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Racial anxiety among medical residents: Institutional implications of social accountability

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Abstract

As the U.S. population becomes more racially diverse, physicians need cultural skills for optimal health outcomes; however, the literature is sparse for cultural skill application of medical trainees. Forty-five Family Medicine residents in Alabama completed an online survey asking them about cultural issues including implicit bias, stereotype threat, and racial anxiety. Racial anxiety is the focus of this paper because of its direct impact on patient-provider dynamics. The majority of respondents were female, and 70% were non-Hispanic White, 20% African American, and 10% Native American. Most participants demonstrated good general knowledge and or self-efficacy on racial anxiety, but produced lower scores in workplace skills and actions related to racial anxiety. Thus, physician training programs should incorporate more skill development around racial anxiety. Ten strategic recommendations give schools a clear direction to assess and evaluate their understanding and action towards the evolution of a more culturally competent physician workforce.

Keywords

Medical residents; cultural competency; racial anxiety; social accountability

Some ethnic/racial populations have been shown to have poorer health outcomes than non-Hispanic Whites in the United States.¹ The attitudes and behaviors of health care providers have been identified as one factor that contributes to health disparities.²⁻⁴ Research is now focused upon better characterization of health care providers' attitudes and behaviors as well as possible mechanisms to increase cultural competency knowledge, awareness, and skill sets of health providers, particularly physicians.⁵⁻⁷

As the United States becomes more ethnically diverse, physicians are also interacting with a more diverse patient population. Their ability to address cultural variability adequately will become more and more important even within medical school and residency training. Cultural competency in health care is defined as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency or among professionals and enable that system, agency or those professions to work effectively in cross-cultural situations."⁸ [p.7] Additionally, as the field of cultural competency grows and changes, up-to-date information and education and skill-building will become even more critical to good clinical practice.

A robust body of research in social and cognitive psychology suggests that health care providers may be affected by their attitudes about patients, often automatically activated and influential over behavior without conscious volition. This phenomenon, known as *implicit bias*, has been increasingly studied in the health literature.⁹⁻¹³ Findings are consistent regarding the impact of implicit racial bias on providers' treatment decisions.¹⁴⁻¹⁵ Schulman found that 720 physicians were 40% less likely to refer Black patients for cardiac cauterization than White patients.¹⁶ Another study's results revealed doctors' negative implicit attitudes towards Black patients was as uncooperative. The more negative the doctors' implicit attitudes, the less likely they were to recommend the appropriate drug for the Black patient.¹⁷ Despite these disturbing findings, the literature suggests that providers with implicit bias may be able to overcome their own bias and make equitable decisions for diverse patient populations.

An additional cognitive phenomenon, *racial anxiety*,¹⁹ has been identified as potentially critical to patient-provider interactions.²⁰ The stress of cross-racial interactions can lead to distancing, less eye contact, and using a less friendly verbal tone.²¹ Researchers have found that when a patient and their health care provider are of different races, interactions are shorter,²² and the provider provides less information.²³ Another research team found that physicians working with patients of color were less likely to be empathetic, elicit sufficient information, or encourage the patients to participate in medical decision making.²⁴

The effects of racial anxiety in the healthcare setting can be better understood using two constructs-egalitarianism and pluralistic ignorance. The source of racial anxiety is not always bias or prejudice. The social norm of egalitarianism and growing conversations of health equity create an environment where majority groups feel anxious about not appearing to be racist. Unfortunately, for those who experience a negative cross-racial interaction, they are less likely to seek out or engage in subsequent interactions or expect a different outcome.

