

Enhancing racial equity in LIS research by increasing representation of BIPOC

Charles R. Senteio^{a,*}, Kaitlin E. Montague^a, Bettina Campbell^b,
Terrance R. Campbell^b and Samantha Seigerman^a

^a*Rutgers University School of Communication and Information, New Brunswick, New Jersey, USA*

^b*YOUR Center, Flint, Michigan, USA*

The escalation of discourse on racial injustice prompts novel ideas to address the persistent lack of racial equity in LIS research. The underrepresentation of BIPOC perspectives contributes to the inequity. Applying the Community Based Participatory Research (CBPR) approach meaningfully engages BIPOC to help guide LIS investigations that identify evolving needs and concerns, such as how systematic racism may contribute to social justice issues like environmental and health inequity. Engaging with BIPOC, using the CBPR approach, can help address racial equity in LIS because it will result in increased racial representation which enables incorporation of the perspectives and priorities of BIPOC. This shift to greater engagement is imperative to respond to escalating attention to social injustice and ensure that these central issues are adequately reflected in LIS research. The discipline is positioned to help detail the drivers and implications of inequity and develop ways to address them.

We underscore the importance of working across research disciplines by describing our CBPR experience engaging with BIPOC in LIS research. We highlight the perspectives of community partners who have over two decades of experience with community-based LIS research. We offer lessons learned to LIS researchers by describing the factors that make these initiatives successful and those which contribute to setbacks.

Keywords: Racial equity, community-based research, LIS research

1. Introduction

Social justice is about “giving voice to communities who have been forced into silence; social justice is about equity and access” (Rodriguez & Cummings, 2007, p. 12). It is vital for LIS researchers and practitioners to consistently consider research approaches that intentionally engage with communities at each stage of the research process. They should actively seek to identify their own bias and stereotyping, which is necessary to reduce their negative effects. There is ample literature compelling LIS researchers and practitioners to more effectively incorporate social justice issues, such as addressing racism, into LIS work. This literature calls to transform the current LIS landscape, and emerging literature describes the vital importance of integrating

*Corresponding author: Charles R. Senteio, Rutgers University School of Communication and Information, New Brunswick, New Jersey, USA. Tel.: +1 848 932 7586; E-mail: charles.senteio@rutgers.edu.

social justice and racial equity into every facet of LIS work, from research to training students and researchers, to how librarians go about their important work (Cooke, 2019a; A.N. Gibson & Hughes-Hassell, 2017; Irvin, 2019; Kumasi & Manlove, 2015; Mehra, 2019; Noble & Sullivan, 2014; Fritch, 2018; A. Gibson et al., 2018; Hudson, 2017; Dali & Caidi, 2020). Reviewing the literature, and contributing to it, can help push the field forward; however, Cooke (2020) calls upon LIS researchers and practitioners to “stand in the gap.” Standing in the gap refers to interceding on the behalf of others. Standing in the gap is what we, in the LIS discipline, must do to initiate and sustain progress towards racial justice (Cooke, 2020).

The LIS literature outlines resources and training which can be implemented to reduce racial bias (Matsuda et al., 2020). And we acknowledge the structural, multifaced changes necessary to reduce racism (Williams & Cooper, 2019). But we assert that we can promote racial equity while addressing underrepresentation by including the perspectives and participation from Black, Indigenous, and People of Color (BIPOC) communities who are both targeted by LIS research (e.g., health informatics) and served by practitioners (e.g., public libraries). We commend the contemporary efforts in LIS to acknowledge and confront systemic racism and oppression (Mehra & Gray, 2020). But we assert that LIS can even more effectively address racism by welcoming the perspectives and equal participation of individuals from BIPOC communities.

The authors provide perspectives based on our academic training and our diverse experiences as LIS practitioners which have been informed by our work in the United States. The first author is a LIS professor, researcher, and a licensed clinical social worker who is a BIPOC. The second author is a librarian and LIS doctoral student. The third and fourth authors are BIPOC who serve communities of color. They have been community collaborators on numerous LIS research projects (i.e., community health informatics) for over thirty years combined in Michigan and across the United States. Their experiences include projects led by different principal investigators on efforts to promote community health and wellness and neighborhood safety. The fifth author is a current master’s of social work student who is placed at a public library for her internship. Given that racism in LIS can vary across regions and countries, we acknowledge and encourage readers to consider how the U.S.-based perspectives described in this paper may support efforts in their regions. Our recommendations will help future LIS researchers design, execute and disseminate findings from racial equity investigations.

