

“What does racial equity mean to you?” — Using photovoice to explore college students’ viewpoints

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ABSTRACT

Racial disparities often lead to health disparities among racial and ethnic minorities, affecting overall health and quality of life. Additionally, racial and ethnic minorities report more perceived racism and discrimination, which is also significantly associated with negative health outcomes. The purpose of this study was to explore how college students understand and define racial equity using photovoice. This study engaged 11 college students in North Carolina through photovoice, a qualitative research method, which utilized photo-taking and discussions to explore U.S. college students’ perspectives on racial equity. Participants took 10-15 photos that represented their perspectives on racial equity. Following submission of the photos, a follow-up interview was conducted for participants to discuss the images, explain opinions on racial disparities, and provide recommendations for improving racial equity. Photos and photo discussions were transcribed, coded, and analyzed by the research team. This study identified five emerging themes, including 1) equal opportunities (e.g., high-quality educational opportunities, job opportunities, opportunity for success), 2) tangible support (e.g., large company support, community support), 3) social connectedness (e.g., working together, sharing and enjoying other cultures), 4) safe and inclusive environments (e.g., personal and environmental safety, inclusive environments), and 5) health justice (e.g., accessible health care, food security). The emerging themes identified in this study provide insights into how college students understand racial equity and might inform efforts to promote equity in college and community settings. Future research should continue exploring this topic and addressing racial equity concerns.

KEYWORDS: Photovoice, community safety, young adults, participatory research, racial disparities, racism

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Racial disparity, referring to the unequal distribution of resources, power, and economic opportunity across socially defined races in a society, is an important concern in the United States (US) (U.S. Department of the Treasury, 2022). These inequities contribute to persistent health disparities and result in overall poorer health outcomes among minoritized racial and ethnic (i.e., Asian, Black, Latinx) groups (CDC, 2021). Advancing racial equity is essential to improving the overall well-being of Americans, as persistent disparities profoundly impact the health and quality of life of minoritized racial and ethnic young adults (Bravo et al., 2023).

Research indicates that college students of minoritized racial and ethnic groups report more perceived racism and discrimination than non-Hispanic White students (Bravo et al., 2023; Hwang and Goto, 2008). Perceived discrimination among minoritized racial and ethnic young adults is also significantly associated with various negative outcomes, including mental health problems (anxiety, depression), substance use (nicotine and cannabis products), disordered eating behaviors, suicidal ideation and behaviors, and a decline in academic performance (Hwang & Goto, 2008; Jacobs et al., 2024; Kelly et al., 2020; Stevens et al., 2018; Bravo et al., 2023; Walker et al., 2022). Addressing racial disparities is essential for promoting overall well-being among young adults, requiring an acknowledgment of the distinct challenges and needs of individual communities.

Although anti-racism policies and education campaigns have been developed and implemented nationally and locally, more effort is needed to achieve racial equity (Williams & Mohammed, 2009). A multi-faceted approach, considering unique experiences and barriers of diverse populations, is crucial for achieving racial and ethnic equity. Some quantitative studies have explored the topic of racial equity among young adults, with most focusing on the relationship between racial discrimination experience and physical or mental health (Bravo et al., 2023; Kelly et al., 2020; Walker et al., 2022). Additionally, a few qualitative studies have used interviews to explore the experience of racial discrimination among minoritized racial and ethnic young adults (Pasco et al., 2022; Williams et al., 2020). Even though these approaches have provided important insights into racial inequities and their consequences, less is known about how participatory visual methods can be used to explore young adults' perspectives on racial equity.

To address the research gaps previously mentioned, the current study utilized photovoice, a qualitative research method that allows for an in-depth understanding of community issues through photo-taking and discussions, to investigate college students' perspectives on racial equity, highlighting factors that foster racial equity in communities (Wang, 2006; Wang & Burris, 1997). Unlike other traditional qualitative research methods that only use verbal communication, such as interviews or focus groups, photovoice interactively engages participants in expressing their thoughts in a visually appealing manner (Wang, 2006). This approach is particularly useful for exploring complex and multidimensional concepts such as racial equity, which participants may experience and understand through their everyday environments. By engaging college students through the photovoice methodology, this study provides valuable insights into how young adults perceive racial equity and the conditions they perceive as important to racial equity in their communities. The purpose of this qualitative study is to explore college students' perspectives about racial equity using photovoice. The question used for college students' photo-taking was "What does racial equity mean to you?"

