhorn found that Black students who had stronger perceptions of a cold and uncaring campus climate tended to have stronger intentions to leave the institution.

More recent studies explored the direct relationship between perceptions of discrimination and persistence and provide further insight on the relationship (Hughes, 2020; Jackson et al., 2020; Park et al., 2020). Among a sample of racially minoritized students, 34% of whom identified as Black, Hughes found that racial discrimination from peers and professors was linked to lower likelihood of graduation. Racial discrimination was measured by students' reports of the frequency of mistreatment by peers or professors that they perceived were because of their race. Park et al. utilized a sample of racially diverse STEM undergraduates across different types of institutions, 23% of whom identified as Black, to examine students' experiences of discrimination from faculty and how such perceptions were associated with their

persistence in STEM. Park found students who reported discrimination were less likely to stay in STEM compared to students who did not report experiences of discrimination. Jackson et al. (2020) similarly found that more frequent reports of discrimination were a direct predictor of students' persistence toward graduation among a sample of racially minoritized students, seven percent of whom identified as Black. Unlike Hughes and Park et al., the measurement of discrimination used by Jackson et al. included students' reports of the frequency they had certain experiences of mistreatment on campus but did not explicitly ask if the experiences were because of their racial identities. Thus, students' reports of discrimination could have been based on several identities (e.g., race, gender, sexual orientation, class, etc.).

There is a growing body of work on the connection between perceptions of campus climate as measured by students' experiences of discrimination and their persistence outcomes. Scholars have also explored the direct link between discrimination and several psychological outcomes among Black college students, including self-esteem (Nadal et al., 2014), substance use (Pro et al., 2018), depressive symptoms (Banks et al., 2010; Billingsley & Hurd, 2019; Jochman et al., 2019; Prelow et al., 2006), psychological distress (Sellers et al., 2003), loneliness (Juang et al., 2016), life satisfaction (Prelow et al., 2006), and racial identity (Chavous et al., 2018). Consistent with this body of work highlighting the implications of discrimination as a salient source of stress for racially minoritized students, researchers have explored how such experiences impact students' sense of belonging.

Associations with Belonging. Hurtado and Carter (1997) provided one of the first investigations exploring the relationship between campus climate and sense of belonging. They specifically looked at the relationship among Latinx students and found that hostile climates, as measured by experiences of discrimination and racial tension, undermined student's sense of

belonging. Sense of belonging was measured by items from Bollen and Hoyle's (1990) sense of belonging scale including three items assessing the extent to which students felt part of the campus community, a member of the campus community, and belonging to the campus community. Although Hurtado and Carter's pivotal study was conducted with a sample of Latinx students, several studies followed and provided support that Black students' perceptions of campus climate is also associated with their sense of belonging. Among a sample of racially diverse students, 5% of whom identified as Black, Johnson et al., (2007) found that perceptions of a supportive campus climate, specifically within their living-learning community, was a positive predictor of sense of belonging. Consistent with the measure of sense of belonging utilized by Hurtado and Carter, Johnson et al.'s measurement of sense of belonging included several items assessing the extent to which students felt they were a member of the campus community. Unlike Hurtado and Carter, Johnson et al. used a broader measure of campus climate including items assessing students' perceptions of transracial interactions and the campus commitment to students of color. Similarly, Johnson (2012) used the same measures of campus climate and sense of belonging with a sample of women majoring in STEM, 5% of whom identified as Black. Perceptions of a positive climate was a significant predictor of sense of belonging within their living-learning communities. More recently, Hussain and Jones (2021) assessed campus climate by measuring how often students perceived or witnessed discrimination among a sample of racially minoritized students, 37% of whom identified as Black. Hussain and Jones reported students who perceived more frequent experiences of discrimination had lower sense of belonging, which was measured by the extent to which students agreed they felt like they belonged and saw themselves as part of the campus community.

Taken together, studies have demonstrated that students' perceptions of campus climate as measured by discrimination undermine or enhance students' sense of belonging, which has been measured similarly throughout the literature. Whether studies utilized three, four, or five-items to assess sense of belonging, they all capture students' level of agreement with whether they feel like they belong and are a member of a campus community.

Cultural Relevance, Cultural Responsiveness, Persistence, and Belonging

To further contextualize students' experiences of discrimination and the implications of such experiences on their sense of belonging, researchers have looked at potential protective factors. Hussain and Jones (2021) found the harmful effects of discrimination on sense of belonging were mitigated for students who reported more diverse peer interactions and positive perceptions of their institution's commitment to diversity among a racially diverse sample, 37% of whom identified as Black. Consistent with the aims of Hussain and Jones' work, other researchers examined factors that are hypothesized to promote students' sense of belonging.

Walton and Cohen (2007) conducted an experiment to examine a sample of 36 Black and 34 White students' sense of belonging in their computer science department. The experiment involved three different conditions asking students about their perceptions of their access to potential relationships with institutional agents within their major. They found that Black students were more uncertain about their sense of belonging in their major when asked to name a higher number of potential relationships. Walton and Cohen's findings suggest Black students' perception of potential peer relationships specifically in their major is associated with their sense of belonging in their major. These findings point to the relevance of interpersonal relationships for establishing a sense of belonging. In alignment with Walton and Cohen's findings, Meuwisse et al.'s (2010) findings also highlighted the impact of relationships on students' sense of

belonging. Although the sample that Meuwisse et al. utilized was outside of the US in the Netherlands, they found that ethnic minority students' (i.e., students of whom they or their parents were from non-Western countries) formal relationships with instructors and fellow students influenced their sense of belonging. Formal relationships with instructors and peers referred to interactions specifically about the university and study-related matters (i.e., teachers approach me to enquire about my study progress; fellow students invite me to work together on school tasks). Consistent with these early findings, Soria and Stebelton's (2013) examined a sample of racially diverse students, of which 1.5% identified as Black, and found that lower-income students had a more challenging time developing relationships with faculty outside of class and in turn reported a lower sense of belonging. They also found that students from lower-income backgrounds had a more challenging time finding classmates to study with compared to students from middle-class backgrounds. Similar to Walton and Cohen, Meuwisse et al., and Soria and Stebelton, Rainey et al. (2018) also found interpersonal relationships with other students and faculty were related to students' sense of belonging. Rainey et al. utilized a mixed-method approach to examine sense of belonging among a sample of racially diverse STEM majors attending UNC system campuses, 31% of whom identified as Black. Rainey et al., revealed that students who reported a higher sense of belonging referenced their social connection to peers and faculty as the reason why. Relatedly, Strayhorn (2019) pointed out that students who participated in organizations on campus such as outreach organizations, student government, or sports teams, were more likely to have a higher sense of belonging.

Guided by a Black feminist lens, Leath et al. (2021) provided additional support for how institutional agents foster Black women's sense of belonging. Specifically, Leath et al. revealed Black women described practices that fostered their sense of belonging included faculty who

served as an antiracist alley and implemented inclusive activities, assignments, and topics in the classroom. Consistent with earlier findings, in a recent qualitative investigation with Black college students at a HWI, Leath et al. (2022) found Black students' intraracial peer networks played an important role in their sense of belonging. Specifically, Leath et al. reported students described both academic and social supports that their intraracial peer networks offered in a way that validated their intersectional identities. Leath et al., also reported students' descriptions of challenges associated with intraracial peer networks such as within group differences that led some Black students to feel isolated. Such challenges included the underrepresentation of Black students on campus resulting in perceived competition between Black students. Additional challenges that contributed to barriers with respect to Black students' intraracial networks included cultural barriers based on differences in ethnicity or community of origin (i.e., hometown), differential treatment based on gender, sexual orientation, or racial ideology (i.e., beliefs about how Black people should talk, dress, perform "Blackness"). Taken together, although most studies have found interpersonal dynamics with institutional agents matter for promoting students' sense of belonging, there is also evidence of nuance in the extent to which students' interactions with institutional agents who share their background lead to a sense of belonging.