Members of both racial minority and majority groups may experience racial anxiety and its concomitant discomfort in cross-race interactions. For example, a Black patient may suffer

the effects of her own experience of interracial anxiety with a White doctor, but may also suffer the effects of the doctor's interracial anxiety. Pluralistic ignorance is the result of both parties unawareness of the effects of each other's racial anxiety. Shelton and Richeson (2005) defined pluralistic ignorance as people observing other's behavior that is similar to themselves but believe that the same behaviors reflect different feelings and beliefs. This false confirmation creates an anxiety feedback loop that reinforces negative behaviors. As a result, it is in everyone's interest to identify and address the effects of racial anxiety.²⁴

From undergraduate medical curricula to residency programs, several articles investigate medical learners' attitudes and beliefs regarding cultural competency skill-building.²⁵⁻²⁹ Medical education studies explore cultural diversity initiatives and interventions to explore relationships between student attitudes, perceived bias, and knowledge regarding health disparities and their subsequent ability to demonstrate culturally competent practices.³⁰⁻³¹ Competencies such as assessing English proficiency, identifying cultural and religious beliefs, and assessing patients' understanding of their illness are a few of the clinical skills developed throughout all levels of medical training. Racial anxiety can strongly affect a novice physician's ability to demonstrate these competencies thereby limiting the effectiveness of treatment. Carter et al. (2006) used vignettes of doctor-patient interactions to assess third-year students' attitudes, beliefs, and cross-cultural communication skills by comparing their pre-test and post-test scores after attending small group workshop on health disparities and a model of cultural competency. Their results suggest that the workshop enhanced student awareness, but they cautiously admitted that more longitudinal work was needed to assess thoroughly cultural competency effectiveness across a diversity of patient backgrounds and settings.²⁸

While cultural competency trainings focused on these areas for medical students and residents have begun, their impact, as well as learner attitudes and barriers, have not been thoroughly explored in the literature. The authors explored attitudes and barriers and subsequent skill levels around racial anxiety in a sample of family medicine residents in Alabama. Following the report on this study below we present a discussion about social accountability in order to frame the bioethical issue of the roles and responsibilities of medical institutions in the development of a workforce of culturally sensitive physicians.

Methods

Online surveys were sent to family medicine residents at the University of Alabama Family Medicine Program in Tuscaloosa between November 2017 and January 2018 after review of protocol and approval by the University of Alabama Institutional Review Board. All of these residents were invited to a voluntary cultural competency training embedded in an annual health conference in March 2017, but none attended. As a follow up, we queried respondents on their knowledge of relevant cognitive phenomena and their attitudes and concerns about cross-racial interactions. The survey took approximately 15-20 minutes to complete. A \$25 gift card drawing was offered as incentive to complete the survey. This paper focuses on the subset of survey questions related to racial anxiety.

A variety of references and expert opinions were used to guide instrument development of the scale used by Perception Institute. For example, for the question, "I feel sure about how to act and what to say when I am interacting with people from racial and ethnic backgrounds different from my own" was adapted from a study examining the effects of intergroup contact.³² Tropp's work identified racial anxiety and intergroup contact as major constructs in navigating race in diverse classroom settings.³³ Two studies with a focus on providing critical feedback to minority populations provided the framework that helped develop questions related to providing feedback and supervision such as, "It is just as easy for me to provide critical feedback to people from other racial backgrounds as it is to provide critical feedback to people from my background; I am motivated to provide people of color I supervise with rigorous feedback to enhance the quality of their work; I encourage people of color that I supervise to achieve excellence in my school/workplace, I feel comfortable challenging people of color I supervise to do their best job."³⁴⁻³⁵

Results

Overall, the response rate was 53%. Most respondents answered all questions. Between one and three respondents consistently skipped questions. Over two-thirds (67%) of respondents were female; 33% were male. All identified as heterosexual. Self-reported race was 67% White, 14% Asian, 19% African American, and 10% Native American. Figure 1 summarizes the respondent's racial anxiety perceptions.

General knowledge and understanding related to racial anxiety.

In response to the statement, "I understand the concept of racial anxiety," 22% strongly agreed, 48% agreed, 13% neither agreed or disagreed, and 17% either disagreed or strongly disagreed.

Confidence/Self-efficacy skills related to cross-racial interactions.

All the respondents either felt very strongly or strongly that they had the skills to develop positive relationships with people from racial and ethnic backgrounds different from theirs. In responding to the statement, "I feel sure about how to act and what to say when I am interacting with people from racial and ethnic backgrounds different from my own, 86% answered agree or strongly agree while 14% were neutral. Nearly an equal amount responded that they also felt confident about the way they treated outside racial groups. In answering the statement, "I am confident that I treat all people the same way, regardless of their racial or ethnic background," only 14% strongly agreed, 71% agreed, 10% were neutral, and 5% disagreed.

