

Re-examining the Socialization of Black Doctoral Students through the Lens of Information Theory

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ABSTRACT

The socialization of Black doctoral students has been studied from many theoretical and conceptual standpoints, with the exception of information theory. In this paper, the conceptual and theoretical frameworks of “small worlds” and the theory of normative behavior developed by information behavior scholar Elfreda Chatman are used to illuminate the information behaviors that are implicit in the socialization of Black doctoral students. Doctoral student socialization is enacted through faculty and peer relationships that communicate the norms, values, and expectations for performance that facilitate academic and social integration in graduate school in preparation for faculty roles in the academy. Despite the importance of socialization for student success, research indicates that Black doctoral students experience racism, isolation, and hostile climates in predominantly white institutions, which jeopardizes their chances for a successful outcome. Through a review of literature about the socialization of Black doctoral students in the United States, viewed through the lens of Elfreda Chatman’s theoretical frameworks, this paper examines doctoral education as a small world characterized by social and cultural norms that facilitate or hinder the socialization of Black doctoral students. Given the absence of an explicit focus on race in Chatman’s research, the salience of race as a context for the experiences and information behaviors of Black doctoral students is discussed. Areas for future research about the socialization of Black doctoral students in library and information studies are also identified.

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INTRODUCTION

Between 1866 and 1962, Black students earned an estimated total of 2,477 doctoral degrees. This achievement is a testament to their determination and resilience, but bittersweet because of the untold numbers who might have also attained the degree if not for the legacy of slavery and the denial of access to educational opportunity for Black people.¹ Nevertheless, Black students have been underrepresented in doctoral education from its origins and into the present. For the 2016-2017 academic year, Black students represented 14,067 (7.7%) of the 181,352 doctorates conferred in the United States. Of the 42 doctorates conferred in library science, 4 were earned by Black students, 21 by white students, 3 by Latinx students, and 4 by Asian/Pacific Islander students. Ten doctoral degrees were awarded to international students, and none were awarded among Native American and Alaska Native students.² The persistent underrepresentation of students of color in doctoral education jeopardizes the development of a diverse faculty to educate future faculty and practitioners in library and information studies (LIS).³

A substantial amount of scholarship on the graduate school experiences of Black students—primarily from the higher education field of study—has developed over the last 30 years. Much of this literature focuses on recruitment, retention, enrollment,

¹ Horace Mann Bond, *Black American Scholars: A Study of their Beginnings* (Detroit, MI: Balamp, 1972), 210; Harry Washington Greene, "The PhD and the Negro," *Opportunity* 6, no. 9 (1928): 267-284; Harry Washington Greene, "Sixty Years of Doctorates Conferred upon Negroes," *The Journal of Negro Education* 6, no. 1 (1937): 30-37, <https://www.jstor.org/stable/2291986>; Harry Washington Greene, *HOLDERS of Doctorates among American Negroes: An Educational and Social Study of Negroes Who have Earned Doctoral Degrees in Course, 1876-1943* (Boston, MA: Meador, 1946); Gail L. Thompson, "What the Numbers Really Mean: African-American Underrepresentation at the Doctoral Level," *Journal of College Student Retention: Research, Theory & Practice* 1, no. 1 (1999): 24.

² United States National Center for Education Statistics, *Digest of Education Statistics, 2017*, https://nces.ed.gov/programs/digest/d18/tables/dt18_324.25.asp?current=yes. Counts include professional doctoral degrees (e.g., medicine or law).

³ Nicole A. Cooke, "Diversifying the LIS Faculty," *Library Journal*, September 25, 2013, <https://www.libraryjournal.com/?detailStory=diversifying-the-lis-faculty-backtalk>; Nicole A. Cooke, "The Spectrum Doctoral Fellowship Program: Enhancing the LIS Professoriate," *InterActions: UCLA Journal of Education and Information Studies* 10, no. 1 (2014), <https://escholarship.org/uc/item/7vb7v4p8>; Vimal Patel, "Dearth of Black Ph.D. Recipients Will Complicate Efforts to Diversify Faculty," *The Chronicle of Higher Education*, December 18, 2015, <https://www.chronicle.com/article/Dearth-of-Black-PhD/234469>; Mega M. Subramaniam and Paul T. Jaeger, "Modeling Inclusive Practice?: Attracting Diverse Faculty and Future Faculty to the Information Workforce," *Library Trends* 59, no. 1 (2010): 110-111.

persistence, and mentoring.⁴ Although there is a substantial body of literature on the socialization of doctoral students within the context of preparation for a faculty career,⁵ research on the socialization of Black doctoral students is less plentiful.

Current survey data indicate that 52% of Black doctorate recipients with definite employment plans identify academe as their post-graduation employment sector. Other Black doctorate recipients identify the government, industry, business, or nonprofit sectors.⁶ Career choice is a lens through which doctoral student socialization can be understood.⁷ But despite doctorate recipients' career interests outside of academe, the extant literature on doctoral student socialization is written primarily with careers in college or university teaching or research in mind, most likely because the graduate program and discipline are the primary sites of socialization, with faculty in traditional roles as mentors for faculty careers.⁸

Given the difficulty with finding tenure-track faculty jobs in higher education today, due in part to an increasing reliance on contingent faculty and to the growing diversity in their career interests, doctorate holders are considering non-traditional roles as permanent options to a post-doctorate career. However, Finkelstein, Conley, and Schuster pondered that these non-traditional roles might be an interim step *en route* to a tenure-track position while awaiting a better job market.⁹ New and revised models of

⁴ Geneva Gay, "Navigating Marginality En Route to the Professoriate: Graduate Students of Color Learning and Living in Academia," *International Journal of Qualitative Studies in Education* 17, no. 2 (2004): 265, <https://doi.org/10.1080/09518390310001653907>.

⁵ Ann E. Austin and Melissa McDaniels, "Preparing the Professoriate of the Future: Graduate Student Socialization for Faculty Roles," in *Higher Education: Handbook of Theory and Research*, ed. John C. Smart (Dordrecht, Netherlands: Springer, 2006), 397-456.

⁶ Jaqueline Falkenheim, "Doctorate Recipients from U.S. Universities, 2017," Table 47, (Alexandria, VA: National Science Foundation, 2018), <https://nces.nsf.gov/pubs/nsf19301/data>.

⁷ James Soto Antony, "Reexamining Doctoral Student Socialization and Professional Development: Moving Beyond the Congruence and Assimilation Orientation," in *Higher Education: Handbook of Theory and Research*, ed. John C. Smart (Dordrecht, Netherlands: Springer, 2002), 350.

⁸ Meghan Pifer and Vicki Baker, "Identity as a Theoretical Construct in Research About Academic Careers," in *Theory and Method in Higher Education Research*, ed. Malcolm Tight and Jeroen Huisman (Bingley, UK: Emerald Publishing Limited, 2013), 119, [https://doi.org/10.1108/S1479-3628\(2013\)0000009010](https://doi.org/10.1108/S1479-3628(2013)0000009010).

⁹ Martin J. Finkelstein, Valerie Martin Conley, and Jack H. Schuster, *The Faculty Factor: Reassessing the American Academy in a Turbulent Era*, (Baltimore, MD: Johns Hopkins University Press, 2016), Location 2844, Kindle edition; Fernanda Zamudio-Suaréz, "This Academic Took a Job at BuzzFeed. Here's Her Advice to Graduate Programs," *The Chronicle of Higher Education*, April 27, 2018, <https://www.chronicle.com/article/This-Academic-Took-a->

doctoral student socialization are now needed to account for how doctoral preparation and advisement is approached for alt-ac (alternative academic) careers for doctorate holders.¹⁰ But regardless of their career aspirations, more research is still needed on the role of race and ethnicity in the socialization of doctoral students.¹¹

With the exception of publications about diversity-related dissertations, and about the need for more diversity in the LIS faculty,¹² research and scholarship about the experiences of Black doctoral students in LIS is extremely scarce. This is not surprising given the statistics on doctorate attainment cited above. Nevertheless, this void in LIS literature cannot remain unfilled if the LIS community is serious about attracting and retaining more racial and ethnic minority students, faculty, and staff.

Previous research indicates that racial identity has a significant impact on the graduate school experiences of Black students, especially with respect to developing faculty and peer relationships in predominantly white institutions.¹³ The socialization experiences of Black doctoral students have been studied from various theoretical and conceptual standpoints, such as social network theory, stereotype threat, and critical race theory.¹⁴ However, information theories and frameworks have not traditionally been employed in this area of inquiry. In this paper, drawing upon empirical studies of the

Job-at/243264; Vimal Patel, "How a Famous Academic Job-Market Study Got It All Wrong—and Why It Still Matters," *The Chronicle of Higher Education*, September 9, 2018, <https://www.chronicle.com/article/How-a-Famous-Academic/244458>.

¹⁰ Meghan Pifer and Vicki Baker, "Identity as a Theoretical Construct in Research About Academic Careers," 122.

¹¹ Darla J. Twale, John C. Weidman, and Kathryn Bethea, "Conceptualizing Socialization of Graduate Students of Color: Revisiting the Weidman-Twale-Stein Framework," *Western Journal of Black Studies* 40, no. 2 (2016): 92.

¹² Mega M. Subramaniam et al., "The Implications of a Decade of Diversity-Related Doctoral Dissertations (2000–2009) in LIS: Supporting Inclusive Library Practices," *The Library Quarterly* 82, no. 3 (2012): 361-377; Renee E. Franklin and Paul T. Jaeger, "A Decade of Doctorates: An Examination of Dissertations Written by African American Women in Library and Information Studies, 1993-2003," *Journal of Education for Library and Information Science* 48, no. 3 (2007): 187-201, <https://doi.org/10.1086/665931>.

¹³ Twale, Weidman, and Bethea, "Conceptualizing Socialization of Graduate Students of Color," 84, 89-91.

¹⁴ Ryan Evely Gildersleeve, Natasha N. Croom and Philip L. Vasquez, "'Am I Going Crazy?!" A Critical Race Analysis of Doctoral Education," *Equity & Excellence in Education* 44, no. 1 (2011): 93-114, <https://doi.org/10.1080/10665684.2011.539472>; Ferlin G. McGaskey et al., "The Social Support Networks of Black Males in Higher Education Administration Doctoral Programs: An Exploratory Study," *Western Journal of Black Studies* 40, no. 2 (2016): 141-158; Edward Taylor and James Soto Antony, "Stereotype Threat Reduction and Wise Schooling: Towards the Successful Socialization of African American Doctoral Students in Education," *Journal of Negro Education* 69, no. 3 (2000): 184-198, <https://doi.org/10.2307/2696231>.

socialization of Black doctoral students, I explore an information-theory-based understanding of these socialization experiences, using the conceptual framework of small worlds and the theory of normative behavior advanced in the scholarship of LIS scholar and information behavior theorist Elfreda Chatman.¹⁵

Socialization in graduate school is a process through which students “gain the knowledge, skills and values necessary for successful entry into a professional career requiring an advanced level of specialized knowledge and skills.”¹⁶ For doctoral students preparing for an academic career, this process occurs through experiences such as being mentored by faculty; involvement in scholarly activities such as research, conference presentations, and publishing with faculty and/or peers; teaching or research assistantships; and social interaction with peers.¹⁷ These experiences indicate a need for access to information about the kinds of professional, academic, and social experiences that facilitate success in graduate school.