Two studies guided by the CECE model examined the extent to which interpersonal factors within the institutional context including students' experience of culturally relevant institutional agents (i.e., cultural relevance) and students experience of support that is responsive to their cultural needs (i.e., cultural responsiveness) (Museus et al., 2017; Museus et al., 2018;) influenced their sense of belonging. Museus et al. (2017) explored the association between cultural relevance and responsiveness and sense of belonging with a sample of 499

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undergraduate students across three campuses. The sample was composed of 27% White, 5% Black, and 51% students identified with another racially minoritized group. Among the full sample, they found one of the cultural relevance indicators, collectivist cultural orientations, had the strongest positive relationship with sense of belonging. Other culturally relevant indicators including cultural validation and cultural familiarity, were associated with higher sense of belonging. Additionally, culturally responsive indicators including proactive philosophies and holistic support, were associated with higher sense of belonging. Interestingly, one of the cultural relevance indicators, cultural community service, was associated with lower sense of belonging. They also found these relationships did not vary by race but women tended to report stronger sense of belonging compared to men. This finding reaffirms the importance of viewing students' sense of belonging with an intersectional lens. They also found the CECE indicators accounted for 69% of the variance of sense of belonging, which validates the CECE model's suggestion that these factors are important for fostering students' sense of belonging. Museus et al. (2018) utilized the same CECE measure to explore cultural relevance and responsiveness with a sample of 870 undergraduate students, 8% of whom identified as Black, at one historically White institution and found that the indicators explained a notable portion of the variance in sense of belonging as well. They estimated separate models for White students and for all racially minoritized students. Among White students, culturally relevant indicators including cultural familiarity, collectivist cultural orientation and cultural validation was associated with higher sense of belonging. One of the culturally responsive indicators, holistic support was also associated with higher sense of belonging. Among the racially minoritized sample, students' perceptions of campus cultural relevance, including cultural familiarity and collectivist cultural orientations, were associated with higher sense of belonging. While there were similarities in the

role of holistic support, cultural familiarity, and collectivist cultural orientations between White and racially minoritized students, cultural validation (i.e., the extent to which institutional agents acknowledge and show an understanding of students' cultural background) was not significant among racially minoritized students. Although it was not significant in the full model, when cultural familiarity was removed from the model it became significant, which suggests the possibility that cultural familiarity serves as a means to promote cultural validation. This is a logical explanation especially in a HWI where there may not be a large pool of institutional agents who share cultural backgrounds of underrepresented students, increasing the likelihood that institutional agents are less familiar with them and engage in practices that may invalidate who they are.

These two studies provide support for the association between the extent to which students view their campus as culturally relevant and responsive and their sense of belonging. Although a study has not utilized the CECE measure to examine the direct association between students' view of their campuses as culturally relevant and responsive and persistence, existing research provides support that the CECE indicators are indeed directly related to persistence. Museus et al. (2008) explored predictors of students' persistence among a racially diverse sample and found students' participation in study groups and faculty interactions about academics mediated their perceptions of campus climate on their persistence toward degree completion (i.e., re-enrolled or graduated). It is possible students' participation in study groups and their faculty interactions mediated campus climate perceptions because the interpersonal interactions they had with their peers and faculty were culturally validating and countered the negative messages they perceived elsewhere on campus. Relatedly, Rainey et al.'s mixed-method investigation revealed the main reasons students reported leaving their STEM major was because of a lack of

interpersonal relationships. Additionally, Leath et al. (2021) found Black women reported inclusive classroom practices implemented among faculty contributed to their persistence within their major. Considering the importance of interpersonal interactions for students' persistence toward graduation, cultural relevance and responsiveness likely have a direct association with persistence. It is also possible there is an indirect association between cultural relevance and responsiveness and persistence, as suggested by the CECE model. Studies have found Black students' perceived support and interactions with institutional agents and associated with their academic performance (Beasley & McClain, 2020), which is one of the strongest predictors of student persistence (Museus, 2010).

Taken together, the pattern of findings concerning psychological climate, the cultural relevance, and responsive points to the important role each are for supporting students' sense of belonging and persistence outcomes. Investigations on how psychological climate, campus cultural relevance, and campus responsive simultaneously inform students' sense of belonging and persistence is limited. While Hussain and Jones (2021) explored how both potential positive and negative factors work together to inform students' sense of belonging, few other studies have done so. Furthermore, less is known about such factors within an MSI context since most prior work was conducted within the context of HWIs in which there is a relatively low percentage of Black students represented in the campus student body.

Study Aims, Research Questions, and Hypotheses

The current study aimed to 1) explore if there are context profiles characterized by different patterns of Black students' perceptions of psychological climate for diverse cultural communities, cultural relevance, and cultural responsiveness at a southeastern MSI, 2) examine the association between student demographic characteristics, including their Pell grant recipient

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status, undergraduate year, gender, living arraignments, and off-campus employment, and the emergent context profiles, and 3) investigate the extent to which emergent context profiles are associated with students' sense of belonging and persistence toward graduation at UNCG. Specifically, the study sought to answer the following research questions:

1. Is there heterogeneity in Black students' perceptions of the interpersonal context at a southeastern MSI?

2. Are student characteristics (i.e., Pell grant status, undergraduate year, gender, living arraignments, and off-campus employment) related to context profiles?

3. Are context profiles associated with students' sense of belonging and persistence toward graduation?

No studies have utilized a person-centered approach to explore if there is heterogeneity in student perceptions with respect to campus cultural relevance or responsiveness. Lui et al. (2022) utilized a person-centered approach to identify typologies of students' experiences of discrimination among a sample of racially diverse students attending a HSI. Two classes emerged from the data indicating students' reports of discrimination consisted of different combinations and frequencies of institution-specific experiences of discrimination and microaggressions. Considering the heterogeneity Lui et al. found, heterogeneity of Black students' perceptions of UNCG's institutional context marked by different combinations of discrimination experiences and the extent to which the institution is culturally relevant and responsive is also expected. Given no studies have utilized a person-centered approach to examine the combination of factors under investigation in the current study (i.e., culturally relevance, responsiveness, and discrimination/prejudice) the nature of the heterogeneity in student perceptions is exploratory.

In light of prior work that found students who were men (Cress, 2008), lower-income (Soria & Stebelton, 2013), first generation (Katrevich & Aruguete, 2017; Stebleton et al., 2014), living off-campus (Alfano & Eduljee, 2013), working off-campus (Perna, 2010), and upper-class (Hunt et al., 2012) face unique challenges such as limited support on campus, students in the current study who share such background characteristics may have more negative views of the campus. Given UNCG's unique context, the current study is exploratory on how such factors will associate with students' perceptions in a Black-serving MSI context.

Finally, it is hypothesized that the patterns of student perceptions will be associated with sense of belonging and persistence. Considering the consensus in the literature highlighting students' perceptions of a welcoming climate marked by less frequent experiences of discrimination (Hurtado & Carter, 1997; Johnson, 2012; Hussain & Jones, 2021) and positive relationships and interactions with institutional agents (Museus et al., 2018; Rainey et al., 2018; Walton & Cohen, 2007) are associated with higher sense of belonging or greater likelihood to persist, it is expected context profiles characterized by a more positive interpersonal context will be linked to higher sense of belonging and higher likelihood of persistence toward graduation.

CHAPTER IV: METHODS

Employing a cross-sectional design, this study utilized data that was collected in the fall

semester of 2018 and spring semester of 2019 as part of an institutional project at UNCG, the

IBelong Project. UNCG's Office of Student Affairs facilitated the IBelong Project as a university

initiative, which aimed to understand how students perceived the campus environment and

provide programming to help foster positive perceptions of the environment. The project began

with the IBelong survey, which measured students' perceptions of the campus environment using

the Culturally Engaging Campus Environments (CECE) survey. The survey was distributed to a

random sample of 7,000 undergraduate students who were invite by email to complete the

survey. The final sample consisted of 1,126 undergraduates who reflected the general

demographics of UNCG's student body. In 2018, UNCG enrolled 16,641undergraduate students.

UNCG was comprised of 46.2% White, 29.3% Black/African American, 10.3% Hispanic/Latinx,

5.2% Asian, 0.1% Native Hawaiian/Pacific Islander, 5.1% multiracial, and 0.4% Indigenous

students. Women represented 66.4% of the undergraduate student body. Furthermore, Pell grant

recipients represented 48.8% of the undergraduate student body. First year first generation

students represented 49.1% of the undergraduate student body (UNCG Office of Institutional

Research and Analytics, 2021).