Workplace skills and actions related to cross-racial interactions.

In responding to the statement, "I feel comfortable talking about issues related to racial and ethnic differences," 19% strongly agreed, 57% agreed, 10% were neutral, and 14% disagreed. With the statement, "I am confident that I can successfully manage discussions of racial and ethnic issues with others," 66% strongly agreed or agreed with statement, 24% were neutral, and 10% disagreed. With the statement, "I trust my abilities to address racial

and ethnic issues as they arise in my school/workplace,” 80% of respondents strongly agreed or agreed, and 19% were neutral.

In responding to the statement, “It is just as easy for me to provide critical feedback to people from other racial backgrounds as it is to provide critical feedback to people from my background,” 62% of respondents agreed with statement, 14% answered neutral, and 19% strongly disagreed or disagreed. For the statement, “I am motivated to provide people of color I supervise with rigorous feedback to enhance the quality of their work, 67% of respondents strongly agreed or agreed, while 13% were neutral and 20% disagreed.

With the statement “I encourage people of color that I supervise to achieve excellence in my school/workplace,” 80% of respondents strongly agreed or agreed, 13% were neutral, and 7% disagreed. Finally there was a wide range of answers to statement, “I feel comfortable challenging people of color I supervise to do their best job.” 73% strongly agreed or agreed with statement, 13% were neutral while 14% either strongly disagreed or disagreed.

Discussion

This survey of a set of family medicine residents at a large stand-alone program provides preliminary data on residents’ understanding of racial anxiety and attitudes regarding cross-racial clinical interactions. Residents were chosen as the study population because of their unique placement in medical education. Not only are they practicing physicians, but they are also supervisors of medical students and learners under the tutelage of the attending physicians in their department. Therefore, they are the largest source of patient-provider interactions in this setting. Overall, 70% of this sample of residents reported knowledge of racial anxiety as a term and the self-efficacy and skills necessary to manage interactions with people from racial/ethnic backgrounds different from their own.

The authors note that in this sample, 30% of respondents either were neutral or disagreed strongly or simply disagreed that they know the definition of racial anxiety. Our literature review revealed very little on formal training on cultural competency for medical residents in general and even less on current issues around topics like racial anxiety that could be important in their residency. More up to date training within residency curricula must be considered.

It is also salient that the respondents reported much more perceived self-efficacy around cross-racial interactions than actual skills and actions, especially related to skills needed in their work as residents (see Figure 2). For example, all responded affirmatively that they could develop positive relationships with people of different ethnic/racial backgrounds; however, when asked if they could adequately supervise someone of a different racial/ethnic background, more of the responses were neutral or non-affirmative. This suggests that opportunities to develop more skill-building around cultural competency in health care settings both with patients and also among peers should be an integral part of residency training. Rapp²⁴ suggested that cultural competency skill-building be included regularly throughout training medical student through years as a novice and then a master physician.

This is especially crucial because of the nature of medical education where upper-level residents assist in the training of interns and medical students. Such relationships being undermined by racial anxiety could have an overall impact on medical education. In particular, with the lack of racial diversity in the medical field, students and residents of color may experience negative effects of White residents' racial anxiety to which their White peers are not subject. For example, White residents experiencing racial anxiety due to their fear of confirming perceived racist behavior may not feel comfortable providing medical students of color effective feedback potentially alienating their mentees and perpetuating pluralistic ignorance if the medical student perceives the same.

Limitations.

This study has several limitations. As previously noted, the group who was invited to the training was small, and the sample size was even smaller because several of the respondents did not complete the survey. Additionally, the sample was collected in the South, and although the residents may originate in other regions, this group may not be representative of other parts of the country and the demographics of other programs. For example, although there was good representation of African Americans, there were no Latinos in this sample. Because of the voluntary nature of the survey, the self-selected residents most likely had some vested interest in cultural competency and quite possibly positively skewed the results. Despite these limitations, the study provides a glimpse at opportunities for future curriculum development for residency programs in order to prepare future physicians to practice effectively in the 21st century. The authors recommend more comprehensive studies to gain clearer insight into the prevalence of racial anxiety among medical students and residents and the effects it may have on not only patients, but peers as well.

