BIAS Training to Increase Awareness of Concepts Relative to Racial Implicit Bias and

Attitude in Post-Secondary Faculty and Staff:

Implications for Creating Inclusive Educational Spaces

by

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ABSTRACT

Inclusive educational spaces are necessary for all post-secondary students to thrive and enjoy their college experience. Faculty and staff may unintentionally create non-inclusive educational spaces, however, with behaviors relative to race/racism and microaggressions driven by racial implicit bias. Via this mixed-methods action research study I examined ASU faculty and staff attitudes relative to (1) race/racism, (2) implicit bias, and (3) microaggressions, all of which influence perceptions of and intentions toward (4) creating inclusive educational spaces. Specifically, five ASU faculty and staff completed a Canvas based online training that I developed (i.e., BIAS training) during which they were provided information in separate modules about systemic and color-blind racism, implicit bias, microaggressions, and two components of inclusive educational spaces, culturally sustaining pedagogical and race-conscious educational practices. Prior to and at the completion of the training, participants completed a survey instrument that I designed to measure participant attitudes relative to these four concepts. At the completion of each BIAS module with which they engaged, they responded to reflective questions which essentially prompted participants to think about what they learned per module and how it applied to their educational practices. After completion of the BIAS training and an identical post-survey that I used to measure participant's changes in attitudes and perceptions over time, I invited participants to also share their thoughts in an interview. Both quantitative and qualitative data suggested that participant's attitudes positively shifted relative to each of the abovementioned four concepts; knowledge acquisition occurred as intended. In addition, faculty and staff identified specific practices they could, or intended to incorporate to facilitate more

inclusive educational spaces within their spheres of influence. Overall, my BIAS training

seemed to have had a positive impact on the ASU faculty and staff who participated in

this study. A few participants even discussed practices they were able to implement

immediately, as well as positive student reactions, while anecdotal, that they received in

response. Future iterations of my BIAS training will include additional information that

will help to further clarify the four concepts of primary interest herein, particularly in

support of creating more inclusive practices inspired by culturally sustaining pedagogy

and race-conscious educational practices. Additionally, I will add a mindfulness

component as another opportunity to increase awareness of faculty and staff attitudes and

behaviors that may also impact their ability to create more inclusive educational spaces.

DEDICATION

To all of the Arizona State University football student-athletes who taught me as much as I taught them. Without their trust, honesty, openness and willingness to share their lives and lived experiences with me, none of this work would have been possible. In my almost 20 years of work with the ASU football program, I met so many incredible young men whose inspiration led me to this work.

Even though this is dedicated to all of the ASU football student-athletes with whom I had the honor of working, I would like to name those who had a particularly profound impact on my growth as a white woman navigating the dynamics of our racialized culture and society: Tyrice Thompson (Rest in Love – Truly), Cornell Canidate, Rudy Burgess, Antone Saulsberry, Brandyn Magee, Shelly Lyons, Vontaze Burfict, Angelo Magee, Justin Taplin, Daryl Lightfoot, Chris Young, Clint Floyd, Delvon Flowers, Nijrell Eason, Keegan Herring, Omar Bolden, Ryan McFoy, and Randy Hill. Love you all!

I also dedicate this to my dad – I so wish he could be here to share this experience with me. He was my biggest overall supporter in everything I did, but particularly my educational achievements. I know how proud he would be of me. He was the most intelligent, well-read, compassionate, kind-hearted, funny, and loving person, and I constantly strive to be like him. Miss you dad!

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together and supported each other through all of life's ups and downs. I am so grateful for

Jann and Liz's friendship; I could not imagine navigating this or any other life journey

without them.

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"Do the best you can until you know better. Then when you know better, do better."

Maya Angelou (Neruda, 2019)

Doing the best one can is admirable, but when dealing with people from diverse backgrounds with diverse perspectives, knowing better and doing better is essential. Awareness, defined as the ability to identify, process, and store information about oneself (Morin, 2011); reflection, defined as "the mental process of trying to structure or restructure an experience, a problem, or existing knowledge or insights" (Korthagan, 2001, p.58); and intention, defined as "an act or instance of determining mentally upon some action or result" (Dictionary.com, 2020); are critical concepts relative to knowing better and doing better. We cannot know better and do better, in other words, unless we are aware of our thoughts and actions, reflect upon the consequences of these thoughts and actions, and intentionally act in a manner to do better. This is particularly true with interactions with individuals who are from or whom we perceive to come from different backgrounds or have different characteristics (e.g., skin color, nationality, gender identification) than we do. Even though Angelou's quote is fairly new to me, circumstances throughout my life have made these words particularly relevant to what I currently do and what I hope to accomplish with my innovation, as well as research on my innovation during this study.

When I was in third grade, my parents received a call from my elementary school principal (the only time that ever happened) because I spit a mouthful of water at Randy E. I am not a person prone to such actions, but he was loudly (and offensively) announcing that my dad was a Nazi and should return to Germany. My dad was in fact from Germany, was recruited into the German army at a very young age and fought for

Germany in World War II, but he also defected from the army after the war ended. He was in hiding for almost a year, after which he lived in fear until he and his parents "escaped" and were able to come to the United States. My father was an extremely intelligent, kind-hearted, non-judgmental, and accepting person, and as a child I could not understand why Randy E could say such hurtful things about a person he never met; basing his words solely on my dad's nationality. This incident set the tone for my perceptions of and feelings for people who were different than I, throughout the rest of my life.

Growing up in Michigan and experiencing the race riots of the 1960's also helped set the tone for my perceptions and feelings for people who had physical characteristics different from me, namely in terms of skin color. That was also a tumultuous time, especially as a young person who could not understand why people did not like each other due to the color of their skin. These bewilderments were reinforced when, at age 19 I moved to Georgia to model and was paired with a Black roommate. We were the only Black/white roommates in the housing complex for the agency for which we modeled. I will admit that I was uncomfortable at first, but after a few days realized that we were very much alike, even though society taught me that we were very much different. I, again, questioned why we were so often partitioned based solely on our skin color. At that point I was very aware of racial biases, stereotypes, and discrimination, but I did not fully understand the scope of consequences for Black people due to these diminishments.

Realization of the ramifications of biases, stereotypes, and discrimination for Black people happened during my almost twenty-year career with the Arizona State University (ASU) athletics department. I was a Learning Specialist and primarily worked

with the most "at-promise" football student-athletes, most of whom were Black. I worked

alongside the coaching staff to recruit these young men, in addition to working closely

with them during their entire academic careers at ASU. During this time, I became very

well acquainted with the young men, as well as their families. As a middle-aged white

woman, there were obvious differences between the football student-athletes and myself,

but as we learned more about each other and developed trusting relationships, we had

rich discussions about race, discrimination, their self-views, their views of whites, and

what they experienced daily given the color of their skin. I learned so much about their

life experiences as young Black men that helped to more fully inform what I experienced

at a young age – people wrongfully and harshly judging others based on certain

characteristics (e.g., skin color, nationality, religion, gender identity, sexual orientation)

without knowing anything about those whom they judged; and behaviors that reflected

these judgements.

　　　　While it was highly unfortunate that some of the negative life experiences these

young men shared with me occurred in their ASU classrooms, or with interactions with

ASU faculty, staff, and students, I benefited from learning and becoming more

empathetic about these young men's lived realities. Perhaps unsurprisingly, I still deeply

care for all of the wonderful young Black men with whom I worked throughout my

career and greatly appreciate the life lessons I learned through my work with them.

Purpose of this Action Research Study

> *"The bad news from science is that even well-intentioned individuals have*
> *biases that can impact their perceptions and behavior - producing*
> *discriminatory behavior. The good news from science is that individuals,*
> *once educated on the science of implicit bias, can impact those biases."*

Correspondingly, the individuals mentioned above are my inspiration for this action research study and the purpose of the study relates to the Fridell quote; biases and subsequent perceptions and behaviors (race/racism and microaggressions) impacted through increased knowledge and awareness. In this action research study, I examined implicit bias, defined as "the attitudes or stereotypes that affect our understanding, actions and decisions in an unconscious manner" (Staats, 2016. p. 29); in addition to race/racism and microaggressions and their potential impact on creating inclusive educational spaces within ASU as a model, post-secondary, educational institution and environment. My research on my innovation, hereafter referred to as my BIAS training – with Beliefs, defined as ideas that are accepted or considered true (Merriam-Webster, n.d.-b), Intentions, defined as plans to act in certain ways (Merriam-Webster, n.d.-c), Actions, defined as the accomplishments of certain behaviors (Merriam-Webster, n.d.-a), and Sustenance, defined as prolonged behavior change (Merriam-Webster, n.d.-d)), during which I provided a space for faculty and staff participants to identify, reflect upon, and work through their own implicit biases and attitudes relative to race/racism, microaggression and creating inclusive educational spaces (see also forthcoming) – resulted in findings that promote better understanding and awareness of race/racism and microaggressions, better understanding of how we acquire our own implicit biases and their impact and how we can, with more intentional and thoughtful behavior, reframe our biases for the betterment of ourselves, not to mention others given our interactions with others who may be different from us in multitudes of ways, especially as it relates to creating inclusive educational spaces at ASU. The research questions that I answered at

the completion of this action research study are: RQ1: To what extent did increasing awareness of race/racism through BIAS training change understanding of race/racism relative to Black students within ASU staff and faculty? RQ2: To what extent did increasing awareness of implicit bias through BIAS training change understanding of how bias influences a) attitudes towards and b) behaviors related to Black students within ASU staff and faculty? RQ3: To what extent did increasing awareness of microaggressions through BIAS training change ability to identify microaggressions and their impact on Black students within ASU staff and faculty? RQ4: To what extent did increasing participants' awareness of race/racism, implicit bias, and microaggressions through BIAS training impact ASU faculty and staff understanding of what constitutes an inclusive educational space at ASU? Even though this study is centered on Black people, I wish to acknowledge that all of this information and training is relevant to any population that is marginalized or oppressed in anyway; racism, bias and microaggressions are not limited to Blacks, however, Blacks were my priority for this research. In addition, inclusive educational spaces need to exist for all students to foster their engagement, sense of belonging and academic/life success.

As Maya Angelou said, "once we know better we can do better." That is my priority, purpose, and goal herein.

LITERATURE REVIEW

"One may understand the cosmos, but never the ego;
the self is more distant than any star."

Chesterton (n.d.)

As Chesterton's quote implies, understanding the self can be elusive. One of the primary goals of this action research study, as such, was to gain a better understanding of oneself relative to one's implicit biases, in addition to the attitudes and resulting behaviors that can arise from implicit biases and relate to race/racism, microaggressions, and the impact of these on creating inclusive educational spaces. Accordingly, the foundation for this study came from one of the two primary constructs built into the Harvard Implicit Association Test (IAT). This construct, attitude, is directly relevant to this action research study; hence, I will examine attitudes toward members of the ASU Black community, specifically relating to race/racism, microaggressions and creating inclusive educational spaces. I describe the construct of attitude in further detail below, as a key component of implicit bias. Implicit bias (discussed further in the next section) arose from implicit social cognition (Greenwald & Banaji, 1995) and even though it consists of an ever-increasing body of research, there are many theoretical questions relative to implicit social cognition that remain unanswered, which is one of the primary reasons for the description of the construct attitude. I use the construct attitude, accordingly, to ground this action research study, also within the literature review, in addition to inclusion of a discussion of implicit bias, a foundation of our attitudes. Implicit bias is also considered one of the four concepts which comprise my BIAS training; the other three are race/racism, microaggressions, and inclusive educational spaces, and these three I describe within the conceptual framework section of this paper.

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Implicit Association Test (IAT)

Since its development in 1995, and its introduction into the scientific literature in 1998, the IAT has been used to indirectly measure the strength of one association over another (Greenwald et al, 2002) or, rather, an automatic preference for one (racial, gendered, religious, cultural) group over another. As such, the IAT is a response latency indicator that can be used to pair an attitude object, defined as a concept from which one can form an attitude (Fishbein, 1963), whereby a particular group of people might be matched with an evaluative dimension (Banaji, 2001), whether positive or negative or good or bad. For example, the Race IAT, which is one of the implicit association assessments offered through the Harvard Implicit Association Project (Project Implicit, 2011), is used to measure a strong, moderate, slight, or no automatic preference for European Americans (heretofore and hereafter referred to as whites, for purposes of consistency), over African Americans (heretofore and hereafter referred to as Blacks, for purposes of consistency), and vice versa, where each attitude object is measured relative to its related attitude object and evaluated, in this case with good and bad attributes (Nosek et al., 2007). Exemplars, such as *typical* white and Black faces, are used as examples for the categories in each of the IAT assessments to represent their respective groups (attitude objects), while words that are generally associated with good and bad help to determine their evaluative components. Words such as fabulous, adore, and joyous are associated with good categories and words such as horrific, abuse, and hatred are associated with bad categories (see forthcoming a more detailed explanation of the IAT). The construct of attitude, a key component to the IAT described next, is also defined relative to the speed with which attitude objects are associated with the

evaluative measurement dimension. The IAT is a component of my BIAS training, leading the way for further examination of implicit biases, racial attitudes, and resulting behaviors, in the form of microaggressions, that may result from said biases and attitudes.

Attitude

The construct of attitude is one of the first constructs described in social psychology (Bogardus, 1925; Thurstone, 1928). As explained by Allport (1935), attitude became a popular construct to study as it applies to individuals and groups in terms of explaining phenomena that cover multiple aspects of psychology, and that are potentially influenced by environmental and hereditary factors. Attitude, as such, is defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Gilbert et al., 1998, p. 269), or "the association of a social object or social group concept with a valence attribute concept" (Greenwald et al., 2002, p. 5). In essence, an attitude represents a binary valence (e.g., good or bad, positive or negative) that is associated with a particular concept; that concept for purposes of this study is skin color and ethnic/cultural background.

Relationship Between Memory, Attitude and Implicit Attitude

Allport (1954), furthermore, described attitude as synonymous to prejudice, and stereotype synonymous with belief, reporting they are both grounded in aspects of memory such as perception, categorization, and remembering. Even though Allport (1954) described attitude and prejudice as synonymous, the creators of the IAT define prejudice as an "attitude that encompasses dislike, disrespect, and even hatred," none of which is meant to be captured by the attitude measured with the IAT (Banaji & Greenwald, 2016, p. 46). Other researchers corroborated Allport's (1954) early

description of the constructs of attitude and memory as inter-related (Banaji, 2001; Schacter, 1987), just as the philosopher Maine de Biran described the connection between memory and unconscious habits, and their influence on automatic performance without memory awareness (Hallie, 2006; Schendan, 2012). These connections provide the framework whereby memory, attitude, and unconscious habits are, again, inter-related.

This early work relative to the connection between attitude and memory led to researchers examining the processes relative to both the conscious and unconscious components of attitudes (Cacioppo, 1982; Chaiken & Eagle, 1983), which in turn led to Greenwald and Banaji's (1995) initial investigations into implicit social cognition and the development of the IAT to measure implicit attitudes. Greenwald and Banaji (1995), accordingly, defined an implicit attitude as "introspectively unidentified (or inaccurately identified) traces of past experience that mediate attributions of qualities to members of a social category" (p. 8). Additionally, Eagly and Chaiken (1993) reported that beliefs support the formation of attitudes. Further research supports the role of beliefs in predicting attitudes and their key role in the association between an attitude and its attributes (Banaji & Heiphetz, 2010). While it was previously mentioned that Allport (1954) described stereotypes as synonymous with beliefs, authors of this later research reveal the role of beliefs in attitude formation, leading one to believe that the constructs of attitude and stereotype are also intertwined (the construct of stereotype is not evaluated in this action research study).

In addition to first describing attitude, Thurstone (1928) was the first to determine that attitudes could be measured. At the time this was a revolutionary idea; however, soon after he made this determination, scientific studies of racial attitudes were conducted by

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sociologist Bogardus (1925) who used the early measurement tool of questions and self-reported answers regarding attitudes that individuals may hold. In the 1960s, researchers determined that these self-reports of attitude were fairly accurate as it was widely thought from the 1930's to the 1960's that attitude involved only conscious operation (Greenwald & Banaji, 1995); however, other researchers simultaneously began questioning the validity of self-reported attitude as factors, such as impression-management (i.e., defined as the attempt by individuals to control the impressions others form of them; Leary & Kowalski, 1990), could influence these self-reports. In short, impression-management was not the sole concern. Thereafter, Nosek (2007) explained that it is also important to measure what is unknown to a particular individual as this unknown information could itself be impactful to an individual's thoughts and actions and may in fact be different than known (e.g., explicit) information. This difference between what is specifically known and what is unknown highlights the importance of implicit attitudes as automatically and unconsciously initiated (Gawronski & Payne, 2010), which also led to the development of assessments to measure these implicit attitudes.

Measurement of Implicit Attitudes

Currently there are several means of measuring implicit attitudes, with two of the most frequently used being evaluative priming and the IAT (Banaji, 2001; Blair & Banaji, 1996; Glaser et al., 1999). In evaluative priming, a prime (i.e., the attitude object, such as an insect, flower, etc.) is followed by a target (i.e., an evaluative word that describes attributes such as pretty, joyful, scary, ugly), and the amount of time it takes to judge the prime, as per the target, indicates the evaluative association between the prime and the target itself (Banaji, 2001; Koppehele-Gossel et al., 2020). Evaluative priming

assessment is somewhat similar to the IAT as both measure time and an evaluative association to determine a measure of implicit attitude (Blair & Banaji, 1996; Glaser et al., 1999). However, the IAT, a response latency measure, also measures the strength of the association between an attitude object represented as a concept (e.g., a mental representation of a group of people) and an evaluation of that concept (e.g., good or bad). The amount of time taken to make that association is what determines the strength of that association and determines the level of implicit attitude. This aspect of the IAT demonstrates its value in assessing implicit attitudes.

Attitude Formation

Attitudes, such as those measured using the IAT, can also reflect a learned cultural or social group membership preference; an indication that attitudes are grounded in individuals' perceptions and experiences with their learned cultural or social preferences (Banaji, 2001; Homer & Kahle, 1988; Milfont et al., 2010; Stern, 2000). Attitudes reflect cultural variation and are indicative of the individuals who are embedded in that culture; they also vary by individual (Banaji et al., 2004; Boer & Fischer, 2013). In addition to cultural influence, attitudes and especially social attitudes can also be developed through various means including interpersonal experiences with family, friends, and other close personal connections, as well as influences from media sources such as television, Facebook, and other social media platforms (Banaji & Heiphetz, 2010). These are examples of environmental influences on attitude. Allport (1935) also described a possible influence of heredity, yet more recent research indicates that heredity may play a role in the development, versus inheritance of attitudes. Further research is still needed, though, to fully develop this proposition as measuring the impact

of heredity is very challenging and may also be related to other cognitive factors (e.g., memory, reasoning; see also Jost, 2006). As it is with many other nature versus nurture debates, it is difficult to separate the interplay between the two (Olson et al., 2001).

Likewise, researchers report that young children demonstrate preference for individuals who have physical attributes similar to theirs, which may also influence attitude development (Bigler et al., 2001) and is likely related to a strong identification with one's own group. Not surprisingly, there is a strong association between the attitudes that parents hold and those of their children. This is particularly noteworthy when attitudes are directed toward racially minoritized people (Sinclair et al., 2005; Tenebaum & Leaper, 2002). This research reveals a combination of the social and environmental impact on attitude formation. While I will not directly examine attitude formation in this action research study, the origination of attitudes will be addressed within the training.

Attitude and Behavior

In addition to research relative to attitude formation and measurement, Fazio (1990) was interested in studying any possible connection between attitude and behavior. Earlier in this exploration, though, Nisbett and Wilson (1977) reported that human beings may not know and, therefore, may be unable to report the reasons for their behaviors. Fazio (1990) continued his idea with a discussion of the differences between spontaneous and deliberative processing, as per the influences of attitudes on behavior. Spontaneous processing occurs frequently and requires "effortless functioning" (Fazio, 1990, p. 103), as this process is based on information stored within an individual's memory from prior similar circumstances. Fazio (1990) described deliberative processing as a process that

"considers specific attributes of the attitude object" and the implications of behavior based on those attributes" (p. 91), as well as a process that develops from an individual's "motivation and opportunity" (p. 103) in order to facilitate an intentional behavior. Deliberative processing happens much less frequently than spontaneous processing and is characterized by "cognitive work" (p. 88), which includes analyzing all available information and making decisions based on the potential positive and negative outcomes of any decision. Based on formation previously discussed, then, implicit attitudes appear to be more related to spontaneous processing which has implications for behaviors resulting from implicit attitudes. Even though I am not specifically studying behavior, I will challenge participants in this action research study to examine the relationships between their implicit attitudes and behaviors.