We assert that enhancing engagement with BIPOC in LIS research can help promote racial equity because it ensures that the perspectives and priorities of BIPOC are incorporated in the inception, design, execution and dissemination of research efforts.

1.1. BIPOC representation in LIS research

LIS researchers and practitioners must better engage with BIPOC to help address the negative impact of racism in LIS which is illustrated in the wide body of literature that describes the lack of racial diversity in LIS as a profession (Croxtton et al., 2016;

Harper, 2020). The lack of diversity has been detailed among practicing librarians and library administrators (Buddy & Williams, 2005; Lance, 2005; Morgan et al., 2009), master's students and doctoral students (Bonnici & Burnett, 2005; Jaeger et al., 2011), and in both teaching and research faculty (Adkins & Espinal, 2004; Jaeger & Subramaniam, 2010; Wheeler, 2005). The lack of racial equity in LIS research is partially due to BIPOC not being engaged in LIS research. This paucity of research and consequential underrepresentation has resulted in LIS research not achieving its full potential to impact social justice, specifically racial social justice. Increasing this representation in LIS research will improve the amount and quality of racial equity research because it will require engaging more fully with communities of color who continue to be underrepresented in research. The drivers of lack of representation are complex and not fully described, but the persistent meager representation, in perspectives and content, is restricting. Racial diversity is necessary for research which even hints at investigating issues associated with racial equity, simply because social scientists are prone to influences like biases and stereotypes. As the distinguished Black psychologist, Charles A. Thomas noted in 1985, "science is a human activity which is hardly neutral, objective, or impartial." (Thomas, 1985). Therefore engaging effectively with BIPOC will address both the lack of research and representation because when BIPOC are engaged in research projects their issues and concerns are more likely to be addressed, and by definition, their views will be represented (Hughes et al., 2017; Israel et al., 2020).

Welcoming this engagement from BIPOC will enable LIS to advance closer to the full potential of racial equity in the field. We LIS researchers must do more than just solicit input or listen – we must surrender some of our power. We must do the uncomfortable work to identify our own biases. We must be open to change, and respond when our work reveals opportunities to create systematic change in how we go about our work and the results it may achieve.

2. Engagement and inclusion through CBPR

LIS researchers should seek ways to apply the community-based participatory research (CBPR) approach in their investigations to engage with BIPOC. The approach is designed to create reciprocal relationships between academic researchers and community partners. In the context of health equity, community partners may possess relevant insight on particular local social, cultural, and environmental nuances which influence health outcomes. These insights can include structural barriers like perceived racism (e.g., a health center with a reputation of treating community members poorly), environmental factors like neighborhood safety (e.g., local walking groups which address safety during specific times) and health behaviors like dietary choices (e.g., availability of affordable, culturally appropriate foods). These insights are necessary to help understand why traditional prevention and promotion approaches are ineffective (Israel et al., 2001; Israel et al., 2005).

It is vital to include community members at the very inception of the research

Box 1 – Key Principles of CBPR (adapted from Unertl et al.)

1. Seek to understand the existing strengths and resources within the community. Begin with the premise that resources are there, and the task of the team is to access them.
2. Establish and nurture reciprocal relationships at the very inception of the potential research idea, through the dissemination of findings. This is often an iterative process, which requires negotiation across project phases.
3. Begin with the notion that research findings will have mutual benefit.
4. Empower both researchers and community members while being cognizant of the inequalities inherent in most community-research partnerships. The researcher has the financial and resource support of an organization with more economic and administrative support. The community member has social capital and trust.
5. Be aware of strength-based approaches to communities and individuals. Seek to understand and promote ecological explanatory models of behavior in health contexts.
6. Disseminate findings and insights to all relevant parties. Co-develop and co-select approaches, format, and language (e.g., infographic). Researchers should build into work planning the capacity to disseminate beyond traditional peer-reviewed journal papers and conference presentations. Begin with assumption of co-authorship across the collaborative team.

process because community members may provide vital insights for research design, from instrument development and design, to analysis approaches (both qualitative and quantitative), to data validation, to dissemination. In fact, models have been developed to help guide mixed methods research design (Lucero et al., 2018). CBPR is valuable in the context of health informatics research to enhance equity because it: enables designing research projects that result in broad impact, promotes engagement with populations historically underrepresented in research, and accelerates the translation of research findings into practice, and perhaps most importantly it can promote the development of research skills for researchers and community members (Unertl et al., 2016). See Box 1: Key Principles of CBPR research for health informatics.