Bioethical issues.

Racial anxiety and other seemingly innocuous reactions to cultural difference nevertheless contribute to producing and reinforcing disparities in health treatments and outcomes.³⁶ The secondary goal of this article was to generate a dialogue about the phenomena of medical institutions' role of social accountability to address racial anxiety and its harmful effects on population health. This issue of social accountability is rarely acknowledged in traditional bioethical discourse but implications of social justice as it relates to the health disparities of minority patients and racial interactions between medical school learners, practitioners and mentors necessitate more discussion. For instance,

- How do medical institutions address the ethical issues of the scarcity of training for residents in this topic?
- What are the ethical issues ingrained in the historical institutional bias for training residents in this topic?
- What are the ethical issues in ensuring that medical institutions create safe spaces for discussions and training around this topic?

Traditionally, medical schools trained future physicians with proficiency in medical knowledge and practice-based learning while also adding to the scientific body of research. Internationally, a new challenge builds on these objectives to advance the social role of

medical schools shifting and transforming missions, value statements, and strategic planning to improve population health status and eliminate health disparities. U.S. medical schools and organizations such as the Association of American Medical Colleges created 10 strategic directions for social accountability, imparting tangible approaches to assist medical institutions part in reversing current negative trends in health disparities.³⁷

In 2010, a peer-reviewed article spurred discussion about the social accountability of medical schools to educate physicians to care for the national population.³⁸ That article ranked current U.S. medical schools based on which schools were more or less likely to produce primary care physicians and physicians who practice in underserved areas. The results of study showed great variation in scores for medical schools, with historically Black medical schools scoring the highest and public and community-based programs faring better than private schools. There were also geographical differences including urban/rural variation. The authors suggest that initiatives at the medical school level could increase the proportion of physicians who practice primary care, work in underserved areas, and are underrepresented minorities. Since that time others including family medicine specialty organizations have begun to address the global social accountability of medical education as well as residencies.³⁹ Graduate medical education or residencies have also begun to address these issues by tying some to funding.⁴⁰ The upward trajectory of cultural competency standardized curricula and comprehensive educational interventions, along with a social accountability framework for medical students and residents, have the potential to address the needs of future physicians ready to do their part in eradicating health disparities. And in consideration of the fact that the medical education trajectory from novice to master physician is a life-long endeavor, it may be even more fitting to examine social accountability with the concept of cultural humility. Murray-García and Tervalon's⁴¹ description of engagement in self-reflection self-critique of power imbalances in an effort to develop and maintain mutually respectful and dynamic partnerships between providers and patients serves as a great anti-thesis to the drivers of racial anxiety.

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References

1. Levine RS, Foster JE, Fullilove RE, et al. Black-White inequalities in mortality and life expectancy, 1933–1999: implications for healthy people 2010. *Public health reports*. 2001; 116(5):474–83. [PubMed: 12042611]
2. Schulman KA, Berlin JA, Harless W, et al. The Effect of race and sex on physicians' recommendations for cardiac catheterization. *NEJM* 1999; 340 (14):1130.
3. Smedley BD, Stith AY, Nelson AR, eds. In: Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, D.C.: The National Academies Press 2001.
4. Van Ryn M, Fu SS. Paved with good intentions: do public health and human service providers contribute to racial/ethnic disparities in health? *American journal of public health* 2003; 93(2), 248–255. [PubMed: 12554578]
5. Saha S, Beach MC, Cooper LA. Patient centeredness, cultural competence and healthcare quality. *J Natl Med Assoc*. 2008;14(11):1275–1285.

