

Un(Bundling) the Black Experience at PWIs: Using Assets-based Frameworks to Explore the Lived Experiences of Black Sub-Saharan African-born Graduate Students in STEM

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ABSTRACT

This article is a research summary of a dissertation in progress that explores the experiences of Black Sub-Saharan African-born (BSSA) graduate students pursuing degrees in the STEM fields at a predominantly white institution (PWI). This includes meaning-making of their experience with the campus climate at PWIs from BSSA graduate students' community cultural wealth, familial background, and other funds of knowledge in their educational journey and academic success. Hence, the study is guided by complementary theoretical frameworks that shed

light on the assets of BSSA graduate students as they navigate challenging educational environments such as STEM departments and PWIs. The preliminary results of the study are presented along with implications of the research.

Keywords: assets-based frameworks, graduate students, STEM, Sub-Saharan Africa,

INTRODUCTION

Despite the promise that improving campus climate offers for promoting students' socialization and psychological safety, marginalized students continue to face negative experiences on campuses that hamper their academic success. This experience is grave in graduate educational environments and the science, technology, engineering, and mathematics (STEM) fields (Slay et al., 2019), and at Predominantly White Institutions (PWIs). Meanwhile, foreign-born students are represented and thrive in these educational environments. In the United States (U.S.), foreign-born students are critical to diversity in graduate education, national innovation, and economic growth. However, there are internal differences among foreign-born students. Specifically, Black Sub-Saharan African-born (BSSA) students are unique culturally, based on their orientation.

BSSA students account for students with origins from Sub-Saharan Africa (SSA), encompassing immigrants and international students. SSA is a region of Africa that excludes countries in the Northern/Maghreb region (Echeverria-Estrada & Batalova, 2019). Most African-born immigrants in the U.S. are Black and emanate from SSA countries (Nigeria, Ethiopia, Ghana, etc.). This brings a new meaning to Blackness in the U.S. due to an identity clash with the native-born Black population (Landry, 2018). Hence, there are within-group differences depicted by socio-cultural orientation among Black students. Therefore, seeking to explore the Black student population's perspectives as a monolith is problematic. From this backdrop, this research seeks to unbundle the Black experience by focusing on BSSA graduate students in STEM at PWIs. The study focuses on graduate students in STEM, given that BSSA students are more likely to pursue degrees in STEM (New American Economy, 2018).

Purpose of the Study and Research Questions

The purpose of this study is to understand the multiple realities of BSSA graduate students' experience with campus climate at PWIs. Essentially, focusing on BSSA graduate students' community cultural wealth, familial background, and funds of knowledge in their educational journey and academic success. Hence, the research is guided by the following research questions:

- How do BSSA graduate students in STEM deploy their assets in the lived experience with campus climate at PWIs?
- What forms of cultural wealth do BSSA graduate students in STEM engage with to sustain their interest towards degree completion at PWIs?
- How do BSSA graduate students in STEM describe the influence of family on their educational journey and success?
- What funds of knowledge among SSA families contribute to the persistence and academic success of BSSA graduate students in STEM?

LITERATURE REVIEW

Campus climate represents the perception of "the current attitudes, behaviors, and standards and practices of employees and students of an institution ... that concern the access for, the inclusion of, and level of respect for individual and group needs, abilities, and potential" (Rankin & Reason 2008, p. 264). While the construct has been used more frequently to focus on specific social groups that are largely historically underrepresented in higher education, campus climate is not limited to traditionally minoritized groups as it advances a holistic educational environment that seeks to increase the success and benefits for all groups at institutions (Rankin & Reason, 2008). Therefore, campus climate is critical to improving academic environments and promoting a culture of diversity and inclusivity of all groups, including foreign-born students.

A way to improve the campus climate for foreign students entails increasing students' sense of belonging to ensure their transition in a culturally sustaining manner (Yao, 2019). The high number of foreign-born students in STEM (Open Doors Report, 2019) and graduate programs necessitates an inclusive approach with cultural sensitivity to ensure their educational success. Specifically, the "African population is noticeably diverse culturally, linguistically, economically, and educationally" (Harushimana & Awokoya, 2011,

p.35). However, the homogeneous classification of Sub-Saharan African-born individuals into the racial and ethnic category as Black/African Americans presents African immigrants as ethnic/racial minorities in the U.S and negatively impacts African immigrants. This identity monolith also ignores the unique cultural/ethnic background of the BSSA population and generates identity clashes and tension with the domestic Black population (Nsangou & Dundes, 2018; Waters et al., 2014).