Attitude Malleability

As per the quote by Freidan (2017) written into the description of this action research study (p. 3), perceptions and behaviors can be modified with increased knowledge and awareness; the mechanism for this modification in perceptions and behaviors may be the potential malleability in attitudes, especially given those that are implicit. Even some of the earliest researchers examining implicit bias, including Banaji et al (2004), were not convinced that implicit attitudes were malleable due to the unconscious nature of their awareness and control; however, evidence since the 1990's demonstrates that malleability is possible via three mechanisms: contextual variables, motivational states, and cognitive factors (Blair, 2002; Dasgupta & Nelson, 2009; Gawronski & Bodenhausen, 2006).

These three mechanisms – context, motivation, and cognition – can function separately or together to facilitate attitude malleability (i.e., the ease or capability by which an attitude may be changed or influenced). An example of cognitive and contextual factors working together is via "associative process," a term used by Gawronski and Bodenhausen (2006, p. 693) that describes the formation of implicit attitudes in conjunction with a means by which they may change, primarily through more focused cognitive attention to the attitude and awareness of contextual factors that lead to attitude formation (i.e., paying attention to one's attitude and also attending to what environmental, social etc. factors led to that attitude). Following the associative process is the "propositional process" (Gawronski & Bodenhausen, 2006, p. 694), whereby feelings are consciously examined within the context of forming an evaluative judgment relative to an attitude object, which is another process whereby cognitive factors (e.g., examining feelings) and contextual factors combine to facilitate attitude malleability. Additionally, Dasgupta & Greenwald (2001) report that attitude toward a group or a member of a group depends on contextual factors one encounters relative to one's evaluation of that group which is, again, a combination of context specific factors and cognition (e.g., evaluation).

Motivation, the third mechanism for attitude malleability, is described by Blair (2002) as the idea that an individual's motivation has the potential to override any automatic processes that could influence an individual's behavior through either intentional recognition of external or internal cues, or through an individual's perception of any current situation. Motivation linked with cognitive control (defined as the ability to pursue goal-directed behavior; Ajzen & Madden, 1986) is, thus, opposed to allowing "habitual or immediately compelling behaviors" to direct actions (Braem & Egner, 2018,

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p. 4). Dasgupta & Nelson (2009) reports that these goal-directed motivational processes may play a key role in modifying behaviors due to implicit attitudes by allowing an individual to change or inhibit automatic responses via intentional utilization of goals or plans. Gawronski and Bodenhausen (2006) subsequently argued that if the attitude formation process was solely unconscious (i.e., without cognition or motivation), attitude malleability would not occur.

In conclusion, attitude as one of the primary constructs of the IAT, relates to implicit bias (i.e., as measured by the IAT); therefore, understanding formation and malleability of attitudes is important to understanding implicit bias. Researchers have and continue to evolve and deepen understandings of the precise nature of an implicit attitude, how to best measure it, how it influences behavior, and the malleability of attitudes to facilitate changes in behavior. This understanding of implicit attitudes, measurement of attitudes, and potential malleability of attitudes with ensuing behavior change is, subsequently, the focus of this action research study. As such, I examined the measurement and malleability of attitudes in this study.

Implicit Bias

The term *implicit* gained prominence with the work of Graf & Schacter (1987) who used the term to describe memory, as revealed through indirect measures. Additional work on this area of memory further enhanced the use of the term implicit (Jacoby et al., 1993; Jacoby & Dallas, 1981; Schacter, 1987). As mentioned previously, researchers introduced the concept of implicit social cognition (Greenwald & Banaji, 1995; Greenwald & Lai, 2019) in an attempt to provide an explanation for the impact of unremembered past experiences on present behaviors. Earlier work by Greenwald and

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Banaji (1995) was a social/cognitive revolution in psychology, especially as it pertained to implicit social cognition as their work *blended* the two previously separate constructs of affect and cognition. Prior to the concept of implicit social cognition, researchers were convinced there were separate cognitive and affective pathways resulting in implicit attitudes and behaviors (Madva & Brownstein, 2018). In the 1990's Greenwald and his doctoral students (one of whom was Banaji) began their first experiments examining the idea of implicit attitudes, which they defined as "introspectively unidentified (or inaccurately identified) traces of past experiences that mediate favorable or unfavorable feeling, thought or action toward social objects" (p. 8). Greenwald and Banaji (1995) then included the concept of stereotypes in their research and defined it as "a socially shared set of beliefs about traits that are characteristic of members of a social category" (p. 14). As a result of this work, in the early 2000's the terms implicit and implicit bias were expanded to include the social constructs of attitude, stereotypes, identity and self-esteem, all of which were measured indirectly, and are automatic or unconscious (Fazio & Olson, 2003). The social construct of attitude was discussed earlier within this literature review relative to the Implicit Association Test (IAT), for this action research study.

Recently, though, there has been much discussion in the literature relative to the use of terms such as unconscious and automatic as synonyms for implicit. Greenwald and Banaji (2017) also discussed the implications of using unconscious and conscious to explain implicit and explicit, respectively, and proposed the use of indirect and direct, instead, as based on Fazio & Olson (2003). They argued that these terms are more appropriate, as both implicit memory and implicit social cognition do not fit within the

theoretical conceptualization of conscious and unconscious. This is an interesting area of discussion, given although the use of implicit may not fit within the theoretical conceptualization of unconscious, it is the most recognized way to describe this form of bias. Thus, the term implicit is appropriate for utilization in this paper.

Additionally, De Houwer (2019) suggested reframing the definition of implicit bias in a behavioral manner instead of solely as a "hidden force" (p. 835) within us that potentially drives our actions. De Houwer (2019) posited that the framing of implicit biases as latent mental constructs that influence one's inappropriate actions may "threaten" (p. 835) the beliefs we hold about ourselves of who we are and who we wish to be, which may provoke a defensive reaction in individuals when learning about their implicit biases. The behavioral idea explained by De Houwer (2019), as such, states that social cues may elicit automatic negative behaviors and these behaviors may be more malleable, which could lead individuals to believe they have more control over the impact of implicit biases than the idea that the behaviors are rooted in unconscious thought patterns, over which it may be very difficult to realize control.

Regardless of whether implicit biases are framed as latent mental constructs or a behavioral phenomenon, though, they are pervasive, and we all have and hold them, for better and for worse (Nosek et al., 2007). Implicit biases are the result of past experiences and structural realities stored in the brain and automatically and unconsciously activated when presented with a particular stimulus (i.e. a person belonging to a particular social group); (Greenwald & Banaji, 1995). These experiences are not necessarily ones that we consciously remember or can consciously activate, whereas implicit biases are activated without our intention or control (Greenwald & Krieger, 2006; Kang et al., 2012). An

example of this process occurs when reading words with certain letters missing, whereby our brains are able to fill in the letters because we have prior experience with the words, and our brains have stored the words, so unconsciously our brains fill in the missing letters when reading the words.

Likewise, motivation to understand implicit biases and resulting attitudes may be impeded by a lack of awareness of our biases, or of a reluctance to report social preferences held by individuals (Nosek et al., 2007). Likewise, and according to (Greenwald & Banaji, 1995; Nosek et al., 2007), people may not wish to report biases because they may not be comfortable with the fact that they hold certain biases, or they may not be able to report them under conditions where they are not aware that their biases were being assessed (Fazio & Olson, 2003).

As our own implicit biases may impact our understandings and decisions in highly subconscious manners, then, we often subconsciously act counter to how we believe ourselves to be (Motzkus et al., 2019). For example, we may consciously realize that men and women in the workplace are equal and should be treated equally; however, if we have an implicit bias that favors men over women in the workplace, we may subconsciously make decisions that favor men (e.g., more promotions, differential merit increases, different hiring and retention practices). The same is true for racial bias. While we may believe ourselves to view all people as equal, or rather view ourselves as not racist, some of our thoughts and actions may run counter to the beliefs we truly believe we hold. For example, I as a white woman may cross the street or move my purse to the other side of my body if approached by a Black man while walking on a sidewalk. In the classroom, I may call on white students more or hold them to a higher standard than I do

Black students. In either of these instances, and likely more, my behaviors may be subconscious; I enact these behaviors without thinking about my actual behaviors or the fact that these behaviors may reflect my bias and any discrimination or stereotypes that result from my bias.

Implicit bias clearly has a negative impact on students, especially in post-secondary environments. Jacoby-Senghor et al. (2016), for example, revealed that instructor implicit bias affects students' lessons and performance in spite of a lack of overt prejudice on behalf of instructors. Additionally, Jacoby-Senghor et al. (2016) reported that instructor explicit bias explains or predicts lower learner test performance and Black student anxiety in the classroom. Related, Boysen (2012) reported that 63% of undergraduate students noticed "subtle bias" (p. 122) during one year, and 44% of undergraduate students reported noticing obvious bias over the same period of time, both of which resulted in students viewing their campus climates negatively. Boysen (2012) concluded that these forms of observable bias could predict symptoms of psychological stress and physical/psychological dysfunction, and might also negatively impact academic performance.

As, via my study, I focus on the impact of concepts such as bias and the relationship of that concept to perceptions of and intentions toward creating inclusive educational spaces, it is important to consider the impact of biases on Black students' performance and emotional/psychological well-being. It is also important to consider the impact of potential bias outcome behaviors, specifically race/racism and microaggressions, and the impact of these three concepts on creating inclusive educational spaces, all of which I describe in more detail next.

CONCEPTUAL FRAMEWORK

"*My humanity is bound up in yours, for we can only be human together*"

(Desmond Tutu et al., 1984)

To more fully appreciate the humanity and lived experiences of Black individuals and the impact of racial implicit biases and attitudes, we need to fully understand concepts relative to the outcome behaviors of our biases and attitudes. Implicit bias is the primary concept in which this research is grounded; however, racism (including color-blind racism[1], defined as a dominant racial ideology in post-civil rights America whereby whites "explain, rationalize and defend their racial interests"; Bonilla-Silva & Dietrich, 2011) and microaggressions, as manifestations of biases and attitudes, also warrant discussion and understanding. Additionally, the impact of implicit biases, racism, and microaggressions in post-secondary educational environments, especially as they relate to creating inclusive educational spaces, needs to be addressed.

Racism

The two forms of racism central to this study, and therefore included in this conceptual framework, are systemic racism and color-blind racism[1]. Harrell (2000) offers a definition of systemic racism as:

> A system of dominance, power, and privilege based on racial group designations: rooted in the historical oppression of a group defined or perceived by dominant-group members as inferior, deviant, or undesirable; and occurring in circumstances where members of the dominant group create or accept their societal privilege by maintaining structures, ideology, values, and behavior that have the intent or effect of leaving nondominant-group members relatively excluded from power, esteem, status, and/or equal access to societal resources. (p. 43)

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[1] I use the term color-blind racism throughout my study; however, I wish to acknowledge a more appropriate term for the same idea, color-evasive racism (Annamma et al, 2017), which removes ableist language.

While other definitions of systemic racism also include "structures, policies, practices and norms" (Jones, 2002, p. 8), Harrell's (2000) definition is more comprehensive in several ways. In addition to including an inclusive definition of systemic racism, it highlights differentials in power and privilege and the consequences of systemic racism. Relative to bias, it is important to distinguish and understand both systemic and individual racism, as both are manifestations of bias.

Bonilla-Silva (2021) extends the discussion of systemic racism and frames it both in terms of the structures that support it and the practices that perpetuate it. According to Bonilla-Silva (2021), current systemic racism is grounded in white individuals seemingly normal and non-racial (defined as behavior that would not be called out as typical overt racist behavior) collective actions, behaviors, and habits that result in societal structures supporting systemic racism. These behaviors and actions include choosing to live in all white neighborhoods, sending children to primarily all-white schools, surrounding oneself with white friends and acquaintances, socializing at work or school with white colleagues and, in general living in racial isolation. This structure is also comprised of a mainly all white network of individuals, also as per their conscious or subconscious perpetuation of the above actions, behaviors, and habits which helps to build the system described in systemic racism.

In addition, the behaviors and attitudes (prejudice and discrimination) associated with systemic racism include different access to goods, services,

opportunities, and power (Jones, 2000). This differential access is currently more covert, which allows the space for individuals to not acknowledge systemic racism. Indeed, laws have been passed to reduce overt systemic racism (e.g., Affirmative Action) which can lead people to believe it no longer exists; however, it is still evident in housing discrimination, social segregation, police profiling, and access to healthcare, to name a few (Sommers & Norton, 2006). Notwithstanding, individual and systemic racism are detrimental to the lived experiences of Black individuals.

Due to the above described nature of systemic racism, individual racism is much easier for people to identify and isolate than is systemic racism. People understand when they feel prejudice and demonstrate discrimination (two behaviors related to individual racism); however, they may not always acknowledge their prejudice or discriminatory behaviors. They may also have a more difficult time recognizing prejudice and discrimination as systemic, an element of what Bonilla-Silva (2015) described as post-racial (p.1366) America, which is an America where, because we elected a Black President, we believe racism no longer exists. However, that ignores the reality of systemic racism. Additionally, when individuals think of racism solely as an individual act, they can relate it to a decline in prejudice and discrimination, especially if they feel they do not demonstrate or observe prejudicial or discriminatory behaviors. All of this can result in individuals dismissing the presence of racism altogether (Bonilla-Silva & Baiocchi, 2001); when individuals believe they are not racist,

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they tend to believe that racism does not exist in either an individual or systemic form.

Individuals who believe they are not racist may also exhibit color-blind racism, which also arises from the belief that racism no longer exists (i.e., it is only a part of a history; see, for example, Leonardo, 2004) and is characterized by individuals who say *I don't see color*, or *I don't have a racist bone in my body*, or *Race does not matter*, all of which discount the lived experiences of people who are the subjects of racism, often on a daily basis (Bonilla-Silva, 2015; Bonilla-Silva & Forman, 2016). Bonilla-Silva (2015) describes this as "new racism" (p. 1361), also as a facet of "post-racial" (p. 1366) America. Even more profound is that color-blind racism allows denial of any negative experiences relative to race and racism, which is an ideology that has been adopted by individuals in the dominant culture throughout the United States as part of its post-civil rights era (Bonilla-Silva & Forman, 2016; Leonardo, 2004).

Indeed, Bonilla-Silva (2018) describes four frames within the color-blind racism ideology: abstract liberalism, naturalization, cultural racism, and minimization; these frames situate how whites interpret, justify, and ignore racial inequality. Abstract liberalism uses the concept of liberalism to frame race-related activities in a way that makes whites appear less racist, and also rationalize racially unfair situations. An example provided by Bonilla-Silva (2018) describes equal opportunity, once opposed by whites, now used by whites to oppose Affirmative Action on the grounds that it allows for preferential treatment of certain groups, but it also ignores that these groups have been underrepresented in

all of the areas that are described in Affirmative Action. Naturalization explains

away racial phenomenon as naturally occurring situations. Examples of this

include whites wanting to live in all white neighborhoods or dating/marrying

other whites because it is natural to want to be around people who are like them.

Cultural racism explains standings of groups of people based on certain cultural

characteristics that have been attached (possibly wrongly) to that group, such as

single parent Black households, lack of motivation or decreased work ethic.

Finally, minimization, is the idea that discrimination no longer exists due to civil

rights legislation, evidenced by whites countering claims of discrimination or

racism as excuses for lack of opportunity or advancement.

As reported in the literature, color-blind racism may yield negative effects in post-

secondary educational environments. Holoien & Shelton (2012), for example, reported

that white students were primed with either a color-blind message (we are all the same)

or a multicultural message (the identity of different groups was validated) prior to set

conversations with Black students. After conversations concluded, Black students were

administered a Stroop test which measured their cognitive functioning (the test measures

a delay in reaction time between congruent (the word red printed in red) and incongruent

stimuli (the word green printed in red) whereby subjects need to name the color of the

word, not the actual word). Results revealed that when the white students were primed

with the color-blind message, they demonstrated a higher degree of prejudice. In

addition, the Black students on the receiving ends of the set conversations demonstrated

lower levels of cognitive functioning. The inverse was true when white students were

primed with the multicultural stance or control message. Subsequently, Holoien &

Shelton (2012) concluded that our ideologies do, indeed, influence our behaviors and the behaviors of individuals with whom we interact. Ryan et al. (2007) also reported that students who endorse a multicultural ideology demonstrate improved intergroup relations versus those who endorsed a color-blind ideology. Similarly, Vorauer et al. (2009) reported that a multicultural ideology resulted in more positive remarks directed toward student members of a minority group. Interestingly, the antiracism message had no effect, which led the authors to speculate that this may have been due to the participants feeling as though they were not racist.

Systemic and color-blind racism, the two forms of racism central to this study, are both convenient for whites to consciously or unconsciously choose to overlook. Systemic racism is ignored when whites choose to not acknowledge the systems that have and continue to support a differential between Blacks and whites. Color-blind racism is not necessarily ignored; rather, it is used as a way for whites to defend the position of Blacks in our current society. Both forms of racism are detrimental to the post-secondary educational experiences of Black students; systemic racism, due to the structures in place within post-secondary education that do not allow for an equitable experience for Black students and color-blind racism, which frames how white faculty and staff view the experiences of Black students.

Microaggressions

The term microaggressions was originally coined by Pierce (1970, 1974) to describe the subtle insults experienced by Black people. This idea was expanded by Sue et al. (2007) and is currently defined as "brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate

hostile, derogatory, or negative racial slights and insults toward [a] target person or group" (p. 273). As subtle insults, these are opposed to the overt and purposeful nature of macroaggressions, defined as "blatant, egregious acts" (Donovan et al., 2013, p.193); also what we observe in overt racism. Solorzano et al. (2000), also, describe microaggressions as insults that are so subtle, prevalent and automatic that even if realized, they are overlooked as innocent comments.

Sue et al. (2007) describes ten microaggression themes, five of which are relevant for this study: ascription of intelligence, color-blindness, denial of individual racism, myth of meritocracy, and environmental microaggressions. Ascription of intelligence involves an assumption of an individual's intelligence based solely on their racial designation. Color-blindness and denial of individual racism (both of which also align with Bonilla-Silva's (2018) color-blind racism frames, respectively) include a white person not acknowledging the existence of race and a white person denying any racial biases they hold. Microaggressions that fall under the myth of meritocracy theme are used to contend that race is not a factor in an individual's success and include, for example, instances during which others might say "*if they work hard enough, anyone can succeed*" or "*the most qualified students are admitted to post-secondary institutions*." Finally, an environmental microaggression is one in which a subtle message of being an outsider or lack of belonging is conveyed, such as buildings being named after only white males or an underrepresentation of Black people in television shows or movies.

These microaggressions (in addition to the other five not described above) deplete the "psychic and spiritual energy of recipients" (Sue et al., 2007, p. 273) and can result in increased racial anger and mistrust, as well as decreased levels of self-esteem among the

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microaggressed. These negative effects of microaggressions, such as increased stress and negative mood, can last long after the actual experience of the microaggression (Donovan et al., 2013; Sue, 2010; Wang et al., 2011). For these reasons, microaggressions may be more challenging to deal with than overt and obvious racism. Overt and obvious forms of racism are less prevalent, more direct, and less likely to be overlooked by perpetrators and victims, leaving victims less likely to question if the offensive act actually occurred, as would be the case with covert racism (e.g., microaggressions), where victims often question themselves and their perception of the microaggression (Sue et al., 2007).

In a recent review, for example, Lilienfeld (2017) posited that the concept of microaggressions is not grounded fully enough with research to validate its use as a descriptor of experiences or as a framework for discussion and training. In addition, he wrote that there is little evidence to support claims of the impact of microaggressions on the microaggressed. While he did not deny that subtle forms of prejudice and discrimination exist and are experienced by marginalized populations, he did express that he was not convinced that all of the behaviors described as microaggressive are actually and accurately defined as prejudice and discrimination, nor do they necessarily result from implicit biases. Sue (2017) countered Lilienfeld's (2017) claims from a frame of privilege and power, stating that even though current knowledge relative to microaggressions is based on qualitative studies and the lived experiences of microaggressed individuals, this should not diminish the reality of these experiences and the educational or corrective measures meant to decrease microaggressions. Sue (2017) added that microaggressions resulting from implicit bias are impactful and significant and something that people in positions of power and privilege do not experience; therefore, it

is crucial to advocate for further scientific research to support the existence and actual lived impacts of microaggressions.

Microaggressions are also impactful within a post-secondary environment. Suárez-Orozco et al. (2015) studied microaggressions within three New York City metropolitan area community post-secondary institutions to determine how they occurred in this environment. Observers in 60 classrooms identified microaggressions in terms of student or faculty perpetrators, student victims, classroom responses, and faculty responses. Microaggressions were identified in 17 of the 60 (28%) classrooms, and in those 17 classrooms, 51 occurrences of microaggressions were identified, the majority of which were related to intelligence (59%), whereas at least one student's intelligence was questioned based on their group membership. The second highest percentage of microaggressions (24%) were based on cultural/racial backgrounds whereas at least one student's ethnicity/race, linguistic/socio-economic background, country of origin, or immigrant status was targeted. The majority of these microaggressions were perpetrated by faculty (88%) and directed to specific students.