6. Office of Minority Health. National standards for culturally and linguistically appropriate services in health care. Final report. Washington DC: U.S. Department of Health and Human Services; 2001.
7. Henderson S, Kendell E, See L. The effectiveness of culturally appropriate interventions to manage or prevent chronic disease in culturally and linguistically diverse communities: a systematic review. *Health Soc Care Community*. 2011;14(3):225–249.
8. Cross TL., et al., & Georgetown Univ. Child Development Center, W. D. C. T. A. C. (1989). *Towards a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally Disturbed*.
9. Hall WJ, Chapman MV, Lee KM. Implicit Racial/Ethnic Bias Among Health Care Professionals and Its Influence on Health Care Outcomes: A Systematic Review. *American Journal of Public Health* 2015; 105:12: 2588–2588.
10. Association of American Medical Colleges. What You Don't Know: The Science of Unconscious Bias and What to Do About It in the Search and Recruitment Process. Available at: https://www.aamc.org/initiatives/leadership/recruitment/178420/unconscious_bias.html. Accessed August 5, 2018.
11. Green AR, Carney DR, Pallin DJ, et al. Implicit bias among physicians and its prediction of thrombolysis decisions for Black and White patients. *J Gen Intern Med* 2007; 22(9):1231–8. [PubMed: 17594129]
12. Sabin JA, Rivara FP, Greenwald AG. Physician implicit attitudes and stereotypes about race and quality of medical care. *Med Care*. 2008; 46(7):678–85. [PubMed: 18580386]
13. Cooper LA, Roter DL, Carson KA, et al. The associations of clinicians' implicit attitudes about race with medical visit communication and patient ratings of interpersonal care. *Am J Public Health*. 2012;102(5):979–87. [PubMed: 22420787]
14. Hall WJ, Chapman MV, Lee KM, et al. Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: a systematic review. *American journal of public health* 2015;105(12), e60–e76.
15. Blair IV, Steiner JF, Hanratty R, et al. An investigation of associations between clinicians' ethnic or racial bias and hypertension treatment, medication adherence and blood pressure control. *Journal of general internal medicine* 2014; 29(7), 987–995. [PubMed: 24549521]
16. Tropp LR, Page-Gould E. Contact between groups. In Mikulincer M, Shaver PR, Dovidio JF, & Simpson JA (Eds.), *In: APA handbooks in psychology. APA handbook of personality and social psychology, Vol. 2. Group processes*. Washington, DC, US: American Psychological Association; 2015:535–560). 10.1037/14342-020
17. Hagiwara N, Slatcher RB, Eggly S, et al. Physician racial bias and word use during racially discordant medical interactions. *Health communication* 2017; 32(4), 401–408. [PubMed: 27309596]
18. Dovidio JF, Kawakami K, Gaertner SL. Implicit and explicit prejudice and interracial interaction. *Journal of personality and social psychology* 2002;82(1), 62–68. [PubMed: 11811635]
19. Cooper LA, Roter DL, Johnson RL, et al. Patient-centered communication, ratings of care, and concordance of patient and physician race. *Annals of internal medicine* 2003;139(11), 907–915. [PubMed: 14644893]
20. Ferguson WJ, & Candib LM (2002). Culture, language, and the doctor–patient relationship. *Family Medicine*,34, 353–361 [PubMed: 12038717]
21. Gordon HS, Street RL, Sharf BF, et al. Racial differences in doctors' information-giving and patients' participation. *Cancer* 2006; 107(6), 1313–1320. [PubMed: 16909424]
22. Godsil R, Tropp L, Goff PA, et al. “The Science of Equality (Volume 1): Addressing Implicit Bias, Racial Anxiety and Stereotype Threat in Education and Health Care, 11 2014.
23. Green AR, Carney DR, Pallin DJ, Ngo HL, Raymond KL, Iezzoni LI, & Banaji MR, (2007). Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of General Internal Medicine*. 22(9), 1231–8 [PubMed: 17594129]
24. Shelton JN, & Richeson AJ, (2005). Intergroup Contact and Pluralistic Ignorance. *Journal of Personality and Social Psychology*, (1), 91 [PubMed: 15631577]
26. Horvat L (2014). Cultural competence education for health professionals. *Cochrane Database of Systematic Reviews* (5).