Participants

The data that were used for this study is a subset of the sample used in the original study,

including only students that identified as Black/African American (n=274). Amongst the

Black/African American sample, the average age of the sample was 22 years. The proportion of

students in each year in college is as follows: 15% seniors, 20% juniors, 24% sophomore, and

41% freshman. 78% of the sample identified as women, 18% men, 3% another gender. 62% were first generation and 69% were Pell grant recipients.

<div align="center">**Measures**</div>

The CECE survey (Museus et. al., 2018) is a 39-item measure based on the CECE model to capture the five constructs that represent cultural relevance including cultural familiarity, cultural relevant knowledge, cultural community service, cross-cultural engagement, and cultural validation. The measure also captures the four constructs that represent cultural responsiveness including collectivist orientations, humanized environments, proactive philosophies, and holistic support. The CECE survey measures all nine indicators using a 5-point Likert response scale.

Cultural relevance and cultural responsiveness

Six items captured cultural familiarity, including: (a) it is easy to find people on campus with similar backgrounds as me; (b) I frequently interact with people from similar backgrounds as me on campus; (c) there is sufficient space for me to connect with people from my community; (d) it is easy to find people on campus who understand me; (e) it is easy to find people on campus who understand my struggles; and (f) people on campus are generally willing to take the time to understand my experiences. The scale showed Cronbach's $\alpha = 0.89$ in previous studies (Museus et al., 2018) and in the current sample Cronbach's $\alpha = 0.86$.

Three items captured cultural relevant knowledge, including: (a) there are enough opportunities to learn about the culture of my own community; (b) there are enough opportunities to learn about my own cultural community's history; and (c) There are enough opportunities to gain knowledge about my own cultural community. The scale showed Cronbach's $\alpha = 0.92$ in previous studies (Museus et al., 2018) and in the current sample Cronbach's $\alpha = 0.92$.

Three items captured cultural community service, including: (a) there are enough opportunities to help improve the lives of people in my cultural community; (b) there are enough opportunities to give back to my cultural community; and (c) there are enough opportunities to positively impact my cultural community. The scale showed Cronbach's α = 0.92 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.93.

Three items captured cross cultural engagement, including: (a) there are enough opportunities to discuss important social issues with people from different cultural backgrounds; (b) there are enough opportunities to discuss important political issues with people from different cultural backgrounds; and (c) there are enough opportunities to discuss important diversity-related issues on campus. The scale showed Cronbach's α = 0.91 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.85.

Three items captured cultural validation, including: (a) people on campus value knowledge from my cultural community; (b) my cultural community is valued on campus; and (c) people on campus value the experiences of people in my cultural community. The scale showed Cronbach's α = 0.91 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.88.

Three items captured collectivist cultural orientations, including: (a) people on this campus help each other succeed; (b) people on this campus support each other; and (c) people on this campus work together toward common goals. The scale showed Cronbach's α = 0.91 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.89.

Three items captured humanized educational environments, including (a) I view educators on campus as caring human beings; (b) educators care about students on this campus;

and (c) educators on this campus are committed to my success. The scale showed Cronbach's α = 0.93 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.90.

Three items captured proactive philosophies, including the extent to which (a) people on this campus often send me important information about new learning opportunities, and (b) people on this campus often send me important information about support that is available on campus. The scale showed Cronbach's α = 0.83 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.74.

Three items captured holistic support, including the extent to which (a) if I need support, I know a person on campus who I can trust to give me that support; (b) if I have a problem, I know a person on campus who I can trust to help me solve that problem; and (c) if I need information, I know a person on campus who I can trust to give me the information I need. The scale showed Cronbach's α = 0.92 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.93.

Discrimination/prejudice

Four items captured students' reports of direct and vicarious experiences of discrimination or prejudice, including a) if they experienced prejudice (i.e., bias toward an identity group), b) seen other people experience prejudice (i.e., bias toward an identity group) c) experienced discrimination (i.e., mistreatment of someone because of their identity) and d) seen other people experience discrimination (i.e., mistreatment of someone because of their identity). The scale showed Cronbach's α = 0.90.

Each CECE indicator will be averaged together to create nine summary variables to include in a latent profile model. All four discrimination/prejudice items will also be averaged together to create a summary variable to include in a latent profile model.

Sense of belonging

Sense of belonging is captured using three items measuring students' sense of belonging to their campus cultures, including: The extent to which students (a) see themselves as part of the campus community; (b) feel that they belong on campus; and (c) feel a strong sense of connection to the campus community. All three items will be averaged together to create a summary variable. The scale showed Cronbach's α = 0.93 in previous studies (Museus et al., 2018) and in the current sample Cronbach's α = 0.90.

Persistence

Persistence is measured with students re-enrollment the semester following survey completion. For seniors, it is measured by graduation status.

Analysis

Considering that the psychometric properties of the CECE survey have not been examined among a sample of Black college students (separately from other racially minoritized students), a confirmatory factor analysis was conducted to explore the factorial structure of the CECE survey. All 39 items were specified to load on nine factors. The measurement model was assessed by goodness of fit indices including chi-square, the root mean square error of approximation (RMSEA) and comparative fit index (CFI). Convention states that good model fit occurs when the CFI is greater than .90 and when the RMSEA are below .06 (McDonald & Ho, 2002).

To answer the first research question, latent profile analysis was used to examine a) if there were emergent profiles of students' perceptions of the institutional context. Latent profile analysis (LPA) is a person-centered approach that allows for the identification of typologies based on response patterns. Based on the results of a confirmatory factor analysis, all nine

cultural relevant and responsive factors were included in the latent profile model as summary variables by averaging the items within each scale together, along with discrimination as a summary variable. A series of latent profile models starting with two classes was examined to identify the best fitting LPA model. A set of fit indices and tests were used to identify the best model including the Akaike information criterion (AIC; Akaike, 1974), Bayesian information criterion (BIC; Schwarz, 1978), adjusted Bayesian information criterion (aBIC), Lo-Mendell-Rubin (LMR) test (LMR-LRT; Lo, Mendel, & Rubin, 2001), and the parametric bootstrapped likelihood ratio test (BLRT). Better model fit is indicated by lower AIC and BIC. These indices and tests provide support on the probability that a model with k classes fits better than the k-1 class model (Nylund et al., 2007). The entropy was also examined to identify values approaching one, which signals the classification accuracy (Celeux & Soromenho, 1996). Higher entropy values indicate higher classification accuracy with one being the maximum value. The entropy was not used for class enumeration but to provide additional support for model comparison.

To explore the second research question, a multinomial logistic regression model was used to examine if student factors, such as gender, undergraduate year, first generation status, employment status, residential status, and Pell grant status, increased the likelihood of a participant being classified into one of the emergent profiles compared to another.

Finally, to examine the third research question, the Bolck-Croon-Hagenaars (BCH; Bolck, Croon, & Hagenaars, 2004) method was used to examine sense of belonging and persistence as distal outcomes of profile membership. The BCH method reduces shifts in profile from the unconditional model (Nylund-Gibson et al., 2019). In other words, the BCH method ensures the identified classes remain stable while assessing their relationship with an outcome variable. Furthermore, the BCH method assesses the mean of the outcome variable across the

identified classes (Asparouhov & Muthen, 2021). Similar to an analysis of variance estimate, the method estimates the overall statistical significance between all profiles and tests between each pair of profiles.

CHAPTER V: RESULTS

The first goal of the study was to identify patterns of Black students' perceptions of UNCGS's institutional interpersonal context (i.e., cultural relevance, cultural responsiveness, and psychological climate). A latent profile analysis (LPA) was conducted with Mplus version 8.8 to distinguish context profiles utilizing students' reported perceptions of cultural relevance, cultural responsiveness, and psychological climate. Summary scores for each CECE cultural relevance and cultural responsiveness subscales, along with discrimination, were included in the LPA. Before creating summary scores for each CECE subscale, a confirmatory factor analysis was conducted. Table 1 illustrates the factor loadings for each subscale. Fit statistics suggest the originally proposed factor structure as described by Museus (2016) generally applies to the current sample ($X2= 6962.567$ df=369 $p<.001$ RMSEA =.071, CFI = .922). Given the confirmatory factor analysis provided support for the applicability of the CECE measure with the current sample, the measure was used to conduct the latent profile analysis with each of the subscales included as summary scores.