Solorzano et al. (2000), as yet another example, conducted focus groups with Black students at three predominantly white universities relative to their experiences of microaggressions on campus. Student participants reported feeling diminished, invisible in their classrooms, and that faculty generally had low expectations for Black students (i.e., one student scored a 95% on a math test and the faculty member accused the student of cheating and asked the student to take the test again, after which the student scored a 98%). In addition to this, students reported experiencing segregation when forming and participating in study groups (i.e. not being included in groups or relegated to Black only

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study groups), and expressing discomfort when studying in the library (i.e. feelings of being viewed as though they did not belong there). Student participants reported the impact of these experiences with microaggressions as primarily feeling self-doubt, frustration, and isolation, or feeling they could not perform well academically, subsequently dropping classes, changing majors, or leaving school. Additionally, they oft-felt they were being asked to be the spokesperson for the group(s) they represented.

Related, Ellis et al. (2019) examined the impact of microaggressions on the experiences of first-generation post-secondary institutions' students by gathering open-ended survey data of 296 first generation students at a predominantly white institution. The authors reported that the innocuous insults they gathered impacted how connected students felt to others on campus, whereby the students, via their personal and educational experiences, felt demeaned and felt their efforts and accomplishments were belittled.

Related, it is important to note that microaggressions occur more often and have greater impact, in particular according to Donovan et al. (2013), than do macroaggressions, which are more overt forms of aggression towards members of other races, cultures, etc. Similar to Solorzano et al. (2000), Donovan et al. (2013) also found that the two most common microaggressions were rude or disrespectful treatment of students and students being ignored or overlooked; however, they also reported that these microaggressions significantly predicted students' levels of depression. Only macroaggressions significantly predicted anxiety.

Microaggressions, even though described as subtle, do not have a subtle effect on the microaggressed. The subtle nature of microaggressions also makes it more difficult

for individuals who commit microaggressions to actually recognize that these are, in fact, racist statements. Understanding the microaggression themes outlined by Sue et al. (2007) and how these are conveyed through words and actions can provide individuals with the tools to recognize when they commit, or hear others commit, a microaggression, and then take active steps to eliminate or mitigate the impact of such microaggressions.

Inclusive Educational Spaces

For purposes of this study, I define inclusive educational spaces as those where all students feel welcomed, valued, represented, and supported; where social exclusion is eliminated; and where the faculty and staff with whom students interact are a foundation for students' growth and development as both students and individuals. To facilitate this inclusivity by creating and maintaining inclusive educational spaces, especially for Black post-secondary students, faculty and staff can engage in culturally sustaining pedagogical (Paris & Alim, 2014) and race-conscious educational practices (Harper, 2009). Both of these practices can help to reframe access and equity in education for Black students (Paris & Alim, 2014) by articulating how faculty and staff can provide meaningful and engaging post-secondary experiences for these students.

Culturally sustaining pedagogy as defined by (Paris, 2012) involves supporting students "multilingualism and multiculturalism in practice and perspective" and "perpetuat[ing] and foster[ing] linguistic, literate and cultural pluralism" (p. 95) as part of an inclusive educational practice. This is accomplished by including, honoring, and promoting within a classroom context, students' linguistic practices (e.g., African American Vernacular), as well as nontraditional texts and artifacts that are reflective of the way students engage with their culture. Linguistic practices outside Dominant

American English (DAE) are important for Black students, and valuable for all students as our society is becoming increasingly more diverse. A broader linguistic foundation can also provide increased access and power within domestic and global contexts (Paris & Alim, 2014). Additionally, incorporating nontraditional texts, especially those created by Black individuals and including artifacts and representations of Black culture not only support inclusivity for Black students but enrich the learning experience for all students.

Related, culturally sustaining pedagogical practices use students' strengths while incorporating elements of students' cultural practices to drive curriculum and instruction (Ginsberg et al., 2021); all of which also enhance the way students engage with course material. Culturally sustaining pedagogy also entails a level of care for students in combination with high expectations of student performance, in addition to differentiated instruction (Ginsberg et al., 2021; Harper, 2009) in a way that supports all learners. Dismantling the white, middle-class norms that historically defined language and curriculum within classrooms (Paris, 2012) is, accordingly, a foundational goal of culturally sustaining pedagogical practices, primarily given this decentering of white norms allows faculty to delve into and honor student's heritage and community (Paris & Alim, 2014).

Similarly, race-conscious educational practices go beyond institution's diversity and inclusion statements and involve a committed and intentional practice on the part of faculty and staff to engage Black students such that they have the opportunity to achieve the same outcomes as their white peers. As with culturally sustaining pedagogical practices, race-conscious educational practices also address the ways students are engaged with their cultural identities and allows those identities to play roles within

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classrooms (Ginsberg et al., 2021; Harper, 2009; Peña et al., 2006). These practices call for faculty to collaborate in meaningful ways with students, such as fielding questions within and outside of classrooms and providing individualized and constructive feedback on assignments and during office hours. Race-conscious educational practices allow students to feel that the individuals with whom they engage are invested in their future and interested in supporting them as individuals. Other engagement practices noted by Harper (2009) that positively effect Black students are "high-impact" practices identified by Kuh (2008) which include study abroad programs, service learning, internships, and senior capstone projects. Other race-conscious engagement practices, such as facilitating conversations with Black students outside of the classroom, encouraging Black students to share their classroom and campus experiences, and understanding that their Black students may need additional engagement experiences to achieve similar educational outcomes as their white peers are all key to creating and supporting an inclusive educational space for Black students. Indeed, Harper (2009) includes these practices within his race-conscious educational practices framework as they encourage and increase students' interactions with faculty and staff in meaningful ways, facilitate feedback from faculty, provide an opportunity to generalize learning from one situation to another, and allow students the space to reflect on their learning experiences. Another important aspect of race-conscious educational practices is that the responsibility of promoting student engagement falls on the educator, not on the student (Ainscow. 2005; Harper, 2009). Ainscow (2005) described this process as an interruption in the way we think about interacting with students to create more inclusive spaces; hence, educators

need to put in the work to facilitate these practices, not leave it up to students to engage in these practices of their own will.

Both culturally sustaining pedagogical and race-conscious educational practices ultimately promote the exploration and utilization of student narrative as a crucial aspect of an educational experience within the classroom (Harper, 2009; Paris & Alim, 2014). This narrative can incorporate the linguistic, literate, and cultural importance of the student, but also needs to be a space where the student feels heard and valued. Culturally sustaining pedagogical and race-conscious educational practices help to assure that students do not feel the alienation and disengagement resulting from experiences in educational spaces that do not ascribe to these practices, especially within predominantly white institutions. Feelings of disengagement and alienation are, accordingly, reported to align with decreased persistence (Ainscow, 2005; Hausmann et al, 2007), whereby if students do not persist within post-secondary institutions, they are not able to obtain the benefits of a post-secondary education (Tinto, 2012), including increased job and wage opportunities over the long term.

As such, creating inclusive educational spaces requires a change in thinking and a change in practice (Fullan, 2015). Ainscow (2005) expands this idea by asserting that change occurs through learning processes that influence thinking and the actions that result from that thinking, including reflective practice that also embraces what educators are currently doing and what they wish to do to improve their practice. Introspection is also important for educators to evaluate how they perceive learners and how they perceive these learners learn. Finally, Ainscow (2005) describes inclusive teaching as a process, one where educators are constantly striving to find better ways to support and

create inclusive educational spaces. All of this leading to greater learning outcomes for Black students.

In sum, all of the research reviewed within the literature review and the conceptual framework above, in which researchers investigated the occurrence and impact of racism and how microaggressions indicate deleterious effects, especially on Black students, and the benefits to students of creating inclusive educational spaces, supports increased awareness of these (and possibly other) behaviors that may result from implicit biases. Thus, acknowledging, understanding, and successfully navigating our implicit biases is crucial for faculty and staff, especially in post-secondary educational environments like the ASU environment of interest herein. While post-secondary institutions are often beautifully diverse environments, all students deserve to navigate such environments free of bias, racism, microaggressions, and any other behaviors, especially as displayed or perpetuated by faculty or staff, and especially if as to negatively impact any student's experiences or opportunities to participate in an educational space that facilitates their connection and engagement.

Action Description

The "action" part of this action research study is my BIAS training, where participants engaged with material relative to race/racism, implicit bias, and microaggressions, all of which likely impact peoples' perspectives of and intents towards creating inclusive educational spaces. Figure 1 outlines the relationship between the primary construct of the IAT (attitude) and the related concepts that are relevant to my research questions, study design, and BIAS (i.e., Beliefs, Intentions, Actions, Sustenance) innovation training.

Figure 1

Conceptual Framework of BIAS Innovation

Primary Construct	Concepts related to Attitude	Key Topics covered in BIAS training
ATTITUDES	Race/Racism (RQ1)	Individual vs systemic History and Sociology of racism Color-blind racism
	Implicit Bias (RQ2)	Awareness of biases Influence on behavior Pervasiveness of biases
	Microaggressions (RQ3)	Definition, forms of microaggressions and examples Behavioral outcome of bias Form of racism
	Inclusive Educational Spaces (RQ4)	Culturally sustaining pedagogical practices Equity-conscious educational practices Strategies to create inclusive educational spaces

I delivered my training, BIAS, via Canvas (Instructure, n.d.), the Learning Management System currently utilized at ASU. This online learning platform consisted of six self-paced modules; the time to complete all six modules was approximately 120 minutes total. Module 1 contained an introduction to my study and the remaining modules. Module 2 covered race and racism (e.g., history, sociology, and color-blind racism). Module 3 involved participants learning about implicit bias and completing the Race IAT. The majority of the reflective questions (i.e., seven total) dealt with implicit bias in Module 3, specifically given participants' Race IAT results, feelings relative to their results, and any perceived misalignments between the results of their Race IAT results and self-perceptions relative to racial bias. Module 4 covered microaggressions, specifically definitions, examples, and manifestations of microaggressions. Module 5 introduces culturally sustaining pedagogies and race-conscious educational practices and

provides reflective questions and strategies based on these pedagogies and educational practices, all to create inclusive educational spaces. The sixth module consists of a link to the post innovation survey, a link to a google form if participants wished to be contacted for a follow-up interview and additional resources on each of the four concepts. Within each module, reflective questions guided participants to think more deeply about the content in the module and its relevancy to their work with diverse student populations (see Appendix A for a fuller description of the Canvas modules).

Prior to soliciting participants for my dissertation study, I obtained the required approval from the Arizona State University (ASU) Institutional Review Board (IRB; see Appendix B). In order to solicit participants, I sent an invitation/recruitment email that included a description of my study, the training in which I invited them to engage, as well as information about my role as a doctoral student, this study's action researcher, and also the director of a student support unit at ASU (see my recruitment email in Appendix C). My hope was to have an equal number of both faculty and staff participate; however, I did not anticipate any major issues if group proportions were unequal.

METHODS

As articulated in Figure 1, this study was designed to measure attitudes relative to race/racism, bias, microaggressions and inclusive educational spaces pre and post my BIAS training, as well as assess, via reflective writing and interviewing, any noticeable shifts in participants' awareness and knowledge of the impact of implicit bias, race/racism, and microaggressions, on participants' perspectives of, and intents towards creating inclusive educational spaces. I accordingly designed this training and methods to answer the following research questions: RQ1: To what extent did increasing awareness of race/racism through BIAS training change understanding of race/racism relative to Black students within ASU staff and faculty? RQ2: To what extent did increasing awareness of implicit bias through BIAS training change understanding of how bias influences a) attitudes towards and b) behaviors related to Black students within ASU staff and faculty? RQ3: To what extent did increasing awareness of microaggressions through BIAS training change ability to identify microaggressions and their impact on Black students within ASU staff and faculty? RQ4: To what extent did increasing participants' awareness of race/racism, implicit bias, and microaggressions through BIAS training impact ASU faculty and staff understanding of what constitutes an inclusive educational space at ASU?

Study Design

As noted, the primary goal of this study was to determine the impact of my innovation (i.e., BIAS training) on participant attitudes relative to implicit bias, racism, and microaggressions, all of which were to impact participant perspectives of and intentions towards creating more inclusive educational spaces. To study this, I

implemented a quasi-experimental pretest-posttest design. This type of design is common in educational research studies such as this, where participants are not randomly assigned to control or treatment groups (Plano Clark & Creswell, 2015). Indeed, I did not have control or treatment groups because the training innovation that I implemented in this study was theoretically beneficial for all participants, and I only measured changes in attitudes of participants who completed the BIAS training. Notwithstanding, I intended for my independent variable (i.e., BIAS training) to (hopefully, and positively) impact my dependent variables (i.e., attitudes toward and awareness of race/racism, implicit bias, and microaggressions, as related to creating inclusive educational spaces). Additionally, as a researcher who was also an active participant with a vested interest in the topic I researched, an action research study design was also appropriate.

Action Research Approach

Action research involves a researcher identifying a problem within their professional (in this case, educational) environment, designing a study to examine this problem, and developing potential solutions to the problem. Mertler (2017) defines action research as a process of systematic inquiry performed by practitioners, which is continually evolving and cyclical in nature, and which is accomplished through iterative stages of planning, acting, developing, and reflecting. This iterative nature of action research is particularly applicable to "wicked problems," defined as problems that are not necessarily solvable, primarily because there are an inconceivable number of solutions (see also Rittel & Webber, 1973, p. 160). This type of research deals with people's attitudes and behaviors embroiled within a potentially emotional and sensitive topic; therefore, there is no one specific solution. The solution is dependent on each individual

person and where they are in their levels of awareness and intention, and the solution is ever evolving, as is the training, again, via iterative stages of planning, acting, developing, and reflecting.

In terms of iterative stages, it is important to note that I have studied this topic prior during other action research iterations of this study. Through the first iteration, Cycle 1, I found that if a participant pool of 25 might be desired, I would need to solicit at least 125 ASU faculty and staff as during this cycle I only received a 20% response rate. Cycle 1 involved participants taking two of the IAT assessments (i.e., the Race IAT and one other) and responding to a 12-question survey instrument. I also learned that I needed to create more effective messaging to counter potential hesitancies in potential participants to confront their own implicit biases. Otherwise, though, Cycle 1 did not directly involve my current innovation given prior changes in my research areas of interest; although, it is also important to note that I presented some of my innovation information during a four-hour workshop in Washington D.C. in February 2020. During this workshop I trained post-secondary administrators on creating inclusive educational spaces, whereby navigating similar material during the workshop provided clarity for me relative to the concepts that have now become essential to cover in my innovation (i.e., race/racism, implicit bias, microaggressions, inclusive educational spaces). It is also important to note that also given changes over the past two years, I did not conduct additional research during what would have normally been my Cycle 2.

For this cycle, though, and more specifically, I utilized a mixed methods action research (MMAR) approach via which I collected and triangulated three forms of data. I collected quantitative data (i.e., pre and post survey data) at around the same time as I

collected qualitative data, which is also a signature feature of an MMAR design (Ivankova, 2015). Neither form of data collection was more important or relevant than another, whereby I used the quantitative data I collected to assess, for example, the extent to which there were changes in attitude post my BIAS training, and I used the qualitative data I collected to yield deeper insights into the participant experience, again, through examinations of race/racism, implicit biases, microaggressions, and inclusive educational spaces. The specific methods I used were survey research methods, a series of reflective questions (e.g., with the same reflective intent as a journal), and interview methods. I describe each of these methods in more detail next.

Data Collection – Survey

Survey research is useful to identify trends or patterns in behaviors or attitudes over time, or as a result of a training to test one or more research questions and provide explanations for any observed changes in behaviors or attitudes as a result (Creswell & Guetterman, 2018; Ivankova, 2015; Plano Clark & Creswell, 2015). The purpose of administering a longitudinal survey, whereby I collected similar data on pre- and post-test occasions (Creswell & Guetterman, 2018), helped me determine said changes in attitudes post participation in my BIAS innovation.

Survey Instrument

The survey instrument I used for this part of my research consisted of questions in the race/racism section derived from Bonilla-Silva's (2018) color-blind racism frames; including naturalization, cultural racism, and minimization of racism, in addition to questions that addressed systemic racism. Questions in the bias section of the survey were designed to gain an understanding of the role of bias on behavior. Questions in the

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microaggressions section of the instrument were derived from Sue et al. (2007) microaggression framework themes, specifically, ascription of intelligence, color-blindness, denial of individual racism, environmental, and myth of meritocracy. Survey questions that I used to address inclusive education spaces were based on race-conscious educational practices (Harper, 2009) and culturally sustaining pedagogical practices (Paris & Alim, 2014).

The primary construct I measured was attitude, which is also one of the constructs of the IAT and is important to understand relative to race/racism, implicit bias, microaggressions and inclusive educational spaces, as one's attitude is a foundational element of these concepts. The instrument, accordingly, included these four concepts with 37 total Likert-scale items that fell along a six-point Likert-type scale of Strongly Agree (1) to Strongly Disagree (6). I did not include neutral or "I don't know" response options to ensure that participants provided a response that reflected their attitudes at the time (Fowler, 2014). Additionally, I included one open-ended question at the end of each section (four total) soliciting participants' thoughts relative to the concept of each section. I also included two overall open-ended questions at the end of the survey instrument. These questions I included to allow participants to relay any additional information that I did not solicit or permit participants to relay via any of the close-ended questions included prior (Creswell & Guetterman, 2018). See Appendix D for the survey instrument that, again, I used on a pre- and post-test occasion (given the instrument stayed the same across administrations).

Survey Administration

I administered both the pre- and post-survey instruments via Qualtrics (Qualtrics, n. d.). I included the informed consent form via a link to a google form in the aforementioned recruitment email (see, again, Appendix C). The recruitment email was sent to approximately 540 ASU faculty and staff members (e.g., via the Tempe Council of Academic Advisors list serve, previous participants in Global Advocacy training and College of Integrative Sciences and Arts writing programs faculty). Twenty-four respondents completed the informed consent. I sent three reminder emails to all respondents who completed the informed consent, describing the timeline of the study and their time commitment should they have participated in the study. After each participant completed the pre-training survey, they were provided (at the end of the survey) with a link to access the Canvas BIAS innovation training shell so they could begin their engagement with the BIAS innovation training. The link to the post-survey was included in Module 6 of the Canvas training, as noted prior, for participants to complete at the end of the training. Participants did not have access to the post survey until they completed Modules 1-5.

Survey Sample

As previously mentioned, I sent the recruitment email to approximately 540 ASU staff and faculty with 24 submitting the informed consent. Of these 24, 23 completed the pre-survey and 5 completed the post-survey. As anticipated, attrition (Smith & Glass, 1987) was clearly a factor in pre and post survey completion numbers. I will discuss attrition and its implications forthcoming.

Data Collection – Reflective Questions

I also used a series of reflective questions as part of my data collection efforts, in that akin to traditional journaling methods, reflective questions can be valuable sources of personal reflection and description capturing participants' experiences, as well as valuable sources capturing participants' personal accounting of events (Hayman et al., 2012). Even though reflective questions are similar to journal entries, again, in terms of capturing said reflections, a more appropriate term for what I intended with these questions was reflective writing. While not a true journaling method, except so as to seize participants' personal reflections and descriptions as they proceed through my BIAS training, this is still a very personal form of document-based research. Hence, these "personal documents" (Holbrook, 1995), also served highly valuable as they ultimately contained "individuals['] reflection[s] on [these] specific topic[s]" (p. 747).

Typically, as part of data collection, such reflective entries span a period of time (again, akin to journals); however, I used reflective questions and entries for this action research study to help capture participants' reflections at one point in time, after completion of each of the BIAS innovation training modules. The purpose of my reflective questions, accordingly, was to understand, from participants' viewpoints, their feelings relative to each of the concepts mentioned prior. In addition, writing in response to reflective questions required participants to articulate and share their written views/definitions of racism, color-blind racism, biases, microaggressions, and the impact of their thoughts on these concepts given the students they serve, with implications for their actions and intents towards creating inclusive educational spaces.

Reflective Questions

Modules 2 through 5 in the BIAS Canvas training included reflective questions that participants answered at the conclusion of each module within the BIAS training. Each of these questions aligned with the same set of concepts measured in my afore-described attitudes-based survey instrument. There were 20 reflective questions in total, five of which covered the race/racism information in Module 2, seven of which covered the bias information in Module 3, three of which covered the microaggression information in Module 4, and five of which addressed participants' attitudes and behaviors relative to creating inclusive educational spaces in Module 5. See all reflective questions in Appendix E.

Reflective Questions Administration

As noted, the reflective questions were located at the end of each module within the canvas BIAS training shell, and participants completed the reflective questions at the end of each module. I captured participants' responses to each reflective question via an anonymous Google form, with all open-ended responses created as a separate page within Canvas and linked to each respective module.