27. Rapp DE (2006). Integrating cultural competency into the undergraduate medical curriculum. *Medical Education*, 40(7), 704–710. doi:10.1111/j.1365-2929.2006.02515.x [PubMed: 16836545]
28. Carter MM, Lewis EL, Sbrocco T, Tanenbaum R, Oswald JC, Sykora W, Williams P, Hill LD (2006). Cultural Competency Training for Third-Year Clerkship Students: Effects of an Interactive Workshop on Student Attitudes. *Journal of the National Medical Association*, 98(11), 1772–1778. [PubMed: 17128686]
29. Willen SS, Bullon A, & Good M-JD (2010). Opening Up a Huge Can of Worms: Reflections on a “Cultural Sensitivity” Course for Psychiatry Residents. *Harvard Review of Psychiatry*, 18(4), 247–253. doi:10.3109/10673229.2010.493748 [PubMed: 20597595]
30. Levine CS, & Ambady N (2013). The role of non-verbal behavior in racial disparities in health care; implications and solutions. *Medical Education*, 47(9), 867–876. [PubMed: 23931536]
31. Woolf K, Dacre J (2011). Reducing bias in decision making improves care and influences medical student education. *Medical Education*, 45(8), 762–764. [PubMed: 21752070]
32. Mazziotta A, Mummendey A, & Wright SC (2011). Vicarious intergroup contact effects: Applying social-cognitive theory to intergroup contact research. *Group Processes & Intergroup Relations*, 14(2), 255–274.
33. Tropp LR (2018). Intergroup contact, racial anxiety, and navigating race in diverse classrooms. Invited Presentation, Southern Poverty Law Center. Montgomery, AL.
34. Harber KD (1998). Feedback to minorities: Evidence of a positive bias. *Journal of personality and social psychology*, 74(3), 622–628 [PubMed: 9523409]
35. Yeager DS, Purdie-Vaughns V, Garcia J, Apfel N, Brzustoski P, Master A, & Cohen GL (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *Journal of Experimental Psychology: General*, 143(2), 804–824. [PubMed: 23937186]
36. Randall Vernellia R (1996) Slavery, segregation and racism: trusting the health care system ain't always easy! An African American perspective on bioethics. *Saint Louis University public law review*, 15 (2). pp. 191–235. [PubMed: 11656870]
37. Rourke J (2018) “Social Accountability: A framework for medical schools to improve the health of the populations they serve” *Academic Medicine* 93: (8): 1120–1124. [PubMed: 29642103]
38. Reddy AT, Lazreg SA, Phillips RL, et al. (2013) “Toward Defining and Measuring Social Accountability in Graduate Medical Education: A Stakeholder Study” *Journal of Graduate Medical Education*, 439–445. [PubMed: 24404308]
39. Schulman KA, Berlin JA, Harless W, Kerner JF, Sistrunk S, Gersh BJ, Dubé R, et al. (1999). The effect of race and sex on physicians’ recommendations for cardiac catheterization. *New England Journal of Medicine*, 340, 618–626
40. Woollard R, Buchman S, Meili R, et al. (2016) “Social accountability at the meso level into the community.” *Canadian Family Physician*, 62 (7) 538–540. [PubMed: 27412198]
41. Murray-García J, Tervalon M (1998) Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved*. 9(2):117–125. doi:10.1353/hpu.2010.0233 [PubMed: 10073197]

