Color-Blind Racial Beliefs Among Dental Students and Faculty

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Abstract: Providing culturally competent patient care requires an awareness of racial and cultural norms as well as a recognition of racism. Yet, there is a paucity of research devoted to this problem. In dental education, increased attention has focused on eliminating oral health care disparities due to ethnicity and race. Further investigation to determine the relationship between color-blind attitudes (failing to recognize the impact of race and racism on social justice) and dental educators' cultural competence is needed. The aim of this study was to determine dental faculty and student baseline color-blind racial attitudes scale scores, using the color-blind racial attitudes scale (CoBRAS). This 20-item instrument that measures three subscales of color-blind racial attitudes (Unawareness of Racial Privilege, Institutional Discrimination, and Blatant Racial Issues) was administered to student and faculty groups at one U.S. dental school. Out of a total 245 students in three class years, 235 responded to all items, for a response rate of 96%; out of a total 77 faculty members invited to participate, 71 responded to all items, for a response rate of 92%. Underrepresented minority (URM) faculty scored significantly higher on the Institutional Discrimination subscale and lower on Unawareness of Racial Privilege compared to non-URM students. Males scored significantly higher on Institutional Discrimination and Blatant Racial Issues compared to females. Compared to white students, URM students scored lower on all three subscales. The findings were consistent with previous studies indicating that female and URM students were more sensitive to racism compared to male and majority students. The findings that white faculty had higher awareness of racial privilege than white students and that URM faculty were less aware of institutional discrimination than URM students provided new information. These findings suggest that dental faculty members need professional development opportunities that promote becoming color-conscious and understanding privilege and biases, that model instruction on discussing race and racism, and that extend beyond a brief workshop.

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From a historical perspective, white adults' views on racial policies changed very little between 1998 and the election of President Barack Obama.[1] Others argue that there has been an increase in explicit and implicit anti-black racial prejudice since President Obama's historic election.[2] An increase in anti-black prejudice indicates that race still matters in U.S. society. As a result, color-blind racial beliefs—defined as the denial, distortion, or minimization of racism—have increasingly received attention among researchers as an emerging color-blind racial ideology.[3-5] Individuals with such beliefs tend to deny, distort, and/or are unaware of the existence of racism. They believe that people's lives are unaffected by race. The American Psychological Association (APA) asserted that racial diversity with approved multicultural guidelines is essential in professional studies.[6] The APA also pointed out the limitations of color-blind racial perspectives for clinical research and practice. Whether this issue pertains to counseling or other health care professions, the same concern applies.

Race exists in people's everyday attitudes and behaviors. Failure to be aware of or acknowledge racial differences makes it difficult to recognize the unconscious biases that individuals hold and may further the expression of racial prejudice.[7-9] Thus, psychologists, clinicians, and other health care providers need to acknowledge that racism exists, so they can provide better culturally competent services across racial groups. The relationship between disparities and race underscores the point that we do not live in a racially egalitarian or ideal society.[9] Exemplifying this point is the fact that a lack of access to health care has resulted in long-standing health disparities, particularly among racial and ethnic minority populations.[9] For example, in 2001, Taylor reported 83,000 "excess deaths" among African Americans.[10] Excess deaths are additional mortalities among African Americans beyond what one would expect if

their death rates were the same as those for the non-Hispanic white population.[11]

In dental education, increased attention has focused on eliminating oral health care disparities due to ethnicity and race. Further investigation to determine the relationship between color-blind attitudes and dental educators' cultural competence is needed. The aim of this study was to determine dental faculty and student baseline color-blind racial attitudes scale scores, using the color-blind racial attitudes scale (CoBRAS).