Latent Class Analysis

Two, three, four, and five typology solutions were considered for the current profile analysis. Given the pattern of model fit statistics and the increasingly similar theoretical meaning of additional typologies, the analysis stopped estimation at the five-typology solution. The five-typology solution yielded the lowest AIC, BIC, and ABIC indicating a better fit compared to the two, three, and four typology solutions. The entropy for the five-typology solution was higher, which also indicated a better fit compared to the two, three, and four typology solutions. Although the fit statistics and entropy of the five-typology had better fit statistics (see Table 2 for details), a four-typology solution was retained for parsimony, given that the five-typology

solution did not generate profiles that were theoretically different from the four-typology

solution. Additionally, the five-typology solution consisted of latent classes with small sample

sizes as low as four respondents.

Description of the Four-Typology Solution

For Profile 1 (n=67), 24% of the sample were classified as *Highly culturally*

engaged/welcomed. This profile was characterized by reports of low discrimination/prejudice

and above average cultural relevance and cultural responsiveness, relative to other context

profiles. The *Highly culturally engaged/welcomed* context profile is the most ideal interpersonal

context for students given it is marked by more positive views of campus. Students in this profile

generally perceive there to be institutional agents who can relate to their cultural background,

provide supports that are responsive to their unique needs, and less frequent experiences of

discrimination/prejudice based on their cultural community. Profile 2 (n=145), 53% of the

sample were classified as *Moderately culturally engaged/welcomed*. This profile was

characterized by average levels of discrimination/prejudice, cultural relevance, and cultural

responsiveness. Although, less ideal than the *Highly culturally engaged/welcomed*, the

Moderately culturally engaged/welcomed context profile is also marked by overall positive

views of the campus environment. For Profile 3 (n=50), 18% of the sample were classified as

Moderately culturally unengaged/unwelcomed. This profile was characterized by above average

discrimination/prejudice and below average cultural responsiveness (i.e., proactive philosophies,

holistic support, collectivist orientations, and humanized environments) and one of the cultural

relevance indicators (i.e., cross-cultural engagement), and slightly below average on the

remaining cultural relevance indicators (i.e., cultural familiarity, cultural validation, culturally

relevant knowledge, and cultural community service). Students embedded in this type of

interpersonal context perceive limited opportunities to connect with institutional agents of whom they can culturally relate, support that does not adequately respond to their unique circumstances, and more frequent experiences of discrimination. For Profile 4 (n=12), 4% of the sample were classified as *Highly culturally unengaged/unwelcomed*. This profile was characterized by above average discrimination/prejudice, below average culturally responsiveness (i.e., proactive philosophies, holistic support, collectivist orientations, and humanized environments) and three cultural relevance indicators (i.e., cross-cultural engagement, culturally relevant knowledge, and cultural community service), and well below average on the remaining cultural relevance indicators (i.e., cultural familiarity and cultural validation). Students embedded in this type of interpersonal context is the most concerning since it is marked by negative views of the campus environment including a lack of institutional agents of whom they can culturally relate, a lack of supportive resources tailored to their needs, and frequent experiences of discrimination/prejudice. See figure 2 for an illustration of the four-typology solution.

Correlates of Profile Membership

The third goal of the current study was to explore if student factors (i.e., gender, undergraduate year, first generation status, employment status, residential status, and Pell grant status) increased students' likelihood of belonging to one of the emergent classes. All profiles were compared to each other using each profile as a reference group. With the exception of the comparison between the *Moderately culturally unengaged/unwelcomed* and *Highly culturally unengaged/unwelcomed* profiles on college generational status, all other statistically significant comparisons were only significant when compared to the *Highly culturally engaged/welcomed profile* (see table 3 for comparisons).

First generation students were less likely to be in the *Moderately culturally engaged/welcomed* compared to the *Highly culturally engaged/welcomed* profile (OR = 0.428, p=.04). First generation students were also less likely to be in the *Moderately culturally unengaged/unwelcomed* compared to the *Highly culturally engaged/welcomed* profile (OR = 0.297, p=.01). Furthermore, being first generation was associated with lower odds of belonging to the *Moderately culturally unengaged/unwelcomed* compared to *Highly culturally unengaged/unwelcomed* profile (OR =.087, p=.035). Considering first generation students were less likely to be in the *Moderately culturally engaged/welcomed* or *Moderately culturally unengaged/unwelcomed*, which means first generation students were more likely classified as *Highly culturally engaged/welcomed* compared to the other profiles.

Students who worked more hours off campus had greater odds of belonging to the *Moderately culturally unengaged/unwelcomed* (OR = 1.194, p = .04) or *Highly culturally unengaged/unwelcomed* compared to the *Highly culturally engaged/welcomed* profile (OR = 1.332, p = .021). Student's time working off campus was not associated with membership in the Moderately culturally engaged/welcomed compared to the *Highly culturally engaged/welcomed* profile (OR = 1.128, p =0.107). Thus, students working more hours off campus were more likely to be classified in either the *Moderately culturally unengaged/unwelcomed* or the *Highly culturally unengaged/unwelcomed* compared to the *Highly culturally engaged/welcomed profile*. Students who lived off or further away from campus had greater odds of belonging to the *Moderately culturally unengaged/unwelcomed* compared to the *Highly culturally engaged/welcomed* (OR = 1.689, p=0.025). Living arrangements were not associated with membership in either the *Highly culturally engaged/welcomed* (OR = 1.268, p=0.242) or the *Highly culturally unengaged/unwelcomed* profiles (OR = 1.498, p=0.232). Thus, students living

off and further away from campus were more likely to be classified in the *Moderately culturally unengaged/unwelcomed* profile but not the other profiles.

The more semester hours students completed, the greater odds they had of belonging to the *Moderately culturally engaged/welcomed* (OR = 1.349, p=0.045) or *Moderately culturally unengaged/unwelcomed* (OR = 1.555, p =0.006) compared to the *Highly culturally engaged/welcomed*. Completing more semester hours was not associated with membership in the *Highly culturally unengaged/unwelcomed* (OR = 1.105, p =0.783) compared to the *Highly culturally engaged/welcomed*. In other words, as students progress in their academic journey, they are not culturally engaged and welcomed on the same level as they likely once were earlier in their journey but enough so that they are not completely culturally unengaged and welcomed.

Profile Membership and Distal Outcomes

Sense of Belonging. The fourth goal of the current study was to examine the relationship between patterns of students' perceptions of campus environment and sense of belonging. The overall chi-square test, which compares the means across profiles, was significant indicating that sense of belonging was different across profiles. The *Highly culturally engaged/welcomed* profile had the highest average sense of belonging, followed by the *Moderately culturally engaged/welcomed* profile, *Moderately culturally unengaged/unwelcomed* profile, than the *Highly culturally unengaged/unwelcomed profile*. All profiles were significantly different from each other (See table 4). Thus, the difference in sense of belonging across profiles suggest the more culturally engaging and welcoming students perceived the interpersonal context to be, the higher their sense of belonging.

Persistence. The fourth goal of the current study was to also examine at the relationship between patterns of students' perceptions of campus environment and persistence. The overall

chi-square test, which compares the means across profiles, was not significant indicating that whether students re-enrolled the following semester did not differ based on their profile membership. Descriptively, persistence rates ranged from 73%-75% within each context profile. In other words, three-quarters of students within each context profile re-enrolled the following semesters.

CHAPTER VI: DISCUSSION

Using the integrative model of student experiences within embedded context in higher education, the aims of the study were to 1) explore typologies of Black students' perceptions of psychological climate, cultural relevance, and cultural responsiveness at UNCG, 2) examine the association between student characteristics, including their Pell grant status, undergraduate year, gender, living arrangements, and employment off campus, and their perceptions of UNCG's institutional context, and 3) investigate the extent to which patterns of student perceptions of UNCG's institutional context are associated with their reports of sense of belonging and whether or not they persist toward graduation at UNCG. In the following section, I discuss the identified profiles, the student characteristics that were associated with profile membership, the profiles' association with sense of belonging and persistence, the strengths and limitations of the current study, and potential implications for future directions.