Reflective Questions Sample

Participants who complete each module within the BIAS training completed the reflective questions at the end of each module. Seven participants completed the race/racism reflective questions, six participants completed the bias reflective questions, six participants completed the microaggression reflective questions, and six participants completed the attitudes and behaviors relative to creating inclusive educational spaces reflective questions (the sixth participant in each instance was the same individual).

Data Collection – Interviews

Interviews are a common source of data collection in action research studies (Ivankova, 2015), also in this case as another component of my qualitative methodologies (Creswell & Guetterman, 2018; Plano Clark & Creswell, 2015). In a semi-structured interview, participants provide more in-depth information about their personal experiences (Brinkman & Kvale, 2015) relative to attitudes, behaviors, and feelings about the research topic. This allows researchers to gain a broader perspective of the results of their research, as participants have the opportunity to share information that may not have been captured by other methods otherwise.

Hence, for this study I utilized a post training semi-structured interview method to expand upon and better understand how information in the BIAS training could ultimately help lead ASU faculty and staff towards creating more inclusive educational spaces, perhaps in their classrooms if faculty integrate more diverse materials or in meetings with students if staff work to eliminate any preconceived assumptions or ideas about students. More specifically, I gathered information relative to, again, participants' shifts in knowledge and attitude regarding race/racism, implicit bias and microaggressions (RQ1, RQ2, RQ3), and how participants perceive any observed shifts might impact their inclusive educational practices (RQ4).

Interview Protocol

The interview protocol I developed contained 10 questions with additional probes to prompt participants to further elaborate or clarify on an as needed basis (Creswell & Guetterman, 2018). The semi-structured interview protocol and questions are provided in Appendix F.

Interview Administration

I conducted all interviews via Zoom, audio recorded each interview, downloaded a transcript of each interview and then deleted the Zoom recording. I anticipated each interview would last approximately 30 minutes.

Interview Sample

After participants completed the BIAS training, they had the opportunity to submit, via a google form, interest in participating in the interview. Two participants, both of whom are faculty, agreed to participate in the interview. As faculty potentially have the capacity to create an inclusive educational space in their classrooms and staff during their one-on-one meetings with students, I feel not only, as noted, that they are the ideal participants for this action research project but also that they will be able to subsequently provide more in-depth information relative to the impact of the training on their current and future inclusive practices. The interviews were conducted two weeks after the start of the spring 2022 semester to give faculty the opportunity to think about how the information in the BIAS training potentially impacted their actions and intents towards creating inclusive educational spaces.

Data Analysis

As mentioned, I used a convergent MMAR design (Creswell & Guetterman, 2018) whereby the quantitative and qualitative data that I collected will hold equal weight, and are analyzed concurrently. I also merged results from the qualitative component (open-ended questions) of the survey, the reflective questions within BIAS training, and the interviews with results from my quantitative results to help determine convergence or divergence, whereby this form of analysis allows for depth and context, again, as relative to my research questions.

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An inductive approach sought answers to RQ1, RQ2 and RQ3 via a pre/post survey and guided quantitative analysis of participants' attitudes relative to race/racism, implicit bias, and microaggressions, all of which impact perspectives of and intentions towards creating inclusive educational spaces (RQ4). An inductive approach also sought an answer to RQ4 (in addition to supporting quantitative results for RQ1, RQ2, and RQ3) and guided qualitative analysis of open-ended survey questions, BIAS training reflective questions, and post-training interviews relative to the concepts described above, in addition to the participants' perceived impacts of the training on their perspectives of and intentions towards creating inclusive educational spaces.

I used constructivist grounded theory as the framework for analyzing the aforementioned qualitative components of my data (Charmaz, 2014), with the constant comparative method in grounded theory as my analysis practice. The constructivist version of grounded theory acknowledges any potential researcher subjectivity during data analysis as the researcher is constructing a story through interpretation of participants' words (Hallberg, 2006). Constructivist grounded theory also involves an ongoing relationship between the researcher and participants' words to accurately reflect meaning derived from the participants themselves, as active agents involved in this action and action research study (Hallberg, 2006). In line with this approach, I coded my data, all the while becoming intimately familiar with my participants' perspectives as I also constructed categories and themes from my qualitative data.

One of the important processes within this analysis approach is the constant comparative method which involves continual comparison of all qualitative data, from emerging codes to categories and themes, to fully explore patterns and similarities within

and across data sources (Hallberg, 2006); hence, my analyses of all three qualitative components of this study align with and are informed by the constant comparison method.

Data Analyses – Survey

It is important to note that of the 37 questions on my survey, 15 were written such that Strongly Disagree was the desired response with the remaining 22 written such that Strongly Agree was the desired response. This directionality issue resulted in analysis challenges for both Cronbach alpha (negative values for one of the concepts and potentially unreliable values) and the paired samples *t*-test (unreliable means when analyzed by concept, therefore analysis was done by question). I piloted my survey instrument during May 2021 with ASU faculty and staff who were not recruited for participation in my actual study. For the pilot (and after revisions of the survey post-pilot), and then actual use within my research, on both the pre-and post-test occasions, I calculated Cronbach's alpha for internal reliability for each concept of the survey instrument and the survey instrument overall. A Cronbach's coefficient of .70 or higher indicates a high level of internal consistency, more specifically evidencing that survey items (i.e., by concept and overall) correlate well with one another; this indicates that I measured that which I am trying to measure (Salkind & Frey, 2019). Table 1 reports both the reliability coefficients after the pilot of the survey and the pre-and post-survey combined questions for the five participants who completed the entire training.

Table 1.

Cronbach's coefficient for the pilot and the pre/post survey

Concept	Pilot		Pre and Post Combined	
	N of Items	Cronbach α	N of	Cronbach α
Race/Racism	18	0.558	18	0.568
Bias	5	0.769	5	0.506
Microaggressions	5	0.595	5	0.474
Inclusive Educational	9	0.673	6^2	-0.680

Reliability results for the pilot indicate that if question 16 for the race/racism concept was eliminated, the Cronbach's alpha for that concept would be 0.693. That question would also be appropriate as part of the microaggression concept, but I chose to keep it under the racism concept. Additionally, if question number 1 in the microaggression concept was eliminated, the Cronbach's alpha for that concept would be 0.858; this question would also be appropriate as part of the racism concept, but I chose to keep it under the microaggression concept.

The overall alpha for the combined pre- and post-survey (five respondents each) was 0.755; additionally, the alpha levels for each of the four concepts, also combined pre- and post-survey for the five respondents, are reported in Table 1.

To determine changes in attitude post-training, I analyzed quantitative pre/post BIAS training survey results using *t*-tests for dependent means (Salkind & Frey, 2019). Typically, Likert scale surveys reporting ordinal type data are assumed to violate

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[2] The reliability analysis for three of the questions was not included due to lack of variance in responses

parametric measures such as *t*-tests; however, researchers of several studies report that a parametric test with ordinal data can still provide valuable information even when such assumptions (e.g., sample sizes being too small, data potentially not normally distributed with ordinal data) are violated (Murray, 2013; Norman, 2010). Results of *t*-tests, via IBM SPSS Statistics software (IBM, n.d.), ultimately helped me determine statistically significant ($p < 0.05$) differences between the means for each of my attitude constructs, again, as measured before and after participants engage in my BIAS training. Also, I calculated effect sizes to determine if results indicate practical significance, regardless of statistical significance. Cohen's *d*, whereby a *d* value from 0 to 0.2 indicates no effect, between 0.2 and 0.4 indicates a small effect, from 0.5 to 0.8 indicates a medium effect, and *d* > 0.8 indicates a large effect provides a measure of practical significance even if there is no statistical significance, especially with small sample sizes, given a small sample may result in a lack of statistical significance but may still demonstrate practical significance (Salkind & Frey, 2019). .

I analyzed the qualitative data by concept yielded via the open-ended questions I included in my survey instrument, the reflective responses at the end of each BIAS training module and the interview transcripts, by carefully reading each response, identifying in vivo codes to delineate what is happening in the data for each of the four concepts, in addition to the meaning of the data (as opposed to having preconceived ideas for codes), then organized and synthesized my initial codes via focused coding into themes, whereby I ultimately used participants' responses to answer my research questions relative to their attitudes (i.e., RQ1, RQ2, RQ3). This process was iterative with codes, in vivo and focused, constantly compared to one another to develop overall themes

in the responses (Charmaz, 2014; Hallberg, 2006), and to ensure uniformity across all three forms of qualitative data. According to Charmaz (2014) "comparing codes with codes" heightens one's sense of direction of analysis and "clarifies the theoretical centrality of certain ideas" (p. 140). Additionally, I coded all three forms of data collection concurrently for each construct, thereby triangulating the qualitative data as I initially coded and then constructed the themes. The qualitative results are reported by construct (RQ) and derived from the concurrent in vivo and focused coding for each of the constructs.

In addition to following the hierarchical nature of grounded theory coding, I also created detailed notes throughout the analytical process for all qualitative data to capture ideas and associations in the data and my reflections of the data (Hallberg, 2006). My analyses of the pre and post BIAS training survey data occurred after all survey responses were received.

Data Analyses – Reflective Questions

The analysis process for the reflective questions at the end of each BIAS training module was the same as that described above for open-ended survey questions (see the process described above), and occurred concurrently with analysis of the open-ended survey questions and interview responses. For this set of data, I analyzed participants' responses to the reflective questions in order to determine participants' attitudes and feelings relative to the constructs covered in each module (race/racism (RQ1), implicit bias (RQ2), microaggressions (RQ3), as well as the relationship of these constructs to participants' perceptions of and intentions towards creating inclusive educational spaces (RQ4) with those of the open-ended survey questions and interview responses. Again, I

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carefully read the responses, identified and compared initial in vivo codes, focused codes, and developed themes based on participants' reflections and responses. Analysis occurred after all reflective questions were completed for each module in BIAS training.

Data Analyses – Interviews

Analysis of interview transcripts followed the same coding process as that of the open-ended survey questions and reflective questions (see the process described above). I compared in vivo and focused codes and constructed themes based on concurrent analysis of the interviews, the open-ended survey questions and reflective questions, again, to ensure uniformity among codes and themes, as well as accuracy in reflecting participants' responses. Analyses of interview transcripts occurred with the other two forms of data after the completion of both interviews.

Triangulation

Complete analysis of my action research study occurred through triangulation whereby I integrated and interpreted the results of individual data analysis seeking "complimentary evidence" (Ivankova, 2015) through comparison and synthesis to answer my research questions (Creswell & Guetterman, 2018). In addition to complementary evidence, the integration process revealed discrepancies in the data which are potentially useful in subsequent iterations of my innovation and/or research (Turner et al., 2017).

A triangulation approach to data analysis is beneficial for multiple reasons, one of which is studying complex phenomena such as people's attitudes and feelings relative to this study's constructs and the resulting research questions (Turner et al., 2017). A second benefit in triangulating data is compensation for any weaknesses or inherent flaws in any one particular methodology, a strength of one method may compensate for a flaw in

another in the final analysis (Turner et al., 2017). Relationships of results between multiple data forms also increase credibility (Ivankova, 2015) and ensure consistency (Mertler, 2017) by cross-checking results of qualitative data with each other and with quantitative data. Thus, triangulation is an effective method to effectively analyze my data and better understand the answers to my research questions (Creswell & Guetterman, 2018).

Role of the Researcher

As a researcher, practitioner, and individual who is emotionally connected to this action research study, I am acutely aware of the responsibility to my various roles and my research. As an action researcher, I must design, implement and analyze a study that has potential ongoing positive implications for my community of practice (please see [Appendix G](#) for data collection and analysis timeline for this study). Faculty support and the well-being of students constitute the core of my community of practice. Additionally, I need to recognize any assumptions and biases I may hold as an individual that may potentially affect my role as a researcher. To help mitigate any potential biases, I kept a research journal whereby I documented emergent themes in my data and used these to ground interpretations of my data; also, I also documented my known assumptions and biases to provide a continual check for any subjective interpretation of my data.

In my practitioner role as Success by Design Director, I train, mentor, and develop a diverse group of faculty at ASU (some of whom are advisors and other professional staff) and feel it is my responsibility to foster in them the desire and motivation to create inclusive educational spaces while recognizing attitudes and behaviors that are not inclusive and potentially harmful to students. Also, as in my

practitioner role, I oversee courses that serve over 6000 ASU students each academic year; I feel I must foster a space where these students feel included and free from any implicit biases that may lead to overt or covert expressions of racism and microaggressions within an ASU educational space. The participants in my study did not report to me and do not teach courses in my unit, however, we are all part of the greater ASU community and a student's experience within one educational space at ASU can affect experiences within other educational spaces.

As evidenced in my introduction I have a strong emotional connection to the concepts I am studying. I am acutely aware of the biases and resulting behaviors on the behalf of faculty and staff that can negatively impact a student's experience; my hope as a researcher and practitioner is to increase awareness of these biases and resulting behaviors through knowledge acquisition and reflection, all of which (hopefully) continues in my participants after completion of this study. I wish to make a large impact toward more inclusive educational spaces but know that lasting and impactful change begins with small steps; BIAS training and my role as researcher and practitioner is a small step forward.

RESULTS

Quantitative Data Results

Twenty-three (n=23/23; 100%) participants completed the pre-survey. Five participants completed the training and the post-survey in addition to the pre-survey. Demographic characteristics for both groups are illustrated in Table 2; however, I only used the five participants who completed the pre-survey, BIAS training, and post-survey in my subsequent quantitative analyses, in which I matched pre- and post-survey scores.

Table 2

Demographic Characteristics of Pre and Post Survey Respondents

	Completed Pre-Survey		Completed Post-Survey	
	n =23	%	*n=5*	%
Gender				
Female	19	83%	3	60%
Male	4	17%	2	40%
Self-Described Ancestral Lineage				
White/Euro-Amer	12	52%	2	40%
Hispanic/White	1	4.3%	1	20%
Mexican	1	4.3%	1	20%
Asian/White	1	4.3%	1	20%
Black/White	2	9%		
Asian	1	4.3%		
White/Native Amer	1	4.3%		
Middle Eastern	1	4.3%		
African Amer	1	4.3%		
Filipino/Amer	1	4.3%		
No Response	1	4.3%		
Age				
Under 30 years old	2	9%		
31-40 years old	8	35%	1	20%
41-50 years old	7	30%	2	40%
51-60 years old	5	22%	1	20%
Over 60 years old	1	4%	1	20%
ASU Classification				
Staff	18	78%	2	40%
Faculty	5	22%	3	60%

Noted in Table 2 is that for both groups, female participants outnumbered males (pre-survey *n* = 19/23 or 83% female; *n* = 4/23 or 17% male; post-survey *n* = 3/5 or 60% female; *n* = 2/5 or 40% male), percentages of white/Euro-American outnumbered percentages of other self-described ancestral lineage groups (pre-survey *n* = 12/23 or 52%; post-survey *n*= 2/5 or 40%), and the majority of participants were aged 31-50 (*n* = 15/23 or 65% pre-survey; *n* = 3/5 or 60% post-survey). Interestingly a majority of ASU staff completed the pre-survey (staff *n* = 18/23 or 78%; faculty *n* = 5/23 or 22%);

however, faculty were the majority who completed the post-survey (staff $n = 2/5$ or 40%; faculty $n = 3/5$ or 60%).

In order to examine pre and post-survey differences, I calculated paired samples t-tests for the five participants on each question within the four concepts of pertinence in this study: race/racism (RQ1), bias (RQ2), microaggressions (RQ3), and inclusive educational spaces (RQ4). Table 3 illustrates, first, the means, standard deviations, and mean differences for the 18 race/racism survey questions for these five participants on the pre- and post-survey occasions. Please note that even though Likert-type response items violate assumptions of normality inherent with parametric tests, researchers have proposed that Likert scales typically follow a normal distribution, therefore may be considered interval data and appropriate for comparing groups based on mean differences (Boone & Boone, 2012). Also illustrated for each question in Table 3 are the results of the SPSS paired t-tests, including t-test statistics, degrees of freedom (df), levels of statistical significance (2-tailed, with $p < 0.05$), and effect size coefficients as per Cohen's d. Please note that the race/racism construct survey questions illustrated in Table 3 are listed in descending order by absolute mean differences. Please also note that thirteen of the race/racism survey questions (Questions #2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 18) were written such that Strongly Disagree (with a value of 6) was the desired response; the remaining five questions were written such that Strongly Agree (with a value of 1) was the desired response. This explains the negative values for some of the mean differences illustrated, and also why all mean differences are ordered by absolute value regardless of whether the mean differences noted were positive or negative.

Table 3

Paired Samples T-test Results for the Race/Racism Construct (n=5)

Race/Racism Survey Questions	Pre		Post		M Diff	SD	t	df	Sig (2-tailed)	Cohen's d
	M	SD	M	SD						
16. It is appropriate to align one's thinking with the concept of only one race, the human race.	3.00	2.12	5.00	1.73	2.00	2.24	2.00	4	.116	0.20
2. Black students are less likely to persist and graduate from post-secondary institutions due to cultural characteristics.	4.00	1.58	5.40	0.55	1.40	1.52	2.06	4	.108	0.18
6. It is normal for people to want to live around others of similar racial backgrounds.	3.20	1.10	4.40	0.89	1.20	1.30	2.06	4	.109	0.19
8. People feel most comfortable surrounded by people of the same race.	3.20	1.10	4.40	0.55	1.20	0.84	3.21	4	.033	-0.10
9. It is normal for white staff and faculty to primarily interact with other white staff and faculty outside of work responsibilities.	3.80	1.30	5.00	1.23	1.20	1.92	1.40	4	.235	0.38
14. Black people are in the position they are today as a group because of present day discrimination.	2.60	1.94	1.40	0.55	-1.20	2.28	1.18	4	.305	1.44

	Pre		Post							
	M	SD	M	SD	M Diff	SD	t	df	Sig (2-tailed)	Cohen's d
3. Black students are less likely to persist and graduate from post-secondary institutions due to family backgrounds.	3.80	1.30	4.80	1.10	1.00	1.22	1.83	4	.142	0.25
5. The lack of Black senior administrators and/or faculty at post-secondary institutions is due to the lack of qualified candidates.	4.80	1.30	5.80	0.45	1.00	1.58	4.14	4	.230	0.37
7. People naturally wish to develop romantic relationships with people who are of the same racial background.	4.20	1.30	5.20	0.84	1.00	1.58	1.41	4	.230	0.37
12. Black people over use discrimination as an excuse to hide the real reason they are behind white people in society.	4.80	1.30	5.80	0.45	1.00	1.00	2.24	4	.089	0.14
15. Black people do not get access to well-paying jobs because of discrimination.	2.40	0.55	1.60	0.89	-0.80	0.84	2.14	4	.099	2.01
1. Policies and practices embedded within post-secondary institutions perpetuate racial inequities among faculty, staff, and students.	2.00	1.00	1.40	0.55	-0.60	1.14	1.18	4	.305	1.44

	Pre		Post							
	M	SD	M	SD	M Diff	SD	t	df	Sig (2-tailed)	Cohen's d
11. In our current society, if Black people worked as hard as white people, they would achieve the same outcomes.	5.60	0.48	6.00	0.00	0.40	0.55	-1.63	4	.178	0.31
17. Black people are not promoted to the same extent as their white peers.	1.60	0.89	1.40	0.55	-0.20	1.10	0.41	4	.704	1.06
4. Black students are less likely to persist and graduate from post-secondary institutions due to underlying structural constraints.	2.00	1.00	2.00	0.71	0.00	NA	NA	NA	NA	NA
10. The current status of Black people in the United States is due to their lack of motivation.	6.00	0.00	6.00	0.00	0.00	NA	NA	NA	NA	NA
13. Black students' underachievement in post-secondary institutions can be explained by cultural values that are not consistent with educational success.	5.60	0.55	5.60	0.55	0.00	NA	NA	NA	NA	NA
18. Affirmative action resolved most problems with unequal access to post-secondary education for Black students, staff, and faculty.	5.20	0.84	5.20	0.84	0.00	NA	NA	NA	NA	NA

Of note, as illustrated in Table 3, is that the concept of color-blindness (Question #16) yielded the largest mean difference between pre and post responses, with systemic racism (Question #2) the next highest mean difference, which indicates that participants reportedly increased their understandings of the ideas represented in terms of color-blindness (the inappropriateness of aligning one's thinking with only one race) and systemic racism (that cultural characteristics decrease Black students' persistence and graduation from post-secondary institutions). Even though thirteen of the questions were written such that the desired response was Strongly Disagree, and the remaining five were written in the inverse, all of these mean differences indicated that the directions of change in the pre to post responses were in their desired directions.

The pre and post means did not change for four of the Questions, Question #4 (systemic racism), Question #10 (cultural racism), Question #13 (systemic racism), and Question #18 (minimization), which indicates that BIAS training did not, at least reportedly as per the perspectives of participants, impact participants' attitudes relative to the concepts framing these questions. However, the pre and post scores for all four questions were consistent with desired results.