The Color-Blind Racial Attitudes Scale

The CoBRAS developed by Neville et al. is a 20-item instrument, designed to measure dimensions of participants' color-blind racial attitudes.[7] It consists of three subscales (represented by a selected survey item): 1) Unawareness of Racial Privilege (e.g., "Race plays a major role in the type of social services such as the type of health care or day care that people receive in the U.S."); 2) Institutional Discrimination (e.g., "White people in the U.S. are discriminated against because of the color of their skin"); and 3) Blatant Racial Issues (e.g., "It is important for public schools to teach about the history and contributions of racial and ethnic minorities"). The CoBRAS is scored on a six-point Likert scale ranging from 1=strongly disagree to 6=strongly agree; higher scores signify higher levels of color-blind racial attitudes. Higher scores indicate a greater unawareness of how these factors influence social justice and a belief that a person's status is due to merit and hard work, not discrimination and bias.

Neville et al. situated their research in the framework of color-blind racial ideology (CBRI).[3] As a worldview, CBRI serves to justify and explain away racial inequalities in society; thus, it is used "to [help] sustain the social hierarchy while maintaining a perspective that provides the cover of innocence." Racial ideology is a worldview that includes ideas and values about race that cohere. This worldview is used to publicly justify political stances. In relationship to racialized matters that shape and are shaped by society, racial ideology serves as a filter of what individuals see and respond to in social contexts.[12]

Previous studies have measured various psychometric properties of CoBRAS. In the Neville et al. validation study, CoBRAS showed a high level of internal consistency: Cronbach α ranged from 0.7 (Blatant Racial Issues) to 0.86 (total scale) and demonstrated an acceptable level of two-week test-retest reliability, and coefficient alphas ranged from 0.34 (Blatant Racial Issues) to 0.8 (Racial Privilege).[13] Other studies have found evidence of CoBRAS's concurrent validity. In one, higher levels of color-blind racial attitudes were significantly related to an increased embrace of modern racism attitudes and lower levels of two beliefs in a Just World Scale, a measure of racial and social prejudice.[14] Also, that study found a significant negative correlation between the CoBRAS total score and two subscales (women's inequality and general cognitive) of the Quick Discrimination Index, a measure of racial diversity and women equality. However, no discriminant validity was found in the absence of a relationship between CoBRAS and the Marlowe-Crowne Social Desirability Scale, an instrument that measures social desirability. Other studies concluded that, although color-blind racial beliefs are different from racism, people who have inaccurate or distorted perceptions of racial-ethnic diversities may take actions consistent with racial discrimination.[3,15]

The Neville et al. CoBRAS validation study has been widely used for research across racial and ethnic groups.[13] In another study examining the relationship between racially color-blind attitudes and white racial identity attitudes among 177 white counseling trainees, higher level of color-blind attitudes was associated with less integrated white racial identity status.[16] Other investigators found moderate relationships between two subscales of CoBRAS (Blatant Racial Issues and Institutional Discrimination) and the social dominance orientation.[17] They concluded that color-blind racial attitudes were positively associated with perceptions of racial-ethnic campus climate (RECC). However, white students rated RECC more positively than students of color. Worthington et al. reported that white students were less likely to experience racial conflict and experienced less pressure resulting from racial discrimination than racial minority students.[18]

Theoretically, the racially color-blind perspectives assessed by CoBRAS were related to stronger symptom perception for blacks but not for their counterparts of color.[19] Lower multicultural competence among white counselors,[20,21] lower levels of racial sensitivity among white therapists,[20] and stronger awareness of white fear among white students and trainees[22] suggested that these groups have racialized stereotype beliefs. One study also found that white

individuals were more likely to adopt racially color-blind attitudes than other racial groups.[12] Findings regarding racially color-blind attitudes showed an unawareness of racial privilege, emphasizing that racial group variations should be acknowledged and supported. The connection between color-blind racial attitudes and cultural competence was further illustrated by the following explanation. Cultural competence is a construct that implies the existence of a set of behaviors, attitudes, and/or beliefs that may facilitate or impede one's ability to demonstrate racial/cultural understanding.[23] Demonstrating cultural proficiency means that individuals capably respond to an environment shaped by its diversity.[24] For dental educators, being culturally competent means that the dentist as practitioner has both the ability and delivery system to meet the oral health needs of the underserved in the context of their cultural beliefs, values, language, practice, and heath behaviors.[25]