2.1. CBPR is inconsistent in practice due to bias and lack of skills

Our team of co-authors includes two individuals with over thirty combined years of experience as community partners on LIS engagements focused on issues that disproportionately impact communities of color, like environmental safety and community health and wellness. Their CBPR experience spans projects in collaboration with the University of Michigan (United States) Prevention Research Center that include violence prevention, to developing electronic tools to help disseminate sexual health information (Griffith et al., 2010; Griffith et al., 2010; Griffith et al., 2010; Senteio et al., 2018), to designing and engaging technology to help provide health information to older Black adults with diabetes (Senteio, 2018; Senteio et al., 2021). They have collaborated to discuss community needs before the very inception of a research project, advised research teams on study design (e.g., participatory design), on recruitment, and on facilitating focus groups, data analysis, and dissemination which has included co-authorship.

Overall the experiences of the community partners have been valuable for them and for the communities they continue to serve. The potential to help their communities

become healthier and safer places to live, work, and play remains the primary motivation for continuing to be open to research collaborations. The community partners have observed that CBPR projects are successful when researchers engage effectively with them by building equitable, trusted relationships at the earliest stages of an effort. These principles are consistent with models and guidance for conducting research using the CBPR approach (Wallerstein et al., 2017).

Despite the considerable literature describing the benefits of applying CBPR for community-based research projects focused on social justice and health equity, in particular, these well-outlined principles are not consistently applied in LIS research. The reasons are multifactorial and not clearly defined. For example, the tracking of the impact of these efforts remains elusive as models to help explain specific pathways from CPBR efforts to health equity outcomes are still being developed and tested (Oetzel et al., 2018).

Simply declaring a LIS investigation “community-based” or calling a study “CBPR” is insufficient when this approach is not applied consistently and appropriately. In our collective experience, we have observed barriers to applying CBPR which provides mutual value – the version articulated in CBPR literature. There are several reasons for this disconnect between theory and practice. Unsuccessful projects have the following interrelated characteristics: first, they can be led by Principal Investigators (PIs) who wield their access to resources or status in the academy to exert dominance. They can be hostile to input from community partners. These PIs tend to disregard what the community may have to offer. Second, just as racial bias and stereotypes persist across society, these same prejudgements can influence research activities. Academic research is not protected from larger societal dynamics. Of particular concern is that BIPOC communities are viewed as in need of perpetual “help”. They are perceived to fundamentally lack the capacity to design, implement, and evaluate sustainable interventions that merit serious consideration in scholarly work. These communities are too often viewed as categorically deficient. In response to these perceptions, which are held by various other community partners, the Community-Based Organization Partners (CBOP) was established in Genesee County Michigan, United States (*Partnership Consortium*, n.d.). Community partners in Flint and across the county formed this organization to ensure that community partners are recognized as equitable partners in any community-based research. CBOP also formed a Community Ethics Review Board (CERB) which reviews proposals from any researchers wishing to collaborate with any one of the community partners (Skolarus et al., 2011). The community partners took these steps because they observed that BIPOC communities continue to be at risk of being studied from a deficit position, instead of one which can be characterized by strength and resiliency. Third, researchers tend to view BIPOC communities as the cultural “other”. Literature describing work across cultural, economic, and educational differences includes that doing so can result in forming broad-stroke assumptions which can reduce the opportunity to observe, listen, and evaluate individual constructs equitably (Guttormsen, 2018). Seeing BIPOC as “other” can occur across differences common

to community-based research, and doing so reinforces the contradiction between the oppressor and the oppressed. Freire's groundbreaking work reminds us that transformation is definitionally a mutual process (Freire, 1993). Fourth, disconnects on timelines for equitable incentives, both pre- and post-funding, are a persistent issue in community-academic partnerships. Community needs can be quite pressing and timely responses may be necessary to literally save lives. Conversely, the research process – from inception to dissemination of results – is typically more measured. We also acknowledge disparate definitions for a successful project. The project may be perceived as successful from the perspective of the community partners (e.g., designing and conducting health improvement sessions), but unsuccessful from the research standpoint (e.g., insufficient number of publications and/or lacking preliminary data to fund follow-up work).