Most notable, especially from a statistical significance perspective, was that the results from the race/racism construct pre-survey and post survey indicated a significant (i.e., at a statistically significant $p < 0.05$ level) shift in participants' attitudes towards Black people relative to comfort level of being surrounded by people of a like race (Question #8; pre $M = 3.20$, $SD = 1.10$, post $M = 4.40$, $SD = 0.55$; $t(4) = -3.21$, $p = .033$)

after participating in BIAS training. I derived Question #8 from Bonilla-Silva's (2018) naturalization frame.

As this is social science research and my sample size was small ($n = 5$), I could have also determined statistical significance at the $p < 0.10$ level. If I were to use this level of significance, instead, four additional questions would have reached significance. Question #12 (pre $M = 4.80$, $SD = 1.30$, post $M = 5.80$, $SD = 0.45$; $t(4) = -2.24$, $p = .089$), which indicates that participants more strongly disagreed, after my training, that Black people over use discrimination as the reason they are behind white people in society (cultural racism); Question #15 (pre $M = 2.40$, $SD = 0.55$, post $M = 1.60$, $SD = 0.89$; $t(4) = -2.14$, $p = .099$), which indicates that participants more strongly agreed, after my training, that Black people do not get access to well-paying jobs because of discrimination (minimization); Question #2 (pre $M = 4.00$, $SD = 1.58$, post $M = 5.40$, $SD = 0.55$; $t(4) = -2.06$, $p = .108$), which indicates that participants more strongly disagreed, after my training, with the idea that Black students are less likely to persist and graduate from post-secondary institutions due to cultural characteristics (systemic racism); and Question #6 (pre $M = 3.20$, $SD = 1.10$, post $M = 4.40$, $SD = 0.89$; $t(4) = -2.06$, $p = .109$), which indicates that participants more strongly disagreed, after BIAS training, with the idea that it is normal for people to want to live around others of similar racial background (naturalization).

To measure the effect sizes of the results for each question, regardless of their statistical significance, I used Cohen's (1988) effect size measurement, Cohen's *d*. Four of the questions indicated a significant, large, positive effect ($d > 0.8$) on the

understanding of race/racism relative to Black people in ASU staff and faculty. These questions included Question #15 (minimization, $d = 2.00$), whereby it seems that participants more strongly agreed, after my training, that discrimination results in less access to well-paying jobs for Black people; Question #1 (systemic racism, $d = 1.44$), whereby it seems that participants more strongly agreed, after my training, that policies and practices embedded within post-secondary institutions perpetuate racial inequities; Question #14 (minimization, $d = 1.44$), whereby it seems that participants more strongly agreed, after my training, that discrimination results in Black people's current position; and Question #17 (systemic racism/minimization, $d = 1.06$), whereby it seems that participants more strongly agreed, after my training, that Blacks are not promoted to the same extent as white peers.

Altogether, these findings indicate that my BIAS training did seem to provide information that shifted participants' understandings of systemic racism. In addition, it seems that my BIAS training seemingly helped participants recognize color-blind racism according to Bonilla-Silva's (2018) color-blind racism frames, particularly naturalization, minimization, and cultural racism relative to Blacks in ASU staff and faculty.

Next, I turned to my survey construct on bias (RQ2). Table 4 illustrates, first, the means, standard deviations, and mean differences for the five bias survey questions for these same five participants on the pre- and post-survey occasions. As it was with Table 3, also illustrated for each question in Table 4 are the results of the SPSS paired t-tests, including t-test statistics, degrees of freedom (df), levels of statistical significance (2-tailed, with $p < 0.05$), and effect size coefficients as per Cohen's d. Please note that the

bias construct survey questions illustrated in Table 4 are also listed in descending order

by absolute mean differences. One of the bias survey questions (Question #5) was written

such that Strongly Disagree (6) was the desired response; the remaining four questions

were written such that Strongly Agree (1) was the desired response. Again, I ordered the

negative values for mean differences by absolute value. This explains the negative values

for some of the mean differences illustrated, and also why all mean differences are

ordered by absolute value regardless of whether the mean differences noted were positive

or negative.

Table 4

Paired Samples T-test Results for the Bias Construct (n=5)

Bias Survey Questions	Pre		Post		M Diff	SD	t	df	Sig. (2-tailed)	Cohen's d
	M	SD	M	SD						
2. Biases are formed through early life experiences.	2.40	0.55	1.60	0.55	-0.80	0.45	4.00	4	.016	3.24
1. Biases are conditioned responses to our perceptions and characterizations of certain people.	2.00	0.71	1.80	0.48	-0.20	1.10	0.41	4	.704	1.06
3. Subconscious attitudes and thoughts impact any racial biases I may hold.	1.80	0.84	1.60	0.55	-0.20	0.84	0.54	4	.621	1.12
4. I think that my behaviors and actions reflect implicit biases I may hold.	2.60	0.55	2.40	1.52	-0.20	1.92	0.23	4	.828	0.98
5. My unconscious views about racial biases are easily changed.	4.60	1.14	4.40	0.89	-0.20	1.30	0.34	4	.749	1.03

Of note here, as illustrated in Table 4, is that the question related to bias formation (Question #2) had the highest mean difference and was statistically significant at the $p <$ 0.05 level (pre $M = 2.40$, $SD = 0.55$, post $M = 1.60$, $SD = 0.55$; $t(4) = 4.00$, $p = .016$). Notably, the effect size for this item was 3.24. This means that my BIAS training appeared to have had a significant, large, positive effect on participants' understanding of biases forming through their early life experiences.

Of the other three questions that were written such that Strongly Agree was the desired response (Questions #1, #3, and #4), the mean differences indicated that the directions of change in participants' pre to post responses were also in the desired direction. For the sole question (Question #5) in which the desired response was Strongly Disagree, the mean difference indicated the direction of change in the pre to post response was in the non-desired direction (see more forthcoming).

Nonetheless, to measure the effect size of the other results (besides Question #2 above) for the bias construct questions (i.e., Questions #1, #3, #4, and #5), I used Cohen's d, again. Three of these questions (Questions #1, #3, and #4) indicated a significant, large, positive effect in the desired direction relative to the understanding in ASU staff and faculty of how biases influence attitudes and behaviors towards Blacks. Question #5 also indicates a significant, large, positive effect but, again, in the non-desired direction. More specifically, and in order, Question #3 ($d = 1.12$) indicated that participants were reportedly more aware, after BIAS training, that subconscious attitudes and thoughts impacted their racial biases. Question #1 ($d = 1.06$) indicated that participants were reportedly more aware, after BIAS training, that biases are conditioned responses,

meaning that their biases produce automatic perceptions and characterizations of certain

people. Question #4 (Cohen's d = 0.98) indicated that participants, after BIAS training,

more strongly agreed that their behaviors and actions reflect implicit biases they hold.

And Question #5 ($d = 1.03$), the item that yielded undesired responses, indicated that

participants more strongly believed, after BIAS training, that their racial biases could

easily be changed.

Altogether these findings also indicate that BIAS training seemed to have

increased ASU faculty and staff's understanding of biases, and how their biases might

influence their attitudes and behaviors towards Blacks.

Next, Table 5 illustrates, again, the means, standard deviations, and mean

differences for the five bias microaggression (RQ3) survey questions for these same five

participants on the pre- and post-survey occasions. As it was with Tables 3 and 4,

illustrated for each question in Table 5 are the results of the SPSS paired *t*-tests, including

t-test statistics, degrees of freedom (df), levels of statistical significance (2-tailed, with *p*

< 0.05), and effect size coefficients as per Cohen's *d*. Again, the microaggression

construct survey questions are listed in descending order of absolute mean differences.

Two of the microaggression survey questions (Questions #1 and #3) were written such

that Strongly Disagree (6) was the desired response; the remaining three questions were

written such that Strongly Agree (1) was the desired response. Again, I ordered the

negative values for mean differences by absolute value. This explains the negative values

for some of the mean differences illustrated, and also why all mean differences are

ordered by absolute value regardless of whether the mean differences noted were positive

or negative.

Table 5

Paired Samples T-test Results for the Microaggression Construct (n=5)

Microaggression Survey Questions	Pre		Post		M Diff	SD	t	df	Sig (2-tailed)	Cohen's d
	M	SD	M	SD						
2. It is inappropriate to ask a Black person if the problem they are experiencing really arises from racism.	4.40	1.14	2.00	1.23	-2.40	2.19	2.45	4	.070	2.20
1. A white person who has Black friends is less likely to say and do racist things.	3.60	1.52	4.60	1.14	1.00	1.41	-1.58	4	.189	0.32
3. It is unfair (or unethical) to consider race in hiring or admissions decisions, even if the goal is to increase racial diversity.	5.00	0.71	4.80	1.10	-0.20	1.48	0.30	4	.778	1.01
4. Post-secondary institutions/university buildings named after only white individuals undermines belonging for non-white students.	1.40	0.55	1.20	0.48	-0.20	0.84	0.54	4	.621	1.12
5. It is inappropriate (or insensitive) to say a Black staff or faculty member is articulate.	1.40	0.89	1.60	0.89	0.20	0.45	-1.00	4	.374	0.50

As noted in Table 5, if I chose to determine significance at the $p < 0.10$ level (social science research with $n = 5$), Question #2 (pre $M = 4.40$, $SD = 1.14$, post $M = 2.00$, $SD = 1.23$; $t(4) = 2.45$, $p = .07$), would have reached statistical significance. Notably this question also had the highest mean difference and the effect size was $d = 2.20$, which indicates that participants more strongly agreed, after engaging in BIAS training, that it is inappropriate to ask a Black person if the problem they are experiencing really arises from racism. This survey question aligned with Sue's (2007) microaggression color-blindness conceptual framework.

Of the other two questions that I wrote such that Strongly Agree was the desired response (Questions #4 and #5), the mean differences indicated that the direction of change in participants' pre to post responses was in the desired direction for Question #4, but not for Question #5. For the two questions (Questions #1 and #3) in which the desired response was Strongly Disagree, the mean difference indicated the direction of change in the pre to post response was in desired direction for Question #1 and in the non-desired direction for Question #3 (see more forthcoming).

Nonetheless, to measure the effect size of the other results (besides Question #2 above) for the microaggression construct questions (i.e., Questions #1, #3, #4, and #5), I used Cohen's d, again. Question #4 ($d = 1.12$) indicated a significant, large, positive effect in the desired direction relative to participants' understanding that sense of belonging is undermined for non-white students when post-secondary buildings are named after only white people. Again, this question aligned with Sue's (2007) environmental conceptual framework. Question #3 ($d = 1.01$) also indicated a significant,

large, positive effect, but in the non-desired direction, meaning that participants more strongly believed, after BIAS training, that it is unfair to consider race in hiring or admission decisions, which was aligned with Sue's (2007) myth of meritocracy conceptual framework. Questions #1 and #5 did not yield large effects.

Altogether these findings indicate that BIAS training, again, seemed to have increased participants' awareness and understanding of the color-blind and environmental microaggression conceptual frameworks, and the impact of these types of microaggressions on Black students.

Finally, Table 6 illustrates the means, standard deviations, and mean differences for the nine inclusive educational spaces (RQ4) survey questions for these same five participants on the pre- and post-survey occasions. As it was with the previous three tables, also illustrated for each question in Table 6 are the results of the SPSS paired t-tests, including t-test statistics, degrees of freedom (df), levels of statistical significance (2-tailed, with $p < .05$), and effect size coefficients as per Cohen's d. Additionally, the inclusive educational spaces construct survey questions are listed in descending order of absolute mean differences. One of the inclusive educational spaces survey questions (Question #6) was written such that Strongly Disagree (6) was the desired response; the remaining eight questions were written such that Strongly Agree (1) was the desired response Again, I ordered the negative values for mean differences by absolute value. This explains the negative values for some of the mean differences illustrated, and also why all mean differences are ordered by absolute value regardless of whether the mean differences noted were positive or negative.

Table 6

Paired Samples T-test Results for the Inclusive Educational Spaces Construct (n=5)

Inclusive Educational Spaces Survey Questions	Pre		Post		M Diff	SD	t	df	Sig (2-tailed)	Cohen's d
	M	SD	M	SD						
5. Post-secondary faculty and staff must amplify the voices of their Black students by validating their work through individual feedback, in addition to anonymously sharing their voice in class discussions.	2.20	0.44	1.00	0.00	1.20	0.45	6.00	4	.004	4.65
6. African American Vernacular English (e.g., slang) is inappropriate to use within an educational environment (e.g., written assignments, oral presentations).	4.60	0.55	4.20	1.30	0.40	1.67	0.54	4	.621	1.12
1. Post-secondary faculty and staff should assume responsibility for creating an inclusive learning environment that eradicates racial inequity in engagement and achievement.	1.00	0.00	1.20	0.48	-0.20	0.45	1.00	4	.374	0.50
3. An inclusive educational space incorporates elements from various cultural backgrounds and the contributions from diverse scholars.	1.20	0.48	1.00	0.00	0.20	0.45	1.00	4	.374	1.35

	Pre		Post							
	M	SD	M	SD	M Diff	SD	t	df	Sig (2-tailed)	Cohen's d
7. Educational institutions have a responsibility to hire Black faculty and staff in numbers proportional to Black students.	1.40	0.55	1.20	0.45	0.20	0.84	0.54	4	.535	1.12
9. Post-secondary faculty should proactively invite Black students to engage with them individually during office (student) hours to explore ideas presented in class or ask questions, in addition to normalizing relationship building between faculty and students.	1.40	0.55	1.20	0.45	0.20	0.84	0.54	4	.621	1.12
2. Post-secondary faculty and staff need to be aware of and understand the implications of what they say to students	1.00	0.00	1.00	0.00	0.00	NA	NA	NA	NA	NA
4. Post-secondary faculty have a responsibility to consider and incorporate histories of diverse populations when creating lessons and assignments.	1.00	0.00	1.00	0.00	0.00	NA	NA	NA	NA	NA
8. Post-secondary faculty and staff should commit to developing Black students outside of the classroom (e.g. prepare for graduate school, careers).	1.00	0.00	1.00	0.00	0.00	NA	NA	NA	NA	NA

Of note, as illustrated in Table 6, is that the question related to amplifying voices

of Black students (Question #5) had the highest mean difference and was statistically

significant at the $p < .05$ level (pre $M = 2.20$, $SD = 0.48$, post $M = 1.00$, $SD = 0.00$; $t(4) =$

6.00, $p = .004$). Additionally, the effect size for this item was $d = 4.65$. This, again,

indicates a significant, large, positive effect on participants, after BIAS training,

acknowledgement that amplifying Black students' voices by validating their work

through individual feedback and anonymously sharing their voices in classroom

discussions are both necessary. This question was based on Harper's (2009) race-

conscious engagement practices.

Of the other seven Questions that were written such that Strongly Agree was the

desired response (Questions #1, #2, #3, #4, #7, #8 and #9), the mean differences indicated

that the directions of change in participants' pre to post responses were desired for three

of those question (Questions #3, #7, and #9). Questions #1 and #6 yielded mean

differences in their non-desired directions of change, and no changes in mean differences

in either direction were observed for Questions #2, #4 and #8. The three Questions where

the pre and post mean did not change (Questions #2, #4, and #8) indicated that BIAS

training did not, at least reportedly as per the perspectives of participants, impact

participants' attitudes relative to the concepts framing these questions. However, the pre

and post responses are Strongly Agree for each of the three questions, which is the

desired response.

Nonetheless, to measure the effect size of the other results (besides Question #5

above) for the inclusive educational spaces construct questions I, once again, used

Cohen's *d*. Three of these questions (Questions #3, #7, and #9) indicated a significant, large, positive effect in the desired direction relative to participants' expressed desires towards creating inclusive educational spaces. Question #3 ($d = 1.350$) indicated that participants more strongly agreed, after BIAS training, that inclusive educational spaces incorporate elements from various cultural backgrounds and include contributions from diverse scholars. Question #7 ($d = 1.12$) indicated that participants, after BIAS training, more strongly agreed that educational institutions have a responsibility to hire Black faculty and staff in numbers proportional to Black students. Question #9 ($d = 1.12$) indicated that participants, after BIAS training, more strongly agreed that post-secondary faculty should proactively invite Black students to engage with them more and normalize relationship building between students and faculty. And Question #6 ($d = 1.12$) indicated that participants more strongly believed, after BIAS training, that African American Vernacular English is inappropriate to use in an educational environment; this was a non-desired response.

Altogether these findings indicate that BIAS training seemed to have increased participants' understandings of what constitutes an inclusive educational space at ASU, especially as it relates to engaging and amplifying Blacks students, incorporating material that represents diverse cultures and scholars, and hiring Black faculty and staff in numbers proportional to Black students. See also Appendix H for the means and standard deviations for all 23 participants' pre-survey responses, in addition to the means and standard deviations for all 5 pre- and post-survey participants' responses.

Qualitative Data Results

I limited my qualitative analyses to only the data derived from the pre- and post-survey's open-ended questions from the same five participants whose data I analyzed above. These were the same participants who completed the BIAS training and the post-survey. Please also recall that other information about the additional 15 participants who completed the pre-survey open-ended questions is documented in Appendix I. Notwithstanding, the reflective questions at the end of each of the BIAS training modules were also completed by the same five participants, and two of these five participants agreed to be interviewed. Hence, in this section I include my findings from all five participants' open-ended pre- and post-survey questions, all five participants' module-based reflective responses (also including the responses from one participant who completed the Canvas modules and the reflective questions, but not the pre-and post-survey), and two of five participants' interview responses.

I analyzed the open-ended questions from the pre- and post-surveys (five questions total; one per construct and one overall), the reflective questions for each construct (five questions for race/racism [RQ1], five for bias [RQ2], three for microaggressions [RQ3], and five for inclusive educational spaces [RQ4]), and the interview questions (all seven questions I used to address participants' perspectives of and intents towards creating inclusive educational spaces), and I did all of this concurrently by concept (RQs 1-4) using the constant comparative method I described prior in my Methods section.

First, as related to the race/racism construct (RQ1), there were five themes that I constructed from my analyses of these qualitative data. These themes include: (1) How

understanding of concepts relative to race/racism (i.e., systemic racism, color-blind racism) changed pre and post BIAS training; (2) The specific information acquired during BIAS training; (3) Behaviors that changed as a result of BIAS training; (4) Feelings that arose as a result of BIAS training; and (5) How that information reportedly impacted participants' perspectives of and intents towards creating inclusive educational spaces.

In terms of (1) how participant understandings of concepts relative to race/racism (i.e., systemic racism, color-blind racism) changed after BIAS training, pre-survey responses indicated that two participants were less apt to identify racism as an issue at ASU prior to completing my training. One participant stated that "[r]acism at ASU is not bad," but there is "room to grow." Another mentioned that they did "not have much experience with race/racism as a member of the ASU community," and wrote that they recognized that ASU has a very diverse population because of its proximity to Native American tribal lands and Mexico. The other three participants acknowledged, in their pre-survey responses, that racism does exist at ASU. One stated that "it is rampant" and "embedded in academic structures for both students and faculty." Another did not overtly state that racism existed at ASU; rather, they stated that it "needs to be front and center of policies, operations, strategy, and governance." Another stated "we need to work diligently and persistently to combat racism." However, in the post-survey responses, four participants (one did not respond to this question) were more emphatic that racism exists at ASU, or more specifically that ASU is "in need of a lot of change," also given ASU removed its former Multicultural Student Center which, to this respondent, indicated that ASU follows a colorblind way of thinking, that ASU has "institutional

incentives that perpetuate structural racism," and overall that ASU has "more to do." Based on the differences between the pre- and post-survey responses, it appears that participants, after completion of BIAS training, were more apt to articulate that, indeed, racism does exist at ASU.

Enhanced understandings of race/racism after completion of BIAS training were also articulated in the reflective question responses for all five participants. Participants mentioned "clarification, confirmation and conviction," meaning that the information in the race/racism module led to increased understanding of the concepts highlighted in the module, and lead to "a better understanding about the differences between racism, racial discrimination, and racial inequity" with regards to the race/racism's module readings relative to the history and sociology of racism. In addition, several mentioned in their reflective responses that the BIAS training informed and enhanced a basic understanding of color-blind racism, all while race/racism concepts were better clarified, interest was heightened about race/racism concepts, and the information evoked "a-ha" moments. One participant added that the one thing that stood out to them from the training was "the idea that white people HAD [emphasis in the original] to convince themselves that black people were an inferior, inhumane, race to justify slavery and brutality." None of the interview responses indicated a change in understanding of concepts relative to race/racism.

In terms of (2) the specific information participants reported they acquired during BIAS training, three of the five participants identified how the training defined and clarified race/racism concepts. The specific information that one participant mentioned in

a post-survey response was their identification of at least one form of color-blind racism (i.e., ASU eliminating its former Multicultural Student Center, as also described above). In the race/racism module's reflective responses, three participants mentioned that they specifically gained a better understanding of race, color-blind racism, racial discrimination, and racial inequality/inequity. Specific information relative to information acquired in the race/racism module of the BIAS training mentioned in one of the interviews was the importance of understanding our history and all aspects of systemic racism. This indicated that information in the race/racism module of BIAS training seemed to be new and relevant to the participants, and also helped increase their understanding of race, color-blind and systemic racism, and racial inequities.