Racial bias itself is an issue for health care professionals because of a lack of racially concordant providers for many patients and an increase of diversity in our society. People of color comprise more than 37% of the U.S. population.[26] The two fastest growing groups in the U.S. are Hispanics/Latinos and Asian Americans. In 2015, the U.S. population was estimated at 321,418,820 including those who are white alone 77.1% (61.6% not Hispanic/Latino), African Americans (13%, 43 million people), and Hispanics/Latinos (17%, 54 million people). According to the U.S. Census Bureau, Asian Americans comprise 18 million people and, based on a 3.4% population increase from July 2014 to July 2015, are the fastest growing racial group in the U.S. In the 2010 census, 1.2 million people in the U.S. identified as Native Hawaiian and other Pacific Islander, and 5.2 million (1.7%) identified as Native American. These statistics reinforce the necessity for developing cultural competencies to augment oral health providers' technical and clinical acumen. Unless oral health professionals acquire knowledge, skills, and abilities in cultural competence, including an exploration of their CBRI, effective and efficient delivery of oral health care is unlikely.

Studies have found a preference among many URM individuals for racial/cultural concordance with their providers.[27,28] URM dentists are more likely to accept Medicaid/Medicare and to provide care that is sensitive to existing racial/ethnic differences—differences that established white, non-Hispanic providers often do not appreciate.[29] A diverse health care workforce is associated with improved patient-provider communication, greater choice and satisfaction among patients, and improved access to care for racial and ethnic majority groups.[27] Although the number of URM students entering dental schools across the U.S. has increased, this number is inadequate to meet the nation's rapidly changing demographics[30] and combat oral health disparities.

Also, there is a paucity of research or programs in dental education devoted to the exploration of racial identity development and its impact on culturally competent patient care. Therefore, health care providers in particular are urged to develop cultural competence and promote social justice while using their assessment of color-blind racial attitudes.[30] Complicating this challenge is that concepts of cultural competence in dental education are taught in a broad and diverse fashion. Based on current information, it is difficult to discern how cultural competence in general and specific elements in particular are included in students' dental school experiences.[30,31]

Based on their recognition of the importance of cultural diversity, an increasing number of cultural competency training programs and multiple curricular approaches have been proposed for increasing the cultural awareness and effectiveness of professional preparation in the health professions (medicine, nursing, veterinary medicine, and pharmacy).[32-38] A required medicine curriculum using clinical and patient experience, which incorporated a variety of activities (e.g., self-reflection, lecture, and case studies) and adopted team-based learning strategies (e.g., role-playing exercises), increased health professions students' awareness of racial bias and enhanced the application of patient-centered care in racially diverse environment.[32] In their study, Mills et al. found that foreign language skills had positive effects on veterinary students' understanding of patient needs and increased their realization of cultural embeddedness.[35] In dental education, attention to eliminating oral health care disparities led to an enhanced focus on the problem.[31] However, only a couple of articles in the dental education literature provide guidance to dental faculty regarding curriculum modifications and teaching methodologies needed to graduate culturally competent dentists.[27,31] Perhaps dental faculty can consider applying the curriculum approaches described in those studies to their curricula.

The Commission on Dental Accreditation (CODA) mandates that dental schools provide training to ensure that students develop cultural

competence and become effective, responsible, and knowledgeable in terms of multicultural concerns.[39] Smith et al. reported that health care providers and dental students who received cultural competency education tended to more readily treat racially and ethnically diverse patients.[40] Even though cultural competency training has been increasingly integrated into dental curricula, little research has been published on curricular interventions to address health disparity issues; this absence may hinder the development of cultural competence among dental students. Without training that helps develop these competencies, racially color-blind attitudes—which ultimately result in health care disparities among racial-ethnic groups—are likely to remain. Health care providers who hold color-blind racial attitudes are more likely to deny or neglect the importance of effectively interacting with their minority patients and thus negatively influence the treatment effects. Previous studies have convincingly shown that implicit ethnic/racial bias and stereotyping exist among health care clinicians and providers.[32-38,41-43] Such attitudes can prevent building clinical relationships with minority patients and further jeopardize other health care processes.[35] Paradies's systematic review of 36 studies of racism among health care providers called for additional research to examine the extent of racism and for the use of more effective measurements among health profession disciplines.[44] However, information on the impact of racial bias in dental education remains limited.