Materials and Methods

Study Design and Location

This study was conducted at a private university in North Carolina during the spring and summer of 2023. This university is located in a county with a significantly higher proportion of Black residents (34.5%) compared to the national average (13.7%) (U.S. Census Bureau, 2025). The county has also experienced systematic racial segregation and continues to face disparities in access to high-quality education and health care. This demographic and social context provides a unique opportunity to explore residents' perspectives on racial equity.

Participants

This study was part of a county-wide photovoice project aimed at exploring opinions and suggestions regarding racial equity from community residents and understanding the challenges and needs associated with reaching racial equity in local communities. For an in-depth understanding of racial equity perceptions among college students, a total of 11 participants were recruited via on-campus flyer distribution, student groups, social media posts, and snowball sampling. This study included both undergraduate and graduate students enrolled at the participating university.

The sample was racially and ethnically diverse. Of the 11 participants (mean age = 25, female 72.7%), five identified as Black/African American (45.5%), three as Asian (27.3%), two as White (18.2%), and one as Multiracial (9.1%). See **Table 1** for demographic characteristics of the participants.

Table 1. Demographic characteristics of the study sample (N=11)

Participant ID	Age	Gender	Race/Ethnicity
1	21	Female	White
2	20	Female	Asian
3	21	Female	Black or African American
4	26	Male	Asian
5	19	Male	Multiracial (Asian and White)
6	29	Female	White
7	34	Female	Black or African American
8	31	Male	Asian
9	25	Female	Black or African American
10	26	Female	Black or African American
11	23	Female	Black or African American

Ethical Statement

This study was approved by the corresponding author's (YY) Institutional Review Board (IRB). All participants signed an online consent form via Qualtrics. This consent form included key information about the study, such as photo-taking activities, audio recording permission for photo discussions, and photo use permission for exhibition, presentation, and publication. Each

participant received a \$50 e-gift card upon completing the photo discussion session. Interested individuals voluntarily participated in the study.

Procedure

This study included a training session, a photo-taking session, and a photo discussion session. At the training session, participants received information on the ethical and technical use of cameras (e.g., no selfies, no identifiable information) and the concept of photovoice. At the photo-taking session, each participant was asked to take 10-15 photos to answer the question "*What does racial equity mean to you?*" After participants finished photo-taking and shared their photos with the research team, a follow-up photo discussion session was typically scheduled within a week based on participants' availability.

All photo discussions were conducted virtually via Zoom (about 30 minutes) and guided by a revised *SHOWED* framework (e.g., "What do you see in this photo", "How does this photo relate to racial equity", and "How to improve racial equity?") for participants to explain their photos, express their perceptions of racial equity, and provide recommendations on how to promote racial equity (Wang, 1999). All photo discussions were audio recorded. Participants who completed both the photo-taking sessions and the follow-up discussions were offered incentives in appreciation of their time and input.

Thematic Analysis

The audio recordings were transcribed, and photos were integrated into the transcripts to align discussions with their corresponding images. Following multiple rounds of coding and collaborative peer discussions, the emerging themes and subthemes representing participants' perceptions of racial equity were identified and summarized. An initial codebook was created to guide this process. Two researchers (XY, MP) reviewed the photos and transcripts independently, coding each photo into a theme. Each photo and its discussion were coded into only one theme; no photos were coded across multiple themes or left uncoded. The third researcher (YY) checked all coding and provided additional input on coding decisions. The research team then compared coding and discussed discrepancies during multiple rounds of review. The codebook, themes, and subthemes were refined based on these discussions and confirmation by a fourth researcher (CR). The research team reached consensus on the final themes and subthemes representing participants' perceptions of racial equity.

The research team coded all the data, which included photos and transcripts. Following multiple rounds of revisions and adjustments, the emerging themes were identified based on codes that frequently appeared in both the photographs and the discussions about them. All collected data, such as digital photos and audio recordings, were kept confidential in accordance with IRB protocols. No photos containing identifiable features, such as faces or properties with visible addresses, were shared or published.