The study identified four context profiles of how students perceived the extent to which UNCG is culturally relevant, responsive, and discriminatory. The largest context profile consisted of a combination of relatively moderate perceptions of cultural relevance, responsiveness, and discrimination. The second largest context profile consisted of a combination of high perceptions of a cultural relevance and responsiveness with low perceptions of discrimination. The third largest context profile consisted of a combination of relatively lower cultural relevance and responsiveness, and slightly above average discrimination. The smallest context profile consisted of a combination of low cultural relevance, even lower cultural responsiveness, and the highest perceptions of discrimination. The integrative model of student experiences within embedded context in higher education explains how students simultaneously experience both negative and positive experiences. The context profile configurations reveal

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students' negative perceptions of cultural relevance and responsiveness were paired with more negative perceptions of discrimination/prejudice, while more positive perceptions of cultural relevance responsiveness were paired with lower discrimination/prejudice, and moderate cultural relevance responsive with moderate discrimination/prejudice. Collectively, these findings point to the presence of different types of student experiences, defined by the different interpersonal context they are embedded within at UNCG. The differences between the emergent context profiles are not surprising, as the proposed integrative model of student experiences within embedded context in higher education suggests students experience different interpersonal contexts on campus marked by a combination of positive and negative experiences. Together, 77% of students were classified in the highly or moderately culturally engaged/welcomed profiles. The percentage of students who perceive a positive campus environment is comparable with studies that have explored Black students' perceptions at HBCUs, such as Outcalt & Skews-Cox (2002) who found 65% of students were satisfied with the experiences with the diverse faculty and students at their HBCU. This notable finding highlights UNCG's vision of serving as a national model for how a HWIs can cultivate an inclusive place for students of all backgrounds.

The integrative model of student experiences within embedded context in higher education can help make sense of why the majority of UNCG students were embedded in a culturally engaging and welcoming interpersonal context. Specifically, the model acknowledges the role that organizational values play in the interpersonal context. UNCG's values include a focus on fostering diversity and inclusion. The transmission of such values across interpersonal interactions on campus is one way UNCG's values inform students' perception of the context. UNCG's Chancellor Franklin D. Gilliam Jr,. promoted UNCG's diversity and inclusion values

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by encouraging the campus to collectively and intentionally be innovative in its approach to serving a diverse student body and faculty (2016 UNCG State of the Campus Address). Chancellor Gilliam set this charge within the context of UNCG's historical and structural climate, signaling the campus's geography, unique history, and diverse composition of students, faculty, and staff, as conduits of change (Hunter et al., 2022). Such leadership can influence institutional agents to embody these in how they contribute to diversity and inclusion efforts on campus. Since Chancellor Gilliam's inauguration, several committees and organizing bodies assembled to operationalize diversity and inclusion values. The 2018-2019 student body president further illustrated the transmission of diversity and inclusion values through lived experience and campus advocacy. The collective enforcement of diversity and inclusion values during this era of UNCG's existence logically influences the context profiles by setting the backdrop of interactions between students and institutional agents.

Although about 77% of students were classified into the highly or moderately culturally engaged/welcomed profiles, it is important to acknowledge the roughly 22% of students who perceived the campus environment as moderately or highly culturally unengaging/unwelcoming. The historical and structural climate within the integrative model of student experiences within embedded context in higher education suggest the consequences of UNCG's exclusionary past informs ongoing challenges related to students' experiences. UNCG's faculty who were socialized in a context in which diversity and inclusion was not a core value may vary on the extent to which they center such values in their approach to supporting students. Furthermore, Black faculty have grown in number (Brown, 2021), which is a point of celebration; however, they are still underrepresented on campus (UNCG, 2021). Llamas et al. (2021) found student-faculty racial/ethnic match was a significant predictor of students' perceptions of the campus

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climate among a sample of racially minoritized students, 36% of whom were Black. Having faculty who shared the same racial/ethnic background was positively associated with more positive perceptions of the campus climate. It is likely that there are many Black UNCG students who do not have access to Black faculty, given they are underrepresented on campus. Additionally, faculty likely vary on the extent to which they hold diversity and inclusion as core values and thus vary in the extent to which fostering a culturally engaging and welcoming climate is a personal priority and practice. Students who were in the *moderately* or *highly culturally unengaged/unwelcomed* profile reported above average experiences of discrimination, which is consisted with the existing literature documenting discrimination as a common experience among Black students (Ancis et al., 2000; Johnson et al., 2007; Park et al., 2020; Thelamour et al., 2019).

Taken together, the first aim to explore students' perceptions of UNCG's institutional context brought to light that Black students at UNCG are not a homogenous group and are situated within different interpersonal contexts. The majority of Black students have positive perceptions of the institution given the intentional efforts the campus makes to promote inclusion and diversity, but there is a small group whose interpersonal context is shaped by the institution's context in less positive ways.

The second aim focused on examining the student factors that increased students' likelihood of being in one context profile compared to another. Students who were first generation were more likely to be in the *highly culturally engaged/welcomed* or the *highly culturally unengaged/unwelcomed* context profiles. One factor that might explain the contrast in first generation students' context profile membership is the extent to which institutional agents engaged this population in a way that was responsive to their unique struggles and provided

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relevant support and resources. First generation students represent 30% of UNCG's student body. In response to the notable percentage of first generation students on campus, the campus includes several resources for this population including the UNCG-McNair Scholars Programs, Spartan Start Up, Trio Student Support Services, First G at the G, and more. Thus, institutional agents have multiple resources to connect students with that can complement any direct support they provide. Richards' (2022) qualitative investigation revealed first generation students often felt intimidated by faculty so engaged in fewer help seeking behaviors and when they did seek help from faculty it was often as a last resort. Additionally, when they sought out help, they did not know how to take advantage of the resources they were offered. Considering Richards' findings, students in the *highly culturally engaged/welcomed* profile may have had more personalized experiences with institutional agents when they sought out help compared to those in the *highly unengaged/unwelcomed* profile. This explanation is consistent with Grim et al. (2021) who found first generation students were more likely to utilize resources obtained from people they had trusting relationships or shared backgrounds. The *highly unengaged/unwelcomed* profile was particularly characterized by low humanized educational environments. This means students in the *highly culturally unengaged/unwelcomed* profile were more likely to disagree that there were available opportunities to develop meaningfully relationships with faculty and staff who cared and were committed to their success. Faculty and staff who point first generation students to resources without first getting a deeper understanding of who they are and in turn what their needs are, they may deliver support in a way that unintentionally communicates that they do not care about the student and are not committed to their success. This profile was also characterized by well below average collectivist cultural orientations, which means students in this profile tended to perceive the environment as

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individualistic. Liversage et al. (2018) conducted qualitative interviews and found Black first generation students acknowledged the value of social support but faced challenges with establishing relationships with other students. Considering these findings with respect to the current study, it is possible first generation students who struggle to develop relationships with other students might have a harder time seeing the campus as a space that fosters teamwork and collaboration. Taken together, there are two types of interpersonal context Black UNCG first generation students are embedded. One is defined by positive perceptions of cultural relevance, responsiveness, and welcomeness and the other defined by negative perceptions of these factors.

Students' living arrangements were also associated with profile membership. Those who lived off and further away from campus had greater odds of belonging to the *Moderately culturally unengaged/unwelcomed* compared to the *Highly culturally engaged/welcomed* profile. This finding is consistent with Fassett et al. (2020) who found Black students who lived off campus perceived lower levels of support on campus and perceived their living arrangement as having a higher impact on their educational experience including making friends on campus. The findings are also consistent with Holloway-Friesen (2018) who found commuter students reported limited interactions with institutional agents, time spent commuting was a barrier to participating in campus programming, and feeling pressures to adjust because of their living status. The integrative model of student experiences within embedded context in higher education suggests the extent to which all students become meaningfully involved with campus is driven by how culturally relevant, responsive, and welcoming the campus environment is for them. Black students typically live on campus (Fassett et al., 2020); however, among those who live off campus they are uniquely vulnerable to experiencing a culturally unengaging/unwelcoming campus. UNCG provides a few efforts to support commuter students

including the Spartan Chariot that offers transportation from commuter parking lots to central campus and the celebration of Commuter Appreciation Day. Most other resources that are marketed to commuter students are also open to all students, including locker rentals in the university center and lounge areas. With limited presence of dedicated areas, programs, and resources specifically for commuter students, UNCG may not positively acknowledge or respond to their unique needs. Additionally, the lack of resources for this population may produce perceptions of mistreatment when students are in the midst of seeking support and find out they cannot utilize a resource because of their living arrangements.