In a study examining the effects of curriculum intervention on dental students' perceptions of racism, Behar-Horenstein and Garvan found that males showed significantly higher levels of discrimination and blatant racial issues than females, and URM students showed significantly lower racially color-blind attitudes than majority students on all three subscales of CoBRAS.[45] Since racial bias is an issue, it is particularly important to better understand how it influences health care professionals' knowledge of and practice with increasingly diverse patient populations so that interventions can be planned for faculty and students.[7] Our study thus sought to determine faculty and dental students' baseline CoBRAS scores and to use the findings to guide the development of a cultural intervention to address these issues. Given that the faculty are charged with ensuring student development of cultural competence and reducing pre-existing racialized stereotypes, assessing their degree of color-blind attitudes is essential. Findings from this study may inform the profession about the necessity to determine baseline attitudes and can guide curriculum interventions aimed at reducing the occurrence of color-blind attitudes.

Methods

This study was approved by the University of Florida's Institutional Review Board (#2010-U-1071). Dental faculty members and dental students in the Classes of 2016, 2017, and 2018 at the University of Florida were invited to participate in this study, conducted between 2013 and 2016. An email invitation was sent to the participants using the professional version of SurveyMonkey, which offers the highest level of security.

To compare groups on the CoBRAS subscales, independent t-tests were used assuming unequal group variances. Analysis of variance (ANOVA) testing was used to compare the CoBRAS mean values by year. All data were analyzed using SAS software version 9.4 (Cary, NC, USA). The level of significance was set at 0.05. Two-sided hypothesis testing was used for all tests.

Results

Out of a total 245 students in the three class years, 235 responded to all items, for a response rate of 96%. Out of a total 77 faculty members invited to participate, 71 responded to all items, for a response rate of 92%.

The student sample was comprised of 126 (54.1%) females and 107 (45.9%) males, with 12 nonrespondents on gender. There were 92 (39.2%) URM students, 143 (60.9%) non-URM students, and ten nonrespondents on race/ethnicity (Table 1). Student ethnicity was self-reported as American Indian; Black; Hispanic; Native Hawaiian; Pacific Islander; any Asian other than Chinese; Filipino, Japanese, Korean, Indian, or Thai; or none of above. In this study, URM was defined as students who self-identified as American Indian, Black, Hispanic, Native Hawaiian, Pacific Islander, any Asian other than Chinese, and Filipino, Japanese, Korean, Indian, or Thai. Those who selected "None of above" were considered non-URM.

The faculty sample was comprised of all full-time employees: 33 (42.9%) females, 38 (49.4%) males, 23 (29.9%) URMs, and 48 (62.3%) non-

URMs (Table 2). Faculty ethnicity, taken from an institutional database, was Non-Hispanic/Asian, Non-Hispanic/White, Hispanic/White, and Non-Hispanic/Black. In this study, URM included Hispanic/Asian, Hispanic/White, and Non-Hispanic/Black. Non-URM included Non-Hispanic/White.

The means on the CoBRAS subscales showed that the faculty and students possessed moderate levels of color-blind racial attitudes (Table 3 and Table 4). The CoBRAS subscales were compared by faculty groups (URM/nonURM), student groups by URM/non-URM, years, gender, and then between faculty and student groups on the three dimensions of CoBRAS. No statistically significant results were found for faculty. However, there were statistically significant differences between URM and non-URM students on all three subscales. Participants in the URM student group scored lower on the Racial Privilege ($p=0.0047$), Institutional Discrimination ($p<0.0001$), and Blatant Racial Issues ($p=0.0001$) subscales than the majority students. In addition, there was statistically significant evidence of gender differences on the Institutional Discrimination ($p=0.0095$) and Blatant Racial Issues ($p=0.0202$) subscales. Males scored significantly higher on those two subscales. The only difference by year was for the Blatant Racial Issues subscale: students in the Class of 2018 scored significantly lower than the other two years ($p=0.0375$). Table 5 shows the results of comparison by URM faculty with URM students and non-URM faculty with non-URM students. URM faculty scored significantly higher than URM students on the Institutional Discrimination subscale. Non-URM students scored significantly higher than non-URM faculty on the Racial Privilege subscale.