It is estimated that up to 50% of all doctoral students depart their program early, with comparable rates for US racial and ethnic groups.¹⁸ In a study of doctoral student attrition, Barbara Lovitts found that students who left their program without completing the degree were more likely to lack access to information about the nature of graduate education across all phases of the socialization experience.¹⁹ If doctoral student

¹⁵ Elfreda A. Chatman, “Life in a Small World: Applicability of Gratification Theory to Information-seeking Behavior,” *Journal of the American Society for Information Science* 42, no. 6 (1991): 438-449, [https://doi.org/10.1002/\(sici\)1097-4571\(199107\)42:6<438::aid-asi6>3.0.co;2-b](https://doi.org/10.1002/(sici)1097-4571(199107)42:6<438::aid-asi6>3.0.co;2-b); Victoria EM Pendleton and Elfreda A. Chatman, “Small World Lives: Implications for the Public Library,” *Library Trends* 46, no. 4 (1998): 732-752; Elfreda A. Chatman, “Framing Social Life in Theory and Research,” *New Review of Information Behaviour Research* 1 (2000): 3-18; Gary Burnett, Michele Besant, and Elfreda A. Chatman, “Small Worlds: Normative Behavior in Virtual Communities and Feminist Bookselling,” *Journal of the American Society for Information Science and Technology* 52, no. 7 (2001): 536-547, <https://doi.org/10.1002/asi.1102>.

¹⁶ John C. Weidman, Darla J. Twale, and Elizabeth Leahy Stein, *Socialization of Graduate and Professional Students in Higher Education: A Perilous Passage? ASHE-ERIC Higher Education Report* (San Francisco, CA: Jossey-Bass, 2001), iii, <https://files.eric.ed.gov/fulltext/ED457710.pdf>.

¹⁷ Austin, “Preparing the Professoriate of the Future,” 397-456; John C. Weidman and Elizabeth L. Stein, “Socialization of Doctoral Students to Academic Norms,” *Research in Higher Education* 44, no. 6 (2003): 647, <https://doi.org/10.1023/A:1026123508335>.

¹⁸ Michael T. Nettles and Catherine M. Millett, *Three Magic Letters: Getting to Ph.D.* (Baltimore, MD: Johns Hopkins University Press, 2006), 120, 122. Attrition (i.e., permanent or temporary departure from a doctoral program prior to completion) varies by discipline and by reason(s) for the departure (e.g. personal or financial issues, or problematic experiences in graduate school).

¹⁹ Barbara E. Lovitts, *Leaving the Ivory Tower: The Causes and Consequences of Departure from Doctoral Study* (Lanham, MD: Rowman & Littlefield, 2001), 79.

socialization can be seen as a function of information access, it is reasonable to consider information theory as a standpoint from which to understand this phenomenon.

INFORMATION THEORY AS A LENS FOR THE SOCIALIZATION OF BLACK DOCTORAL STUDENTS

In this paper, I conceptualize doctoral education as an “information-rich” small world characterized by social and cultural norms, values, and information behaviors that facilitate or complicate the socialization of Black doctoral students.²⁰ This conceptualization is informed primarily by Chatman’s 2001 article on normative behavior in the small worlds of virtual communities and feminist booksellers, and by the work of Gary Burnett, Paul T. Jaeger, and Kim M. Thompson, and Jaeger and Burnett.²¹ As will be discussed, these pieces feature a broader context for the small world concept than what Chatman originally articulated in her earlier work, but they demonstrate the applicability of the small world construct to the circumstances of doctoral education.

Influenced by previous scholars who had also theorized about small worlds, Elfreda Chatman used the concept to investigate information behaviors in the everyday lives of often overlooked and marginalized social groups constrained by limited resources and difficult life circumstances, such as incarcerated women, janitors at a university, women in a retirement community, and the poor.²² Information behavior involves more than information seeking. As Chatman defined it, this behavior encompasses any number of ways in which someone might behave in relation to information.²³ Chatman theorized that people who are information poor do not perceive that they have the means to access information that will change their circumstances.²⁴ For example, one might seek—or

²⁰ Gary Burnett, Paul T. Jaeger, and Kim M. Thompson, “Normative Behavior and Information: The Social Aspects of Information Access,” *Library & Information Science Research* 30, no. 1 (2008): 58. The authors refer to the small worlds of virtual communities and feminist bookselling as information-rich, which is a departure from the poverty framework in Elfreda Chatman’s earlier scholarship.

²¹ Burnett, Besant, and Chatman, “Small Worlds,” 536-547; Burnett, Jaeger, and Thompson, “Normative Behavior and Information: The Social Aspects of Information Access,” 56-66, <https://doi.org/10.1016/j.lisr.2007.07.003>; Paul T. Jaeger and Gary Burnett, *Information Worlds: Behavior, Technology, and Social Context in the Age of the Internet*, (New York: Routledge, 2010), Kindle.

²² Chatman, “Framing Social Life in Theory and Research,” 3-18.

²³ Burnett, Besant, and Chatman, “Small Worlds,” 537.

²⁴ Elfreda A. Chatman, “The Impoverished Life-world of Outsiders,” *Journal of the American Society for Information Science* 47, no. 3 (1996): 194, [https://doi.org/10.1002/\(SICI\)1097-4571\(199603\)47:3<193::AID-ASIS3>3.0.CO;2-T](https://doi.org/10.1002/(SICI)1097-4571(199603)47:3<193::AID-ASIS3>3.0.CO;2-T).

choose not to seek—or use available information depending on how they perceive the potential value or outcome of these efforts.²⁵

The conceptual framework for a small world is comprised of four elements: social norms, worldview, information behavior, and social types.²⁶ Social norms define expectations for behavior in a social group, helping the members differentiate between appropriate and inappropriate behavior. A worldview is a social group's collective outlook on life which establishes what should be important to the members, and what should be of little consequence or interest. As defined above, information behaviors are the many ways that a person might respond to information within the context of their everyday life. Social typing helps members of a group to determine whether their behaviors align with the norms and values of the group. A social type could be any descriptive label that helps others to know a person's role in a social group, such as "leader" or "listener." Burnett, Besant, and Chatman describe social typing as a classification or typology that allows "for the sharing or hindrance of information."²⁷ Those who are classified as outsiders will not be able to share in information with members of the small world who do not share their values and worldview.²⁸

Small worlds, such as the work lives of the women janitors employed in a university in Chatman's gratification theory study, are characterized by an everyday-ness in which life is lived in a routine manner, with few surprises. In a 2001 keynote address on insider/outsider status and marginalization, Chatman noted: "What I have often referred to as *small world lives* is that which is played out on a small stage and where most useful information comes from small places."²⁹ Given the marginalized status of the social groups that Chatman studied, it is important to point out that "small" in this context does not mean insignificant or unworthy of attention. Rather, "small" refers to a life in which everyday happenings are mostly routine and predictable, and in which information behaviors are enacted within social boundaries defined and legitimized by the values and norms of members of a social group.³⁰ Gary Burnett, Michele Besant, and Elfreda Chatman note that small worlds are sustained by the normative behaviors that allow

²⁵ Chatman, "Framing Social Life in Theory and Research," 12-13; Burnett, Besant, and Chatman, "Small Worlds," 538.

²⁶ Chatman, 10-11; Burnett, Besant, and Chatman, 536-538.

²⁷ Burnett, Besant, and Chatman, "Small Worlds," 537-538.

²⁸ Burnett, Besant, and Chatman, 537-538.

²⁹ Elfreda A. Chatman, "An Insider/Outsider Approach to Libraries, Change, and Marginalized Populations. Keynote Address at Alteration of Generations National Conference," (presentation, Alteration of Generations National Conference, Boras, Sweden, April 23-25, 2001). <http://www.diva-portal.org/smash/get/diva2:909801/FULLTEXT01.pdf>.

³⁰ Chatman, "An Insider/Outsider Approach to Libraries, Change, and Marginalized Populations," 3; Pendleton, "Small World Lives: Implications for the Public Library," 733; Chatman, "Framing Social Life in Theory and Research," 3, 10; Jaeger and Burnett, *Information Worlds*, 20.

members to define the behaviors, norms, and values that signal what is appropriate or normal for the group.³¹

From the four elements that make up the conceptual framework for a small world, Chatman developed a theory of normative behavior to make sense of life lived in a small world, and offered the most updated articulation of both concepts in the 2001 article “Small Worlds: Normative Behavior in Virtual Communities and Feminist Bookselling” before her death in 2002.³² In this article, in addition to the four core elements, the concept of compliance was added to further define the theory to note that members of a social group comply with social norms so that they are able to identify acceptable and normal public behavior. Further, information behavior was framed as a mechanism for making sense of life’s everyday realities, which are lived out through a social group’s shared worldview.³³

This 2001 article is of particular interest for this paper because it marked a turning point in Chatman’s scholarship. Whereas in previous work Chatman had very narrowly conceptualized small worlds and normative behavior to pertain to impoverished members of society, in her 2001 article she considered an expanded view of a small world. This world was not so tightly limited by socioeconomic or geographic constraints that characterized the social groups in her previous scholarship.³⁴

This expanded conceptualization of a small world was a framework for theorizing about information behaviors in the non-impooverished environments of virtual online communities and feminist bookselling. Burnett, Besant, and Chatman chose virtual communities, such as email listservs, as a context for considering further development of the theory of normative behavior because they believed these social groups represent an ideal case in that they have specific topics of interest, have stable, although virtual, boundaries, and produce text through which information behaviors can be observed.³⁵ The feminist bookseller community represented an environment that was seemingly tailor-made for the theory of normative behavior, in that the authors argued that the distribution of feminist literature *is* an information behavior, driven by social norms that reflect a commitment to lifting up the voices of women.³⁶

³¹ Burnett, Besant, and Chatman, “Small Worlds,” 537.

³² Burnett, Besant, and Chatman, “Small Worlds,” 536-547; Elfreda A. Chatman, “A Theory of Life in the Round,” *Journal of the American Society for Information Science* 50, no. 3 (1999): 207-217; Jaeger, *Information Worlds and Interpretive Practices: Toward an Integration of Domains*, 21.

³³ Burnett, Besant, and Chatman, “Small Worlds,” 538.

³⁴ Jaeger, *Information Worlds and Interpretive Practices: Toward an Integration of Domains*, 20; Burnett, “Normative Behavior and Information: The Social Aspects of Information Access,” 58.

³⁵ Burnett, Besant, and Chatman, “Small Worlds,” 539.

³⁶ Burnett, Besant, and Chatman, 540.