Trustworthiness

The trustworthiness of this photovoice study was assessed based on four criteria for qualitative research: credibility, dependability, confirmability, and authenticity (Guba & Lincoln, 1994). Several strategies were employed throughout the research process to enhance

trustworthiness. An audit trail, including audio recordings, transcripts, coding documentation, and records of analytic decisions, was maintained to support the dependability and confirmability of the findings. A code-recode process was also used, in which codes were developed, reviewed, revised, and finalized through iterative discussions among members of the research team.

To increase credibility and authenticity and to ensure that the findings were grounded in participants' perspectives, two photos were selected to depict each emerging theme, accompanied by a corresponding quote for each photo. Additional quotes were included in the Findings section to further support these themes. The research team also sought external feedback on preliminary findings by presenting the study at local and national conferences. Feedback from individuals outside the research team provided opportunities to consider alternative interpretations, critically examine the emerging findings, and identify potential researcher assumptions or biases. These strategies strengthened the credibility, dependability, confirmability, and authenticity of the study findings.

Researcher Positionality and Reflexivity

The research team recognized that researchers' social identities, academic training, professional experiences, and disciplinary perspectives may influence the interpretation of participants' perspectives on racial equity. The first author (XY) is an Asian woman and graduate student in Health Education and Promotion with research interests in adverse childhood experiences and college student health. The second author (MP) is a White woman and graduate student in Health Education and Promotion with research interests in women's health and the health of people with disabilities. XY and MP independently coded the data. The third author (YY) is an Asian woman and Assistant Professor of Public Health with research expertise in violence prevention and community safety. The fourth author (CR) is a Black woman and Professor in African and African American Studies, Global Health, and Family Medicine and Community Health whose research focuses on the intersections of race, ethnicity, ancestry, and health, as well as on addressing racism in research, healthcare, and society.

The research team acknowledged that these diverse racial identities, scholarly backgrounds, and research experiences could inform both the perspectives brought to the analysis and the interpretation of participants' experiences. Although all members of the research team identified as women, the team did not identify gender or sexual identity as a primary analytic lens for interpreting participants' perspectives on racial equity. Nevertheless, the researchers remained attentive to the possibility that multiple dimensions of their identities and experiences could shape the analytic process.

Throughout the analytic process, the research team engaged in ongoing reflexive discussions to examine how their identities, disciplinary perspectives, and prior experiences might influence the coding and interpretation of the data. Independent coding by XY and MP, third-researcher review (YY), discussion and resolution of coding discrepancies, confirmation by a fourth researcher (CR), and iterative refinement of the codebook and themes provided opportunities to critically examine alternative interpretations. These procedures were used to enhance the trustworthiness of this photovoice study and reflexivity of the analytic process. Despite these efforts, the authors recognized that researcher perspectives could not be entirely eliminated from the thematic analysis process.

Findings

A total of 111 photos were collected in this study from the 11 participants. Of the 111 photos analyzed, 54 were categorized within the five emerging themes presented below. The remaining photos represented less frequently emerging themes and were not included in the presentation of the primary findings. Emerging themes on college students' perceptions of racial equity included:

Theme 1: Equal opportunities (e.g., high-quality educational opportunities, job opportunities, opportunity for success)

Theme 2: Tangible support (e.g., large company support, community support)

Theme 3: Social connectedness (e.g., working together, sharing and enjoying other cultures)

Theme 4: Safe and inclusive environments (e.g., personal and environmental safety, inclusive environments)

Theme 5: Health justice (e.g., accessible health care, food security)

Equal Opportunities

Equal opportunities were the most frequently emerged theme (n=12) and was among the most frequently discussed meanings of racial equity, as a total of six participants captured this theme. Examples of photos and quotes are provided in **Figure 1**. Subthemes included:

- 1) educational opportunities
- 2) job opportunities
- 3) opportunities for success

Regarding equal high-quality educational opportunities, one participant took a photo of a pencil and a post-it notes, and stated that equal education is the path for equal opportunities, irrespective of race:

Regardless of whichever race, I think, in the modern society, and of course, the extent to which different society of that make up majority of different races, they get different levels of education. But education is often the gateway for more opportunities. And I really am a believer of the outcome, but more so than the outcome itself, the opportunity, equitable opportunity, regardless of whichever race you are, is very important." They also expressed how important education is to racial equity: "And I think education is one of the big, perhaps one of the biggest components that can have put everyone together in a platform.