Table 1. Demographic information for students, by percentage of respondents in each category and number

Category	Percentage (Number)
Gender N=233	
Male	45.9% (107)
Female	54.1% (126)
URM N=235	
No	60.9% (143)
Yes	39.2% (92)
Single N=237	
No	19.8% (47)
Yes	80.2% (190)
Class year N=245	
2016	26.5% (65)
2017	37.6% (92)
2018	35.9% (88)

Note: Some respondents did not report gender, URM status, or marital status. Percentages may not total 100% because of rounding.

Table 2. Demographic information for faculty, by percentage of total respondents (N=77) and number

Category	Percentage (Number)
Gender	
Male	42.9% (33)
Female	49.4% (38)
URM	
No	29.9% (23)
Yes	62.3% (48)

Note: Percentages do not total 100% because respondents (N=6) not answering demographic items were excluded.

Discussion

This study investigated individual differences in color-blind racial attitudes in dental education by assessing faculty and dental student baseline CoBRAS scores. The results showed that female students scored significantly lower on Institutional Discrimination and Blatant Racial Issues compared to male students. URM students had significantly lower scores than majority students on all three subscales. These findings were consistent with those in a previous study, indicating female and URM students were more sensitive to racism compared to male and majority groups.[7] Students in the Class of 2018 scored significantly lower than students in the Classes of 2016 and 2017 on Blatant Racial Issues, indicating that first-year students had higher awareness of pervasive racial discrimination than their counterparts. This could have emerged from an increased emphasis on the importance of cultural competence among students. Perhaps curricular interventions concerning the development of racism awareness were introduced to students before they entered dental school, and they were more culturally sensitive.

No significant effects of gender or URM status difference were found among the faculty. As Neville et al. pointed out, one possible explanation for the homogeneity of color-blind racial attitudes among faculty may be the similar racial outlook across genders among faculty.[7] Another reason could be the limited sample size of faculty in our study.

Table 3. Statistical analysis for student group on three subscales

Category	Racial Privilege Mean (SD)	Racial Privilege p-value	Institutional Discrimination Mean (SD)	Institutional Discrimination p-value	Blatant Racial Issues Mean (SD)	Blatant Racial Issues p-value
Gender						
Male	30.8 (6.9)	0.3880	26.3 (6.1)	0.0095*	17.7 (4.9)	0.0202*
Female	29.7 (6.0)		23.9 (6.6)		16.1 (4.3)	
URM						
No	30.4 (6.0)	0.0047**	26.9 (6.1)	<0.0001**	17.7 (4.6)	0.0001**
Yes	27.9 (6.4)		21.1 (5.0)		15.3 (4.1)	
Single						
No	30.3 (6.6)	0.2676	25.2 (6.2)	0.3820	16.5 (4.6)	0.8072
Yes	29.0 (6.3)		24.2 (6.4)		16.7 (4.6)	
Class year						
2016	29.5 (6.9)	0.6512	25.9 (8.1)	0.1638	17.5 (4.9)	0.0375*
2017	28.8 (6.6)		23.6 (5.4)		17.3 (4.2)	
2018	29.7 (5.8)		24.6 (6.4)		15.8 (4.6)	

*p<0.05, **p<0.001

Table 4. Statistical analysis for faculty group on three subscales

Category	Racial Privilege Mean (SD)	Racial Privilege p-value	Institutional Discrimination Mean (SD)	Institutional Discrimination p-value	Blatant Racial Issues Mean (SD)	Blatant Racial Issues p-value
Gender						
Male	24.03 (5.1)	0.330	27.61 (5.1)	0.636	20.03 (4.1)	0.472
Female	23.27 (5.5)		26.94 (6.5)		20.76 (4.3)	
URM						
No	23.10 (4.4)	0.334	27.06 (5.2)	0.658	20.08 (3.7)	0.471
Yes	21.57 (6.9)		27.78 (6.8)		20.96 (5.1)	