The authors acknowledged that their theoretical arguments about virtual communities and feminist bookselling were based on socioeconomic and cultural characteristics that were unlike those from Chatman's previous work. As such, they acknowledged that further refinement of the theory of normative behavior and additional empirical research would be needed to test whether the theory could adequately accommodate these new conceptualizations of a small world.³⁷ Gary Burnett, Paul T. Jaeger, and Kim M. Thompson later theorized about social aspects of information access in other arguably information-rich small world contexts such as the 1996 redesign of the San Francisco Public Library, information policy implementation during the administration of the second President Bush, and a controversial library book banning incident in a small town in Oklahoma in 1951.³⁸ If Chatman had been able to continue working with feminist bookselling as a context, it would also be intriguing to discover whether Black feminist theory would have been part of future development of the theory of normative behavior.³⁹ As will be discussed in the following section on race and information theory in this paper, Chatman primarily focused on social class and not race in her research on marginalized populations.

Researchers have grappled with the prospect of applying Chatman's theoretical work on small worlds and normative behavior to situations outside of its original socioeconomic and geographic contexts.⁴⁰ For example, in *Human Information Interaction: An Ecological Approach to Information Behavior*, Raya Fidel questioned the appropriateness of applying Chatman's theoretical work on small worlds to purportedly information-rich circumstances. Commenting on researchers' application of the concept to non-impooverished contexts, Fidel noted that such an endeavor might be limited, if not altogether irrelevant, in its usefulness outside of the poverty contexts that Chatman originally articulated. However, Fidel left open the possibility of an expanded conceptualization of a small world, noting that researchers would need to conduct rigorous research to demonstrate the concept's relevance to other environments.⁴¹

Paul T. Jaeger and Gary Burnett proposed an even broader conceptualization of a small world. In *Information Worlds: Behavior, Technology, and Social Context in the Age of the Internet*, Jaeger and Burnett argued that although small worlds are essential to

³⁷ Burnett, Besant, and Chatman, 536, 546.

³⁸ Burnett, "Normative Behavior and Information: The Social Aspects of Information Access," 58.

³⁹ Valerie Smith, "Black Feminist Theory and the Representation of the 'Other,'" in *Changing Our Own Words: Essays on Criticism, Theory, and Writing by Black Women*, ed. Cheryl A. Wall (New Brunswick, NJ: Rutgers University Press, 1989), 38-57.

⁴⁰ Gary Burnett, "Information Worlds and Interpretive Practices: Toward an Integration of Domains," *Journal of Information Science Theory and Practice* 3, no. 3 (2015): 8-9, <https://doi.org/10.1633/jistap.2015.3.3.1>.

⁴¹ Raya Fidel, *Human Information Interaction: An Ecological Approach to Information Behavior* (Cambridge, MA: MIT Press, 2012), 55.

understanding the phenomena that are of concern to specific social groups, these small worlds do not exist in isolation from a larger “lifeworld.”⁴² Hence, the authors contend that individuals encounter and live in and across the boundaries of multiple small worlds defined by their own set of normative behaviors in what they argue constitutes a larger “information world.”⁴³

While retaining Chatman’s conceptualization of a small world at its core, this broadened conceptualization makes room for the possibility that small worlds can be defined for situations other than the socioeconomic circumstances that Chatman studied.⁴⁴ It is not possible to know how Elfreda Chatman would have responded to this expanded application of the concepts that she so diligently and expertly developed over the span of her career. Yet, given her own foray into this endeavor by theorizing about the small world lives of virtual communities and feminist booksellers, it is plausible that an application of her work to the case of the socialization of Black doctoral students might lend itself to a similar effort. Moreover, additional theoretical lenses for the study of doctoral student socialization can help to identify ways to improve students’ graduate school experiences.⁴⁵

CONSIDERING RACE IN ELFREDA CHATMAN’S INFORMATION THEORIES

At the beginning of this paper, I noted the dearth of doctorates awarded to Black students in LIS, and argued for a need to better understand the experiences of Black doctoral students in order to achieve greater inclusivity in the profession. Previous researchers have found that Black doctoral students have experienced racism, isolation, and/or hostile climates in predominantly white institutions, threatening their prospects for success.⁴⁶ Thus, an information-theory-based explication of doctoral student socialization cannot be accomplished without a consideration of race. Although Elfreda Chatman’s scholarship focused on information behaviors in the everyday lives of marginalized groups, race did not appear to be an intentional or prominent variable of interest in her studies. Socioeconomic status, geography, and/or culture were the primary contexts of

⁴² Jaeger and Burnett, *Information Worlds*, 29. In “The Impoverished Life-World of Outsiders,” Elfreda Chatman described a life-world as the smaller part of the larger world in which members of a social group live, marked by local customs and norms.

⁴³ Jaeger and Burnett, *Information Worlds*, 31-32.

⁴⁴ Jaeger and Burnett, 35.

⁴⁵ Bryan Gopaul, “Distinction in Doctoral Education: Using Bourdieu’s Tools to Assess the Socialization of Doctoral Students,” *Equity & Excellence in Education* 44, no. 1 (2011): 19, <https://doi.org/10.1080/10665684.2011.539468>.

⁴⁶ Gay, “Navigating Marginality En Route to the Professoriate,” 265-287.

her research.⁴⁷ Chatman was not completely silent on the issue of race, however, and broached the topic by identifying the race of the Black women janitor respondents in her study of gratification theory and small world life, and the white southern women in her study of a retirement community.⁴⁸

Writing about the women janitors in a subsequent article entitled “The Impoverished Life-World of Outsiders,” Chatman reported Black women’s perceptions of their contentious relations with their white and Black co-workers.⁴⁹ In neither piece, however, did Chatman center the intersections of race and gender. As with Chatman’s theoretical exploration of feminist bookselling mentioned earlier, it also would be interesting to discover whether Black feminist thought could be combined with information theory to explain Black women’s experiences in small worlds. For example, although the essay refers to academic settings, Patricia Hill Collins’s piece on Black women as “outsiders within,” that is, being part of a social milieu with white women but also deemed an outsider to that same space, might be instructive in explaining information behaviors among Black women.⁵⁰

In “Trippin’ Over the Color Line,” Todd Honma calls for open and honest discussions of race in LIS, arguing that it is glaringly absent from the field, to the detriment of persistent efforts to diversify the profession in service of an increasingly diverse user population.⁵¹ In the absence of available personal testimony from Elfreda Chatman, it is not possible to know how she perceived herself as a Black woman writing LIS scholarship, or whether she had considered making race explicitly a variable of interest in her published studies or in possible future work. Therefore, in situating this discussion of the socialization of Black doctoral students within the context of Chatman’s scholarship, I do not criticize or speculate on the absence of a frank discussion of race in her work. Instead, I consider a racialized view of Chatman’s theoretical and conceptual frameworks in understanding the socialization of Black doctoral students.

The specificity of Blackness in this paper does not ignore the experiences of other doctoral students of color. In fact, research about the experiences of Latinx doctoral students is also an ongoing topic of interest and importance in the higher education

⁴⁷ Burnett, Besant, and Chatman, “Small Worlds” 536.

⁴⁸ Chatman, “Life in a Small World,” 442; Elfreda A. Chatman, *The Information World of Retired Women* (New York: Greenwood Press, 1992).

⁴⁹ Chatman, “The Impoverished Life-world of Outsiders,” 202.

⁵⁰ Patricia Hill Collins, “Learning from the Outsider Within: The Sociological Significance of Black Feminist Thought,” *Social Problems* 33, no. 6 (1986): s14, <https://doi.org/10.1525/sp.1986.33.6.03a00020>.

⁵¹ Todd Honma, “Trippin’ Over the Color Line: The Invisibility of Race in Library and Information Studies,” *InterActions: UCLA Journal of Education and Information Studies* 1, no. 2 (2005), <https://escholarship.org/uc/item/4nj0w1mp>.

literature.⁵² But as Tara Yosso argues in a discussion of critical race theory and cultural wealth, we need not engage in a competition of oppressions when discussing the racialized experiences of different groups.⁵³ Thus, this paper is focused on understanding the socialization experiences of Black doctoral students from their unique historical and cultural background, in full awareness that other racial and ethnic minorities also have an important narrative to tell.⁵⁴

DOCTORAL EDUCATION AS A SMALL WORLD

There are some similarities between doctoral education and the small worlds that Elfreda Chatman conceptualized and studied. As an institutional and social phenomenon, doctoral education exists within a well-defined intellectual and institutional boundary of a university. Participation in this small world is legitimized through a normative admissions process that is mediated by “faculty expectations, university standards, and desired professional outcomes.”⁵⁵ Most importantly, like the small worlds that Chatman theorized, doctoral education has a very specific context and expected behaviors,⁵⁶ which involves the acquisition and production of knowledge to prepare teachers, researchers, and professional practitioners to assume these roles in their prospective field.

In conceptualizing doctoral education as an information-rich small world, the primary context for this “richness” is the vast accumulation, production, and acquisition of knowledge and information, and all of the acquired and accumulated resources in universities—money, human labor, and others—that make that project possible. This richness of assets is not typical of the small worlds in Chatman’s research. However, socioeconomic diversity among students in doctoral education cannot be ignored.

Financial concerns such as education debt, which is an indicator of the availability of financial support, are important aspects of the doctoral experience.⁵⁷ Black doctorate

⁵² Elvia Ramirez, “Unequal Socialization: Interrogating the Chicano/Latino (a) Doctoral Education Experience.” *Journal of Diversity in Higher Education* 10, no. 1 (2017): 25, <https://doi.org/10.1037/dhe0000028>.

⁵³ Tara J. Yosso, “Whose Culture has Capital? A Critical Race Theory Discussion of Community Cultural Wealth,” *Race Ethnicity and Education* 8, no. 1 (2005): 72-73, <https://doi.org/10.1080/1361332052000341006>.

⁵⁴ Amado M. Padilla, “Ethnic Minority Scholars, Research, and Mentoring: Current and Future Issues,” *Educational Researcher* 23, no. 4 (1994): 25, <https://doi.org/10.2307/1176259>.

⁵⁵ Weidman, Twale, and Stein, *Socialization of Graduate and Professional Students in Higher Education*, 27.

⁵⁶ Pendleton, “Small World Lives: Implications for the Public Library,” 536.

⁵⁷ National Science Foundation, National Center for Science and Engineering Statistics, *Doctorate Recipients from U.S. Universities 2017*, by Jaquelina Falkenheim, Special Report NSF 19-301, (Alexandria, VA, 2018), <https://nces.nsf.gov/pubs/nsf19301/assets/report/report.pdf>.

recipients have the highest cumulative average education debt (\$67,183) among doctorate recipients,⁵⁸ and earn the doctorate in the field of study (education) that has the highest debt level.⁵⁹ Even with debt, these students do not exemplify the same impoverishment that Chatman centered in her research, but the data suggest that the intersections of race, socioeconomic status, and field of study are implicated in their information behaviors. For example, an information theory approach to understanding their socialization would need to explore the circumstances around risking indebtedness to achieve their goals. This approach should be undertaken from a critical standpoint that resists deficit models, as discussed below.