In terms of (3) behaviors that changed as a result of BIAS training, all participants mentioned behavior changes in either the reflective question responses or during their interviews; although, behavior changes were not mentioned in any of the post-survey responses. In the modules' reflective question responses, participants described behaviors such as wanting to learn more about systemic and color-blind forms of racism to enable them to "do more and be better," listen and evaluate more to contribute to a solution, and facilitate increased understandings with colleagues and friends to help foster positive change. In addition, one participant reflected on their experience with the color-blind racism information in the training and wrote they were now concerned "about my own color-blind racism and how it might show up." Another participant reflected on their level of understanding of color-blind racism and how it influences "thoughts, expectations, and understandings." No change in behavior was discussed in either of the

two interviews. These results collectively indicate that participants connected with concepts of racism, especially color-blind racism, and identified current and potential future behavior changes based on this information.

With regards to (4) participants' feelings that reportedly arose as a result of BIAS training, all participants mentioned feelings relative to the information in the race/racism modules in the reflective questions responses; feelings were not mentioned in the pre- or post-survey or the interview responses. The feelings reported included anger, agitation, sadness, and frustration, as primarily related to the readings on the history and sociology of racism and the color-blind racism video (four of the participants mentioned feelings of anger and frustration after engaging with these materials). The feelings evoked during engagement, in addition to the knowledge acquired, indicated that this material was challenging, but necessary.

Finally, I used interview questions to specifically ask participants (5) how information in the race/racism module impacted participants' perspectives of and intents towards creating inclusive educational spaces; this information was not obtained in the post-survey or the module reflective question responses. The two participants who participated in the interviews stated that they were more aware of and conscious of color-blind racism and the importance of history and knowledge of systemic racism, especially for educators, after BIAS training. It was also noted that this module was very intense and thought provoking, as expressed by a participant who grew up in a very diverse background and is in a biracial marriage.

In sum, the qualitative data that I collected via my pre-and post-survey data, reflective questions, and interview responses collectively indicated that BIAS training participants seemingly acquired knowledge relative to race/racism (systemic and color-blind) through my training. In addition, they reported that they would continue to strive to learn more and use the information they learned in order to create more inclusive educational spaces.

Second, as related to the bias construct (RQ2), there were three themes that I constructed from my analyses of these same qualitative data. These themes include: (1) Knowledge among participants that biases exist; (2) The need for increased awareness of our own biases; and (3) The acknowledgement that our behaviors can result from our biases.

In terms of (1), participant knowledge of the existence of biases was evident in the pre-survey responses. Three of five participants mentioned that "we all have them," "they are grounded in our experiences," and one responded that they work hard to expose the biases that they hold. In the post-survey, three of the five participants again mentioned the existence of bias. The presence of bias was also evident in the reflective question responses. The first two questions asked participants about their experiences taking the Race IAT, primarily how they felt about the results, and if the results aligned with the perception they have of their racial bias. All but one participant agreed that their results aligned with their perception of their racial bias; one did not agree wondering if they have been "deluding" themselves both in their self-bias identification and their results aligning with their perception of themselves. In the interview, this same

participant mentioned that the results "took me a little bit by surprise" as they are active in organizations that support the advancement of Black individuals; they strive to be inclusive. This same individual wondered if perhaps the discrepancy observed could have been due to the IAT assessment itself. Notwithstanding, results indicated that a majority of the participants are aware of the biases they hold and that these biases align with who they believe themselves to be; although, again, this was not the case for one of the participants.

With regards to (2), the necessity for increasing awareness about their own biases, three participants in the pre-survey and two in the post-survey mentioned the need for increasing awareness of their own biases. One of the questions in the module asked participants to connect the information in the race/racism module to awareness of any racial implicit biases they may have had, and all five participants mentioned that they were perhaps not aware as they should be about their own biases (which was somewhat of a contradiction to the general responses regarding awareness of biases). One participant mentioned that "beliefs about race/racism come from unconscious/unknown influences," another stated that the materials "reignited my desire want to continue to strive for better," one mentioned that "I can be a contradiction to my values through my biases;" one admitted that they were not as self-aware as they thought; and another articulated that since our culture perpetuates racism, intentionality is important to recognize our own biases. There was no mention of increasing awareness of biases in either of the two interviews other than a mention of the general importance of one's awareness of one's biases. Responses across all three forms of data collection ultimately

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indicated that all participants agreed that increased awareness of their own biases is essential.

In terms of (3), the acknowledgment that behaviors can result from our own biases, one participant mentioned in the pre-survey that "we have to be able to recognize when our biases are impacting others so we can pull back," and one mentioned in the post-survey that "what you do with that bias that counts." Additionally, in the reflective responses all participants recognized the role bias can play in people's, including their own, behaviors. One participant mentioned that they need to better identify bias to "work to mitigate [its] negative affects," another mentioned that awareness and understanding is important to correct biased "beliefs and values," and several mentioned the necessity of metacognition and checking in with oneself to ensure their own biases were not impacting their own behaviors. One interview participant noted they intended to work to better understand their biases and how they might gain a better understanding of the potential impact of their biases. Another interview participant shared that understanding bias and the impact of bias is a "constant work in progress." Hence, and as it was with the second theme relative to the bias construct, all participants recognized that their own biases influenced their behaviors which was noted, again, from within all three forms of data collection.

Overall, as per this construct (RQ2) it appears that my BIAS training inspired increased awareness of one's own biases, especially the influences of such biases on one's behavior. An interesting outcome to also note was that a majority of the participants were not surprised with the results of the Race IAT, which indicates that they

were seemingly more aware of their racial biases, something which three of them stated they were also still working on.

Third, as related to the microaggression construct (RQ3), there were two themes that I constructed from my analyses of these same qualitative data. These themes include: (1) Existing awareness and observation of microaggressions; and (2) Increased knowledge from the training of forms of microaggressions and their impact.

In terms of (1), existing awareness and observation of microaggression, four participants mentioned in the pre-survey that they were aware of microaggressions and one mentioned that they saw them "frequently." Another wrote that they had heard of "MANY examples from other colleagues" even though they had not experienced them themselves, or they overlooked them. Similarly, in the post-survey, one participant mentioned "they most definitely exist" and another reported seeing them regularly. All five participants mentioned awareness and observation of microaggressions in the training modules' reflective questions response. Their responses indicated initial (before BIAS training) awareness and observation of microaggressions; however, both awareness and observation of microaggressions were impacted positively by BIAS training (described in the next section). Similarly, both interview participants mentioned awareness and observation of microaggressions prior to the training, and a deeper reflection of both after BIAS training (also described in the next section). From these results, it appears that all participants had some level of awareness of microaggressions and also some experience observing forms of microaggressions; however, it also appears,

as based on the following information, that this awareness may have been at least partially superficial.

In terms of (2), increased knowledge of microaggressions and the impact of BIAS training, none of the participants specifically mentioned additional knowledge acquisition in the post-survey; however, all five participants mentioned in the module reflective questions that information within the module increased their understanding and awareness of microaggressions. Participants reported now having a "better understanding" of microaggressions, "further depth and width to [understanding] types of microaggressions," increased awareness that microaggressions "[occur] more frequently than [they] imagined," that microaggressions deal with "unquestioned assumptions and associations that are disrespectful and hurtful to others," that they "really hadn't realized how much of an impact they have," and that the training "made [them] reflect on them more." Also mentioned within the reflective responses were specific aspects of the BIAS training that led to their increased awareness, specifically in terms of "examples of microaggressions," "tips for how to avoid using microaggressions, as well as call out microaggressions." Also, of note was the TEDx Talk ("Why Microaggressions Aren't So Micro") within Module 4 of BIAS training (see Appendix A) which provided examples of microaggressions and their impacts on the microaggressed. Participant responses to the reflective questions also included that they "saw how real it was," noticed that "common phrases in modern culture are hurtful," and that microaggressions can be "overtly racist statements." One participant reflected that the training was "helpful to understand how to be more proactive in understanding and confront microaggressions in myself and

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identifying it in others." Even though knowledge acquisition overall was not mentioned in the post-survey, one participant did state that the "how to speak up" document was very helpful (this document addresses responding to microaggressions and is within BIAS training Module 4, see Appendix A). Additionally, one interview participant stated that they became "more reflective before [they spoke]," and "even in this semester already [they've] taught [they've] pointed out some microaggressions and gentle ways to people" during active classroom discussions. This same interview participant stated that they thought that everyone should take the microaggression training to increase others' general awareness of and about microaggressions. Another interview participant also stated that they were both more aware of microaggressions and more willing to call them out if they observed any instances of microaggression in others. All three forms of data collection captured the information participants gained from the training; in addition to an increased realization of the impact of microaggressions.

All of these results, again, as per this construct (RQ3), indicated that the information within the microaggression module in my BIAS training seemingly helped participants better understand and identify microaggressions, provided concrete examples and explanations of microaggressions, and help to provide participants with strategies to help them confront and deal with microaggressions when witnessed and observed.

Fourth, as related to the inclusive educational spaces construct (RQ4), there were three themes that I constructed from my analyses of these same qualitative data. These themes include: (1) Knowledge of what constitutes inclusive educational spaces; (2) Practices that participants can implement within their educational spaces to increase

inclusivity; and (3) Why creating inclusive educational spaces is important for Black students.

In terms of (1), knowledge of what constitutes inclusive educational spaces, two of the five participants responded to the corresponding open-ended question on both the pre- and the post-survey instruments, and both indicated that this is not an emphasis for faculty and staff yet it is important for student success. One participant noted in the post-survey that this would be "a big step to take" and would be difficult in an institution as large as ASU, with many large classes, and with faculty not having the time to provide inclusive educational spaces as particular types of learning environments. In the reflective responses, four of five participants noted that their understanding of what constitutes inclusive educational spaces changed after the training, and the fifth participant noted that the training was a good reminder of "things that everyone should ALWAYS [emphasis in the original] be considering." Additionally, participants mentioned that relative to the information in the three prior modules (race/racism, bias, and microaggressions) the training "made [them] reflect on what [their] students may be experiencing on campus," the information in the training "made me think about my thinking about these topics" in terms of how these constructs relate to creating inclusive educational spaces, and the training "made me pause to check my phrasing and monitor[ing of] myself [on my own] unstated assumptions." These results indicate that participants did not reportedly have a good understanding of what constitutes an inclusive educational space prior to BIAS training; however, after the training they reported having a much better idea of how

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race/racism, bias, and microaggressions can impact their and others' actions and intents towards creating inclusive educational spaces.

In terms of (2), the practices that participants plan to implement (articulated via respondents' reflective question responses) or already are implementing (articulated via interviewees' responses), responses included more diverse representations of authors/presenters in course materials (readings, videos etc.), in addition to other personal and pedagogical strategies, such as seeking more student feedback and providing space for students to share their personal narratives. No practices were articulated from within either the pre- or the post-survey instruments. One participant, in their reflective response, mentioned that representation in materials was not something previously considered, but they would now "include materials from scholars that reflect[ed] the diversity of the student population." Another stated they would "add text and videos from indigenous, black, Latinx, and Asian scholars," and another wrote that even though they were already implementing this strategy, they would now do so more intentionally. Another reflective response indicated that they would "ask students for their feedback and personal narratives" to gain a better understanding of how students experience ASU in order to create more educationally purposeful and inclusive engagement. One interview participant mentioned that they were, after the training, making a greater effort "than [they had] ever made in [their] life [so as] to be [more] vulnerable with students," and that even though they appreciated a student's right to use their own language in the classroom, because they want students to feel that their language has value, they also wanted students to be prepared for any judgement that may occur due to use of a

particular language (i.e. African American Vernacular); these students will face "a very racist world." This participant also disclosed that this was a source of internal conflict for them. Related, both interview participants mentioned intentional awareness of using students' preferred gender pronouns as part of their strategies to create inclusive educational spaces, and one interview participant mentioned certain pedagogical practices they were implementing, such as allowing students to have a greater choice in how to earn points in the class; an assignment menu was mentioned whereby students could pick and choose the assignments and the point values that aligns with their grasp of the course material. Additionally, this participant mentioned allowing grade adjustments and adjustments to late policies, and even the desire to try the practice of ungrading in their classes, where students receive feedback but not a grade. This same interview participant mentioned that even though they felt that they had always been an empathetic teacher, they now "employ their empathy more." These results collectively demonstrate that participants, post BIAS training, were able to articulate several strategies within the training that they would now (or already had) adopted in their classrooms to create more inclusive educational spaces; this indicates that the strategies mentioned in the training were (for the most part) new ideas for the participants and were reportedly quite easy to implement in their classes.

The third (3) theme relates to the importance of creating inclusive educational spaces to support Black students. Again, none of the pre- and post-survey responses aligned with this theme. However, each of the participants articulated in their reflective responses why they believed creating inclusive educational spaces is important for Black

students. These responses included: "mak[ing spaces] inviting to develop trust," "so [Black students] feel valued and that they belong," so "that [Black students] have allies at the university [who] want to see them reach their goals," "to show care, respect, and appreciation to create sense of belonging and [to] optimize their learning experience," and because "everyone deserves opportunities to thrive." One participant mentioned in their reflective response that "these students likely feel isolated, unsupported, and unacknowledged in many other spaces within academic, but also specifically at ASU" and "similar to the Black Lives Matter movement; black students matter NOW [emphasis in the original]." And even though not specific to the impact of an inclusive space for Black students, the other interview participant stated that when they hear a remark that "everyone is so sensitive now", they reply that it is not sensitivity, rather it is being inclusive, understanding of others, and caring about others' needs. These results indicate that participants reflected upon their pedagogical and curricular practices and what they might do to help create more inclusive educational spaces for Black students.

Additional information that participants shared that effectively captured participants' overall thoughts relative to creating inclusive educational spaces included, on a post-survey response "In annual evaluations, I would like to see faculty write about how they foster inclusion in their teaching, research and service." Also, both interview participants mentioned that the information in the BIAS training was so valuable in terms of increasing awareness of practices that promote inclusivity; everyone should take trainings such as BIAS training because lack of inclusivity is "probably a matter of not being aware."

In sum, the information shared by study participants relative to creating inclusive education spaces points to the value of the information in my BIAS training, as far as increasing awareness and providing strategies that can be easily implemented within one's educational space, so as to ultimately promote race-conscious educational and culturally sustaining pedagogical practices that might better lead to increased inclusivity.

DISCUSSION

*"…..we can embrace being good-ish, which is a good person who is always
striving to be a better person, a true work-in-progress. To do that, we need
to let go of the idea of being a good person in order to become a better
person. Good-ish people are always growing, which is why being goodish
is better than being good. Being good-ish sets a higher ethical standard for
ourselves, because when we are goodish, we are learning.*

Dolly Chugh (2018)

This quote from Dolly Chugh's book "The Person You Mean to Be: How

Good People Fight Bias" represents how I feel about my BIAS training and how

my participants in my BIAS training seemingly viewed their experience. Please

also note that my introductory video in the training mentioned this book and noted

how we are all good-ish people and can strive to know and be better.

In this section, accordingly, I discuss my findings in relation to each of my

research questions, all the while integrating the quantitative and qualitative results.

Following the discussion, I present limitations of my study and my conclusion.

Discussion of Findings

In this mixed methods action research study, again, I examined via a pre-

and post-BIAS training survey instrument, participants' attitudes relative to

race/racism (RQ1), implicit bias (RQ2), and microaggressions (RQ3), as well as

the impact of these three concepts on participants' perspectives of and intents

towards creating inclusive educational spaces (RQ4). I further explored any change

of attitude or understanding relative to these same four RQs using participants'

responses to open-ended pre- and post-survey questions, reflective questions at the

completion of each module in the BIAS training set, and post-BIAS training interviews.

In terms of RQ1, both quantitative and qualitative results indicated that awareness of race/racism, specifically systemic and color-blind racism, was enhanced after engaging in my BIAS training, as was understanding of race/racism relative to Blacks at ASU. Participants acknowledged in the post-survey responses that racism does indeed exist at ASU, and I observed increased understanding of both forms of racism in participants' reflective responses and interview questions. Even with a small sample size (n=5), several survey questions reached significance at the $p < 0.10$ level, and several more reached large levels of practical significance based on effect sizes ($d > 0.8$). In addition, all survey responses moved in the desired direction after participants completed my BIAS training, indicating a positive shift in participant's collective attitudes relative to race/racism over time.

I also observed this shift in attitude for several of Bonilla-Silva's (2018) color-blind racism frames, where participants indicated an increased awareness of the ideology that whites use to justify racial inequalities. Specifically, participants expressed an increased understanding of the naturalization frame (Bonilla-Silva, 2018) whereby they recognized that it is not natural to feel more comfortable around and live near individuals with similar racial backgrounds. Participants' attitudes relative to discrimination also shifted, especially regarding the role discrimination plays in the current societal position of Blacks, in terms of the minimization frame, with participants noting that discrimination is not an excuse

used by Blacks to explain their current societal position, as per the cultural racism frame. This increased understanding of Bonilla-Silva's ideology will (hopefully) lead to participants' increased awareness and recognition of how racial inequalities are processed and justified.

Participants also relayed an increased understanding of and shift in attitude relative to systemic racism. This shift primarily centered around the racial inequity of policies and procedures within post-secondary educational spaces that influence Black students' matriculation through higher educational spaces, rather than cultural characteristics that negatively impact their success. Participants also expressed a desire to learn more about systemic and color-blind racism, which furthers the "the more we know, the better we will do" idea expressed by Maya Angelou and adopted by me as a foundation of this work.

Even though, not specifically part of RQ1, it is also important to note that the information in the race/racism module in the BIAS training evoked strong emotional feelings of sadness, anger, and frustration relative to the challenging but necessary information on the history, sociology, and ideological frameworks of race/racism.

All of the data collected relative to race/racism, however, indicate that participants were not very aware of nor had a complete understanding of both systemic and color-blind racism; although, after acquiring a more complete understanding of both forms of racism after my BIAS training, they were better

able to not only identify both forms of racism but also how both forms manifest in their daily lives and impact their Black students.

In terms of RQ2, both quantitative and qualitative results indicated that even though awareness of the existence of biases did not change as a result of BIAS training, awareness and understanding of bias formation and how biases influence attitudes and behaviors did change. The pre- and post-survey question regarding the formation of biases through early life experiences was the only question statistically significant at the $p<.05$ level; however, all but one of the responses moved in the desired direction and all demonstrated large levels of practical significance based on effect sizes ($d > 0.8$), relative to the shift in understanding of implicit bias. Participants' responses post BIAS training also indicated that they reportedly better understood that biases are conditioned responses, biases are impacted by their subconscious attitudes and thoughts, and these biases influence behaviors towards Blacks. Participants also demonstrated somewhat of an increased understanding of the malleability of racial biases which may be due to the focused cognitive attention required during the implicit bias module and the awareness of contextual factors (Gawronski & Bodenhausen, 2006) present in the race/racism module.

Interestingly, in terms of the Race IAT, only one participant was surprised with their results; all other participants revealed that the results of this assessment aligned with the perceptions they had of themselves. This result countered what

one may expect, and could be related to the self-selection threat to internal validity present in this study (more forthcoming in the limitations section).

Notwithstanding, all of the data I collected relative to awareness and understanding of bias revealed that even though individuals may acknowledge they hold biases, they are not fully aware of how biases influence their own attitudes and behaviors. Although information in the BIAS training increased their awareness and understandings, particularly regarding how these biases could impact Black students at ASU.

In term of RQ3, both qualitative and quantitative data revealed that even though participants were aware of and observed microaggressions prior to BIAS training, the training provided additional examples of microaggressions to further clarify their overt as opposed to covert nature. In addition, the training highlighted methods to avoid the use of microaggressions and strategies to call them out when observed, empowering participants to recognize and do something about microaggressions for themselves and others. Most importantly however, my BIAS training apparently increased participants' awareness of the impact of microaggressions on the microaggressed. Again, the survey questions aligned with several of Sue et al. (2007) microaggression themes; specifically, color-blindness (which also aligns with the racism concept) where participants were more likely to express that they agreed that it is inappropriate to ask a Black person if the problems they experience really arise from racism, and environmental (or environmental exclusion according to Williams et al, 2021), by recognizing, for

example, that university buildings named only after white individuals undermines sense-of belonging for Black students. Such microaggression examples undermine the lived experiences and sense of belonging for Black people, and increased awareness of microaggressions such as these could lead to greater inclusivity in educational spaces.