The current study also revealed students who worked more hours off campus had a higher likelihood of belonging to the *Moderately culturally unengaged/unwelcomed* or *Highly culturally unengaged/unwelcomed* compared to the *Highly culturally engaged/welcomed* profile. The integrative model of student experiences within embedded context in higher education suggests UNCG's historical mission centered around supporting students who were not employed, thus produced lingering institutional policies and practices that may not be relevant for students employed off campus. UNCG offers limited support or guidance to faculty or students regarding student employment off campus. Considering this context, when students who work off campus interact with institutional agents it seems logical that faculty and staff have little to lean on in their attempts to support this population. Consequently, institutional agents may signal that needs related to students' employment status are something with which they cannot help students. In turn students who work off campus may perceive a campus climate that lacks responsiveness to their situation.

The current findings also revealed the more semester hours students completed, the greater odds they had of belonging to the *Moderately culturally engaged/welcomed* or

Moderately culturally unengaged/unwelcomed compared to the *Highly culturally engaged/welcomed.* Considering Hunt et al. (2012) found seniors reported burnout and working off campus as barriers to their persistence, it is logical that upper-class students are more likely to be in the *Moderately culturally engaged/welcomed* or *Moderately culturally unengaged/unwelcomed* compared to the *highly culturally engaged/welcomed profile*. Upper-class students likely acquire more personal responsibilities overtime (e.g., financial obligations). Their increased responsibilities and proximity to life post-graduation makes their need for specific supports different from those they may have benefited from in earlier years. As upper-class students get closer to defining their plans for after graduation, their relationships with institutional agents, particularly faculty, become more salient. Depending on the quality of those relationships, in terms of the extent to which they can leverage them to reach their post-graduation goals, may shape whether they see the campus as culturally relevant and responsive to their unique needs.

The current study also considered whether gender influenced students' likelihood of being classified in one of the profiles. Gender was not associated with context profile membership. It is possible the analysis was underpowered, considering men only represented 18% of the sample. It is also possible that Black men and women have mostly similar experiences at UNCG but differences are more pronounced when considering additional factors such as their college generational status. Prior work suggests that Black men's peer relationships were a critical source of support for them (Bonner 2003; Harper 2006). Considering first generation students tend to seek out support from peers first and women tend to engage in more help seeking in general (Sheu & Sedlacek, 2004), first generation Black women's interpersonal context may be characterized by a mix of peer and faculty institutional agents, whereas Black

men's interpersonal context is primarily peer-based. If so, these differences likely inform their perceptions of the campus environment in different ways. Differences may also be more pronounced when considering students' majors. In light of Park et al.'s (2020) findings that Black women in STEM were more likely to leave STEM compared to men, Black women in STEM majors may have more negative perceptions of the campus environment compared to Black men. Taken together, an intersectional approach may better capture how gender might inform patterns of Black students' perceptions of the institutional context.

Students' Pell grant status was also not associated with profile membership. Theory and research suggest students' economic status is associated with their access to social capital within higher education because such institutions are organized around practices to serve middle-class students (Soria & Stebleton, 2013). Considering many first generation students are also from low-income backgrounds, students' economic status is a salient indicator of campus perceptions by way of their first-generation status. It is possible the resources UNCG offers to students with low-income backgrounds responds to their needs in a way that does not make their economic status a defining feature of how students see the campus. UNCG provides several need-based scholarships, work study programs, and other resources to offset economic burdens.

The third research question concerned the relationship between the emergent profiles and sense of belonging. The hypothesis suggested profiles characterized by high cultural relevance and cultural responsiveness and low discrimination/prejudice would be associated with higher sense of belonging compared to other profiles. Results supported this hypothesis such that context profiles were associated with sense of belonging. As the context profiles were characterized by an increasingly positive interpersonal context, sense of belonging was higher. The association between the context profiles and sense of belonging is consistent with Museus et

al. (2018) who found a positive associations between five of the CECE indicators (i.e., cultural familiarity, cultural validation, culturally relevant knowledge, collectivist cultural orientations, and holistic support) and sense of belonging. Higher reports of cultural familiarity, culturally relevant knowledge, collectivist cultural orientations, and holistic support was associated with higher sense of belonging. Museus et al. did not find cultural community service, cross cultural engagement, humanized educational environments, and proactive philosophies as significant predictors of sense of belonging. The current person-centered approach revealed these factors are relevant to consider with respect to students' sense of belonging. Additionally, including students' perceptions of discrimination further highlighted the importance of factors Museus et al. (2018) did not find significant, such as humanized educational environment. The *Highly unwelcomed/unengaged* context profile was the lowest on humanized educational environment, had the highest reports of discrimination/prejudice, and the lowest sense of belonging. Their low perceptions of a humanized educational environment was a notable distinction between them and the *Moderately culturally unengaging/unwelcoming* context profile. The relationship between the context profiles and belonging provides support for the integrative model of student experiences within embedded context in higher education which places emphasis on the importance of considering students' positive and negative experiences to understand the nature of their experiences and implications for associated outcomes. Context profiles characterized by average or above average perceptions of discrimination/prejudice were associated with lower sense of belonging compared to the context profile with below average perceptions of discrimination. This finding highlights the critical importance of educational leaders to not only provide a culturally relevant and responsive campus environment, but one that also reduces students' experiences of discrimination/prejudice.

Contrary to the study hypothesis, profiles were not associated with persistence. It is possible there is an indirect association between students' perceptions of the campus environment and persistence through other academic outcomes such as academic performance, as Museus et al. (2014) suggested. Additionally, persistence was measured by students' enrollment the following semester after data collection, it is possible that their perceptions of the campus environment is associated with later persistence (i.e., one year later). It is also important to note that although there were no difference across profiles, students within each profile persisted. Most students who were classified in the moderately or highly culturally unengaged/unwelcomed demonstrated resilience considering they reported above average frequencies of discrimination/prejudice. While such resiliency is notable, the quality of their experiences on campus is still concerning. Regardless of if they persisted toward graduation the following semester, the negative quality of their interpersonal context may have implications for their persistence in later semesters or after graduation.

Strengths and Limitations of the Current Study

This investigation demonstrated the success a southeastern MSI has had with respect to supporting a diverse population of Black students. Although there were distinct patterns of interpersonal context in which students were embedded, most students perceived the campus as culturally engaging and welcoming. Students' interactions with other institutional agents at the MSI were characterized by culturally relevant, responsive, and relatively low experiences of discrimination. Thus, the study provided support for specific factors that can support student outcomes in the unique context of a MSI.

Namely, these include opportunities for students to connect with institutional agents who share their background, opportunities for students to learn about their cultural community within

curricular and co-curricular outlets, give back and influence their cultural communities, participate in cross-cultural engagement, and develop meaningful relationships with institutional agents. Additional supportive factors include access to institutional agents who validate students' cultural backgrounds, emphasize collectivist rather than individualistic orientations, are proactive in supporting students, and provide students with a broad range of supports unique to their specific needs. These supports ideally take place in a context with limited experiences of discrimination both directly or observed.

As HWIs across the country are enrolling more diverse student bodies, it is important for higher education leaders to acknowledge the MSI context discussed in this study are becoming more common. The insight generated from this study on the factors that contribute to Black students' sense of belonging, specifically at a MSI, can help higher education leaders ready their institutions for increasingly diverse student bodies. Relatedly, the study revealed the relevance of considering the integrative model of student experiences within embedded context in higher education when exploring the complexity of Black students' experiences. Without this perspective, it is possible to underestimate the significance of multiple layers of institutional context and how they shape distinct patterns of experiences characterized by a paradox of challenges and supports. As institutions work to become student-ready colleges, it is important to invest efforts at multiple levels within the institution. Hunter et al. (2022) described the necessity for diversity, equity, and inclusion principles be reflected in the structural, social, and cultural domains within higher education institutions to ensure alignment across the institution. Such alignment is critical to transmit a consist and cohesive message about the value of diversity. On the receiving side of this alignment, students can receive consistent or contradictory feedback

from different layers of institutional context based on the extent to which those layers are aligned with respect to their consideration of diversity, equity, and inclusion.

A related strength of the current study is the person-oriented approach utilized to examine a combination of factors that characterize students' interpersonal context on campus. The latent profile analysis allowed for an exploration of how both potential positive and negative factors simultaneously inform student outcomes. The presence of perceptions of a cultural relevant and responsive institution did not inherently mean students did not have experiences of discrimination/prejudice. Accounting for both revealed there is likely a complex relationship between the extent the institution is perceived as culturally relevant and responsive and how discrimination/prejudice is experienced.

