

# **ACT ON INTERSECTIONALITY**

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#### CONSORTIUM

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### Introduction

Kimberlé Crenshaw, a legal theorist, coined the term 'intersectionality' in the late 1980s when delving into the antidiscrimination case of DeGraffenreid v. General Motors. Emma DeGraffenried was a Black working mother and she went for a job at General Motors but along with other black women was turned down. She and four other black women sued General Motors for discrimination. The judge however threw out the case: General Motors hired Black people: many Black men worked in industrial and maintenance jobs; they also hired women: many white women worked as secretaries. Crenshaw however noted, that in this instance whilst discrimination on the basis of race or gender were ruled out separately, discrimination on the basis of race and gender together – had not been accounted for. So, Crenshaw coined the term 'intersectionality' and then went on to explain and develop it further in books, papers and lectures. Intersectionality not only emphasised how discrimination can occur on the basis of two different kinds of characteristics and subsequent systems of oppression and policies but also highlighted how anti-discrimination law in this instance fell short.

In the field of health, intersectionality has been defined by the World Health Organization as:

"Intersectionality and its application in health research is an emerging research paradigm that seeks to 'move beyond single or typically favoured categories of analysis (e.g. sex, gender, 'race' and class) to consider simultaneous interactions between different aspects of social identity, as well as the impact of systems and processes of oppression and domination.' (7). Intersectional analysis enables a multi-faceted exploration of how factors of privilege and penalty may alternate between contexts or occur simultaneously (8). Intersectionality is not additive; you should consider how human and social characteristics such as age, gender, sex, ability, disability, ethnicity, sexuality, etc. interact to shape individual experience at a given point or time." (World Health Organization, 2020:10).

Intersectionality has been deemed the "most important theoretical contribution that the field of women's studies has made thus far (McCall, 2005; Carbado et al., 2013)" (Grabe, 2020, p. 1). There are few theories that have managed to have such a reach in terms of transversing disciplines, national frameworks as well as levels of abstraction. Intersectionality operates at the abstract conceptual level, can be operationalised in empirical research, whilst can also be applied to policy interventions (Collins, 2015). Cho et al. (2013) highlight how intersectionality as a field of studies can be classified according to three main tenets consisting of:

- 1) applications of an intersectional framework or investigations of intersectional dynamics
- 2) discursive debates about the scope and content of intersectionality as a theoretical and methodological problem
- 3) political interventions taking an intersectional approach

The shift in focus from "women" being thought about as a homogenous group and thereby sharing common experiences—to a more nuanced approach which recognizes how multiple sources of disadvantage and privilege operate thereby accounting for how individuals may

experience multiple sources of discrimination and oppression is a welcomed move. Sang (2018) notes how "intersectionality can be a theoretical and empirical approach to highlight the interaction of the different categories of difference (Davis, 2008; Hancock, 2007; Warner, 2008)". One of the main tenets of intersectionality is that "an individual is not the sum of social groups they belong to. Rather each group interacts with each other to form experiences and manifestations, which cannot be explained by membership to one group (Warner, 2008)" (*ibid*, p. 4).

An intersectional approach however does not only take into consideration the intersecting aspects of an individual's identity or positionalities, but also takes into consideration the intersecting forces of privilege and oppression operating in a specific context (Sang, 2018). Oppression occurs when certain groups of people are systematically mistreated by other groups of people – which occurs when power is unevenly distributed. This may manifest as one certain group controls a range of institutions (legal, educational, cultural) and uses its power to exclude other groups or favour it's own group (*ibid*). So, regarding gender oppression we can see how sexism, cissexism¹ and patriarchy operate to maintain the status quo, often detrimentally to women, queer people and those that challenge gender norms. The effects of privilege and oppression are unevenly distributed among groups and individuals. For example, women, people of colour, queer people, immigrants or other minority groups experience the effects of these power structures in their daily lives. On the other hand those individuals and groups of people that benefit from these systems of power -may find them difficult to detect. D'Ignazio & Klein (2020) call this a "privileged hazard".