One might argue that a small world cannot be compared to the situation of doctoral education in which there is a wealth of accumulated knowledge and information upon which the socialization of doctoral students depends. This is especially so given Chatman's theory of information poverty which held that people in a small world might decline to seek or share needed information, or they might not use information that can help them if they perceive that doing so would be too costly or inconsequential.⁶⁰ But it is not too presumptuous to consider that despite the vast amount of knowledge and information accumulated in doctoral education, access to these assets might not be equally distributed and accessible among all students.

In an analysis of socialization in doctoral education using Pierre Bourdieu's theories of social and cultural capital and Iris Young's framing of social justice, Bryan Gopaul contends that disparate access to social, economic, and cultural capital sets up an unjust situation of haves and have-nots for doctoral students, with groups that have been traditionally underrepresented being unduly impacted.⁶¹ For example, access to socialization experiences such as presenting at conferences, writing, and publishing are forms of capital or assets that will help doctoral students to succeed in graduate school.⁶² Students without these forms of capital might struggle to access the experiences that facilitate success.

Barbara Lovitts also cautioned that cultural practices in doctoral departments can create inequities in participation in integration experiences that make it less likely that a student will drop out. For example, students who have access to socialization experiences such as research assistantships that prepare them for the scholar role in a faculty career,

⁵⁸ See National Science Foundation, National Center for Science and Engineering Statistics, *Doctorate Recipients from U.S. Universities 2017*, Table 40. Average debt for other U.S. racial/ethnic groups: Asian (\$14,440), White (\$28,685), Latinx (\$38,385), American Indian or Alaska Native (\$46,950).

⁵⁹ National Science Foundation, National Center for Science and Engineering Statistics, Table 41.

⁶⁰ Chatman, "Framing Social Life in Theory and Research," 6-7.

⁶¹ Gopaul, "Distinction in Doctoral Education," 13.

⁶² Gopaul, 16.

might have an advantage over those who do not.⁶³ Previous research has shown that Black doctoral students report feeling isolated on their campus and in their graduate programs due to experiences with bias or discrimination, which impedes access to these social and academic integration experiences.⁶⁴

Tara Yosso offers a cultural wealth theoretical lens through which to view the accumulation of assets that facilitate or hinder success in doctoral education. Yosso argues that cultural and social capital constructs reflect deficit model thinking that can portray communities of color as lacking in ability to access sources of capital, obscuring actual inaccessibility due to structural inequalities that privilege whiteness and the middle class.⁶⁵ A cultural wealth standpoint, Yosso notes, is grounded in critical race theory, centers the lived experiences of people of color, and critiques white normative cultural knowledge and skills that are held up as the standard against which people of color are measured.⁶⁶

Six forms of capital—aspirational, navigational, social, linguistic, familial, and resistant—are the components of a cultural wealth model that recasts so-called “deficits” as assets that communities of color accumulate in the struggle against oppression to achieve racial and social justice.⁶⁷ For example, aspirational capital is the ability to have hopes and dreams regardless of one’s difficult circumstances in life.⁶⁸ This cultural wealth perspective is the opposite of the outlook that Chatman found in her research on the information behaviors of those whom she identified as information poor. Some of the participants in her research lacked hope in the possibility of changing a difficult circumstance despite the existence of valuable information that could help them achieve a different reality.⁶⁹ This suggests that there is utility in looking at information behaviors of marginalized groups from a cultural wealth perspective that could further probe the role of hope or persistence in the lives of those in difficult circumstances. Research indicates that in addition to support from faculty and peers, family, and friends, Black doctoral students rely on faith and spirituality, perseverance, intrinsic motivation, self-confidence, willpower, leadership qualities, and the ability to handle pressure to succeed

⁶³ Lovitts, *Leaving the Ivory Tower*, 261.

⁶⁴ Twale, Weidman, and Bethea, “Conceptualizing Socialization of Graduate Students of Color,” 83.

⁶⁵ Yosso, “Whose Culture has Capital?” 69-91.

⁶⁶ Yosso, 75, 82.

⁶⁷ Yosso, 77-78.

⁶⁸ Yosso, 77.

⁶⁹ Chatman, “Life in a Small World,” 445; Chatman, “Framing Social Life in Theory and Research,” 7.

in graduate school.⁷⁰ This cultural wealth theoretical standpoint lends support to an expanded conceptualization of the small world concept and theory of normative behavior beyond the poverty framework in Chatman's early scholarship.

Larry L. Rowley proposed racial socialization as a culturally and racially relevant alternative framework to traditional socialization models that do not account for the unique challenges that Black doctoral students face. Rowley argued that mastery of the normative behaviors and values of one's discipline and graduate program is just as important for doctoral success as academic knowledge.⁷¹ However, given the evidence that Black students experience barriers to accessing formal and informal networks where these norms are established and communicated, these students must find alternative pathways to success. Racial socialization is intentional in its focus on bringing awareness to the realities of race and racism that permeate society, including graduate programs in predominantly white institutions.⁷² This framework can also include offering students examples of trailblazing Black people who successfully navigated the doctoral environment in hostile institutional climates. Rowley cites exemplars such as Edward Bouchet, the first Black person to earn a doctorate from an American university, and Sadie Alexander, the first Black woman to earn a PhD in economics in the United States.⁷³

⁷⁰ Elisabeth Harrison, "Black Doctoral Graduates from a Predominantly White University" (Paper presented at the Annual National Conference of the National Association of African American Studies and the National Association of Hispanic and Latino Studies, Houston, TX, February 21-26, 2000), <https://files.eric.ed.gov/fulltext/ED455354.pdf>; Susan E. King, "A Multicase Study of African American Doctoral Degree Recipients," *Equity & Excellence in Education* 27, no. 2 (1994): 53-61, <https://doi.org/10.1080/1066568940270210>; Susan E. King, "Hope, Cope and Persevere: The Experience of the African-American Doctoral Women," *The Negro Educational Review* 46, no. 3 (1995): 61-70; Susan E. King and J. R. Chepyator-Thomson, "Factors Affecting the Enrollment and Persistence of African-American Doctoral Students," *Physical Educator* 53, no. 4 (1996): 170-180; Angela Louque, "Factors Influencing Academic Attainment For African-American Women PhD Recipients: An Ethnographic Study of Their Persistence," *The Negro Educational Review* 50, no. 3 (1999): 101-108; Angela Louque and Helen M. Garcia, "Hispanic American and African American Women Scholars," *Race, Gender & Class* (2000): 35-57.

⁷¹ Larry L. Rowley, "The Socialization of African American PhD Students: Race, Sociology of Knowledge, and Historical Concepts for Contemporary Contexts," in *Supporting Graduate Students in the 21st Century: Implications for Policy and Practice*, eds. Pamela P. Felder and Edward P. St. John (New York: AMS Press, 2014), 153.

⁷² Rowley, "The Socialization of African American PhD Students," 159. Previous researchers have found that based on their experiences in other predominantly white settings, African American doctoral students report that they anticipate the possibility of encountering racism in graduate school, and therefore prepare themselves to deal with it if it occurs. See for example, Harrison, *Black Doctoral Graduates*, 235, 238; King, "A Multicase Study," 53-61; and King, "Factors Affecting the Enrollment and Persistence," 170-180.

⁷³ Rowley, "The Socialization of African American PhD Students," 159, 163, 167.

Library and information studies educators could include trailblazing Black librarians who earned doctorates, including Elfreda Chatman and others.⁷⁴

SOCIALIZATION AND THE BLACK DOCTORAL STUDENT

Numerous studies about experiences that contribute to the socialization of Black doctoral students, such as mentoring and advising, have been published over the last 30 years. In this section, I focus almost exclusively on those in which socialization is explicitly named as the sole or a primary phenomenon of interest, and in which the socialization experiences of Black doctoral students are clearly identified. This specificity matters because in studies about graduate students, researchers have often aggregated student and/or institutional data in ways that do not account for the diversity between or within groups or institutions.⁷⁵

Doctoral student socialization depicts an environment in which there is an abundance of explicit and implicit information and knowledge that must somehow be acquired, communicated, and shared to ensure doctoral student success. Several scholars have written extensive evaluations of the theoretical and empirical literature on doctoral student socialization in US higher education, all citing the seminal work on the socialization of graduate and professional students by John C. Weidman, Darla Twale, and Elizabeth Leahy Stein who articulated a model of doctoral student socialization.⁷⁶ Rather than reviewing literature that previous authors have already synthesized,⁷⁷ I will summarize the most salient points about socialization.

Socialization is a process in which students pass through developmental phases or stages from novice to beginning professional expert. Weidman, Twale, and Stein

⁷⁴ Hansel G. Ingram, "Black Librarians with Earned and Honorary Doctorates," in *Handbook of Black Librarianship*, eds. E. J. Josey and Marva L. DeLoach (Lanham, MD: Scarecrow Press, 2000), 188.

⁷⁵ Gary D. Malaney, "Graduate Education as an Area of Research in the Field of Higher Education," in *Higher Education: Handbook of Theory and Research*, ed. John C. Smart (New York, NY: Agathon Press, 1987), 441; Michael T. Nettles and Catherine M. Millett, *Three Magic Letters: Getting to Ph.D.*, 30; Weidman, Twale, and Stein, *Socialization of Graduate and Professional Students in Higher Education*, v.

⁷⁶ Weidman, Twale, and Stein, *Socialization of Graduate and Professional Students in Higher Education*.

⁷⁷ For reviews of the literature on doctoral student socialization, see Ann E. Austin, "Preparing the Next Generation of Faculty: Graduate School as Socialization to the Academic Career," *The Journal of Higher Education* 73, no. 1 (2002): 94-122, <https://doi.org/10.1353/jhe.2002.0001>; Antony, "Reexamining Doctoral Student Socialization and Professional Development," 349-380; and Austin, "Preparing the Professoriate of the Future: Graduate Student Socialization for Faculty Roles," 397-456.

conceptualized graduate student socialization as interactive stages with institutional culture and climate at the core of the process. Socialization is facilitated when students become academically and socially integrated into their academic program and discipline through informal and formal interactions with faculty and peers. Academic integration refers to involvement with faculty and peers in teaching, research, conference presentations, writing, publication, and course work. Social integration experiences include informal contact with faculty and students, particularly outside the classroom.⁷⁸ Integration helps facilitate the acquisition of knowledge, investment in doing what is necessary to become a professional in one's field or practice, and ultimately committing to taking on this new professional identity.⁷⁹

During the socialization process, students also become aware of the values, beliefs, norms, and expectations for behavior to be successful in graduate school and in research and scholarship in their disciplines. A key finding in a research study by John C. Weidman and Elizabeth Stein was that doctoral students are more successfully socialized to the scholar role when faculty are accessible to students and model the scholar role themselves, encourage students to actively engage in scholarly activities, and communicate clear expectations for scholarly work.⁸⁰

Despite the critical role of socialization in doctoral education, one of the main criticisms that scholars have leveled against socialization theories and frameworks is that they are inflexible linear stage models based on assimilationist or dominant cultural values that assume that all students experience socialization in the same way. These models do not account for the experiences, values, behaviors, and beliefs of non-majority cultures such as underrepresented minorities.⁸¹

Recognizing that race and racism present different conditions for socialization for students of color, in 2016, Darla Twale, John Weidman, and Kathryn Bethea proposed a modified version of the original Weidman-Twale-Stein socialization model. This model,

⁷⁸ Evelyn M. Ellis, "The Impact of Race and Gender on Graduate School Socialization, Satisfaction with Doctoral Study, and Commitment to Degree Completion," *Western Journal of Black Studies* 25, no. 1 (2001): 32.