Additionally, this study included a sample of Black students at UNCG. Thus, the findings generated from this investigation can be directly leveraged for programming and efforts to enhance UNCG's campus environment. An additional key strength of the current study is the within-group approach utilized to examine different characteristics among a sample of Black college students. Characteristics such as first generation status, off campus employment, living arrangements, undergraduate year, Pell grant status, and gender were all explored to gain a deeper understanding of how such factors are linked to the types of interpersonal context Black students navigate. Several factors including first generation status, off campus employment, off campus living arrangements, and undergraduate year, were associated with the types of interpersonal context students perceived. This points to the importance of applying an intersectional approach while aiming to understand the range of experiences Black students have on college campuses and the focus of future intervention efforts for the campus.

In addition to the important strengths of the current study, there are also a few limitations. Although the *highly culturally unengaged/unwelcomed* profile only represented four percent of the sample, it is important to understand the experiences of students on campus who view the campus this way. The current study may not have had enough power to detect associations unique to this profile given the small percentage of students. Of the 7,000 randomly sampled to complete the survey, it is possible students who may have been represented in this profile did not complete the survey because of their negative views of campus.

Although the study included several other dimensions of difference among a sample of Black students, the study did not account for variations in immigration status, ethnicity, or sexual orientation. Students from immigrant families have unique challenges associated with their college experiences that may play a role in the extent to which they see the campus as culturally relevant, responsive, and discriminatory. Furthermore, students' ethnic backgrounds may also play a role in such perceptions. Considering Black students' different ethnic backgrounds and cultural communities, who they see as culturally relevant and responsive likely varies. Additionally, students' sexual orientation on a campus that is embedded in a heteronormative society likely inform a distinct interpersonal context.

Another limitation of the study is that there was not a consideration of students' major/college or participation in living learning communities. UNCG consist of seven colleges: College of Arts & Sciences, Business & Economics, Education, Health & Human Services, Nursing, College of Visual & Performing Arts, and the Lloyd International Honors College. Although the campus collectively reflects that of a MSI, representation of Black students is not evenly spread across all majors/colleges on campus. Students in one major/college may see the campus as culturally engaging/welcoming, while students in another major/college may see the

campus differently. Similarly, students who participate in living learning communities may have a unique perception of the campus environment given UNCG's learning communities are designed to create a "small college experience." Ashby College, Grogan College, and Strong College are set up for students to take courses together with faculty in their residence hall. Students participating in these types of arrangements spend more time with the same group of students.

Implications and Future Directions

Findings from the current study suggest it is important for UNCG to ensure institutional agents are available and are aware of how to engage in culturally relevant, responsive, and welcoming practices that foster students' perceptions of a culturally engaging/welcoming campus environment. While most UNCG students may perceived the campus that way, there are still a notable percentage of students who did not. UNCG has demonstrated a degree of success on this front, but it is important to see students' who do not perceive the campus environment as culturally relevant/welcoming as an area of opportunity for growth.

Considering the student characteristics that were associated with profile membership, UNCG leaders may need to promote additional efforts targeted to subsets of students including students who are employed off-campus, students who live off-campus, upper-class students, and first generation students. Most educational programs are designed around students who do not have major life and work responsibilities. While there are a growing number of education programs for working students, these tend to be at the graduate level (e.g., Masters of professional studies (MPS), Masters of business administration (MBAs), Law schools, etc.). Many students experience role conflict while trying to juggle school, work, and family (Xu & Song, 2013). Higher education policies should consider increasing need-based funding to truly

reflect the cost associated with pursuing education and reduce students' unmet financial needs and in turn the need to work. Relatedly, higher education policies should be careful to evaluate the effectiveness of policies that are implemented. It is not uncommon for policies to be implemented with the intent to support students but, when translated to practice, turn out to be ineffective. For example, financial aid policies sometimes penalize students who work to offset their financial needs such that their income is included in their financial aid calculations that reduces their eligibility for funds they actually need. Higher education institutions should also consider increasing the availability of jobs on campus that make it easier for students to work and attend school, by cutting down on commuting time and potentially being in an area that enriches their role as a student. Similarly, higher education institutions should improve the campus culture around working and going to school so that students are not stigmatized for having such an arrangement. One way institutional policies can demonstrate a value of student employment is by integrating employment experiences within curricula or in how students are evaluated. If students gain experience and/or skills relevant to their degree requirements perhaps that can be factored in as course credits.

Similar efforts are needed to better support commuter students. Potential practices to promote commuter students' perceptions of the campus environment include implementing dedicated lounges and parking spaces for them so they can feel valued when they are on campus. Considerations for upper-class students include more intentional efforts to support them with their next steps. Many universities offer career centers as a resource for students; however, this resource could be better integrated with upper-class students' coursework, so they are able to benefit from the resource in a more meaningful way. It is important the university demonstrate its continued commitment to supporting upper-class students.

In addition to practical efforts, future research should further explore the complex perceptions students have in a MSI context. Students' reports of discrimination point to the importance for future research to better understand the types (e.g., microaggressions) and sources (e.g., students, faculty, staff) of discrimination they experience specifically at a MSI. A deeper understanding of the nature of student experiences of discrimination at MSIs can reveal additional insight regarding the complexity of how students' experience of a culturally relevant and responsive institution informs how they experience discrimination/prejudice, if they encounter such experiences.

Additionally, considering the influence of first generation status on students' profile membership, it will be important to explore the unique experiences of first generation students and how they may differentially access and benefit from supports at MSIs. Sims and Ferrare (2021) explored differences among first generation college students from rural and urban areas and found students from rural areas appreciated general support from their families but did not look to them for advice about school (e.g., choosing a major) given their lack of knowledge about college. The current study did not systematically explore specific indicators that influenced why first generation students were most likely to be either *highly culturally engaged/welcomed* or *highly culturally unengaged/unwelcomed* context profiles; however, Sims and Ferrare's findings suggest future research should examine this dynamic more closely.

The current study suggests a culturally engaging and welcoming interpersonal context is important for Black students' sense of belonging. Future research should explore the impact of the interpersonal context of higher education environments on students' identity related outcomes, such as their racial identity, academic identity, and other self-views (e.g., self-concept, self-esteem, etc.). Given the developmental processes occurring during emergent adulthood,

when most students attend college, exploring the relationship between the higher education environment on such outcomes is critical. Gummadam et al. (2016) explored the role of sense of belonging and ethnic identity on the psychological adjustment of racially diverse college students attending a PWI and concluded that both ethnic identity and sense of belonging was related to psychological adjustment and sense of belonging had a stronger relationship to adjustment. Interestingly, in the context of low sense of belonging, students who had a strong sense of ethnic identity had a higher sense of self-worth, which suggested that one's ethnic identity can buffer the negative effects of having a low sense of belonging. As the current study revealed, students' experiences differed and had implications for their sense of belonging. A deeper understanding of the implications the campus environment has on students' identity development, such as their racial/ethnic identity, can help campus leaders identify additional ways to support all students, even those who may not have positive views of the campus and in turn a low sense of belonging. This line of inquiry can also be informed by the body of work that highlights factors that foster racial identity development and how they may also serve as a protective factor among college students. Using a sample of Black college students, Brown and Tylka (2011) found that perceptions of racial discrimination were only negatively associated with student resilience in the context of low parental racial socialization messages. More specifically, investigations can explore how campus environments inform students' identity outcomes and how the environment communicate similar or contrasting messages about race to those from students' families.

It also important to better understand how communities off campus play a role in student outcomes. UNCG is located in a diverse geographic area with a rich history of activism. This history contributed to the existence of local community events and structures that students at

UNCG may engage within and in turn develop a sense of belonging to the broader community in which UNCG is located.

Future research should also explore mediating factors explaining the relationship between the interpersonal contexts in which students are embedded and their persistence toward graduation. The current study did not detect an association; however, such interpersonal context might be a more distal indicator of persistence by way of psychological factors or student performance.