Regarding taking an intersectional approach in research and innovation—there has been less work done than for example in health studies (World Health Organization, 2020; Hoffman et al., 2016; Hankivsky et al., 2014) or in the field of education (Tafera et al., 2018). Work in this field is relatively recent. As regarding the gender/ race nexus, Clancy, et al. (2017) speak of the "Double jeopardy" in astronomy and planetary science where they identify how women of colour face greater risks of gendered and racial harassment. Candace Miller and Josipa Roksa (2019) in their paper "Balancing Research and Service in Academia: Gender, Race and Laboratory Tasks" conclude how: "White men benefit from a combination of racial and gender privilege, which places them in the most advantaged position with respect to protected research time and opportunities to build collaborations and networks beyond their labs. Racial/ethnic minority women emerge as uniquely disadvantaged in terms of their experiences relative to other groups. These findings illuminate how gendered organizations are also racialized, producing distinct experiences for women and men from different racial groups, and thus contribute to theorizing the intersectional nature of inequality in the workplace" (p. 1).

## Why is this Important?

Moving beyond a binary approach to gender is much welcomed in an attempt to transcend the essentialist model of gender which implies that women as a group have a universally shared experience, relative to men as a group (Sang, 2018). Whilst one must recognize that gender based inequalities in research and innovation are well documented, a focus that is

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<sup>&</sup>lt;sup>1</sup> Prejudice or discrimination against transgender people

able to factor in differences between women (and between men) and the context in which they live enables a deeper understanding of the processes through which inequalities operate (Shields, 2008; Grabe, 2020). So, in the UK for example research has documented that black academics report a range of discriminatory practices, including a lack of recognition of scholarly expertise (Mirza, 2006). Black women academics are less likely than white women academics to reach senior academic positions and are more likely to report sexual harassment (Mirza, 2006; Sang, 2018).

An intersectional approach is not only important regarding the recruitment, retention and career progression of researchers, but integrating the gender dimension from an intersectional perspective can also positively impact on research outputs and innovations. For example research carried out by Buolamwini and Gebru (2018) and reported in "Gender Shades: Intersectional Accuracy Disparity in Commercial Gender Classifications" evaluated commercial face recognition systems for their accuracy. Their findings include that darker skinned females are the most misclassified group (error rates of up to 34.7%) whereas the maximum error rate for lighter skin males was 0.8%. They conclude that: "The substantial disparities in the accuracy of classifying darker females, lighter females, darker males and lighter males in gender classification systems require urgent attention if commercial companies are to build genuinely fair, transparent and accountable facial analysis algorithms" (p. 1). This kind of research will become increasingly essential if we are to ensure that algorithms do not reproduce and magnify existing inequalities.

An intersectional approach to research can be carried out by both qualitative and quantitative methods – through formulating relevant research questions and hypotheses. For example, a relevant research question may be: Do groups of female academic staff experience barriers to career progression, compared with groups of men and with other women? Christoffersen (2017) states how asking this research question enables one to "consider what barriers are experienced by different groups of women (white women, black and minority ethnic (BME) women, disabled women, non-disabled women, lesbian, bisexual, transgender and gender-queer women, women of faith, younger and older women, women with caring responsibilities, pregnant women, women on maternity leave)" (p. 4).