⁷⁹ Weidman, Twale, and Stein, *Socialization of Graduate and Professional Students in Higher Education*, 37-38.

⁸⁰ Weidman and Stein, "Socialization of Doctoral Students to Academic Norms," 653.

⁸¹ Antony, "Reexamining Doctoral Student Socialization and Professional Development," 350-351; James S. Antony and Edward Taylor, "Theories and Strategies of Academic Career Socialization: Improving Paths to the Professoriate for Black Graduate Students," in *Paths to the Professoriate: Strategies for Enriching the Preparation of Future Faculty*, ed. Donald H. Wulff and Ann E. Austin (San Francisco, CA: Jossey Bass, 2004), 94-95; Austin, "Preparing the Professoriate of the Future: Graduate Student Socialization for Faculty Roles," 408, 413-414; Weidman, Twale, and Stein, *Socialization of Graduate and Professional Students in Higher Education*, 25-26.

based on evidence from research on the experiences of Black doctoral students, seeks to account for the disparities in access to the experiences that facilitate socialization, by adding preparation and disposition, and faculty and peer climate to the model. These academic and environmental factors have been shown to have unique implications for Black students. The authors note that their revised model was informed by social and cultural capital theory, which as previously discussed in this paper can be problematic. Nevertheless, this revision of a model that has been a primary reference for the majority of contemporary graduate student socialization research includes factors that are salient for the experiences of underrepresented students that were missing from previous traditional models.⁸²

Scholars have researched aspects of the doctoral experience that contribute to the socialization of Black students and other students of color, such as mentoring and advising, with or without specifically naming socialization as an antecedent or outcome in their inquiry.⁸³ Studies by Edward Taylor and James Soto Antony and by Evelyn Ellis in the early 2000s, in which these authors focused specifically on the phenomenon of socialization among Black doctoral students, established a foundation upon which subsequent scholars have built their scholarship on the topic. Many of these researchers employ qualitative methods, much like Chatman did in her field research, to describe and understand the lived experiences of Black doctoral students.⁸⁴ Seminal articles by the authors named above are a point of departure for further discussion of the role of race in the socialization of Black doctoral students.

Edward Taylor and James Soto Antony used Claude Steele's theory of stereotype threat reduction and wise schooling practices as a conceptual framework for examining the relationship between socialization and aspirations for a faculty career among Black doctoral students in the field of education.⁸⁵ Stereotype threat is a sense of anxiety caused by fear that a person will be negatively stereotyped. Wise schooling practices are strategies for mitigating the threat and its potential impact.⁸⁶ The authors identified six practices as delineated by Steele that mitigated the impact of stereotype threat among students in their study: 1) optimistic teacher/student relationship; 2) challenging, not remedial work; 3) a belief in the expandability of students' intelligence and the ability to

⁸² Twale, Weidman, and Bethea, "Conceptualizing Socialization of Graduate Students of Color," 86-87.

⁸³ See reviews of this literature in McGaskey et al., "The Social Support Networks of Black Males," 141-158, Reginald A. Blockett et al., "Pathways to the Professoriate: Exploring Black Doctoral Student Socialization and the Pipeline to the Academic Profession," *Western Journal of Black Studies* 40, no. 2 (2016): 95-110, and Twale, Weidman, and Bethea, "Conceptualizing Socialization of Graduate Students of Color," 80-94.

⁸⁴ Pendleton and Chatman, "Small World Lives: Implications for the Public Library," 743.

⁸⁵ Taylor and Antony, "Stereotype Threat Reduction and Wise Schooling," 184-198.

⁸⁶ Taylor and Antony, 187.

learn; 4) affirmation of intellectual belonging; 5) valuing multiple perspectives; and 6) successful role models and mentors who overcame stereotype threat.

Mentoring proved to be especially influential in mitigating Black doctoral students' apprehensions about having values that are incongruent with their perception of the dominant-culture values of the academy. For example, some students had a service-oriented view of scholarship, whereby they were motivated to pursue a faculty career so that they can teach and conduct research about improving the condition of education for students of color. This motivation was different from what they perceived to be self-serving or competitive motivations for publication and research in the reward structure of the academy.⁸⁷ Supportive faculty mentoring also eased students' fears and allowed them to aspire to a faculty career. Students who did not have a mentor who could talk to them about potential pitfalls for faculty of color in the academy—such as tokenism, the marginalization of research about issues pertinent to race and ethnicity, and the underestimation of minorities' abilities to teach and conduct research—were less likely to have a positive attitude about pursuing a faculty career.⁸⁸

In a study of the impacts of race and gender on doctoral socialization, completion, and satisfaction, Evelyn Ellis found that mentoring was the most important factor in the socialization of Black doctoral students. Students who had successful mentoring and advising relationships with faculty members were more likely to be satisfied with their program and degree progress and to participate in scholarly activities such as presenting at conferences. These students also expressed dissatisfaction with the lack diversity and inclusivity in the classroom and curriculum. Black women participants in the study were least likely to have positive mentoring and advising experiences.⁸⁹ This finding is consistent with other research that indicates that minority women doctoral students have fewer opportunities than their white women counterparts to be mentored and exposed to professional networks by faculty and to engage in scholarly activities such as conference presentations and co-authoring papers with faculty.⁹⁰

⁸⁷ Taylor and Antony, 194.

⁸⁸ Taylor and Antony, "Stereotype Threat Reduction and Wise Schooling," 191-193; Padilla, "Ethnic Minority Scholars, Research, and Mentoring," 25-26; Gail L. Thompson and Angela Louque, *Exposing the "Culture of Arrogance" in the Academy: A Blueprint for Increasing Black Faculty Satisfaction in Higher Education*, (Sterling, UK: Stylus, 2005), 134-135; Caroline Sotello Viernes Turner and Samuel L. Myers, *Faculty of Color in Academe: Bittersweet Success* (Boston, MA: Allyn and Bacon, 2000), 26, 92-94.

⁸⁹ Ellis, "The Impact of Race and Gender on Graduate School Socialization," 30-45.

⁹⁰ Anne Moyer, Peter Salovey and Shannon Casey-Cannon, "Challenges Facing Female Doctoral Students and Recent Graduates," *Psychology of Women Quarterly* 23, no. 3 (1999): 616, <https://doi.org/10.1111/j.1471-6402.1999.tb00384.x>; Caroline Sotello Viernes Turner and Judith Rann Thompson, "Socializing Women Doctoral Students: Minority and Majority

Like Larry Rowley whose work was discussed in the previous section, Pamela Felder, Howard Stevenson, and Marybeth Gasman also proposed racial socialization as a framework for the socialization of Black doctoral students. They examined how race intersects with faculty advising and mentoring, faculty behavior, and faculty diversity to facilitate or hinder doctoral student socialization.⁹¹ Participants in their study who did not have an advisor with whom they could talk about their research interests were more vulnerable to losing their way in the program than those who could talk about their research and be guided in learning more about their areas of interest. One of the most interesting findings of the study was related to faculty advisement about pursuing a PhD, viewed as a research doctorate, or an EdD, often perceived as a professional leadership degree. Some students perceived racial bias on the part of faculty who they believe tried to steer them away from the PhD and toward the EdD. As the authors note, this perceived bias might imply to students that faculty believe they are less qualified or capable of succeeding in a research environment.

Recent scholarship using social network theory provides insight into information behaviors that are implicit in Black doctoral students' experiences with accessing the socialization experiences that have been shown to increase the likelihood of success. Ferlin McGaskey et al. used social network theory to research where Black male doctoral students obtained information about resources and activities that matter for graduate school success.⁹² The authors found that faculty and peers in the program/institution were the primary sources of support. Students also relied on family and friends. Although gender did not appear to be a significant factor in the composition of the students' networks, race was important. The majority of the members of students' network were Black. The authors argued that having Black members in their social support network who could identify with the marginalization experiences of Black people and therefore provide emotional support was important to Black students.⁹³ Interestingly, McGaskey et al. reported that students relied heavily on social support from outside of their graduate program, although research on doctoral socialization stresses the importance of having these supports inside the graduate program which is the primary site and context for their professional development. The authors noted this finding is consistent with previous research about the importance of support sources from outside the doctoral student's department. Having multiple forms of support inside and outside the doctoral program is

Experiences," *Review of Higher Education* 16, no. 3 (1993): 355-370, <https://doi.org/10.1353/rhe.1993.0017>.

⁹¹ Pamela Petrease Felder, Howard C. Stevenson and Marybeth Gasman, "Understanding Race in Doctoral Student Socialization," *International Journal of Doctoral Studies* 9 (2014): 21-42, <https://doi.org/10.28945/1947>.

⁹² McGaskey et al., "The Social Support Networks of Black Males," 145.

⁹³ McGaskey et al., 154.

particularly relevant for Black doctoral students who have positive and negative experiences with mentoring in their program, ranging from strong support to none at all.⁹⁴

McGaskey et al.'s findings about the significance of inside and outside sources of support for Black doctoral students can be juxtaposed with Elfreda Chatman's social network research on the information behaviors of white southern women in a retirement community. Chatman assumed that the homogeneity among the women would be a perfect test case for her hypothesis which was grounded in social network theory.⁹⁵ She anticipated that the women would exchange information in the community without hesitation or barriers, and that they would be supportive of each other. However, she found that instead of freely sharing information, the women engaged in information avoidance behaviors such as deception and secrecy to protect themselves from potential embarrassment or retaliation if they disclosed information to perceived outsiders about problems they were having in life.⁹⁶

Conversely, social support networks—especially those from outside the graduate program—were critical to the socialization of Black male doctoral students in the study by McGaskey et al. These networks were not subject to a climate of distrust and suspicion like the relationships among the participants in Chatman's research. This is especially intriguing given that Chatman theorized that outsiders are unlikely to be able to provide information that insiders of a small world will accept.⁹⁷

More research and theory development about Black doctoral students and social networks from an information theory standpoint would be needed to identify information behaviors that explain their choices for acquiring information about factors that can affect their persistence. For example, McGaskey et al. reported that a Black male doctoral student in their study who was struggling opted not to ask for help from faculty or peers in his program who were the sources most likely to have information about how to manage the rigors of full-time employment, family life, and doctoral study. Instead, he relied on his spouse, family, and a friend outside of his institution for support, and eventually took a leave of absence. There is no evidence in the study that this was due to distrust or suspicion, and little in the broader literature about the socialization of Black doctoral students to suggest that Black students deliberately avoid information in their social network. Rather, they seek it. More studies about doctoral students, attrition, and

⁹⁴ McGaskey et al., 154.