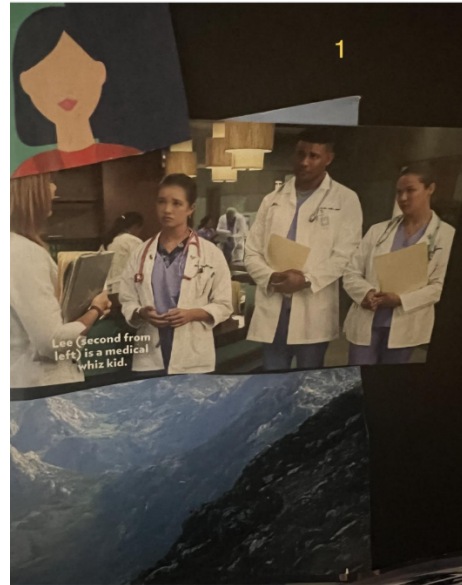
Also, a couple of participants mentioned that equal job opportunities are essential to racial equity. For example, one participant took a picture of medical staff from different racial groups explained that equal job opportunities are important for racial equity, and indicated that job opportunities have been unequal for minoritized racial groups in the past:

I saw this picture and you see patient of color in medicine, and to me in terms of racial equity, it's about allowing for people, minorities, Black people, color to be in these spaces, which originally, they have not been as much.

Equal opportunity for success is another subtheme merged with equal opportunities. From the participants' perspective, this means that everyone should have equal opportunities to grow and develop. One participant shared a photo of her drinks and explained during the discussion that

everyone should have the same opportunity, and no one should be treated differently or adhere to different social norms:

You should have the same opportunity as everybody else. And just because you're a certain skin color doesn't mean that you should be treated differently for wanting to do different things or things out of the norm where you're from.



"I think education is one of the big, perhaps one of the biggest components that can have put everyone together on a platform."

"To me, in terms of racial equity, it's about allowing for people, minorities, black people, color to be in these spaces, which originally they have not been as much."

Figure 1. Equal opportunities

Tangible Support

Tangible support was another emerging theme that emerged from participants' photos (n=11) and discussions, with five participants mentioning this theme. It includes large company support and provides more resources to underserved populations and areas (**Figure 2**).

One participant took a photo of a notable fast-food restaurant chain, emphasizing how the large company provided support by creating more opportunities for minoritized racial and ethnic groups and increasing diversity. He said,

I feel like (the restaurant) was really good about supporting minorities and, yeah, just increasing diversity and stuff." He also highlighted that job opportunities provided by large companies can play a significant role in helping individuals of minoritized racial and ethnic groups achieve greater success within society through a photo of a package from a large e-commerce company and explained: "I feel like (the company) has created a lot of job opportunities, especially for people of color. So just opening up

that space, so people being able to get jobs and get good jobs and do better in society.

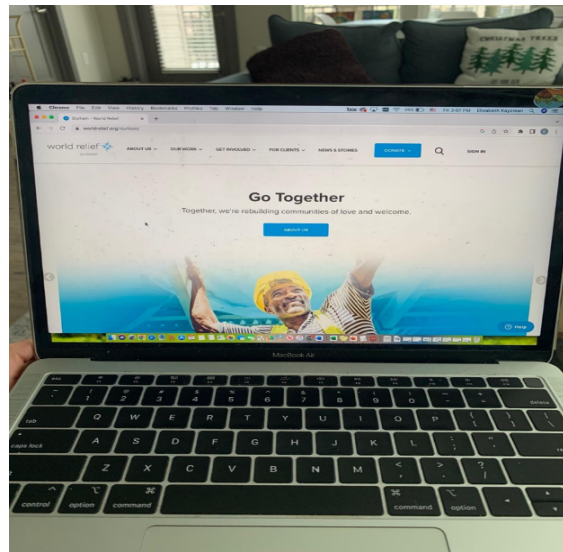
Moreover, participants emphasized the importance of providing more resources to underserved populations and areas, highlighting the need for increased Tangible support. For example, a participant shared a picture showing the difference between equality and equity with people of different heights standing on ladders, and explained in discussion:

Racial equity is more of certain races may need different provisions may need certain programs for them to actually be equal, which is shown on the right side, because the girl who was really short, she needed extra stools versus a person who was taller, he's still in the same store that he had before.