It is perhaps not surprising that the question relative to the myth of meritocracy frame (i.e., Question #3 in the microaggression section of my survey) did not move in the desired direction (the mean difference was very small at 0.20). This may have been due to misunderstanding of meritocracy in this context. For example, it may feel appropriate to think that race should not be considered in college admission or hiring decisions; however, this line of thought discounts the challenges Black individuals have faced achieving upward mobility through one's own merits. It is fair and ethical to consider race in college admissions and hiring practices because of the history of oppression of both; hence, the myth in the myth of meritocracy. Williams et al. (2021) report that this microaggressions occur when the existence of systemic racism is denied and race is considered "irrelevant for success" (p. 1001). Participants expressing increased understanding and awareness of systemic racism and a desire to learn more about this form of racism after the BIAS training module on race/racism underscores the importance of understanding the myth of meritocracy framework as well.

Overall, even though participants were aware of and observed microaggressions prior to engaging with my BIAS training, the training did

apparently equip them with a better understanding of the impact of microaggressions on Black students. Additionally, the training provided participants with tools to better identify microaggressions and address them when they occur. Several participants mentioned that the information in this module of the BIAS training was particularly relevant and useful for them in the classroom and in their work with students and should be available to all ASU faculty and staff.

In terms of RQ4, both the quantitative and qualitative data indicated that even though ASU faculty and staff understand some aspects of inclusive educational spaces, they recognize there is more they can do to facilitate inclusive educational spaces.

Enhanced facilitation of inclusive educational spaces begins with increased understanding of what constitutes an inclusive space, primarily as per this study, culturally sustaining pedagogical and race-conscious educational practices. A majority of participants indicated that they (and potentially other faculty and staff) need a better understanding of these concepts and how to facilitate them within their educational spaces. Additionally, when factoring in the increased understanding of race/racism, implicit bias, and microaggressions, participants were more likely to reflect on the actual experiences of their, primarily, Black students. As a result of the BIAS training, participants identified specific practices they can use to facilitate inclusive educational spaces, such as increasing diverse representation in course materials, asking students for more feedback, and

encouraging students to share their narratives and experiences. Participants also seemed more willing to reflect on the practices they can do to support inclusive educational spaces that go beyond specific strategies, such as building trust and developing empathy with their students.

One aspect of culturally sustaining pedagogical practices that did not move in the desired direction after my BIAS training was the appropriateness of using African American Vernacular English (AAVE) within a classroom environment. The mean difference was very slight (0.40) with participants more strongly agreeing that using AAVE language is inappropriate. A possible reason for this was articulated as a desire to respect the use of AAVE, but also understanding that this language choice may not be acceptable in environments outside of academia; however, Paris and Alim (2014) would counter that linguistic diversity is beneficial in environments beyond classrooms and would encourage the use of multiple forms of language.

In summation, my BIAS training clearly seemed to have increased my participants' awareness and understanding of concepts important to creating inclusive educational spaces, namely in terms of race/racism, implicit bias, and microaggressions, all of which led to a shift in participants' attitude relative to these concepts. In addition to these reported changes in attitude post BIAS training, participants expressed the desire to learn and know more about these concepts, as well as expressed their own intentions to make changes to facilitate increased inclusivity within their educational spaces.

Study Limitations

As with any study, threats to the validity of any findings or inferences relative to this study are important to consider. Accordingly, in this section I discuss both internal and external threats to validity and what, if anything I did to potentially mitigate these threats.

Internal Threats to Validity

Threats to internal validity consist of factors that could impact the outcomes of a study in addition to the impact of the independent variable, which in the case of this study was my BIAS training, on the dependent variables, which in the case of this study were participants' attitudes and understandings about race/racism (RQ1), implicit bias (RQ2), and microaggressions (RQ3), as well as the impact of these on participants' perspectives of and intents towards creating inclusive educational spaces (RQ4). The threats to internal validity that I considered pertinent to my quasi-experimental action research design were history, testing, attrition, and self-selection bias, each of which I discuss next.

The history threat to internal validity occurs when participants' attitudes or opinions are inadvertently affected by events outside of the actual study (Smith & Glass, 1987). As race/racism, implicit bias, microaggression, and inclusive educational spaces are popular topics in media, social media, and in other trainings offered at ASU, participants in my study may have encountered these topics through other varied forms during the duration of my BIAS training. These outside sources may have influenced my participants' self-reported attitudes, assumedly influenced solely by my BIAS training.

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There was nothing I was or would have been able to do, however, to mitigate this threat, unless I asked each of my participants if they believed anything outside of my intervention simultaneously influenced their perspectives. I did not do this; regardless, I have no other indications that participants were influenced by information other than what was in my BIAS training.

The second potential threat to the internal validity of my study was testing (Smith & Glass, 1987). This threat occurs when a pre-test unduly influences the outcomes of a post-test. As via my study I incorporated the measurement of a change in the dependent measure, via a pretest-training/treatment-posttest design, there may have been some information that participants learned or understood due to their taking the pretest. Their initial increased awareness of concepts covered in my BIAS training, for example, could have led to an artificially inflated difference between pre and post-measures that may not have been exclusively or solely related to what participants encountered in and learned from my BIAS training. The reverse may have been true for at least some of the questions on my pre-survey on which participants may have felt some initial discomfort, and that discomfort may have been mitigated on the post-survey as participants had already seen the questions and had time to process any discomfort they may have perceived. Either scenario may have caused falsely inflated or deflated responses, respectively and as a result.

The third potential threat to my study's internal validity was mortality, now more commonly referred to as attrition (Smith & Glass, 1987). My final sample size was five, however 24 individuals completed the informed consent and began the pre-survey and 23

actually completed the pre-survey. Of the 23 that completed the pre-survey, eight began

the BIAS training; however, only five completed all components of the BIAS training

and the post-survey, with two participants agreeing to a post-training interview. Such

attrition may have been due to any discomfort from the questions (during a pilot of my

survey, several individuals relayed that the questions resulted in a level of discomfort for

them), the amount of time required to complete the training, the reflections asked for

during the training, or any number of other factors. Likewise, participants could choose to

drop out of my study at any point in time. An additional factor that may have contributed

to attrition was the ongoing Covid pandemic. Potential participants may have felt they

has less time or less emotional energy (or both) to invest in my BIAS training. To help

mitigate attrition, I sent several reminder emails to everyone who submitted the informed

consent; although, I was not aware of who in that group completed the pre-survey as the

informed consent was the only document with identifying information. But as noted, the

majority of attrition occurred either during or after participants engaged with my pre-

survey and before beginning the BIAS training. I observed a decreased level of attrition

once engagement with the BIAS training began.

Finally, in terms of internal threats to validity, participants who engaged with all

components of this study may have had different characteristics than those who opted

out, such as higher levels of comfort with the material, increased motivation to explore

their feelings relative to the material, more openness to the topics covered, etc. This self-

selection bias, defined as the ability of survey participants to decide for themselves

whether or not they want to participate in the survey (Lavrakas, 2008), and in the case of

my study, deciding whether or not they also want to participate in BIAS training. Related, as participants opted-out for any such reasons (see attrition discussion above), my results may have also yielded even more different outcomes than if attrition did not occur.

External Threats to Validity

The main threat to external validity in my study was that of generalizability. All participants in my study self-selected to participate (as just recalled); therefore, it is also more than reasonable to assume that they had a keen interest in my study's concepts, or even some potential previous engagement with the concepts in my study; hence, they were likely more willing and open to explore and learn about these concepts than their average colleagues. Therefore, all findings and results that I derived via my study are likely not be generalizable to other populations, including the ASU populations from which my participants came (Banerjee & Chaudhury, 2010). Individuals who were not open to learning more about race/racism, implicit bias, microaggressions, and inclusive educational spaces probably did not self-select to participate in my study for a reason.

CONCLUSION

"life is a journey and not a destination"

(Hough, L.H., 1920)

Action research is very much like this quote, another one of my favorite quotes and one that I think of often and relate to almost all of my life experiences. Action research is a journey where practitioners reflect upon and iterate their areas of interest and research (Mertler, 2017), quite possibly never reaching their actual destination. My research is a wicked problem (Rittel & Webber, 1973) journey whereby I acknowledge I will never reach a destination; however, through reflection and iteration I will continue to explore and discover ideas, strategies, and resources to increase awareness of and provide solutions for addressing and moving towards solving this wicked problem. I discuss below the implications of this work on my and potentially the greater ASU practice, in addition to any implications for further study in this area. I end this written journey with a personal reflection.

Implications for Practice

In my role as Director of a student success unit at ASU, I oversee a large (up to 40) group of faculty who facilitate courses for some of ASU's most vulnerable student population. We have a fairly extensive faculty training and development program, where aspects of inclusive educational spaces are included in every training and developmental program. This training has included some aspects of what was included in my BIAS training, but I plan to incorporate all aspects of my BIAS training in future faculty trainings for my unit. As was indicated in my results, faculty and staff who already viewed creating inclusive educational spaces as necessary, gained valuable insight and

ideas from my training. I believe this will be the case with the faculty who currently report to me; they already incorporate inclusive practices, but that is something that can always be improved. Also, as indicated in the results, participants felt that this training should be more available, and in some cases mandatory, for other ASU faculty and staff. My hope is that my BIAS training will serve as a foundation for future iterations of training for ASU staff and faculty that directly address the concepts of race/racism, implicit bias, and microaggressions, all of which impact perspectives of and intentions towards creating inclusive educational spaces, especially for Black students, but also for all other groups of oppressed and marginalized students. In a perfect world, this information would be expanded and available to everyone. The need for this is also evidenced whenever I listen to the news or engage with social media; there is indeed a lack of awareness, knowledge, and understanding of the concepts contained in my BIAS training among the general population.

Implications for Further Study

I recognized throughout this entire process that I was learning much about the concepts included within my BIAS training, and I also learned that there is much more to learn. I wish to deepen my connection to these topics and continue to develop trainings to support ASU faculty and staff in their quest for creating inclusive educational spaces. I feel as though many components of this study were on target, and also some that missed the mark, but in future studies I intend to enhance those aspects that were on target and redesign those that were not. The survey instrument I developed encompassed both hits and misses. Even though some of the questions resulted in discomfort for participants, I

feel a level of discomfort is necessary to facilitate any such necessary change and growth. I will continue to ask the uncomfortable questions, but I will ease into them so as not to discourage participants from the beginning (there will be no impact of what I am doing if individuals do not participate). I will also write my survey questions so they all have the same desired response (i.e., I am still having a hard time wrapping my head around the fact that I missed that).

Much of the content in my BIAS training was also on target, especially in the race/racism, implicit bias and microaggression modules; however, I need to expand the module on inclusive educational spaces. This expansion will include more information on culturally sustaining pedagogical and race-conscious educational practices, as well as more in-depth information relative to incorporating these practices within faculty and staff's educational spaces.

In additional iterations of this work, I would also like to add more information about mindfulness or, rather, the role of mindfulness in increasing awareness of one's beliefs, thoughts, and attitudes, and the impact of these on subsequent behaviors. Mindfulness is incorporated in all of the courses facilitated by my unit and is a part of our faculty training and development programs. Additionally, I am a regular meditator and (try to) practice mindfulness in all that I do. There is new and limited research relative to mindfulness and racial implicit bias and behaviors resulting from those biases, and I would welcome the opportunity to add to that knowledge base.

Personal Reflection

This work was definitely a journey filled with joys, challenges, roadblocks, and excitement. Even though it is difficult to wrap my head around this part of my journey as it concludes, I am excited to embark upon my next journey. This work is grounded in a passion and the belief that all ASU students (especially as per my research questions, Black students) must be inclusively supported by faculty and staff. I entered this doctoral program with that as my research area of interest; although, early on in the program this interest was discouraged as being potentially difficult to research. Despite this, and given all that ended up happening in the United States relative to Black Lives Matter during the time of my study, my passion for this work was further ignited. Likewise, I am grateful to Dr Leigh Graves Wolf for encouraging and supporting my decision to move back to my original plan. I lost two cycles of research and months of background work on my area of interest, but I am so glad that I was able to get back on track and finish with my initial research area of interest, in terms of both developing and researching the impact of such an intervention so personally and professionally important to me.

Finally, and as I mentioned in my introduction, this work was inspired by many life events, and primarily my years of work with ASU Athletics, especially Black football student-athletes. I heard from them, and observed for myself, the impact of ASU faculty and staff (most likely unintentionally) not creating inclusively supportive educational environments. As such, it is incumbent upon us, as educators to learn, grow, and change our practices to better support the students we serve; *all* students that we serve. It is ultimately my hope, that with trainings such as my BIAS training, we all embark on a journey to know and do better.

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APPENDIX A

BIAS INNOVATION CANVAS MODULES

Module 1 – Introduction
        Introduced myself via video introduction and explained why this research is important to me. Provide an overview of the purpose of BIAS Innovation training, the components of Modules 2-5 and normalize the discomfort with exploring bias, racism, and microaggressions. Also included is a timeline describing the time involved with the training (each component with the training has an estimated time to complete noted) and when I anticipate completion of data collection.

Module 2 – Race/Racism
        This module consists of two readings about the history of racism, one that is a more academic discussion of the sociology of racism, "Sociology of Racism," and one that is a personal story with history woven through it, "The 1619 Project" (pages 15-26). The module also contains a brief video describing color-blind racism - an ideology that several scholars use to explain the persistence of racial inequality in "post-racial" America.

Clair, M., & Denis, J. S. (2015). Sociology of racism. *The international encyclopedia of the social and behavioral sciences*, *19*, 857-863.

Warden, M. (2020). The 1619 Project.

Module 3 – Implicit Bias
        Module 3 covers information relative to implicit biases and consists of eight videos from the Kirwin Institute (Module 1 Lessons 1-3, Module 2 Lessons 1, 3, 4 and Module 3 Lessons 1-2), in addition to the opportunity to explore, via the Harvard Implicit Association Test, any racial biases participants may hold.

Module 4 – Microaggressions
        Module 4 covers what microaggressions are and the impact of microaggressions via a TEDx Youth talk, "Why Microaggressions Aren't so Micro" with a Black student. There is also a pdf, "Tool: Recognizing Microaggressions and the Messages They Send," with types of microaggressions and examples of each type. The module ends with another pdf, "Responding to Microaggressions and Bias" with strategies to "call out" microaggressions and another TEDx Talk, "Eliminating Microaggressions; The Next Level of Inclusion" that pulls all the information together.

TED. (n.d.). *Why Microaggressions Aren't So Micro* | Whitney Grinnage-Cassidy [Video]. YouTube. https://www.youtube.com/watch?v=Z7l194OXxYo&t=526s

TED. (n.d). *Eliminating Microaggressions; The Next Level of Inclusion* | Tiffany Alvoid [Video]. YouTube. https://www.youtube.com/watch?v=cPqVit6TJjw

Note. Adapted from *Microaggressions in Everyday Life: Race, Gender and Sexual Orientation*, by D. W. Sue, 2010, Wiley & Sons. Copyright by John Wiley & Sons, Inc.

Note. Adapted from *Promoting Diversity and Social Justice: Educating People from Privileged Groups*, by D. Goodman, 2100, Routledge. Copyright by Taylor & Francis Group.

Module 5 – Relationship of implicit bias, racism, and microaggressions to perspectives of and intentions towards creating inclusive educational spaces

The module was designed to allow participants to explore the meaning of inclusive educational spaces within the culturally sustaining pedagogy and equity-conscious educational practices frameworks. The module contained a reading; "Creating Cultural Sustenance in the Classroom: A Review of Culturally Sustaining Pedagogies: Teaching and Learning for Justice in a Changing World" and a Jamboard with questions and strategies relative to creating inclusive educational spaces.

Montero, M. K. (Ed.). (2019). Creating cultural sustenance in the classroom: A review of culturally sustaining pedagogies: Teaching and learning for justice in a changing world. *Journal of Adolescent & Adult Literacy*, *62*(6), 698-701.

Module 6 – Post Training Survey Link

At the completion of the Canvas training (after Module 6), I shared additional resources relative to each of the constructs for further exploration if desired.

APPENDIX B

ASU IRB APPROVAL

EXEMPTION GRANTED

Audrey Beardsley
Division of Educational Leadership and Innovation - West Campus
-
audrey.beardsley@asu.edu

Dear Audrey Beardsley:

On 6/14/2021 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	BIAS Training to Increase Awareness of Racial Implicit Bias and Attitude in Post-Secondary Faculty and Staff: Implications for Creating Inclusive Educational Environments
Investigator:	Audrey Beardsley
IRB ID:	STUDY00014111
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Consent_13_06_2021.pdf, Category: Consent Form; • IRB Protocol_13_06_2021.docx, Category: IRB Protocol; • Recruitment_methods-email_13_06_2021.pdf, Category: Recruitment Materials; • Supporting_Documents_13_06_2021.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 6/14/2021.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).
If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required.

Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Corinne Corte Corinne
       Corte

APPENDIX C

INFORMED CONSENT AND RECRUITMENT COMMUNICATION

Dear ASU Colleague:

My name is Corinne Corte and I am a doctoral student in the Mary Lou Fulton Teachers Post-secondary institutions (MLFTC) at Arizona State University (ASU). In addition, I am the Director of Success by Design in University College at Arizona State University.

I am working under the direction of Dr. Audrey Beardsley, a faculty member in MLFTC. I am conducting a research study on implicit biases, racism, microaggressions and their impact on creating inclusive educational environments. Via this doctoral research study, I am seeking to determine the impact of an online training program (BIAS) on awareness of concepts relative to inclusive educational spaces; implicit bias, racism, and microaggressions.

In terms of my research on the BIAS training, I am asking for your help, which will involve your participation in an anonymous pre/post training survey, engagement with the Canvas training that includes anonymous reflective questions based on the content in the training, and one (potential) interview.

I anticipate the time required for all aspects of this research study (including the BIAS Canvas training) will be no longer than 4 hours; the Canvas training will take approximately 2 hours and all forms of data collection combined should take 1-2 hours. The survey and reflective writing results will be completely anonymous; some participants may also be asked to participate in a short interview (30 minutes) which will be conducted via Zoom with video/audio recording however only the audio recording will be retained for transcription. After transcription, the audio files will be deleted. The interview will not be recorded without your permission. If you are asked to participate in an interview, please let me know if you do not want the interview to be recorded; you can also change your mind after the interview begins. At the completion of this google consent form, all participants will be asked to create a 4 digit participant ID which will be used to match responses on all forms of data collection (examples of IDs include last 4 digits of phone number, SSN, ASU ID or any other 4 digits that will be easy to remember). The participant ID will never be shared with the researcher and must be used on all forms of data collection.

Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty whatsoever. You must be 18 years of age or older to participate.

The benefit to participation is the opportunity for you to reflect on and think more about implicit biases, racism and microaggressions and their impact within your educational space. Information from this study will inform future trainings on these concepts and the impact of these on inclusive educational spaces. Thus, there is potential to enhance the experiences of our colleagues and students with participation in this study. There are no foreseeable risks or discomforts to your participation.

Your responses across all study activities (i.e., during the BIAS training and data collection and analyses phases) will be confidential. The researcher will have access to identifiable information for administrative purposes (such as sending reminder emails and matching participant responses across the study to conduct analysis) but will never publish or reveal the identity of participants. Results from this study may be used in reports, presentations, or publications, but your name or any other identifying information will not be used.

All information to access the initial survey will be sent after submission of the informed consent (there is also a link to the survey at the end of this consent google form; a link to the Canvas training will be at the end of the initial survey).

If you have any questions concerning the research study, please contact the research team – Audrey Beardsley at Audrey.Beardsley@asu.edu or Corinne Corte at Corinne.Corte@asu.edu or (480) 965-2994. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study by submitting this form; which also means you are agreeing to be part of the study.
After submission of this form, a link to the initial survey will be sent to your ASU email (a link to the initial survey is also at the end of this form).
I hope to have all data collected by the beginning of November.
Thank you in advance for your participation,

Corinne Corte, Doctoral Student
(A copy of the informed consent is included as a page in the Canvas training shell for participants reference)

<div align="center">INVITATION EMAIL</div>

Hello ASU Colleague,
I'm Corinne Corte, Director of Success by Design in ASU's University College, I am also a doctoral student in the Mary Lou Fulton Teachers College at ASU researching factors that influence inclusive educational spaces under the direction of Dr. Audrey Beardsley.
Creating an inclusive environment for all in the ASU community is an important component of who we are as Sun Devils and is represented in our charter. Even as we work to create such an environment for our students we may unintentionally do things counter to fostering inclusivity.
In this study, you will be asked to complete an online Canvas mini-course (approx. 2 hours) and share your thoughts (anonymously) relative to concepts in the course. The attached consent form contains more information about the study and Canvas training.

The data collected will inform future training of faculty and staff relative to inclusive educational spaces, therefore your participation is greatly appreciated to provide this valuable information. Your participation in this research study is completely voluntary. To sign up and consent to participate, please access the consent form here for submission [hyperlink online consent form].
Thank you,
Corinne Corte
Director, Success Courses, Arizona State University
EdD student, Arizona State University

APPENDIX D

SURVEY INSTRUMENT

The purpose of this survey is to determine your thoughts relative to concepts that will be covered in the BIAS Canvas training – race/racism, implicit bias, and microaggressions, all of which impact inclusive educational spaces. Your participation in this anonymous survey is completely voluntary and your responses will remain confidential.