Table 5. Statistical analysis for faculty and students on three subscales

Faculty vs. Students	Racial Privilege Mean (SD)	Racial Privilege p-value	Institutional Discrimination Mean (SD)	Institutional Discrimination p-value	Blatant Racial Issues Mean (SD)	Blatant Racial Issues p-value
URM						
Faculty	26.6 (6.6)	0.980	27.8 (6.8)	<0.001**	21.0 (4.1)	0.388
Students	27.9 (6.4)		21.1 (5.0)		15.3 (4.1)	
Non-URM						
Faculty	23.4 (4.3)	0.040*	26.8 (5.3)	0.336	20.3 (3.7)	0.436
Students	30.4 (6.0)		26.9 (6.1)		17.7 (4.6)	

*p<0.05, **p<0.001

Non-URM students scored significantly higher than non-URM faculty on the Racial Privilege subscale, indicating that white students were less aware of the existence of white racial privilege than white faculty. Ancis et al. noted that white students typically have experienced less racial discrimination and have reported less interracial tensions and recognition of racial conflict.[46] Perhaps this a product of their youthfulness and lack of collective experiences that accrue over the span of adulthood.

When comparing differences across faculty and students, we found URM faculty evidenced higher color-blind racial attitudes than URM students on the Institutional Discrimination subscale, showing

that URM faculty demonstrated lower awareness of institutional racism than URM students. This could be due to the severe segregation of racial communities in the U.S., among which whites are the most residentially independent and typically experience little interaction with other racial and minority groups. As Hinojosa and Moras found, white faculty members usually do not live in diverse communities, thus preventing them from recognizing the structural elements of communities.[47] Given the pervasiveness of racial stereotypes, white faculty members' racial attitudes have far-reaching influence on society. These effects can be a serious limitation when considering their vital role in determining majority and URM students' academic achievement, behavioral evaluations, and ultimate career goals. In discussing students' perceptions and experience of campus cultural climate across racial and ethnic groups, Ancis et al. reported that faculty racism was a potential stressor for URM students.[46]

Ignoring race and failing to acknowledge racism reflect racial intolerance and prejudice among whites.[3] Since faculty represent a microcosm of society, their attitudes and awareness of color-blind racial attitudes might affect the instructional and assessment processes. Thus, it is reasonable to assume that faculty instructional practices and assessment processes may lead URM students to experience both fair and unfair treatment. Developing an understanding of faculty members' perceptions and distinctive experiences regarding culture diversity and principles of equal treatment may help ensure that URM students receive equal opportunities and treatment. Faculty members are, after all, expected to offer educational experiences that meet the needs of students across different racial and ethical groups.

As our study suggests, the existence of racial blindness on a school's faculty increases the importance of faculty programs that help both URM and white faculty members to become culturally competent and underscores the need for services based on anti-prejudice and fair principles. Perhaps even more important is the recognition that ignoring the complexities of race does not make related issues disappear. Attempting to discount color-blindness often creates more problems than it solves.[48] Understanding the implications of general processes of racial bias in health care interactions does not impugn the integrity of dental professionals. Social psychology reveals that racial biases tend to operate unconsciously and unintentionally among well-intentioned people. Findings from our study offer an opportunity for dental faculty and students to better understand the complexity of interracial interactions in the oral health care setting. This knowledge can become the rationale for developing specific interventions aimed at combatting racism and reducing racial disparities in oral health care.[49] We all live in a multi-diverse universe that is filled with peoples of many perspectives, mores, and traditions. As a result, patients may come from life circumstances with which practitioners lack familiarity. These patients may have beliefs about oral health issues, treatment, and care that remain unknown yet are crucial to preventive care, maintenance, and efficacy of care. For these reasons, studies such as ours are important—first to create awareness, second to promote dialogue, and finally to promote changes that are important.