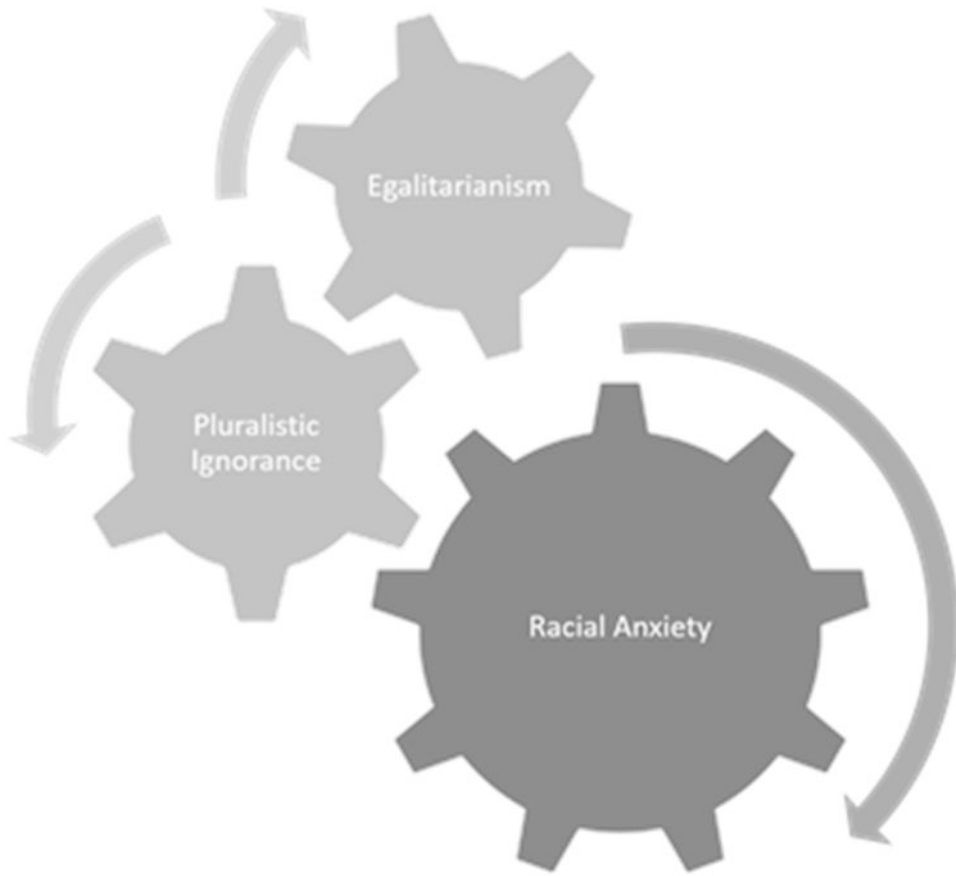


Figure 1.
Drivers of racial anxiety

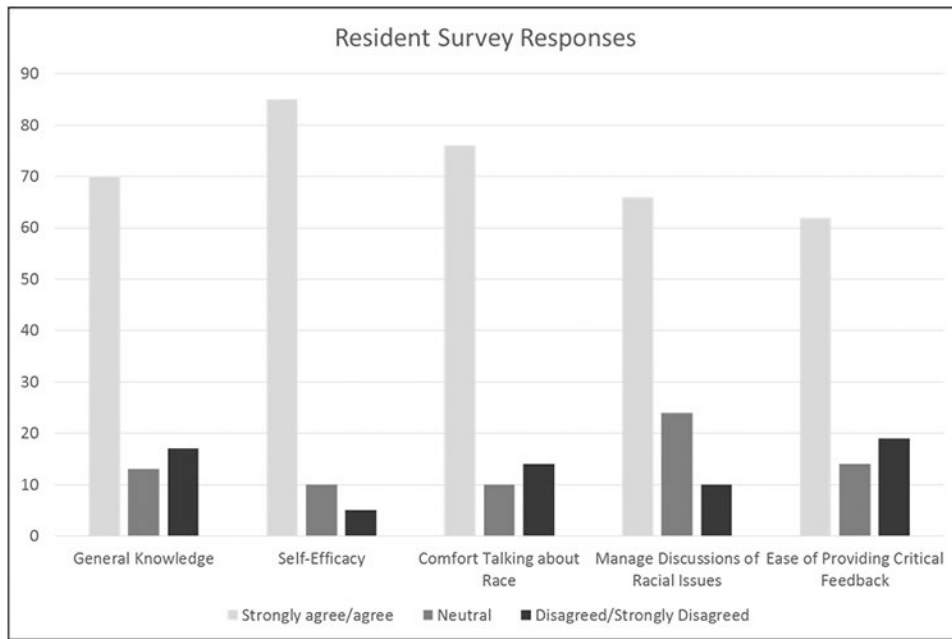


Figure 2.
Resident Racial Anxiety Survey Responses