To date an intersectional approach has predominantly relied on a more qualitative approach to research methodology – focusing on lived experience (Armour Burton, 2017; Trahan, 2011) but a quantitative approach to data collection and analysis is increasingly being developed. Qualitative research methods including semi-structured interviews, focus groups, and narrative methods can be all developed from an intersectional perspective – and "doing" gender, race and class is so much more than simple demographic characteristics (West and Fenstermaker, 1995). Local contextual, environmental and cultural factors "exercise a refractory power over the influences of structure on identity and disadvantage" (Trahan, 2011). Social practices in specific settings therefore give meaning to the intersectionalities of one's race, class and gender as well as how these intersections engage with power structures (Andersen & Hill Collins, 2004; Yuval-Davis, 2006). It has been contended that the scholarship that best captures these mechanisms of identity construction and disadvantage are based on "rich descriptive accounts of the contextual nature of people's lived experience" (Trahan, 2011; Zinn et al., 2005). Reflexivity is also a key part of the qualitative research process – which means

that the researcher should "consider one's own social positions, values, assumptions, interests and experiences and how they can shape the research process, as well as putting the research into context" (Christoffersen, 2017, p. 5).

Quantitative research from an intersectional perspective however is increasingly gaining ground. In the field of psychology, Else-Quest & Hyde (2016) identify and describe six broad components of the psychological research process, in which multiple methods including quantitative methods may be used to implement intersectionality:

Table 1. Components of the Research Process Where Intersectionality Can Be Applied With Multiple Possible Methods
Component 1: Theory
Method A. Categories are framed as person variables
Method B. Categories are framed as stimulus variables
Component 2: Design
Method A. Within group focus
Method B. Between group comparisons
Component 3: Sampling techniques
Method A. Stratified random sampling
Method B. Purposive sampling
Component 4: Measurement
Method A. Conceptual equivalence
Method B. Measurement invariance
Method C. Intersectional measurement
Component 5: Data analytic strategies
Method A. Multiple main effects
Method B. Statistical interactions
Method C. Moderators in meta-analysis
Method D. Multilevel modeling
Method E. Moderated mediation
Method F. Person-centred methods
Component 6: Interpretation and Framing
Method A. Attention to power and inequality

The shift to developing "inclusive" gender equality plans that is foreseen by the European Commission, means in practice developing gender equality plans from an intersectional perspective. A first step to taking an intersectional approach to quantitative data collection in an research organisation may include mapping staff according to hierarchical staff levels and various characteristics (see Christoffersen, 2017, p. 8 for examples of how to do this). Whilst this approach may enable us to detect a possible relationship between certain characteristics (for example gender and ethnicity) and hierarchical levels, other quantitative methods should be utilized to test whether or not there is a meaningful relationship between these variables (*ibid*).

Developing an evidenced-based inclusive gender equality plan would require collecting various data in order to develop relevant actions, measures and interventions that aim to tackle a whole range of inequalities in research organisations. Equality, Diversity and Inclusion (EDI) actions in Research Organisations should be developed from an intersectional approach, "i.e. one that takes into account interactions between the multiple forms of discrimination (linked to racism, to sexism, to homophobia, for instance) or privilege that an individual may experience" (Fonds de Recherche Du Québec, 2021, p. 6). One of Québec's main Research Funding Organisation, however stresses how EDI initiatives must go "beyond diversity statistics: In order to avoid the tokenism of underrepresented groups, efforts must be directed not only at diversity, but also at equitable and inclusive practices that allow every individual to participate in research, develop his or her full potential, and feel respected and valued" (*ibid*).

## Recent and New Insights from Research

Research in the US has increasing taken an intersectional approach to gender equality in the academy with a particular focus on Science, Technology, Engineering, Mathematics, and Medicine (STEMM) disciplines. Research has shown how programs aimed at improving the representation of women in STEMM have tended to benefit white women whilst intersecting identities and subsequent systems of privilege have an effect on the efficacy of gender equality interventions. Ong et al. (2011) suggested that the lack of targeted interventions to serve and support women of colour in STEMM may be "possibly due to the misguided idea that burgeoning efforts by the National Science Foundation (NSF) and other institutions aiming to serve women or minorities would, consequently serve minority women." They go on to note that "history has borne out the reality that programs intended to serve women disproportionately benefit white women, and programs intended to serve minorities mainly benefit minority males (Ong et al., 2011)." (National Academy of Sciences, Engineering, and Medicine, 2020, p. 48).