The findings from the CoBRAS offer an excellent tool for encouraging dental students and faculty members to think about their biases. To address these findings, we recommend interventions for those who demonstrate color-blind racial attitudes. The first step might focus on developing participants' awareness of racism. For those with a high level of recognition and motivation to avoid racial discrimination, service-learning opportunities could be offered with the aims of improving communication, providing ongoing feedback, developing flexibility in managing diverse patients, and learning ways to build provider-patient trust. Cultural interventions might be tailored to address the attitudes and beliefs of white and male students compared to URM and female students.

To ensure that white dental faculty members can benefit the students they prepare for careers in dentistry, they will likely need to explore institutionalized racism and their own racial identities. Faculty members should be provided with experiences that promote what Rothman et al. called "becoming color-conscious: understanding privilege and biases"; expand their ability to model and instruction on discussing race and racism; and extend training opportunities that are continuous and beyond a brief workshop.[50] Other recommended initiatives that seek to reduce racism include a critical examination of the history of racism, personal racism, whiteness, and advocacy. Moreover, as recommended by Rothman et al., this content should be discussed critically in small groups in which individuals freely share their ideas. This discussion should be an ongoing activity supported by persistent reflection that promotes an honest examination of one's beliefs and behaviors.

Faculty members are advised to work with students to help them understand the role of race in their

own lives, including their fears, anxiety, and anger about race.[3] Towards that aim, role-playing activities would provide faculty and students with opportunities to respond to racial information when it is explicitly discussed or implicitly referenced in coded language and to identify and manage anxiety that may result from talking about race and racism. Another approach is to present data about the impact of biases in the evaluations of applicants to raise awareness about how these biases impact the workplace vis-à-vis hiring, promotion, and retention practices.[51]

Individuals are often unaware of issues of race and racism due to the communities in which they live.[52] Thus, more than exposure is necessary to promote awareness of white privilege and power. Faculty and students should engage in the provision of care in diverse communities and Federally Qualified Health Centers. During that time, we recommend that on-site instructional activities include focused conversations about race, racial identity, and race-related issues of privilege and power—topics that are frequently avoided in situations among predominantly white participants.[53] One thing that seems clear from this study and previous research is that white males seem to have a higher level of color-blind attitudes associated with less integrated white racial identity status compared to females and URMs. Also, faculty members in our study showed lower awareness of institutional discrimination than did students.

Faculty perceptions of students influence the way students think about their own behavior and academic performance and affect their engagement.[54,55] However, we found little research that systematically examined the color-blind racial attitudes of faculty members as a group in the U.S. Our study provides descriptive and statistical analysis of dental faculty members' racial attitudes with an attempt to understand how these attitudes differ due to gender and majority/URM status as compared with dental students.

Our study had several limitations. First, the sample size may not have been large enough to yield reliable and stable results. The sample size of faculty participants especially was small to determine significant difference. Our comparison of URM faculty to URM dental students was likely limited by the small number of URM faculty members. Second, the CoBRAS is a self-reported instrument. Participants might have over-evaluated their actual experience or simply provided responses based on what they believed to be important. Third, the study was conducted with dental students and faculty members in only one university. Thus, the results are limited in generalizing across multiple institutions as the findings may be more reflective of a specific institutional culture. Future research is needed to examine color-blind racial attitudes of participants across different institutions with various minority groups. We also advise conducting pre- and posttests to examine if cultural training programs moderate color-blind racial attitudes for both faculty and students.

Conclusion

In this study, faculty participants demonstrated a lower awareness of institutional racism than did the students. Health care providers who pose color-blind racial attitudes are more likely to deny or neglect the importance of effectively interacting with minority patients and negatively influence the impact of their treatment. This type of racial blindness highlights the importance of faculty training programs that augment cultural competence among both white and URM faculty and enable them to provide services based on anti-prejudice and fair principles. To ensure the reduction of racialized stereotyped beliefs, future researchers should use scales such as CoBRAS to assess the outcomes of curriculum revisions or efforts aimed to enhance cultural competence.

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