We encourage LIS researchers to consider these specific insights. CBPR investigations are mutually beneficial and rewarding when both researchers and community partners sustain their relationship beyond the specific research effort and sustainability of the partnership is a suitable metric of success for community-based research that must be defined by an ongoing process, rather than as a project that has a defined beginning and end based on funding availability. These initiatives are successful when the lead researchers (i.e., Principal Investigator/Co-Investigator) are knowledgeable and experienced in leading community-based projects, yet willing to learn about nuances associated with a particular community as it may relate to the context of the study. Conversely, projects are unfavorable, again from the perspective of the community partner, when the research leader is unwilling to recognize or disclose gaps in their own skillset. As a result, they may disregard how their community partners may help them grow and develop. (See Box 2: Guidance for Researchers who Lead CBPR LIS Research Efforts).

2.2. Gaps remain in applying CBPR in LIS research

Our experience reveals important gaps which remain in successfully applying CBPR in LIS research. First, LIS researchers are not trained in the relationship skills required to sustain this work – which means they are often ill-equipped to teach Ph.D. students how to execute this fairly specialized work. This dovetails with the more general finding that LIS programs across the U.S. are not clearly communicating how their curricula incorporate social justice education (Jones, 2020). Second, community partners lack a consistent understanding of the priorities and timelines of research. For example, papers and grants may take a comparatively long time to develop and institutional support relieves researchers from the pressure to generate income which is a pressing issue for community individuals and organizations. Third, incentives are misunderstood and misaligned – there is tension between research deliverables and service delivery (Fletcher et al., 2014). Consequently, it remains difficult to create and sustain the reciprocal relationships necessary to sustain this work across projects (Arora et al., 2015). At a macro level, evaluating the efficacy

Box 2 – Guidance for Researchers who Lead CBPR LIS Research Efforts

1. Look beyond the numbers, to focus on stories too. Since communities are underrepresented in research, data may be incomplete in describing, for example, barriers and facilitators to health information, or residents' desire to participate in research. Recognize that the literature, and your understanding of it may be incomplete. Just as clinicians are encouraged to strive to understand their patients' values and beliefs, seek to understand those of your community partners (Kennedy et al., 2017). Engage with them during the relationship-building process to hear their understanding of the issues and potential approaches to address them. Also, your community partners may also be making assumptions about their own communities which may be incorrect. So, embark upon the research with the understanding that there are learning opportunities for partners too.
2. Be willing to engage with community members throughout the research effort. Begin the relationship-building process before defining research questions or securing funding. Demonstrate to your collaborative community partner that their input may be vital to completing both tasks. The willingness to engage before finalizing research questions, before selecting a research design, and before funding is available, communicates to community partners that you need their input to complete these vital steps. If you are not clear on how to engage, seek input from other research peers who have experience with CBPR and seek support from community partners. Maintain this collaborative orientation throughout the effort. Begin with the assumption that the collaboration will transcend any specific project. Think of community-based research as a process, not a project.
3. Be transparent about what you do and what you do not know. Some research leaders are reticent to disclose their own understanding of the various factors that influence, for example, health behavior in a particular community. For example, the existence of a public hospital may not connote the availability of care. Availability may depend on the credibility of the medical facility, and the healthcare practitioners that work within it.
4. Consider that collaborative partners often are working in communities where they grew up, or where they may have raised their own families. Their investment in their community will typically be far beyond the investment that any researcher has in this community. This investment contrast is fine, but do not lose sight of it. Remember that whether the funding is there or not, your partners will continue to work to improve these communities.
5. As with other collaborative efforts, personality matters. CBPR is fundamentally about building and sustaining nurturing relationships. If the researcher's collaborative experience does not include this vital skill, then the researcher should recognize this skill development opportunity and seek ways to refine these skills, just as they might with either qualitative or quantitative skills.