⁹⁵ Chatman, "Framing Social Life in Theory and Research," 6.

⁹⁶ Chatman, *The Information World of Retired Women*; Chatman, "Framing Social Life in Theory and Research," 6.

⁹⁷ Burnett, Bessant, and Chatman, "Small Worlds," 537-538.

persistence,⁹⁸ guided by information theory, are needed to explain the role of information behaviors in Black doctoral student success.

DISCUSSION

What doctoral education and Chatman's small worlds have in common is a reliance on normative behaviors to legitimize and regulate acceptable behavior. For example, academic integration experiences such as writing, publication, and presenting at conferences are recognized in doctoral programs as activities in which students should engage in order to prepare for their professional faculty career. Unfortunately, research on the socialization of Black doctoral students suggests that if they are isolated or excluded from the faculty and peer networks where these activities are discussed and planned, they might not have access to this valuable information. These circumstances are what make social networks outside of the graduate program essential for Black doctoral students.

Black doctoral students have a dual but conflicting status as insiders and outsiders in the small world of doctoral education. They are insiders in that they are members of the student body in their doctoral program in their discipline of choice, striving with their peers to gain the academic and professional knowledge, skills, and abilities to become successful in their careers.⁹⁹ But they also experience marginalizing situations that render them outsiders. They are "outsiders within."¹⁰⁰

Networking outside of the small world is a departure from Chatman's assertion that in small worlds, information from the outside is not deemed as essential or important if it does not conform to the norms and worldviews of the small world's social group. It can be argued that ignoring information outside the boundary of the small world of a doctoral program can be very costly and detrimental to Black students' development. This suggests that by creating their own networks, sometimes out of necessity, Black doctoral students might actually live in a small world embedded within the broader small world of doctoral education. Paul T. Jaeger and Gary Burnett argued that there are levels of small

⁹⁸ See for example Lovitts, *Leaving the Ivory Tower*, 307, and Karen E. Patterson-Stewart, Martin H. Ritchie and Eugene TW Sanders, "Interpersonal Dynamics of African American Persistence in Doctoral Programs at Predominantly White Universities," *Journal of College Student Development* 38, no. 5 (1997): 489-498.

⁹⁹ Twale, Weidman, and Bethea, "Conceptualizing Socialization of Graduate Students of Color," 87.

¹⁰⁰ Collins, "Learning from the Outsider Within," s14; Tamara Bertrand Jones, JeffriAnne Wilder and La'Tara Osborne-Lampkin, "Employing a Black Feminist Approach to Doctoral Advising: Preparing Black Women for the Professoriate," *Journal of Negro Education* 82, no. 3 (2013): 327, <https://doi.org/10.7709/jnegroeducation.82.3.0326>.

worlds, and that their boundaries are not as rigid as those that Elfreda Chatman originally conceived. Jaeger and Burnett note that one's local world is embedded in the larger lifeworld, not isolated from it.¹⁰¹ This embeddedness makes possible the creation of small worlds that meet the unique needs of a social group. In the context of Black doctoral students and their socialization, the small worlds they create for themselves fulfill needs that are not met in the broader world of doctoral education.

Because of the intense and often pressure-filled nature of doctoral education, it might be difficult to view it through a lens of everyday, uneventful happenings in the same way that Elfreda Chatman described the small worlds of the participants in her research. However, for doctoral students, daily living in the small world of graduate school is enacted through the many formal and informal socialization experiences that frame the pursuit of a graduate degree. For Black doctoral students, navigating daily life in graduate school involves positive and negative experiences. Participating in existing networks with faculty and peers in the graduate program, or creating their own networks inside or outside the graduate program are manifestations of the information behaviors they enact in response to the information, or the lack thereof, about what it takes to succeed in graduate school.

Elfreda Chatman's theories of small worlds and normative behavior are appropriate frames for examining the socialization of Black doctoral students, but not in their original form. The expanded conceptualization—articulated in the works by Burnett, Besant, and Chatman; Burnett, Jaeger, and Thompson; and Jaeger and Burnett—is necessary to examine doctoral education as a small world, but one that is not grounded in the tight boundaries that Chatman conceived.¹⁰²

AREAS FOR FUTURE RESEARCH

Elfreda Chatman's theoretical and conceptual frameworks can serve as a foundation for future theoretical and empirical scholarship on information behaviors and the socialization of Black doctoral students. Indeed, much more work remains to be done and future researchers might explore the following two areas to address the lack in the current literature.

Socialization of Black Doctoral Students in LIS

As noted at the beginning of this paper, there are very few Black recipients of doctorates in library and information studies. Socialization theory identifies the graduate program

¹⁰¹ Jaeger and Burnett, *Information Worlds*, 43.

¹⁰² Burnett, Besant, and Chatman, "Small Worlds," 536-547; Burnett, Jaeger, and Thompson, "Normative Behavior and Information," 56-66; Jaeger and Burnett, *Information Worlds*.

discipline as the primary intellectual climate for the socialization of doctoral students. Future research should incorporate what we know about the socialization of Black doctoral students into developing information theories and practices for the socialization of Black students in LIS. For example, as previously mentioned, Taylor and Antony's research regarding stereotype threat and the socialization of Black doctoral students in education revealed that students may have a social justice motivation for earning a doctorate. With its longstanding-yet-still-unrealized goal of attracting and retaining more students of color into the LIS profession and with an increasing focus on social justice in library services, research on the information behaviors of Black doctoral students in LIS would be of great benefit to schools of library and information studies.¹⁰³

Mentoring and peer relationships have been identified as critical socialization experiences in doctoral education. The literature on the socialization of Black doctoral students should also be integrated into scholarship on doctoral mentoring in LIS to develop studies and theories of information behavior in LIS doctoral programs.¹⁰⁴ It would also be important to hear more from faculty, as the majority of the literature on the socialization of Black doctoral students focuses on the students as the subject of inquiry. Information theory research framed similarly to that by Marybeth Gasman et al., in which faculty talk about their role in the lives of Black doctoral students, is also needed.¹⁰⁵ Voices of Black faculty are especially needed given the role that same-race mentoring might play in mentoring and advising Black students.¹⁰⁶

¹⁰³ Nicole A. Cooke, Miriam E. Sweeney and Safiya Umoja Noble, "Social Justice as Topic and Tool: An Attempt to Transform an LIS Curriculum and Culture," *Library Quarterly* 86, no. 1 (2016): 107-124, <https://doi.org/10.1086/684147>.

¹⁰⁴ Cassidy R. Sugimoto, "Are You My Mentor? Identifying Mentors and their Roles in LIS Doctoral Education," *Journal of Education for Library and Information Science* 53, no. 2 (2012): 2-19, www.jstor.org/stable/23249093; Cassidy R. Sugimoto, "Initiation, Cultivation, Separation and Redefinition: Application of Kram's Mentoring Framework to Doctoral Education in Information and Library Science," *Journal of Education for Library and Information Science* 53, no. 2 (2012): 98-114, <https://www.jstor.org/stable/23249102>; Jongwook Lee, Amelia Anderson and Gary Burnett, "Peer Relationships and Mentoring between LIS Doctoral Students: A Qualitative Approach," *Journal of Librarianship and Information Science* 49, no. 1 (2017): 115-124, <https://doi.org/10.1177/0961000615592024>.

¹⁰⁵ Marybeth Gasman et al., "Negotiating Power, Developing Trust: Transgressing Race and Status in the Academy," *Teachers College Record* 106, no. 4 (2004): 689-715, <https://doi.org/10.1111/j.1467-9620.2004.00355.x>.

¹⁰⁶ King, "A Multicase Study of African American Doctoral Degree Recipients," 53-61; King, "Hope, Cope and Persevere," 61-70; Martin N. Davidson and Lynn Foster-Johnson, "Mentoring in the Preparation of Graduate Researchers of Color," *Review of Educational Research* 71, no. 4 (2001): 549-574, <https://doi.org/10.3102/00346543071004549>; H.R. Milner, Terry Husband, and M.P. Jackson, "Voices of Persistence and Self-Efficacy: African American Graduate Students

Doctoral Student Socialization in Historically Black Institutions

The majority of research about the socialization of Black doctoral students is based on their experiences in predominantly white institutions. According to the United States National Center for Education Statistics *College Navigator* database, 37 of the nation's 101 Historically Black Institutions (HBIs) award doctoral level degrees.¹⁰⁷ Although there is a substantial body of literature on HBIs, with a smaller set of publications about the HBI baccalaureate origins of Black doctoral students, few publications focus on the socialization of Black doctoral students in these institutions.¹⁰⁸ The scholarship on graduate education in HBIs that has emerged within in the last few years can inform the development of information theories of Black doctoral student socialization in HBIs.¹⁰⁹ How would normative behaviors manifest in this environment with a special historical mission to educate Black students? What would insider/outsider status look like in an HBI? How would an information theory of the socialization of Black doctoral students in HBIs differ from one for Black students in predominantly white institutions?

and Professors Who Affirm Them," *Journal of Critical Inquiry into Curriculum and Instruction* 4, no. 1 (2002): 33-39.

¹⁰⁷ United States National Center for Education Statistics, *College Navigator*, accessed June 30, 2019, <https://nces.ed.gov/collegenavigator>.

¹⁰⁸ Willie Pearson and LaRue C. Pearson, "Baccalaureate Origins of Black American Scientists: A Cohort Analysis," *The Journal of Negro Education* 54, no. 1 (1985): 24-34, <https://doi.org/10.2307/2294897>; Daniel G. Solorzano, "The Doctorate Production and Baccalaureate Origins of African Americans in the Sciences and Engineering," *Journal of Negro Education* 64, no. 1 (1995): 15-32, <https://doi.org/10.2307/2967281>; Cheryl B. Leggon and Willie Pearson Jr., "The Baccalaureate Origins of African American Female Ph. D. Scientists," *Journal of Women and Minorities in Science and Engineering* 3, no. 4 (1997): 213-224, <https://doi.org/10.1615/JWomenMinorScienEng.v3.i4.10>.

¹⁰⁹ Pamela Felder Thompson, "On Firm Foundations: African American Black College Graduates and their Doctoral Student Development in the Ivy League," in *Historically Black Colleges and Universities: Triumphs, Troubles, and Taboos*, eds. Marybeth Gasman and Christopher L. Tudico (New York: Palgrave Macmillan, 2008), 27-40; Tiffany Patrice Fountaine, "The Impact of Faculty-Student Interaction on Black Doctoral Students Attending Historically Black Institutions," *Journal of Negro Education* 81, no. 2 (2012): 136-147, <https://doi.org/10.7709/jnegroeducation.81.2.0136>; Robert T. Palmer et al., *Graduate Education at Historically Black Colleges and Universities (HBCUs): A Student Perspective* (New York: Routledge, 2016); Robert T. Palmer, Adriel A. Hilton, and Tiffany P. Fountaine, eds, *Black Graduate Education at Historically Black Colleges and Universities: Trends, Experiences, and Outcomes* (Charlotte, NC: Information Age, 2012).