In educational environments, BSSA students face myriad challenges, including communication typical for most foreign students (Parlar Kılıç et al., 2021). Due to social identity clashes with the Black/African-American racial/ethnic group on campuses, BSSA students also become exposed to diverse forms of marginalization (George Mwangi & English, 2017). This includes racism, stereotypes, and conflicting cultural experiences imposed by previous experiences in their home countries (George Mwangi et al., 2019; Sparks, 2018). These multiple social identities continue to influence the way BSSA students are perceived and affect their overall experience (Traoré, 2006).

THEORETICAL CONSTRUCT

This research is guided by a complementary theoretical framework, Community Cultural Wealth (CCW) (Yosso, 2005) and Funds of Knowledge (FOK) (Moll et al., 1992). Yosso's (2005) CCW accounts for the forms of capital (*aspirational, navigational, resistant, linguistic, familial, & social*) that each ethnic/racial group possesses to support their educational success. Similarly, FOK (Moll et al., 1992) focuses on the historically and culturally accumulated knowledge from the household, family, cultural orientation, and community to inform a culturally-driven approach to improve students learning. Specifically, CCW is used to holistically understand how students deploy their cultural wealth and what specific forms of capital they utilize in navigating challenging academic environments. Similarly, FOK is used to explore the family's role and other accumulated knowledge from the cultural background to understand how essential these are to BSSA graduate students' educational journey and success.

RESEARCH METHOD

In undertaking this research, I employed a qualitative single case study (Yin, 2017). The qualitative case study research methodology is based on examining the context and every complex condition in the real-world setting of the phenomenon to have a critical understanding of that particular phenomenon (Yin,

2011, 2017). Hence, the single case study methodology presents a relevant methodological framework to focus holistically on the phenomena of interest (i.e., campus climate, family's role, funds of knowledge) in the experiences of a particular group (i.e., BSSA graduate students majoring in the STEM fields) in a specific educational and social context (i.e., PWI in the U.S.).

Research Context and Participants

This research was conducted at a public Research 1 PWI in the Mid-Atlantic of the U.S. In the 2020/2021 academic year, the institution enrolled over 6,000 graduate students (U.S. News, 2021) including BSSA students. Hence, a total of 22 BSSA graduate students were recruited as participants for this study. Participants were recruited through purposeful sampling (Merriam & Tisdell, 2015), using two graduate students' organizations for the African graduate students and Black graduate students as gatekeepers.

Data Collection

Following the Human Research Protection Program (HRPP) approval, data were collected during Fall 2021. Sources of data collection included semi-structured interviews, personal reflective journal entries, focus groups, and an impending workshop. Participants participated in two individual semi-structured interviews to gauge their perspectives on the experience at PWIs, submitted a reflective journal entry based on prompts provided about the deployment and validation of their funds of knowledge and cultural wealth, and one focus group to gauge their collective educational experience. The workshop, which focuses on member checking and mapping participants' cultural wealth and funds of knowledge in keeping with the initial data is yet to be held since the analysis of the data is still ongoing.

Data Analysis

Data analysis is being conducted using the thematic analysis approach, which enables the researcher to utilize the individual experiences, interpretations, realities, and discourse found in the data as avenues to explore the group to which it belongs (Robson & McCartan, 2016). For this study, the thematic analysis provides a means to understand the cultural wealth and funds of knowledge of BSSA graduate students in STEM at PWIs as constructed through the experiences and interpretations of participants.

Transcripts are being analyzed using the open coding process to allow codes to emerge from the data and discern themes relevant in the data through two

rounds of traditional qualitative line-by-line coding (Saldaña, 2016). The coding process focuses on participants' unique lived experiences to support both within- and cross-participant analyses, guided by the theoretical frameworks on which the study is based to determine BSSA graduate students' cultural wealth and funds of knowledge.

PRELIMINARY RESULTS

As a work-in-progress, the findings of this research are pending, given that an in-depth analysis of the data has just begun. However, critical issues/themes arising from the interviews, journal reflections, and focus group thus far highlight *hard work, confidence, perseverance, academic self-efficacy, self-affirmation, and determination* as some of the significant areas cutting across students' cultural wealth, deployed to resist and navigate their educational environments.

IMPLICATIONS AND CONCLUSION

Although studies have revealed the essence of supporting international/foreign-born students, empirical research on the experiences of BSSA graduate students in STEM is largely unexplored. This study provides knowledge for institutions on how to be culturally responsive to support and retain diverse international and culturally distinct students. Primarily, the research enlightens institutions and student affairs professionals, including international/global education offices of the valuable assets that BSSA graduate students in STEM fields bring to the U.S. Institutions will be capable of supporting and utilizing students' cultural backgrounds to validate their accumulated wealth and forms capital for a positive outcome.

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