of the partnerships themselves is elusive, and measurement approaches tend to focus on new partnerships, and few metrics have been validated (Israel et al., 2020). For example, payment or other incentives for participation in community-based research in traditional roles is familiar yet amounts remain unclear. Researchers and Institutional Review Boards (IRBs) consistently disagree on defining “fairness” for research participant incentive models – without being coercive or result in undue influence – for data collection methods such as interviews, focus groups, and surveys (Gelinias et al., 2018). Appropriate incentives are even less clear for sustained participation which frequently characterizes CBPR (Fry et al., 2018). Fourth, research institutions do not have a clear understanding of the “invisible work” involved in building and nurturing community-based research (Strauss, 1993). So it is difficult for researchers, especially pre-tenure faculty, to balance the work needed with other faculty responsibilities because much of the relationship-building work required does not directly result in papers and/or grants. This contributes to the lack of this work being done, and when it is done it may not be done “correctly”.

3. Conclusion

CBPR should be effectively applied to enhance engagement with BIPOC in LIS research. Doing so will both increase the proportion of racial equity research and it will increase the representation of BIPOC. CBPR is a particularly well-suited approach given the emerging collaborations between LIS researchers and community partners to guide LIS research opportunities to be more responsive to various community information needs. For example, this responsiveness is vital to help fulfill public library patrons' evolving information needs (Senteio et al., 2020).

Community partners with rich experience in LIS research assert how structural racism continues to exert a negative influence on the proper application of CBPR in LIS investigations, and how mitigating these effects will help incorporate BIPOC concerns and address their lack of representation. We offer experiences for community engagement based on environmental safety and community health and wellness which are transferable to other LIS research efforts (e.g., understanding how public libraries can better meet community needs). Using CBPR to enhance the engagement of BIPOC will enable equitable engagement in all stages of health equity research. CBPR is a proven approach and its successful application in LIS investigations will address representation and inclusion of racial equity concerns in LIS research. The inclusion of BIPOC via community engagement will help promote social justice and fulfill a key tenet of LIS research.

References

- Adkins, D., & Espinal, I. (2004). The diversity mandate. *Library Journal*, 45(2), 149-161. <https://www.libraryjournal.com/?detailStory=the-diversity-mandate>.
- Arora, P.G., Krumholz, L.S., Guerra, T., & Leff, S.S. (2015). Measuring community-based participatory research partnerships: the initial development of an assessment instrument. *Progress in Community Health Partnerships: Research, Education, and Action*, 9(4), 549-560. doi: 10.1353/cpr.2015.0077.
- Bonnici, L., & Burnett, K. (2005). A Web Model of Recruitment for LIS Doctoral Education: Weaving in Diversity. In M.B. Wheeler (Ed.), *Unfinished Business: Race, Equity, and Diversity in Library and Information Science Education*, pp. 119-130. Scarecrow.
- Buddy, J.W., & Williams, M.C. (2005). A dream deferred: school libraries and segregation. *American Libraries*, 36(2), 33-35.
- Croxton, R.A., Crumpton, M.A., & Holmes, G.V. (2016). Promoting diversity to add value to the LIS profession. *The Bottom Line*, 29(3), 191-206. doi: 10.1108/BL-05-2016-0024.
- Fletcher, F., Hammer, B., & Hibbert, A. (2014). "We know we are doing something good, but what is it?": the challenge of negotiating between service delivery and research in a CBPR project. *Journal of Community Engagement and Scholarship*, 7(2). <http://jces.ua.edu/we-know-we-are-doing-something-good-but-what-is-it-the-challenge-of-negotiating-between-service-delivery-and-research-in-a-cbpr-project/>.
- Freire, P. (1993). *Pedagogy of the oppressed*. The Continuum International Publishing Group Inc.
- Fry, C.E., Nikpay, S.S., Leslie, E., & Buntin, M.B. (2018). Evaluating community-based health improvement programs. *Health Affairs*, 37(1), 22-29. doi: 10.1377/hlthaff.2017.1125.
- Gelinas, L., Largent, E.A., Cohen, I.G., Kornetsky, S., Bierer, B.E., & Fernandez Lynch, H. (2018). A framework for ethical payment to research participants. *New England Journal of Medicine*, 378(8), 766-771. doi: 10.1056/NEJMs1710591.