Research approaches that have been carried out to look at gender biases in hiring (Moss-Racusin et al., 2012) are however now being employed to examine other types of biases (Eaton et al., 2020), for example:

"As recently as 2019, in a study of postdoctoral hiring bias, researchers examined how perceptions of race and gender influence evaluation of postdoctoral candidates (n=251) from eight large research universities. Professors were asked to read one of eight identical curriculum vitae (CV) of a hypothetical doctoral graduate applying for a post-doctoral position and rate them for competence, hirability, and likability. The candidates name of the CV was used to suggest race (e.g. Asian, Black, Latinx and White) and gender (female and male). Physics faculty rated the CVs of Black women and Hispanic women lower than the CVs of women and men from any other racial/ ethnic group (Eaton et al., 2020)" (National Academy of Sciences, Engineering, and Medicine, 2020, p. 50).

As well as bias in the recruitment process, women of colour in STEMM tend to "experience isolation (i.e. experience a sense of invisibility or hypervisibility), macro- and micro-aggressions, and a sense of not belonging in STEMM" (Ong et al., 2011). (National Academy

of Sciences, Engineering, and Medicine, 2020, p. 50). These kinds of experiences including bias, isolation, micro-aggressions, and a general feeling of not belonging in STEMM can lead to what has been coined as 'racial battle fatigue' (Smith et al., 2011). This has been described as "cumulative result of a natural race-related stress response to distressing mental and emotional conditions" that adversely affects the health and achievements of faculty of colour (Corbin et al., 2018; Smith et al., 2007). This term was developed by Smith et al. (2007) to highlight the plight of Black men in White spaces – however the concept has been used to describe the experiences of women of colour, particularly Latina and Black women in higher education institutions (Corbin et al., 2018). The US National Academy of Sciences, 2020 report highlights how women of colour are more likely to experience more harassment than White women, and this can manifest as both racial harassment and sexual harassment (National Academy of Sciences, Engineering, and Medicine, 2020, p. 50).

Slowly but surely, gender and race are increasingly being taken into consideration in studies of inequalities in the academy particularly in STEMM fields, yet there are very few studies that examine the career retention of women with disabilities (*ibid*). Building on work looking at disability and STEMM students, disabled women, may face a range of barriers which include: lack of physical access to laboratory and classroom spaces; lack of equipment accessible to people with sensory and motor disabilities, scarcity of disabled role models in STEMM (Duerstock & Shingledecker, 2014). Duerstock and Shingledecker (2014) go on to highlight how there are numerous interventions that can improve the outcomes for students with disabilities including assistive and adaptive technologies, including software that makes printed pages more accessible as well as aiding writing.

Research has also been carried out looking at barriers to STEMM careers and those who identify as Lesbian, Gay, Bisexual, Transgender, Queer, Intersex and Asexual (LGBTQIA). The "Queer in STEM" survey with a population of 1,427 individuals whom identify as LGBTQIA — findings included that felt excluded from STEMM workplaces and professional culture (Yoder & Mattheis, 2016; National Academy of Sciences, 2020).

### The Role of Communities of Practice

There has been little research looking at how communities of practice can facilitate an intersectional approach in research organisations and higher education institutes. One exception that we can build on is the work of López et al. (2019) "Cultivating Intersectional Communities of Practice: A Case Study of the New Mexico State wide Race, Gender, Class Data Policy Consortium as a Convergence Space for Co-Creating Intersectional Inquiry, Ontologies, Data Collection and Social Justice Praxis". Whilst their work looks at state-wide policies, their approach could be adapted for inclusive institutional change in Research and Innovation (R&I) and Higher Education (HE) organisations. In setting up their community of practice they first established their core values:

- Inclusive Leadership: Diversity is our strength
- Interdisciplinary, Transdisciplinary Research
- Multiple Epistemologies & Methodological Approaches
- Transparency and Critical On-going Self-Reflexivity