CONCLUSION

Elfreda Chatman's theoretical concepts of small worlds and normative behavior are an opportunity to frame the socialization experiences of Black doctoral students in the language of information theory. Specifically, Chatman's research and scholarship can be used to elucidate and make more explicit the information behaviors that are implicit in the socialization of Black doctoral students, such as the forming of social networks in order to thrive and succeed as insiders/outsideers in graduate school.

Although Chatman succeeded in establishing empirical and theoretical foundations for understanding information behaviors among marginalized populations based on their social status, her scholarship was less successful in engaging and situating race in these examinations. Therefore, scholars who wish to consider small worlds and normative behavior as frameworks for future studies on the socialization of Black doctoral students must draw upon other frames such as critical race theory and/or Black feminism. It does not appear that Chatman's scholarship was influenced by these fields of study, nor it is known whether she would have incorporated them into future research. Nevertheless, as discussed in the sections on race and information theory in this paper, these critical standpoints are of great value to an information-theory-based analysis of the socialization of Black doctoral students.

BIBLIOGRAPHY

- Antony, James Soto. "Reexamining Doctoral Student Socialization and Professional Development: Moving Beyond the Congruence and Assimilation Orientation." In *Higher Education: Handbook of Theory and Research*, edited by John C. Smart, 349-380. Dordrecht, Netherlands: Springer, 2002.
- Antony, James Soto, and Edward Taylor. "Theories and Strategies of Academic Career Socialization: Improving Paths to the Professoriate for Black Graduate Students." In *Paths to the Professoriate: Strategies for Enriching the Preparation of Future Faculty*, edited by Donald H. Wulff and Ann E. Austin, 92-114. San Francisco, CA: Jossey Bass, 2004.
- Austin, Ann E. "Preparing the Next Generation of Faculty: Graduate School as Socialization to the Academic Career." *The Journal of Higher Education* 73, no. 1 (2002): 94-122. <https://doi.org/10.1353/jhe.2002.0001>.
- Austin, Ann E., and Melissa McDaniels. "Preparing the Professoriate of the Future: Graduate Student Socialization for Faculty Roles." In *Higher Education: Handbook of Theory and Research*, edited by John C. Smart, 397-456. Dordrecht, Netherlands: Springer, 2006.
- Blockett, Reginald A., Pamela P. Felder, Walter Parrish, and Joan Collier. "Pathways to the Professoriate: Exploring Black Doctoral Student Socialization and the Pipeline to the Academic Profession." *Western Journal of Black Studies* 40, no. 2 (2016): 95-110.
- Bond, Horace Mann. *Black American Scholars: A Study of their Beginnings*. Detroit, MI: Balamp, 1972.
- Burnett, Gary. "Information Worlds and Interpretive Practices: Toward an Integration of Domains." *Journal of Information Science Theory and Practice* 3, no. 3 (2015): 6-16. <https://doi.org/10.1633/jistap.2015.3.3.1>.
- Burnett, Gary, Michele Besant, and Elfreda A. Chatman. "Small Worlds: Normative Behavior in Virtual Communities and Feminist Bookselling." *Journal of the American Society for Information Science and Technology* 52, no. 7 (2001): 536-547. <https://doi.org/10.1002/asi.1102>.
- Burnett, Gary, Paul T. Jaeger, and Kim M. Thompson. "Normative Behavior and Information: The Social Aspects of Information Access." *Library & Information Science Research* 30, no. 1 (2008): 56-66. <https://doi.org/10.1016/j.lisr.2007.07.003>.
- Chatman, Elfreda A. "Framing Social Life in Theory and Research." *The New Review of Information Behaviour Research* 1 (December 2000): 3-18.

- Chatman, Elfreda A. "The Impoverished Life-world of Outsiders." *Journal of the American Society for Information Science* 47, no. 3 (1996): 193-206.
- Chatman, Elfreda A. *The Information World of Retired Women*. New York: Greenwood Press, 1992.
- Chatman, Elfreda A. "An Insider/Outsider Approach to Libraries, Change, and Marginalized Populations." Keynote Address at the Alteration of Generations National Conference, University of Borås Swedish School of Library and Information Science, Borås, Sweden, April 23-25, 2001. <http://www.diva-portal.org/smash/get/diva2:909801/FULLTEXT01.pdf>.
- Chatman, Elfreda A. "Life in a Small World: Applicability of Gratification Theory to Information-Seeking Behavior." *Journal of the American Society for Information Science* 42, no. 6 (1991): 438-449. [https://doi.org/10.1002/\(sici\)1097-4571\(199107\)42:6<438::aid-asi6>3.0.co;2-b](https://doi.org/10.1002/(sici)1097-4571(199107)42:6<438::aid-asi6>3.0.co;2-b).
- Chatman, Elfreda A. "A Theory of Life in the Round." *Journal of the American Society for Information Science* 50, no. 3 (1999): 207-217.
- Collins, Patricia Hill. "Learning from the Outsider Within: The Sociological Significance of Black Feminist Thought." *Social Problems* 33, no. 6 (1986): s14-s32. <https://doi.org/10.2307/800672>.
- Cooke, Nicole A. "Diversifying the LIS Faculty." *Library Journal*, September 25, 2013. <https://www.libraryjournal.com/?detailStory=diversifying-the-lis-faculty-backtalk>.
- Cooke, Nicole A. "The Spectrum Doctoral Fellowship Program: Enhancing the LIS Professoriate." *InterActions: UCLA Journal of Education and Information Studies* 10, no. 1 (2014). <https://escholarship.org/uc/item/7vb7v4p8>.
- Cooke, Nicole A., Miriam E. Sweeney, and Safiya Umoja Noble. "Social Justice as Topic and Tool: An Attempt to Transform an LIS Curriculum and Culture." *Library Quarterly* 86, no. 1 (2016): 107-124. <https://doi.org/10.1086/684147>.
- Davidson, Martin N., and Lynn Foster-Johnson. "Mentoring in the Preparation of Graduate Researchers of Color." *Review of Educational Research* 71, no. 4 (2001): 549-574. <https://doi.org/10.3102/00346543071004549>.
- Ellis, Evelyn M. "The Impact of Race and Gender on Graduate School Socialization, Satisfaction with Doctoral Study, and Commitment to Degree Completion." *Western Journal of Black Studies* 25, no. 1 (2001): 30-45.
- Felder, Pamela Petrease, Howard C. Stevenson, and Marybeth Gasman. "Understanding Race in Doctoral Student Socialization." *International Journal of Doctoral Studies* 9 (2014): 21-42. <https://doi.org/10.28945/1947>.

- Fidel, Raya. *Human Information Interaction: An Ecological Approach to Information Behavior*. Cambridge, MA: MIT Press, 2012.
- Finkelstein, Martin J., Valerie Martin Conley, and Jack H. Schuster. *The Faculty Factor: Reassessing the American Academy in a Turbulent Era*. Baltimore, MD: Johns Hopkins University Press, 2016. Kindle.
- Fountaine, Tiffany Patrice. "The Impact of Faculty-Student Interaction on Black Doctoral Students Attending Historically Black Institutions." *Journal of Negro Education* 81, no. 2 (2012): 136-147. <https://doi.org/10.7709/jnegroeducation.81.2.0136>.
- Franklin, Renee E., and Paul T. Jaeger. "A Decade of Doctorates: An Examination of Dissertations Written by African American Women in Library and Information Studies, 1993-2003." *Journal of Education for Library and Information Science* 48, no. 3 (2007): 187-201.
- Gasman, Marybeth, Cynthia Gerstl-Pepin, Sibby Anderson-Thompkins, Lisa Rasheed, and Karry Hathaway. "Negotiating Power, Developing Trust: Transgressing Race and Status in the Academy." *Teachers College Record* 106, no. 4 (2004): 689-715. <https://doi.org/10.1111/j.1467-9620.2004.00355.x>.
- Gay, Geneva. "Navigating Marginality En Route to the Professoriate: Graduate Students of Color Learning and Living in Academia." *International Journal of Qualitative Studies in Education* 17, no. 2 (March 2004): 265-287. <https://doi.org/10.1080/09518390310001653907>.
- Gildersleeve, Ryan Evely, Natasha N. Croom, and Philip L. Vasquez. "'Am I Going Crazy?!' A Critical Race Analysis of Doctoral Education." *Equity & Excellence in Education* 44, no. 1 (2011): 93-114. <https://doi.org/10.1080/10665684.2011.539472>.
- Gopaul, Bryan. "Distinction in Doctoral Education: Using Bourdieu's Tools to Assess the Socialization of Doctoral Students." *Equity & Excellence in Education* 44, no. 1 (2011): 10-21. <https://doi.org/10.1080/10665684.2011.539468>.
- Greene, Harry Washington. *HOLDERS OF DOCTORATES AMONG AMERICAN NEGROES; AN EDUCATIONAL AND SOCIAL STUDY OF NEGROES WHO HAVE EARNED DOCTORAL DEGREES IN COURSE, 1876-1943*. Boston, MA: Meador, 1946.
- Greene, Harry Washington. "The PhD and the Negro." *Opportunity* 6, no. 9 (1928): 267-284.
- Greene, Harry Washington. "Sixty Years of Doctorates Conferred upon Negroes." *The Journal of Negro Education* 6, no. 1 (1937): 30-37. <https://doi.org/10.2307/2291986>.