This photo and discussion highlight that achieving racial equity requires more support and resources for underserved communities and people.



“When I think of racial equity, it's people putting together their resources to make something better. The school that's actually there now.”



“They (this global non-profit organization) help refugees from a bunch of different nations, from Afghanistan, from Burma, from Ukraine, resettle and acclimate to life here in the US, and they help them with a bunch of social support and logistical support and housing and all these things.”

Figure 2. Tangible support

Social Connectedness

Six participants mentioned social connectedness among racial groups in their photos (n=10) and discussions, which emerged as an emerging theme (**Figure 3**). The subthemes included:

- 1) working together
- 2) sharing and enjoying other cultures
- 3) common goals



“I think there are many elements that allows us to build relationship and connect with one another, despite racism, perhaps that could be one of the most powerful ways for us to break our own types that we might have created in our own, due to whatever reasons, and or even the racial tensions that that we may be facing in different parts of the world.”



“People from all backgrounds cheer for the national team. All the racial tension just dissolves. ”

Figure 3. Social connectedness

Regarding the subtheme of working together, one participant took a photo of various colored houses and shared his inspiration from this photo that various racial groups should be able to work together:

So, this picture I took because I really liked the colors of the different houses here. So, this again, was along my thought of the fact that we need to see the bigger picture and make sure that we can allow different races to work together.

Sharing and enjoying other cultures is also important for reaching racial equity. One participant from China took a photo of challah, a Jewish bread, highlighting a meaningful moment where he and his friends of diverse backgrounds came together to make this bread. He emphasized the importance of sharing and enjoying other cultures for racial equity, saying:

Yeah, so this is a type of bread that is Jewish. And I made this with my friends. And my friends, my group of friends who made this, we have someone from the UK, someone from Australia, someone from Jamaica, and someone who's Jewish, and two other people who are Black and Native American, and I'm Chinese. And so, we are a pretty diverse group of people, you could say, but we all made this bread with our Jewish friend who was instructing us how to make it.

The last subtheme associated with social connectedness was common goal among racial groups. For example, one participant showed a picture of a variety of different flowers and shared

her thought that different people in the workplace have the same purpose, which is important to racial equity:

To me, this spoke to racial equity and the fact that in workplaces, there are so many different types of people, people from different races. And they're often put together with the purpose of doing work for the company or doing work for an organization and pursuing the organization's interests. So, I think it is important to value the mix of people that we have and make sure that we can make the best of it.

Safe and Inclusive Environments

Safe and inclusive environments were highlighted by five participants in their photos (n=10) and discussions. Examples of photos and quotes are provided in **Figure 4**. Subthemes included:

- 1) personal and environmental safety
- 2) inclusive environments

First, among the photos that mentioned safety and inclusive environments, some emphasized that personal and environmental safety play a key role in racial equity. For instance, one participant took a photo of the sunflower he planted, and described that environmental safety is important for racial equity, just like how a high-quality environment is needed for a sunflower to grow:

The seeds quality, the air quality, the soil quality, the sunlight, stuff like that helps us to think that we are not in control. And what we get in this life is not an equation of our effort. There are a lot of unseen factors, and I think that also reflects my experience and I think a lot of people experience with race and equity.

Another participant shared a photo of a road, expressing his hope that Black neighborhoods should become safer, indicating the ongoing concerns about safety and the need for greater security and equity in some areas:

Black people being able to walk around their neighborhoods without worrying about being profiled.

A couple of participants also described that inclusive environments for people with diverse cultural backgrounds play a key role in reaching racial equity. A participant shared a picture of a public lake with people of different races swimming and further explained that inclusive environments that welcome everyone are important for racial equity. She stated:

It was also the lake that only the Black community could swim there's about three or four lakes in this county but that was the only that we were allowed to swim in during segregation. Now you can see now there's not very many Black people there. As become more of, say, a good kept secret but it's been more people across different ethnic groups and racial backgrounds that to me that signifies racial equity too that's not just a place where only Black people are allowed to swim. It's since become a place that welcomes everybody.