- Griffith, D.M., Allen, J.O., Deloney, E.H., Robinson, K., Lewis, E.Y., Campbell, B., Morrel-Samuels, S., Sparks, A., Zimmerman, M.A., & Reischl, T. (2010). Community-based organizational capacity building as a strategy to reduce racial health disparities. *J Prim Prev*, *31*(1-2), 31-39. doi: 10.1007/s10935-010-0202-z.
- Griffith, D.M., Campbell, B., Allen, J.O., Robinson, K.J., & Stewart, S.K. (2010). YOUR blessed health: an HIV-prevention program bridging faith and public health communities. *Public Health Reports*, *125*(Suppl 1), 4-11. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2788403/>.
- Griffith, D.M., Pichon, L.C., Campbell, B., & Allen, J.O. (2010). YOUR blessed health: a faith-based CBPR approach to addressing HIV/AIDS among african americans. *AIDS Education and Prevention*, *22*(3), 203-217. doi: 10.1521/aeap.2010.22.3.203.
- Guttormsen, D.S.A. (2018). Advancing otherness and othering of the cultural other during “intercultural encounters” in cross-cultural management research. *International Studies of Management & Organization*, *48*(3), 314-332. doi: 10.1080/00208825.2018.1480874.
- Harper, L.M. (2020). Recruitment and retention strategies of LIS students and professionals from under-represented groups in the United States. *Library Management*, *41*(2/3), 67-77. doi: 10.1108/lm-07-2019-0044.
- Hughes, T.B., Varma, V.R., Pettigrew, C., & Albert, M.S. (2017). African Americans and clinical research: evidence concerning barriers and facilitators to participation and recruitment recommendations. *The Gerontologist*, *57*(2), 348-358. doi: 10.1093/geront/gnv118.
- Israel, B.A., Lachance, L., Coombe, C.M., Lee, S.-Y.D., Jensen, M., Wilson-Powers, E., Mentz, G., Muhammad, M., Rowe, Z., Reyes, A.G., & Brush, B.L. (2020). Measurement approaches to partnership success: theory and methods for measuring success in long-standing community-based participatory research partnerships. *Prog Community Health Partnersh*, *14*(1), 129-140. doi: 10.1353/cpr.2020.0015.
- Israel, B.A., Lichtenstein, R., Lantz, P., McGranaghan, R., Allen, A., Guzman, R.J., Softley, D., & Maciak, B. (2001). The Detroit community-academic urban research center: development, implementation, and evaluation. *Journal of Public Health Management and Practice*, *7*(5), 1-19. http://journals.lww.com/jphmp/Fulltext/2001/07050/The_Detroit_Community_Academic_Urban_Research.3.aspx.
- Israel, B.A., Parker, E.A., Rowe, Z., Salvatore, A., Minkler, M., López, J., Butz, A., Mosley, A., Coates, L., Lambert, G., Potito, P.A., Brenner, B., Rivera, M., Romero, H., Thompson, B., Coronado, G., & Halstead, S. (2005). Community-based participatory research: lessons learned from the centers for children’s environmental health and disease prevention research. *Environmental Health Perspectives*, *113*(10), 1463-1471. doi: 10.1289/ehp.7675.
- Jaeger, P.T., & Subramaniam, M.M. (2010). Modeling inclusive practice?: attracting diverse faculty and future faculty to the information workforce. *Library Trends*, *59*(1-2), 109-127. <https://muse-jhu-edu.proxy.libraries.rutgers.edu/article/407809>.
- Jaeger, P.T., Subramaniam, M.M., Jones, C.B., & Bertot, J.C. (2011). Diversity and LIS education: inclusion and the age of information. *Journal of Education for Library and Information Science*, *52*(3), 166-183. <http://www.jstor.org.proxy.libraries.rutgers.edu/stable/41308894>.
- Jones, R. (2020). Social justice in library science programs: a content analysis approach. *Journal of Librarianship and Information Science*, *52*(4), 1102-1109. doi: 10.1177/0961000620904432.
- Kennedy, B.M., Rehman, M., Johnson, W.D., Magee, M.B., Leonard, R., & Katzmarzyk, P.T. (2017). Healthcare providers versus patients’ understanding of health beliefs and values. *Patient Experience Journal*, *4*(3), 29-37. <https://pubmed.ncbi.nlm.nih.gov/29308429>.
- Lance, K.C. (2005). Racial and ethnic diversity of U.S. library workers. *American Libraries*, *36*(5), 41-43.
- Lucero, J., Wallerstein, N., Duran, B., Alegria, M., Greene-Moton, E., Israel, B., Kastelic, S., Magarati, M., Oetzel, J., Pearson, C., Schulz, A., Villegas, M., & White Hat, E.R. (2018). Development of a mixed methods investigation of process and outcomes of community-based participatory research. *J Mix Methods Res*, *12*(1), 55-74. doi: 10.1177/1558689816633309.
- Matsuda, K., Garcia, Y., Catagnus, R., & Brandt, J.A. (2020). Can behavior analysis help us understand and reduce racism? A review of the current literature. *Behavior Analysis in Practice*, *13*(2), 336-347. doi: 10.1007/s40617-020-00411-4.
- Mehra, B., & Gray, L. (2020). An “owning up” of White-IST trends in LIS to further real transformations. *The Library Quarterly*, *90*(2), 189-239. doi: 10.1086/707674.