- Equity-Based Accountability
- Community Collaboration, Education and Outreach
- Attention to Power Dynamics & Commitment to Power Sharing
- Justice & Social Responsibility
- Do no harm

"Individuals with minority genders, sexual orientation, or both experience higher rates of sexual harassment and assault than cisgender straight women (Brewster et al., 2012, 2014; Eliason et al., 2011). In a recent survey of sexual and gender minorities (n=474) in astronomy and planetary sciences, LGBTQIA women and gender minorities were more likely to experience homophobic and transphobic remarks from their peers, were more likely to feel unsafe at work due to their racial, gender, and/or sexual identities compared with cisgender straight women and were more than twice as likely to experience assault at work. All of this leads to a loss of opportunity and contributes to the underrepresentation of LGBTQIA individuals in astronomy and planetary sciences (Richey, 2019)" (National Academy of Sciences, Engineering, and Medicine, 2020, p. 53).

Their community of practice decided to concentrate on the following questions:

- 1) What data do you currently collect, analyse, report? What needs to be improved for advancing the relevance of this data for civil rights and social justice policy? How can we establish high-quality data infrastructure that allows for examining the simultaneity of race, gender, and class and other social statuses in systems of privilege and inequality for effective [research and higher education] policy?
- 2) How can we harmonise data collection, analysis, and reporting on race, gender, class, and ethnicity to guide effective policy? What data collection instruments and data sets do we already have in place for race, gender, class, ethnicity, and so on?
- 3) What innovations in data collection, analysis and reporting do we need? What...data collection tools can be developed that could be of value to the entire [organization]?
- 4) What are the common structural inequalities that undergird inequalities in [R&I and HE] How can policies address them?
- 5) What are the barriers to and opportunities for advancing sustainable institutional transformations, policies and practices that advance [R&I and HE] equity? (López et al., 2019).

### References

Andersen, M., & Hill Collins, P. (2004). *Race, Class, and Gender: An Anthology*. Wadsworth/Thomson Learning.

Armour Burton, T. (2017). The Lived Experience of Intersectionality Among African American Women with Breast Cancer. *Dissertations*. 81. https://doi.org/10.22371/07.2017.015

Berdahl, J. L., & Moore, C. (2006). Workplace harassment: Double jeopardy for minority women. *Journal of Applied Psychology*, *91*(2), 426–436. https://doi.org/10.1037/0021-9010.91.2.426

Buolamwini, J., & Gebru, T. (2018). Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification. *Proceedings of the 1st Conference on Fairness, Accountability and Transparency*, 77–91.

https://proceedings.mlr.press/v81/buolamwini18a.html

Cho, S., Crenshaw, K. W., & McCall, L. (2013). Toward a Field of Intersectionality Studies: Theory, Applications, and Praxis. *Signs: Journal of Women in Culture and Society, 38*(4), 785–810. https://doi.org/10.1086/669608

Christoffersen, A. (2017). Intersectional approaches to equality research and data. Equality Challenge Unit. Retrieved 19 October 2021, from http://www.ecu.ac.uk/wp-content/uploads/2017/04/Research\_and\_data\_briefing\_2\_Intersectional\_approaches\_to\_e quality research and data.pdf

Clancy, M. N. Lee, E. Rodgers, C. Richey, K. B. H. (2017). Double jeopardy in astronomy and planetary science: Women of color face greater risks of gendered and racial harassment. *Journal of Geophysical Research: Planets, 122*(7), 1610-1623. <a href="https://doi.org/10.1002/2017JE005256">https://doi.org/10.1002/2017JE005256</a>

Collins, P. H. (2015). Intersectionality's Definitional Dilemmas. *Annual Review of Sociology,* 41(1), 1–20. https://doi.org/10.1146/annurev-soc-073014-112142