“Racial equity would mean, regardless of race, people having access to nice homes that are safe and not having the environmental hazards that might come with exposed wires.”

“I can go [to a Mexican restaurant] and feel safe as a Black person, and I think that’s because they are minorities as well.”

Figure 4. Safe and inclusive environments

Health Justice

Health Justice, mentioned by five participants in their photo (n=11) and discussions, was the last emerging theme identified (**Figure 5**). It includes three subthemes:

- 1) inclusive and affordable health insurance
- 2) accessible health care
- 3) food security

Participants highlighted that accessible healthcare plays a crucial role in reaching racial equity, however, there are still areas that need to be worked on. For example, one participant took a picture of birth control pills and stated that Black women are facing inequitable access to healthcare, like prenatal care, but this situation is getting better:

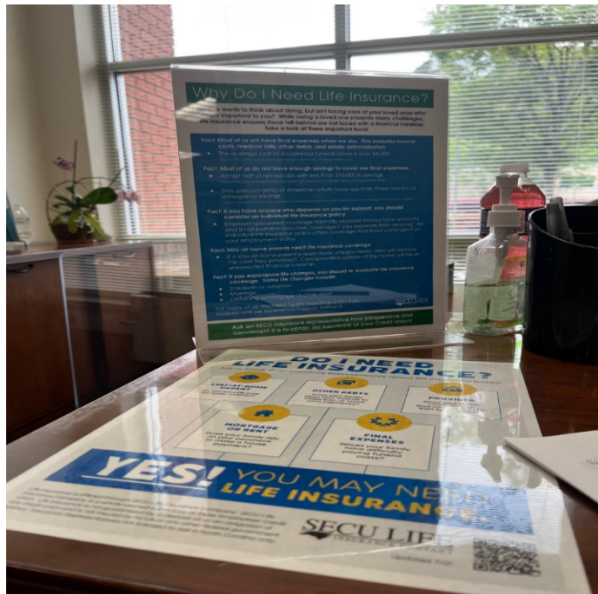
I just wanted to highlight in this message that Black women disproportionately are affected in terms of access to prenatal care, access to healthcare and in terms of, yeah, being able to go to hospitals and stuff for their prenatal care. So, I just wanted to highlight this and how birth control is being more accessible to women of color.

Participants also highlighted that affordable health insurance is just as important as access to health care when reaching racial equity. One participant provided a picture of a community health center website, highlighting the important role health insurance played in building health justice across different races by saying

One initiative that the Community Health Center works on is benefits enrollment and social program enrollment. So, they have a phone banking center that will call different patients who may be eligible for programs like Medicare and Medicaid and help them enroll if they may be having trouble with access to healthcare. And so that's another one of those things like access to healthcare is another thing like food insecurity that the disparities that we see in our population is driven by at the root historical racial inequity and inequality.

Finally, food security was the last subtheme that emerged from the overarching theme of health justice. Participants expressed their wish that people can access safe and healthy food regardless of their race or ethnicity. For instance, one participant took a picture of someone holding broccoli and explained that to him, racial equity means Black people will not be affected by food deserts:

Black people should be able to grow old. Black people having access to safe and healthy food, having options for good food, and food deserts not being disproportionately located in poor Black neighborhoods.



“What does racial equity mean to me? Black people having access to the knowledge and resources that allow them to live full and healthy lives.”



“Black people being able to grow old. Black people having access to safe and healthy food, having options for good food, and food deserts not being disproportionately located in poor Black neighborhoods.”

Figure 5. Health justice

Discussion

A better understanding of college students' perspectives about racial equity is critical to promoting racial equity among college communities and society. This study employed photovoice to capture and explore college students' perspectives, visually documenting and discussing aspects

of their thoughts and experiences regarding racial equity. The use of Photovoice provided a visual dimension to participants' understandings of racial equity. Rather than relying solely on verbal descriptions, participants used photos of their everyday environments to illustrate how they understood racial equity. These visual representations complemented their verbal accounts by providing contextual examples of how participants connected racial equity to their lived experiences and surrounding environments.