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Table 1. Factor Loadings

	Factor Loadings	
Latent Construct	B	*B*
Proactive philosophies		
1. People at UNC Greensboro often send me important information about new learning opportunities.	1.00	0.757
2. People at UNC Greensboro often send me important information about supports that are available.	1.37	0.911
3. People at UNC Greensboro check in with me regularly to see if I need support.	0.81	0.535
Holistic support		
1. If I need support, I know a person at UNC Greensboro who I trust to give me that support.	1.00	0.904
2. If I have a problem, I know a person at UNC Greensboro who I trust to help me solve that problem.	1.03	0.936
3. If I need information, I know a person at UNC Greensboro who I trust to give me the information that I need.	0.86	0.864
Cross-cultural engagement		
1. There are enough opportunities to discuss important <u>social</u> issues with people from different cultural backgrounds.	1.00	0.874
2. There are enough opportunities to discuss important <u>political</u> issues with people from different cultural backgrounds	0.90	0.716
3. There are enough opportunities to discuss important <u>diversity-related</u> issues with people from different cultural backgrounds.	0.98	0.853
Collectivist orientation		
1. In general, people at UNC Greensboro help each other succeed.	1.00	0.839
2. In general, people at UNC Greensboro support each other.	1.00	0.908
3. In general, people at UNC Greensboro work together toward common goals.	0.96	0.826

Humanized educational environments

1. In general, educators <u>care</u> about students at UNC Greensboro.	1.00	0.894
2. In general, educators at UNC Greensboro <u>are committed</u> to my success.	1.04	0.891
3. In general, I view educators at UNC Greensboro as caring human beings.	0.90	0.834

Cultural familiarity

1. It is easy to find people on campus with similar backgrounds as me	1.00	0.677
2. I frequently interact with people from similar backgrounds as me on campus	1.17	0.699
3. It is easy to find people on campus who understand me	1.24	0.795
4. It is easy to find people on campus who understand my struggles	1.25	0.807
5. People on campus are generally willing to take the time to understand my experiences	1.13	0.775
6. At this institution, there are enough opportunities for me to connect with people from my cultural communities	0.72	0.519

Cultural validation

1. In general, people at this institution value knowledge from my cultural communities	1.00	0.798
2. In general, my cultural communities are valued at this institution.	1.11	0.884
3. In general, people at this institution value the experiences of people in my cultural communities.	1.09	0.837

Cultural relevant knowledge

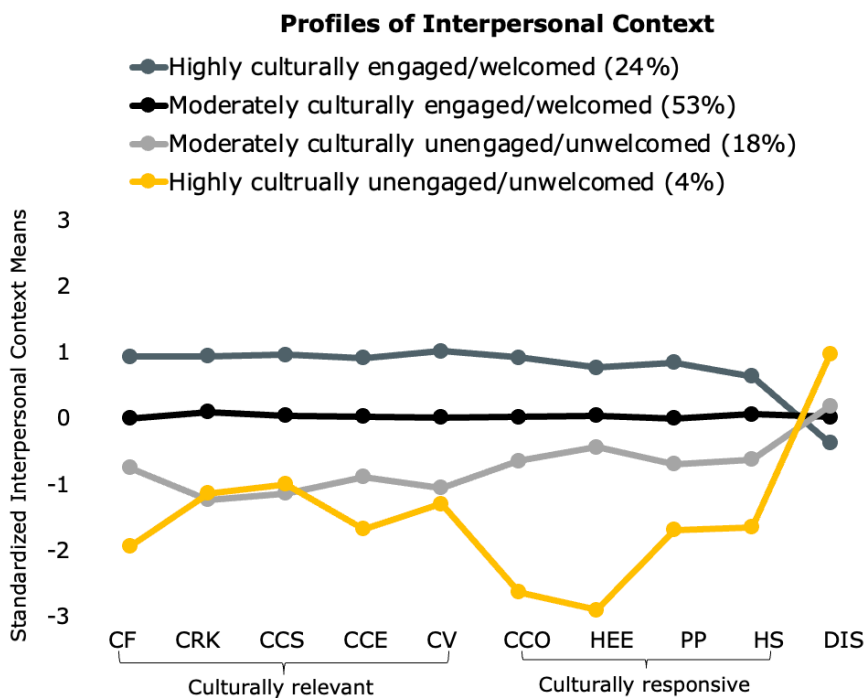|		
1. At this institution, there are enough opportunities to learn about the challenges that exist in my own cultural communities.	1.00	0.889
2. At this institution, there are enough opportunities to learn about important issues within my own cultural communities.	1.05	0.891
3. At this institution, there are enough opportunities to gain knowledge about my own cultural communities.	1.00	0.89

Cultural community service

1. There are enough opportunities (e.g., research, community service projects, etc.) to help improve the lives of people in my cultural communities.	1.00	0.877
2. There are enough opportunities (e.g., research, community service projects, etc.) to give back to my cultural communities.	1.10	0.93
3. At this institution, there are enough opportunities (e.g., research, community service projects, etc.) to positively impact my cultural communities.	1.05	0.91

Table 2. Model Fit Statistics and Latent Profile Enumeration

	2 profile	3 profile	4 profile	5 profile
Information criteria				
Akaike (AIC)	7127.319	6844.54	6707.042	6621.231
Bayesian (BIC)	7239.326	6996.291	6898.538	6852.471
Sample-size adjusted (ABIC)	7141.032	6863.118	6730.486	6649.541
Entropy	0.858	0.89	0.883	0.917
LRT 2 times the loglikelihood difference (Approximate pvalue)	682.085 (p=0.132)	304.779 (p=0.0159)	159.498 (p=0.501)	107.811 (p=0.316)
BLRT 2 times the loglikelihood difference (Approximate pvalue)	682.085 (p= 0.000)	304.779 (p=0.000)	159.498 (p=0.000)	107.811 (p=0.000)

Figure 2. Profiles of Black Students Perceptions of the Campus Environment

Profiles of Interpersonal Context

- Highly culturally engaged/welcomed (24%)
- Moderately culturally engaged/welcomed (53%)
- Moderately culturally unengaged/unwelcomed (18%)
- Highly cultrually unengaged/unwelcomed (4%)

Note. CF=cultural familiarity, CRK= cultural relevant knowledge, CCS= cultural community service, CCE=cross cultural engagement, CV=cultural validation, CCO= collectivist cultural orientations, HEE= humanized educational environment, PP= proactive philosophies, HS=holistic support, DIS=discrimination

Table 3. Multinomial logistic regression for the LPA solution

Variable	Class				
	Moderately culturally engaged/welcomed				
	Estimate	SE	Odds ratio	95% confidence interval	
First generation status	-0.85	0.405	0.428*	0.193	0.946
Gender	0.053	0.403	1.055	0.479	2.324
Pell	0.070	0.362	1.073	0.528	2.182
Living	0.237	0.203	1.268	0.852	1.887
Employment status	0.120	0.075	1.128	0.974	1.306
Undergraduate year	0.299	0.149	1.349*	1.006	1.807
	Moderately culturally unengaged/unwelcomed				
	Estimate	SE	Odds ratio	95% confidence interval	

	Estimate	SE	Odds ratio	95% confidence interval	
First generation status	-1.21	0.47	0.297**	0.118	0.746
Gender	0.526	0.425	1.693	0.736	3.893
Pell	-0.035	0.444	0.965	0.404	2.305
Living	0.524	0.234	1.689*	1.067	2.673
Employment status	0.177	0.086	1.194*	1.008	1.414
Undergraduate year	0.442	0.161	1.555**	1.134	2.132

Highly unengaged/unwelcomed

	Estimate	SE	Odds ratio	95% confidence interval	
First generation status	1.23	1.16	3.425	0.353	33.24
Gender	0.182	0.610	1.200	0.363	3.968
Pell	-1.642	1.124	0.194	0.021	1.754
Living	0.404	0.338	1.498	0.772	2.908
Employment status	0.287	0.124	1.332*	1.045	1.698
Undergraduate year	0.100	0.363	1.105	0.543	2.250

Reference group = *Highly engaged/welcomed*
* $p < 0.05$; ** $p < 0.01$

Table 4. Sense of Belonging and Persistence Profile Means and Standard Errors

Profile	Sense of Belonging		Persistence	
	M	SE	M	SE
Highly engaged/welcomed	4.646	0.054	0.753	0.053
Moderately culturally engaged/welcomed	3.775	0.059	0.740	0.036
Moderately culturally unengaged/unwelcomed	3.097	0.123	0.721	0.063
Highly unengaged/unwelcomed	2.43	0.267	0.749	0.125