- Morgan, J.C., Farrar, B., & Owens, I. (2009). Documenting diversity among working LIS graduates. *Library Trends*, 58(2), 192-214. doi: 10.1353/lib.0.0076.
- Oetzel, J.G., Wallerstein, N., Duran, B., Sanchez-Youngman, S., Nguyen, T., Woo, K., Wang, J., Schulz, A., Keaweaimoku Kaholokula, J., Israel, B., & Alegria, M. (2018). Impact of participatory health research: a test of the community-based participatory research conceptual model. *BioMed Research International*, 2018, 12, Article 7281405. doi: 10.1155/2018/7281405.
- Senteio, C.R. (2018). Investigating the enduring impact of a community-based health education program to promote African American elders' use of technology designed to support chronic disease self-management. *Geriatrics*, 3(70), 1-14. doi: 10.3390/geriatrics3040070.
- Senteio, C.R., Montague, K.M., Brody, S., & Matteucci, K. (2020). Fulfilling Information Needs by Classifying Complex Patron Needs. *Reference Services Review*. doi: 10.1108/RSR-07-2020-0047.
- Senteio, C.R., Soltow Hershey, D., Campbell, T.R., & Mandal, S. (2021). Intergenerational Technology Transfer: Enhancing African American Older Adults' Self-Efficacy for Diabetes Self-Management. *Progress in Community Health Partnerships: Research, Education, and Action*.
- Senteio, C.R., Yoon, D.B., Wang, Y., Jinka, S., Campbell, T.R., & Palena, E. (2018). The impact of being a peer sexual health educator: lessons learned from mobilizing african american adolescents against HIV in flint, michigan. *American Journal of Sexuality Education*, 13(4), 425-451. doi: 10.1080/15546128.2018.1499163.
- Skolarus, L.E., Zimmerman, M.A., Murphy, J., Brown, D.L., Kerber, K.A., Bailey, S., Fowlkes, S., & Morgenstern, L.B. (2011). Community-based participatory research: a new approach to engaging community members to rapidly call 911 for stroke. *Stroke*, 42(7), 1862-1866. doi: 10.1161/STROKE.AHA.110.609495.
- Thomas, C.W. (1985). Social science research and some implications for afro-american scholars. *Journal of Black Studies*, 15(3), 325-338. doi: 10.1177/002193478501500306.
- Unertl, K.M., Schaeffbauer, C.L., Campbell, T.R., Senteio, C.R., Siek, K.A., Bakken, S., & Veinot, T.C. (2016). Integrating community-based participatory research and informatics approaches to improve the engagement and health of underserved populations. *Journal of the American Medical Informatics Association*, 23(1), 60-73. doi: 10.1093/jamia/ocv094.
- Wallerstein, N., Duran, B., Oetzel, J.G., & Minkler, M. (2017). *Community-Based Participatory Research for Health: Advancing Social and Health Equity*. Wiley. <https://books.google.com/books?id=Frg4DwAAQBAJ>.
- Wheeler, M.B. (2005). Faculty Development and Cultural Diversity in Teaching: LIS Education's Last Frontier. In M.B. Wheeler (Ed.), *Unfinished Business: Race, Equity, and Diversity in Library and Information Science Education*, pp. 81-192. Scarecrow.
- Williams, D.R., & Cooper, L.A. (2019). Reducing racial inequities in health: using what we already know to take action. *International Journal of Environmental Research and Public Health*, 16(4), 606. doi: 10.3390/ijerph16040606.