Equal Opportunities

Our study found that college students considered having equal opportunities in work, education, and success as important dimensions of racial equity. This finding is consistent with previous literature (Lindsay et al., 2024; Frankenberg, 2013; Turley, 2009). Minoritized racial and ethnic young people reported facing unfair treatment during job applications, including perceived judgment of non-White names, resulting in unequal work opportunities for the minority population (Lindsay et al., 2024). Such unequal opportunities also exist in academia; for example, higher education institutions are more commonly established in regions inhabited by White and wealthier populations, which limits the opportunities of students from minoritized racial/ethnic groups to access education (Frankenberg, 2013; Turley, 2009).

These findings suggest that future efforts should focus on creating equal opportunities and developing policies and plans to prevent discrimination and bias in both the workplace and academic settings (Felix, 2021; Lindsay et al., 2024). For example, in 2014, California policymakers passed the Student Equity Policy, requiring all community colleges to develop a "student equity plan" that identifies disparities for select groups (CalMatters Digital Democracy, 2024; Felix, 2021; Academic Senate for California Community Colleges, 2019). A case study performed at Huerta College, which focused on Latinx transfers, reported that faculty and administrators viewed the student equity plans as a new opportunity to transform the campus (Felix, 2021). Although these types of policies can transform several college campuses by providing equitable opportunities to various groups, few campuses outside of California community colleges implement such policies.

Tangible Support

This photovoice study showed that young people considered tangible support a critical step in achieving racial equity. Tangible support from community and society is a strong protective factor for mental health and overall well-being (Acoba, 2024; Alegria et al., 2010; Cohen, 2004). Despite the benefits of tangible support, minoritized racial and ethnic populations often receive lower levels of community support compared with other groups (Zhou et al., 2025). The possible reasons for the disparities include cultural norms, stigma, and systemic barriers (Robertson et al., 2023). Our qualitative findings offer unique perspectives from young people that tangible support funded by large companies and communities can promote racial equity. These insights not only reinforce prior evidence of the protective role of tangible support but also emphasize the need for strategies that address barriers to ensure equitable access across racial and ethnic groups (Acoba, 2024; Alegria et al., 2010; Cohen, 2004).

Social Connectedness

Participants identified social connectedness and supportive relationships as important aspects of racial equity. Several studies have reported that social connectedness has significantly affected the association between racial discrimination and health outcomes, especially those associated with mental health (Ransome et al., 2023). A systematic review of these studies reported that higher social connectedness had a weaker association with negative health outcomes (Ransome et al., 2023). Consistent with the broader importance of social connectedness, participants in the current study described several dimensions of social connectedness that associated with racial equity, including collaborating with others, immersing oneself in other cultures, and sharing common goals. Although our study found that experiencing new cultures promoted social connectedness and racial equity, some studies have reported that ethnic or culturally specific social connectedness, rather than generic of population level support buffered negative associations between racial discrimination and mental health outcomes (Ransome et al., 2023; Liao et al., 2016; Wei et al., 2012). These conflicting findings highlight the complexity of social connectedness and its role in promoting racial equity while emphasizing the need for future research to better understand how culturally specific social connectedness may impact racial equity and health outcomes in diverse populations.

Safe and Inclusive Environments

While a safe and inclusive environment is beneficial for an individual's physical, mental, and behavioral health (CDC, 2014), people exposed to racism and community violence tend to report lower levels of perceived safety and more negative health outcomes (e.g., depressive symptoms), particularly among racial and ethnic minorities (Wilson et al., 2023; Quam et al., 2020; Budd et al., 2021). Although previous research has identified an association between racism and perceived safety, most of the existing evidence comes from quantitative studies (Wilson et al., 2023; Budd et al., 2021). Our photovoice study provides unique, qualitative perspectives from college students to improve racial equity by enhancing community safety and inclusive environments. These insights not only support the previous findings of the association between racism and perceived safety (Wilson et al., 2023; Quam et al., 2020; Budd et al., 2021), but also underscore the importance of community-based strategies to foster safer, more inclusive environments to advance racial equity.