Corbin, N. A., Smith, W. A., & Garcia, J. R. (2018). Trapped between justified anger and being the strong Black woman: Black college women coping with racial battle fatigue at historically and predominantly White institutions. *International Journal of Qualitative Studies in Education*, 31(7), 626–643. https://doi.org/10.1080/09518398.2018.1468045

Crenshaw, K. (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*, *43*(6), 1241–1299. https://doi.org/10.2307/1229039

Davis, K. (2008). Intersectionality as buzzword: A sociology of science perspective on what makes a feminist theory successful, *Feminist Theory*, *9*(1), 67-85. https://doi.org/10.1177/1464700108086364

D'Ignazio, C., & Klein, L. F. (2020). Data Feminism. MIT Press.

Duerstock, B., & Shingledecker, C. (2014). From College to Careers: Fostering Inclusion of Persons with Disabilities in STEM. *Science*, *344*(6185), 765–765. https://doi.org/10.1126/science.2014.344.6185.344 765c

Eaton, A. A., Saunders, J. F., Jacobson, R. K., & West, K. (2020). How Gender and Race Stereotypes Impact the Advancement of Scholars in STEM: Professors' Biased Evaluations of Physics and Biology Post-Doctoral Candidates. *Sex Roles*, *82*(3–4), 127–141. https://doi.org/10.1007/s11199-019-01052-w

Else-Quest, N. M., & Hyde, J. S. (2016). Intersectionality in Quantitative Psychological Research: II. Methods and Techniques. *Psychology of Women Quarterly, 40*(3), 319–336. https://doi.org/10.1177/0361684316647953

Fonds de Recherche Du Québec (2021). Equity, Diversity and Inclusion Strategy—Fonds de recherche du Québec. Retrieved 20 October 2021, from https://frq.gouv.qc.ca/en/strategie-en-matiere-dequite-de-diversite-et-dinclusion/

Grabe, S. (2020). Research Methods in the Study of Intersectionality in Psychology: Examples Informed by a Decade of Collaborative Work with Majority World Women's Grassroots Activism. *Frontiers in Psychology*, 11, 2849. https://doi.org/10.3389/fpsyg.2020.494309

Hancock, A.M. (2007). When Multiplication doesn't Equal Quick Addition: Examining Intersectionality as a Research Paradigm. *Perspectives on Politics*, *5*(1), 63-79 <a href="https://doi.org/10.1017/S1537592707070065">https://doi.org/10.1017/S1537592707070065</a>

Hankivsky, O., Grace, D., Hunting, G., Giesbrecht, M., Fridkin, A., Rudrum, S., Ferlatte, O., & Clark, N. (2014). An Intersectionality-based Policy Analysis Framework: Critical Reflections on a Methodology for Advancing Equity. *International Journal for Equity in Health, 13*(1), 119. https://doi.org/10.1186/s12939-014-0119-x

Hoffman, K. M., Trawalter, S., Axt, J. R., & Oliver, M. N. (2016). Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proceedings of the National Academy of Sciences, 113*(16), 4296–4301. https://doi.org/10.1073/pnas.1516047113

Kazantzis, N., Whittington, C., Zelencich, L., Kyrios, M., Norton, P. J., & Hofmann, S. G. (2016). Quantity and Quality of Homework Compliance: A Meta-Analysis of Relations With Outcome in Cognitive Behavior Therapy. *Behavior therapy*, *47*(5), 755–772. https://doi.org/10.1016/j.beth.2016.05.002

López, N., O'Donnell, M., Pedraza, L., Roybal, C., & Mitchell, J. (2019). Cultivating Intersectional Communities of Practice: A Case Study of the New Mexico Statewide Race, Gender, Class Data Policy Consortium as a Convergence Space for Co-creating Intersectional Inquiry, Ontologies. In O. Hankivsky & J. S. Jordan-Zachery (eds.). *The Palgrave Handbook of* 