- Harrison, Elisabeth. "Black Doctoral Graduates from a Predominantly White University." Paper Presented at the Annual National Conference of the National Association of African American Studies and the National Association of Hispanic and Latino Studies, Houston, TX, February 21-26, 2000. <https://files.eric.ed.gov/fulltext/ED455354.pdf>.
- Honma, Todd. "Trippin' over the Color Line: The Invisibility of Race in Library and Information Studies." *InterActions: UCLA Journal of Education and Information Studies* 1, no. 2 (2005). <https://escholarship.org/uc/item/4nj0w1mp>.
- Ingram, Hansel G. "Black Librarians with Earned and Honorary Doctorates." In *Handbook of Black Librarianship*, edited by E. J. Josey and Marva L. DeLoach, 183-205. Lanham, MD: Scarecrow Press, 2000.
- Jaeger, Paul T., and Gary Burnett. *Information Worlds: Behavior, Technology, and Social Context in the Age of the Internet*. New York: Routledge, 2010. Kindle.
- Jones, Tamara Bertrand, JeffriAnne Wilder, and La'Tara Osborne-Lampkin. "Employing a Black Feminist Approach to Doctoral Advising: Preparing Black Women for the Professoriate." *Journal of Negro Education* 82, no. 3 (2013): 326-338. <https://doi.org/10.7709/jnegroeducation.82.3.0326>.
- King, Susan E. "Hope, Cope and Persevere: The Experience of the African-American Doctoral Women." *The Negro Educational Review* 46, no. 3 (1995): 61-70.
- King, Susan E. "A Multicase Study of African American Doctoral Degree Recipients." *Equity & Excellence in Education* 27, no. 2 (1994): 53-61. <https://doi.org/10.1080/1066568940270210>.
- King, Susan E., and J. R. Chepyator-Thomson. "Factors Affecting the Enrollment and Persistence of African-American Doctoral Students." *Physical Educator* 53, no. 4 (1996): 170-180.
- Lee, Jongwook, Amelia Anderson, and Gary Burnett. "Peer Relationships and Mentoring between LIS Doctoral Students: A Qualitative Approach." *Journal of Librarianship and Information Science* 49, no. 1 (2017): 115-124. <https://doi.org/10.1177/0961000615592024>.
- Leggon, Cheryl B., and Willie Pearson Jr. "The Baccalaureate Origins of African American Female Ph. D. Scientists." *Journal of Women and Minorities in Science and Engineering* 3, no. 4 (1997): 213-224. <https://doi.org/10.1615/JWomenMinorScienEng.v3.i4.10>.
- Louque, Angela. "Factors Influencing Academic Attainment for African-American Women Ph.D. Recipients: An Ethnographic Study of Their Persistence." *The Negro Educational Review* 50, no. 3 (1999): 101-108. EBSCOhost.

- Louque, Angela, and Helen M. Garcia. "Hispanic American and African American Women Scholars." *Race, Gender & Class* 7, no. 3 (2000): 35-57.
- Lovitts, Barbara E. *Leaving the Ivory Tower: The Causes and Consequences of Departure from Doctoral Study*. Lanham, MD: Rowman & Littlefield Publishers, 2001.
- Malaney, Gary D. "Graduate Education as an Area of Research in the Field of Higher Education." In *Higher Education: Handbook of Theory and Research*, edited by John C. Smart, 397-454. New York: Agathon Press, 1987.
- McGaskey, Ferlin G., Sydney Freeman, Corey Guyton, Demetrius Richmond, and Chutney Walton Guyton. "The Social Support Networks of Black Males in Higher Education Administration Doctoral Programs: An Exploratory Study." *Western Journal of Black Studies* 40, no. 2 (2016): 141-158.
- Milner, H.R., Terry Husband, and M.P. Jackson. "Voices of Persistence and Self-Efficacy: African American Graduate Students and Professors Who Affirm Them." *Journal of Critical Inquiry into Curriculum and Instruction* 4, no. 1 (2002): 33-39.
- Moyer, Anne, Peter Salovey, and Shannon Casey-Cannon. "Challenges Facing Female Doctoral Students and Recent Graduates." *Psychology of Women Quarterly* 23, no. 3 (1999): 607-630. <https://doi.org/10.1111/j.1471-6402.1999.tb00384.x>.
- National Science Foundation, National Center for Science and Engineering Statistics. *Doctorate Recipients from U.S. Universities 2017*, by Jaquelina Falkenheim. Special Report NSF 19-301. Alexandria, VA, 2018. <https://nces.nsf.gov/pubs/nsf19301/assets/report/report.pdf>.
- Nettles, Michael T., and Catherine M. Millett. *Three Magic Letters: Getting to Ph.D.* Baltimore, MD: Johns Hopkins University Press, 2006.
- Padilla, Amado M. "Ethnic Minority Scholars, Research, and Mentoring: Current and Future Issues." *Educational Researcher* 23, no. 4 (1994): 24-27. <https://doi.org/10.2307/1176259>.
- Palmer, Robert T., Adriel A. Hilton, and Tiffany P. Fountaine, eds. *Black Graduate Education at Historically Black Colleges and Universities: Trends, Experiences, and Outcomes*. Charlotte, NC: Information Age, 2012.
- Palmer, Robert T., Larry J. Walker, Ramon B. Goings, Charmaine Troy, Chaz T. Gipson, and Felecia Commodore, eds. *Graduate Education at Historically Black Colleges and Universities (HBCUs): A Student Perspective*. New York: Routledge, 2016. Kindle.
- Patel, Vimal. "Dearth of Black Ph.D. Recipients Will Complicate Efforts to Diversify Faculty." *The Chronicle of Higher Education*, December 18, 2015. <https://www.chronicle.com/article/Dearth-of-Black-PhD/234469>.

- Patel, Vimal. "How a Famous Academic Job-Market Study Got It All Wrong—and Why It Still Matters." *The Chronicle of Higher Education*, September 9, 2018. <https://www.chronicle.com/article/How-a-Famous-Academic/244458>.
- Patterson-Stewart, Karen E., Martin H. Ritchie, and Eugene TW Sanders. "Interpersonal Dynamics of African American Persistence in Doctoral Programs at Predominantly White Universities." *Journal of College Student Development* 38, no. 5 (1997): 489-498.
- Pearson, Willie, and LaRue C. Pearson. "Baccalaureate Origins of Black American Scientists: A Cohort Analysis." *The Journal of Negro Education* 54, no. 1 (1985): 24-34. <https://doi.org/10.2307/2294897>.
- Pendleton, Victoria EM, and Elfreda A. Chatman. "Small World Lives: Implications for the Public Library." *Library Trends* 46, no. 4 (1998): 732-752.
- Pifer, Meghan, and Vicki Baker. "Identity as a Theoretical Construct in Research About Academic Careers." In *Theory and Method in Higher Education Research*, edited by Malcolm Tight and Jeroen Huisman, 115-132. Bingley, UK: Emerald Publishing Limited, 2013. ProQuest Ebook Central.
- Ramirez, Elvia. "Unequal Socialization: Interrogating the Chicano/Latino(a) Doctoral Education Experience." *Journal of Diversity in Higher Education* 10, no. 1 (2017): 25-38. <https://doi.org/10.1037/dhe0000028>.
- Rowley, Larry L. "The Socialization of African American PhD Students: Race, Sociology of Knowledge, and Historical Concepts for Contemporary Contexts." In *Supporting Graduate Students in the 21st Century: Implications for Policy and Practice*, edited by Pamela P. Felder and Edward P. St. John, 151-175. New York: AMS Press, 2014.
- Smith, Valerie. "Black Feminist Theory and the Representation of the 'Other.'" In *Changing our Own Words: Essays on Criticism, Theory, and Writing by Black Women*, edited by Cheryl A. Wall, 38-57. New Brunswick, NJ: Rutgers University Press, 1989.
- Solorzano, Daniel G. "The Doctorate Production and Baccalaureate Origins of African Americans in the Sciences and Engineering." *Journal of Negro Education* 64, no. 1 (1995): 15-32. <https://doi.org/10.2307/2967281>.
- Subramaniam, Mega M., and Paul T. Jaeger. "Modeling Inclusive Practice?: Attracting Diverse Faculty and Future Faculty to the Information Workforce." *Library Trends* 59, no. 1 (2010): 109-127.

- Subramaniam, Mega M., Howard Rodriguez-Mori, Paul T. Jaeger, and Renee Franklin Hill. "The Implications of a Decade of Diversity-Related Doctoral Dissertations (2000–2009) in LIS: Supporting Inclusive Library Practices." *The Library Quarterly* 82, no. 3 (2012): 361-377. <https://doi.org/10.1086/665931>.
- Sugimoto, Cassidy R. "Are You My Mentor? Identifying Mentors and their Roles in LIS Doctoral Education." *Journal of Education for Library and Information Science* 53, no. 2 (2012): 2-19. <https://www.jstor.org/stable/23249093>.
- Sugimoto, Cassidy R. "Initiation, Cultivation, Separation and Redefinition: Application of Kram's Mentoring Framework to Doctoral Education in Information and Library Science." *Journal of Education for Library and Information Science* 53, no. 2 (2012): 98-114. <https://www.jstor.org/stable/23249102>.
- Taylor, Edward, and James Soto Antony. "Stereotype Threat Reduction and Wise Schooling: Towards the Successful Socialization of African American Doctoral Students in Education." *Journal of Negro Education* 69, no. 3 (2000): 184-198. <https://doi.org/10.2307/2696231>.
- Thompson, Gail L. "What the Numbers Really Mean: African-American Underrepresentation at the Doctoral Level." *Journal of College Student Retention: Research, Theory & Practice* 1, no. 1 (1999): 23-40.
- Thompson, Gail L., and Angela Louque. *Exposing the "Culture of Arrogance" in the Academy: A Blueprint for Increasing Black Faculty Satisfaction in Higher Education*. Sterling, VA: Stylus, 2005.
- Thompson, Pamela Felder. "On Firm Foundations: African American Black College Graduates and their Doctoral Student Development in the Ivy League." In *Historically Black Colleges and Universities: Triumphs, Troubles, and Taboos*, edited by Marybeth Gasman and Christopher L. Tudico, 27-40. New York: Palgrave Macmillan, 2008.
- Turner, Caroline Sotello Viernes, and Samuel L. Myers. *Faculty of Color in Academe: Bittersweet Success*. Boston, MA: Allyn and Bacon, 2000.
- Turner, Caroline Sotello Viernes, and Judith Rann Thompson. "Socializing Women Doctoral Students: Minority and Majority Experiences." *Review of Higher Education* 16, no. 3 (1993): 355-370. <https://doi.org/10.1353/rhe.1993.0017>.
- Twale, Darla J., John C. Weidman, and Kathryn Bethea. "Conceptualizing Socialization of Graduate Students of Color: Revisiting the Weidman-Twale-Stein Framework." *Western Journal of Black Studies* 40, no. 2 (2016): 80-94.
- United States National Center for Education Statistics. *Digest of Education Statistics*, 2017. <https://nces.ed.gov/programs/digest>.

- United States National Center for Education Statistics. *College Navigator*.
<https://nces.ed.gov/collegenavigator>.
- Weidman, John C., Darla J. Twale, and Elizabeth Leahy Stein. *Socialization of Graduate and Professional Students in Higher Education: A Perilous Passage? ASHE-ERIC Higher Education Report*. San Francisco: Jossey-Bass, 2001.
<https://files.eric.ed.gov/fulltext/ED457710.pdf>.
- Weidman, John C., and Elizabeth L. Stein. "Socialization of Doctoral Students to Academic Norms." *Research in Higher Education* 44, no. 6 (2003): 641-656.
<https://doi.org/10.1023/A:1026123508335>.
- Yosso, Tara J. "Whose Culture has Capital? A Critical Race Theory Discussion of Community Cultural Wealth." *Race Ethnicity and Education* 8, no. 1 (2005): 69-91. <https://doi.org/10.1080/1361332052000341006>.
- Zamudio-Suaréz, Fernanda. "This Academic Took a Job at BuzzFeed. Here's Her Advice to Graduate Programs." *The Chronicle of Higher Education*, April 27, 2018.
<https://www.chronicle.com/article/This-Academic-Took-a-Job-at/243264>.