Health Justice

Health justice is a social movement that aims to address the structural causes of health inequities by empowering communities to secure equitable access to health care and healthy living conditions (Wiley et al., 2022). Our study demonstrated that young people believe health justice, including access to healthcare and food security, as important dimensions of racial equity and highlighted these areas as potential targets for promoting racial equity. Although from 1999 to 2018, racial and ethnic disparities in access to health care showed a significant reduction, the gap in the affordability of health care remains a serious concern (Mahajan et al., 2021). Minoritized racial and ethnic groups in the US have still been facing a lack of equitable access to high-quality healthcare, including specialty care services, primary care, and long-term care (Yearby, 2020; Cai et al., 2021; National Academies of Sciences et al., 2021). Additionally, in 2023, Black and

Hispanic households in the US were facing a disproportionately higher rate of food insecurity than White households (Rabbitt et al., 2024). These persistent disparities underscore the need for integrated approaches that address both healthcare access and food security as interconnected dimensions of racial equity. Our findings contribute qualitative insights into how young people see health justice as an essential aspect of racial equity.

Strengths and Limitations

This photovoice study provides college students with an opportunity to think in-depth about racial equity and share their perspectives with broader populations. The racially and ethnically diverse sample allowed us to dive into various viewpoints. The findings of this study provide valuable insights into future research and practice on how to promote health equity. However, the current study has several limitations. First, participant self-selection may have introduced selection bias compared with random selection by researchers. Thus, the findings may not fully represent the perspectives of the broader population of college students and should be interpreted with consideration of limited transferability. Second, the sample of 11 college students limits the representativeness of the findings. Although county-level demographic characteristics were described to provide study background, the participants should not be considered representative of the surrounding county or the broader population of college students. Third, there were relatively fewer male participants in this study, which might compromise the representativeness of findings among male college students. Fourth, participants in this study were all university students, which allows us to understand racial equity in the campus and college community; however, this might exclude young people who did not enter university. Future studies are recommended to keep exploring the racial equity topic in broader communities. Additionally, this sample included both undergraduate and graduate students, ranging from 19 to 34 years old. Differences in academic level, professional experience, and life circumstances may influence how students understand and interpret racial equity. However, due to the current sample size, we were unable to meaningfully examine differences in perspectives by educational level or age. Future studies with larger and more diverse samples should consider comparing undergraduate and graduate students to better understand how educational stage and life experience shape perceptions of racial equity.

Conclusion

This study used photovoice as a method to highlight college students' voices on racial equity and evoked their critical thinking on how to improve racial equity. The main aspects of racial equity identified include equal opportunities, tangible support, social connectedness, safe and inclusive environments, and health justice. The results provide authentic insights and actionable recommendations to inform and strengthen policies, programs, and advocacy efforts aimed at promoting racial equity on campus and beyond. Researchers, practitioners, and policymakers are encouraged to further explore this topic and address college students' concerns about racial inequity.

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Competing interests

The authors have no relevant financial or non-financial interests to disclose.

CRedit authorship contribution statements

Xifan Yang: Formal analysis, Visualization, Writing – original draft, Writing – review & editing.

Morgan Payne: Formal analysis, Writing – original draft, Writing – review & editing.

Yingwei Yang: Conceptualization, Methodology, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Supervision, Project administration, Funding acquisition.

Charmaine DM Royal: Conceptualization, Methodology, Validation, Resources, Writing – review & editing, Supervision, Funding acquisition.

Ethical approval

Data collection for this photovoice study was approved by the Institutional Review Board (IRB) at Duke University (IRB #2023-0037), where the corresponding author (YY) conducted the research as a postdoctoral associate under the supervision of the senior author (CR). After the corresponding author transitioned to The University of Alabama (UA) as an assistant professor, deidentified data were transferred and analyzed at UA. The UA IRB reviewed the data analysis plan and determined that it qualified for exemption from further review (IRB #25-01-8315).

Consent to participate

Informed consent was obtained from all individual participants included in the study.

Consent to publish

The authors affirm that participants provided informed consent for publication of the images in Figures 1-5.

Artificial Intelligence Statement

The authors have not used any AI tool or technology to prepare this manuscript.

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