Intersectionality in Public Policy (pp. 215-243). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-98473-5 9

McCall, L. (2005). The Complexity of Intersectionality. *Signs, 30*(3), 1771–1800. https://doi.org/10.1086/426800

Miller, C., & Roksa, J. (2020). Balancing Research and Service in Academia: Gender, Race, and Laboratory Tasks. *Gender & Society, 34*(1), 131–152. https://doi.org/10.1177/0891243219867917

Mirza, H. S. (2006). Transcendence over Diversity: Black Women in the Academy. *Policy Futures in Education*, *4*(2), 101–113. https://doi.org/10.2304/pfie.2006.4.2.101

Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science Faculty's subtle Gender Biases favor Male Students. *Proceedings of the National Academy of Sciences of the United States of America*, 109(41), 16474–16479. https://doi.org/10.1073/pnas.1211286109

National Academies of Sciences, Engineering, and Medicine. (2020). *Promising Practices for Addressing the Underrepresentation of Women in Science, Engineering, and Medicine: Opening Doors*. The National Academies Press.https://doi.org/10.17226/25585.

Ong, M., Wright, C., Espinosa, L., & Orfield, G. (2011). Inside the Double Bind: A Synthesis of Empirical Research on Undergraduate and Graduate Women of Color in Science, Technology, Engineering, and Mathematics. *Harvard Educational Review*, 81(2), 172–209. https://doi.org/10.17763/haer.81.2.t022245n7x4752v2

Sang, K. J. C. (2018). Gender, ethnicity and feminism: An intersectional analysis of the lived experiences feminist academic women in UK higher education. *Journal of Gender Studies*, 27(2), 192–206. https://doi.org/10.1080/09589236.2016.1199380

Shields, S. A. (2008). Gender: An intersectionality perspective. *Sex Roles: A Journal of Research*, 59(5–6), 301–311. https://doi.org/10.1007/s11199-008-9501-8

Smith, W. A., Allen, W. R., & Danley, L. L. (2007). "Assume the Position . . . You Fit the Description": Psychosocial Experiences and Racial Battle Fatigue Among African American Male College Students. *American Behavioral Scientist*, 51(4), 551–578. https://doi.org/10.1177/0002764207307742

Smith, W. A., Hung, M., & Franklin, J. D. (2011). Racial Battle Fatigue and the MisEducation of Black Men: Racial Microaggressions, Societal Problems, and Environmental Stress. *The Journal of Negro Education*, 80(1), 63–82.

Trahan, A. (2011) Qualitative Research and Intersectionality. *Critical Criminology*, 19, 1–14. https://doi.org/10.1007/s10612-010-9101-0

Warner, L. R. (2008). A best practices guide to intersectional approaches in psychological research. Sex Roles: A Journal of Research, 59(5–6), 454–463. https://doi.org/10.1007/s11199-008-9504-5

West, C. & Fenstermaker, S. (1995). Doing Difference, *Gender & Society*, *9*(1), 8-37. https://doi.org/10.1177/089124395009001002

World Health Organization. (2020). *Incorporating intersectional gender analysis into research on infectious diseases of poverty: A toolkit for health researchers*. World Health Organization. https://apps.who.int/iris/handle/10665/334355

Yoder, J. B., & Mattheis, A. (2016). Queer in STEM: Workplace Experiences Reported in a National Survey of LGBTQA Individuals in Science, Technology, Engineering, and Mathematics Careers. *Journal of Homosexuality*, *63*(1), 1–27. https://doi.org/10.1080/00918369.2015.1078632

Yuval-Davis, N. (2006). Intersectionality and Feminist Politics. *European Journal of Women's Studies*, 13(3), 193–209. https://doi.org/10.1177/1350506806065752

Zinn, M. B., Hondagneu-Sotelo, P., & Messner, M. A. (Eds.). (2005). *Gender through the prism of difference*. Oxford University Press.