Note: All survey questions align with the measurement of attitude (quantitative component of this MMAR design) and the construct of attitude malleability based on each of the four designated categories (race/racism, bias, microaggressions and inclusive educational spaces).

Directions. Below is a set of questions that deal with attitudes toward race/racism, bias, microaggressions and inclusive educational spaces, specifically here at Arizona State University (ASU), as situated within the United States (US).

For the items below, please give your honest rating about the degree to which you personally agree or disagree with each statement, also given your position here at ASU. At the end of each section, there are also open-ended items via which I would also very much appreciate your honest, written responses.

Please be as open and candid as you can; there are no right or wrong answers, nor judgments about any opinions on any of the items forthcoming.

Strongly Agree	Slightly Agree	Agree	Disagree	Slightly Disagree	Strongly Disagree

Please enter your self-determined Participant ID.

Section 1: Via this first set of questions, I am asking for your thoughts relative to race, defined for purposes of this study as a category of people who share common physical characteristics, in this case dark skin (e.g. Black) and racism defined as discriminatory practices based on one's skin color.
Note: All survey questions in this area are aligned with racial attitudes (RQ1)
1. Policies and practices embedded within post-secondary institutions perpetuate racial inequities among faculty, staff, and students.
2. Black students are less likely to persist and graduate from post-secondary institutions due to cultural characteristics.
3. Black students are less likely to persist and graduate from post-secondary institutions due to family backgrounds.
4. Black students are less likely to persist and graduate from post-secondary institutions due to underlying structural constraints.
5. The lack of Black senior administrators and/or faculty at post-secondary institutions is due to the lack of qualified candidates.
6. It is normal for people to want to live around others of similar racial backgrounds.

7. People naturally wish to develop romantic relationships with people who are of the same racial background.
8. People feel most comfortable surrounded by people of the same race.
9. It is normal for white staff and faculty to primarily interact with other white staff and faculty outside of work responsibilities.
10. The current status of Black people in the United States is due to their lack of motivation.
11. In our current society, if Black people worked as hard as white people, they would achieve the same outcomes.
12. Black people over use discrimination as an excuse to hide the real reason they are behind white people in society.
13. Black students' underachievement in post-secondary institutions can be explained by cultural values that are not consistent with educational success.
14. Black people are in the position they are today as a group because of present day discrimination.
15. Black people do not get access to well-paying jobs because of discrimination.
16. It is inappropriate to align one's thinking with the concept of only one race. The human race.
17. Black people are not promoted to the same extent as their white peers.
18. Affirmative action resolved most problems with unequal access to postsecondary education for Black students, staff and faculty.
19. What are your current thoughts relative to race/racism as a member of the ASU community?

Section 2: Via this second set of questions, I am asking for your thoughts relative to bias. For purposes of this study, bias is defined as a tendency for or against someone.
Note: All survey questions in this area are aligned with attitudes relative to bias (RQ2)
   1. Biases are conditioned responses to our perceptions and characterizations of certain people.
   2. Biases are formed through early life experiences
   3. Subconscious attitudes and thoughts impact any biases I may hold.
   4. I think that my behaviors and actions reflect implicit biases I may hold.
   5. Unconscious views about racial biases are easily changed.
   6. What are your current thoughts relative to bias as a member of the ASU community?

Section 3: Via this third set of questions, I am asking for your thoughts relative to microaggressions. For purposes of this study, microaggressions are defined as subtle, often unintentional slights, directed at individuals as based on some characteristic (e.g. skin color) of that individual.
Note: All survey questions in this area are aligned with attitudes relative to microaggressions (RQ3)

1. A white person who has Black friends is less likely to say and do racist things.
2. It is inappropriate to ask a Black person if the problem they are experiencing really arises from racism.
3. It is unfair (or unethical) to consider race in hiring or admissions decisions, even if the goal is to increase racial diversity.
4. Post-secondary institutions/university buildings named after only white individuals undermines belonging for non-white students.
5. It is inappropriate (or insensitive) to say a Black staff or faculty member is articulate.
6. What are your current thoughts relative to microaggressions as a member of the ASU community?

Section 4: Via this fourth set of questions, I am asking for your thoughts relative to inclusive educational spaces, defined for purposes of this study as spaces where all people feel welcomed and valued.

Note: All survey questions in this area are aligned with faculty/staff attitudes relative to inclusive educational environments (RQ4)

1. Post-secondary faculty and staff should assume responsibility for creating an inclusive learning environment that eradicates racial inequity in engagement and achievement.
2. Post-secondary faculty and staff need to be aware of and understand the implications of what they say to students.
3. An inclusive educational space incorporates elements from various cultural backgrounds and the contributions from diverse scholars.
4. Post-secondary faculty have a responsibility to consider and incorporate histories of diverse populations when creating lessons and assignments.
5. Post-secondary faculty and staff must amplify the voices of their Black students by validating their work through individual feedback, in addition to anonymously sharing their voice in class discussions.
6. African American Vernacular English (e.g., slang) is inappropriate to use within an educational environment (e.g., written assignments, oral presentations).
7. Educational institutions have a responsibility to hire Black faculty and staff in numbers proportional to Black students.
8. Post-secondary faculty and staff should commit to developing Black students outside of the classroom (e.g. prepare for graduate school, careers).
9. Post-secondary faculty should proactively invite Black students to engage with them individually during office (student) hours to explore ideas presented in class or ask questions, in addition to normalizing relationship building between faculty and students.
10. What are your current thoughts relative to inclusive educational spaces as a member of the ASU community?

Section 5: Via these questions, I am simply asking you to write, should you wish, any of your general or specific thoughts on any of the issues of interest in this study as included within this survey instrument.

1. If there is anything else you would like to add about race/racism, microaggressions or inclusive educational spaces within the ASU community, please do so here.
2. If there is anything else you would like to add, in general, please do so here.

Section 6: Via this final set of questions, I am asking a few questions to help me capture some demographic variables that are of general interest given the goals of this research.

1. What is your gender identification?
    a. Female
    b. Male
    c. Non-binary
    d. Prefer not to say
    e. Other: _____
2. Please describe your ancestral lineage (i.e. Black, White, Hispanic, European American, African American, Native American, Indigenous etc.). Please use terms/combination of terms you feel best describe you.
3. What is your age?
    a. Under 30 years old
    b. 31-40 years old
    c. 41-50 years old
    d. 51-60 years old
    e. Over 60 years old
4. Are you?
    a. Faculty
    b. Staff
5. Please enter your self-determined Participant ID

Thank you for completing this pre-BIAS Canvas training survey!

Instrument Notes:
- Questions under Section 1 that were adapted from Bonilla-Silva's (2018) color-blind racism frames are:
    o Naturalization – Questions 6, 8, 9
    o Minimization – Questions 14, 15, 17, 18
    o Cultural Racism – Questions 10, 11, 12
    o Color-blindness – Question 16 (please note this question also aligns with the color-blindness frame within the Microaggressions construct)

- Questions under Section 3 that were adapted from Sue's Microaggression Framework (2007) are:
    - Denial of individual racism – Question 1
    - Color-blindness – Question 2
    - Myth of Meritocracy – Question 3
    - Environmental – Question 4
    - Ascription of Intelligence – Question 5
    - Questions under Section 4 that were adapted from Culturally Sustaining Pedagogy are: (Ponterotto et al., 1998)
- Questions under Section 4 that were adapted from the Equity-Conscious Educational Practices (Harper, 2009) are:
    -
- All other questions I developed as per my research questions and the main ideas written into my conceptual framework.

APPENDIX E

REFLECTIVE QUESTIONS IN CANVAS MODULES

These reflective questions will be located at the end of each module (or all will be at the end of training) via an anonymous google form embedded with the Canvas training. All questions will be open-ended allowing as much space as necessary for a response.

Module 2 – Racism (RQ1)

A brief history of racism will introduce this module followed by information relative to individual versus systemic racism and color-blind racism.

1. What thoughts and feelings arose during the readings on the history and sociology of racism?
2. What thoughts and feelings arose during the video on color-blind racism?
3. Did your understanding of race/racism change after the training? If so, how?
4. Do you have any other thoughts relative to race, racism and color-blind racism that you would like to share?

Module 3 – Implicit Bias (RQ2)

Participants will complete the Race IAT, learn about implicit bias, including attitude and stereotype formation and malleability.

1. What were the results of the Race IAT (i.e. moderate preference for European Americans over African Americans)?
2. How did these results make you feel (please use as many words to describe your feelings as necessary)?
3. Do these results align with the perception you have of yourself relative to any biases that are indicated (please describe fully)?
4. What do you think may be the root of the discrepancy (results not aligning with who you think you are)?
5. What connection can you make between the information on race/racism in the previous module and awareness of any racial implicit bias?
6. Please explain how you think your implicit bias may influence your attitudes and behaviors towards Black people.

Module 4 – Microaggressions (RQ3)

Microaggressions will be defined, in addition to their manifestation and impact.

1. Did your understanding of what a microaggression is change after the training? Please explain.
2. Did your understanding of the impact of microaggressions change after the training? Please explain.
3. Do you have any other thoughts relative to race, racism and color-blind racism that you would like to share?

Module 5 – Relationship of implicit bias, racism, and microaggressions to perspectives of and intentions towards creating inclusive educational spaces (RQ4)

Information about culturally sustaining pedagogical and equity-conscious educational practices will be shared, in addition to examples of both.

1. Did your understanding of what constitute an inclusive educational space change after completing the training? Please explain.
2. Did the information about race/racism, implicit bias and microaggressions change how you think about inclusive educational spaces? Please explain.
3. Please share inclusive educational practices that you will implement in your educational space?
4. Please share why you believe it is important for you to create an inclusive educational space to support your Black students?
5. Do you have any additional thoughts relative to inclusive educational spaces that you would like to share?

- Questions 1-4 in Module 2 relate to race/racism information and align with RQ1.
- Questions 1-6 in Module 3 relate to bias information and align with RQ2.
- Questions 1-3 in Module 4 relate to microaggression information and align with RQ3.
- Question 1-5 in Module 5 relate to inclusive educational spaces information and align with RQ4.

APPENDIX F

INTERVIEW PROTOCOL

I. **Introduction**
   a. Welcome and thank you.
   b. Remind participant of the purpose of the study and BIAS training, introduce researcher
      i. You recently completed BIAS (Beliefs, Intentions, Actions and Sustenance) Training with the goal of better understanding race/racism, implicit bias and microaggressions and their impact on inclusive educational environments
      ii. As a reminder, the researcher for this study is Corinne Corte, the Director of Success by Design at Arizona State University (ASU). Additionally, I am a doctoral student in the Mary Lou Fulton Teachers College at ASU. I am working under the direction of Dr. Audrey Beardsley, a faculty member in the Teacher's College.
   c. Ask for verbal authorization to agree to participate in the Zoom recorded interview.

II. **Questions and Probes**
   1. Is there anything you would like to share relative to BIAS training that was not shared in the post survey or the reflective questions?
      - About race/racism? RQ1
      - About implicit bias? RQ2
      - About microaggressions? RQ3
   2. One of the final questions in the BIAS training asked if your understanding of what constitutes an inclusive educational space changed; since completing the training what other information would you like to share about any shift in your understanding? RQ4
   3. One of the final questions in the BIAS training asked if the information relative to race/racism, implicit bias and microaggressions changed how you thought about inclusive educational spaces; since completing the training what other information would you like to share about how that information changed the way you think? RQ4
   4. What specific information in the module on race/racism can you use to create a more inclusive classroom or environment to meet with students? RQ4
      - Can you tell me more about how you will use the information?
   5. Please explain how you feel your attitude toward Black students has changed based on the IAT result and your exploration of bias? RQ1
   6. What specific information in the module on implicit bias can you use to create a more inclusive classroom or environment to meet with students? RQ4
      - Can you tell me more about how you will use the information?
   7. Are there any pedagogical or student-centered practices you plan to change based on what you learned in the implicit bias module? RQ4
      - Diversity of course material (faculty)

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- Lesson plan changes (faculty)
- Changes in pre-conceived ideas or assumptions (advisors)
8. What specific information in the module on microaggressions can you use to create a more inclusive classroom or environment to meet with students? RQ4
    - Can you tell me more about how you will use the information?
9. If you either inadvertently commit or hear a microaggression in your class or during a meeting with a student, how will you handle it? RQ4
10. Is there any other information you would like to share about this overall experience and your approach to creating an inclusive educational environment?

III. **Thank you very much for your time and your engagement with BIAS training.** I will be happy to share the results of this action research with you if you are interested.

APPENDIX G

STUDY TIMELINE

Anticipated Time Frame*	Actions	Procedures
May 2021	Study approval from ASU IRB, Dissertation Committee	Complete dissertation proposal and obtain necessary approvals to proceed with study
September/October 2021	Participant Recruitment	Recruit participants via email,
October/November 2021	Training	
November/December 2021	Post-Survey administration	
December 2021 January 2022	Data preparation and analysis	Prepare data for analysis and analyze quantitative and qualitative data. Bring results of both types of data together for triangulation (convergent MMAR design).
February 2022	Compose findings	Compose the results and findings sections of the study report.
April 2022	Present and defend findings	Present findings to dissertation committee and disseminate to others as appropriate.
May 2022 and onward	Reflect and plan for future cycles of action research	Reflect on study results and plan future cycles based on results, committee feedback, and peer feedback.

*Dates may be adjusted slightly forward or backward to accommodate scheduling and unforeseen circumstances.

APPENDIX H

PRE- AND POST-SURVEY RESPONSES FROM ALL RESPONDENTS WHO
COMPLETED BOTH INCLUDING THE FIVE PARTICIPANTS USED IN THE
ANALYSIS

	Pre-Survey Responses n=23		Post-Survey Responses n=5	
	Mean	S D	Mean	S D
Race/Racism				
1. Policies and practices embedded within post-secondary institutions perpetuate racial inequities among faculty, staff, and students.	2.22	0.85	1.40	0.548
2. Black students are less likely to persist and graduate from post-secondary institutions due to cultural characteristics.	3.87	1.424	5.40	0.548
3. Black students are less likely to persist and graduate from post-secondary institutions due to family backgrounds.	3.48	1.238	4.80	1.095
4. Black students are less likely to persist and graduate from post-secondary institutions due to underlying structural constraints.	1.74	0.689	2.00	0.707
5. The lack of Black senior administrators and/or faculty at post-secondary institutions is due to the lack of qualified candidates.	1.87	1.058	1.20	0.447
6. It is normal for people to want to live around others of similar racial backgrounds.	4.13	0.92	2.60	0.894
7. People naturally wish to develop romantic relationships with people who are of the same racial background.	2.57	0.945	1.80	0.837
8. People feel most comfortable surrounded by people of the same race.	3.78	1.126	2.60	0.548
9. It is normal for white staff and faculty to primarily interact with other white staff and faculty outside of work responsibilities.	3.52	1.344	2.00	1.225
10. The current status of Black people in the United States is due to their lack of motivation.	1.04	0.209	1.00	0.000
11. In our current society, if Black people worked as hard as white people, they would achieve the same outcomes.	1.43	0.945	1.00	0.000
12. Black people over use discrimination as an excuse to hide the real reason they are behind white people in society.	1.52	1.082	1.20	0.447
13. Black students' underachievement in post-secondary institutions can be explained by cultural values that are not consistent with educational success.	1.52	0.947	1.40	0.548

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Item				
14. Black people are in the position they are today as a group because of present day discrimination.	2.52	1.729	1.40	0.548
15. Black people do not get access to well-paying jobs because of discrimination.	2.04	0.767	1.60	0.894
16. It is appropriate to align one's thinking with the concept of only one race, the human race.	2.78	1.783	2.00	1.732
17. Black people are not promoted to the same extent as their white peers.	1.48	0.665	1.40	0.548
18. Affirmative action resolved most problems with unequal access to post-secondary education for Black students, staff, and faculty.	1.65	0.573	1.80	0.837
Bias Construct				
1. Biases are conditioned responses to our perceptions and characterizations of certain people.	1.78	0.518	1.80	0.447
2. Biases are formed through early life experiences.	2.48	0.846	1.60	0.548
3. Subconscious attitudes and thoughts impact any racial biases I may hold.	1.87	0.757	1.60	0.548
4. I think that my behaviors and actions reflect implicit biases I may hold.	2.57	1.199	2.40	1.517
5. My unconscious views about racial biases are easily changed.	3.04	1.107	2.60	0.894
Microaggression Construct				
1. A white person who has Black friends is less likely to say and do racist things.	2.96	1.224	2.40	1.140
2. It is inappropriate to ask a Black person if the problem they are experiencing really arises from racism.	2.91	1.649	2.00	1.225
3. It is unfair (or unethical) to consider race in hiring or admissions decisions, even if the goal is to increase racial diversity.	2.7	1.105	2.20	1.095
4. Post-secondary institutions/university buildings named after only white individuals undermines belonging for non-white students.	1.83	0.937	1.20	0.447
5. It is inappropriate (or insensitive) to say a Black staff or faculty member is articulate.	1.87	1.325	1.60	0.894
Inclusive Educational Spaces Construct				

1. Post-secondary faculty and staff should assume responsibility for creating an inclusive learning environment that eradicates racial inequity in engagement and achievement.	1.09	0.288	1.20	0.447
2. Post-secondary faculty and staff need to be aware of and understand the implications of what they say to students	1.04	0.209	1.00	0.000
3. An inclusive educational space incorporates elements from various cultural backgrounds and the contributions from diverse scholars.	1.13	0.344	1.00	0.000
4. Post-secondary faculty have a responsibility to consider and incorporate histories of diverse populations when creating lessons and assignments.	1.13	0.344	1.00	0.000
5. Post-secondary faculty and staff must amplify the voices of their Black students by validating their work through individual feedback, in addition to anonymously sharing their voice in class discussions.	2	0.905	1.00	0.000
6. African American Vernacular English (e.g., slang) is inappropriate to use within an educational environment (e.g., written assignments, oral presentations).	3.26	1.421	2.80	1.304
7. Educational institutions have a responsibility to hire Black faculty and staff in numbers proportional to Black students.	1.65	0.885	1.30	0.447
8. Post-secondary faculty and staff should commit to developing Black students outside of the classroom (e.g. prepare for graduate school, careers).	1.48	0.593	1.00	0.000
9. Post-secondary faculty should proactively invite Black students to engage with them individually during office (student) hours to explore ideas presented in class or ask questions, in addition to normalizing relationship building between faculty and students.	1.65	0.714	1.20	0.447

APPENDIX I

QUOTES FROM PRE-SURVEY RESPONDENTS NOT INCLUDED IN
QUALITATIVE ANALYSIS

6. What are your current thoughts relative to race/racism as a member of the ASU community?

"There are extensive issues, the entire system of higher ed is built on notions of white, hegemonic, colonized practices, structures, etc. I also don't feel like we're taking an actual look at what this looks like at ASU. Pull back the curtain and compare the salaries of people who work here and what their identities are - I think we'll find there are significant discrepancies. "

"As educators and being in the educational system, it is our responsibility to create the conversations necessary to make changes in the current systems since they were not created with equality in mind. We should be at the forefront of educating all on the topics you are addressing here since most are not even aware they are not thinking without biases., "

"There's a huge disconnect between staff/faculty and students' reality, and I wish ASU did more to make staff/faculty aware of issues. I've heard of incidents that students receive official communication from ASU about, but staff do not, which makes me as a staff member less aware of my students' circumstances and puts the burden on them to bring up ongoing issues that the institution is well aware of. Also, I would have answered many of the questions within this survey differently depending on wording. E.g., is it normal for White people to hang out with White people? Yes, in so far as studies show people tend to surround themselves with environments familiar to which they grew up in. Is it acceptable for White people to recognize this and actively choose White spaces and not try to create more multicultural space? No. So, semantics mattered a lot in my responses here."

"Though the idea of just the human race is appealing, that cannot come through pretending not to see color or the discrimination that happens because of that color. I think that ASU has made some strides in the last year and a half, but this is in reaction to world events and pressure, not something they took on independently. It is great that some of the structural issues are currently being recognized, but we have a long way to go."

"There are sincere efforts being made to improve the disparities, but they are currently insufficient."

"Racism exists quite strongly in both is overt and covert forms. There are institutional and systemic issues with racism that persist across this university. The troubling thing is that the gatekeepers involved in perpetuating this environment seem to think that they are liberal minded and fair when nothing could be further from the truth."

7. What are your current thoughts relative to bias as a member of the ASU community?

"Bias is another systemic issue here at ASU. In various colleges and departments, it is most prevalent. Unfortunately, the majority of people in positions of power are White and they often either do not see or more frequently want to see that problems exist and that some of the offhand comments they make are inappropriate. It creates a hostile culture for the staff, faculty, and students of color."
"We have, as a community, spent a long-time pretending bias do not exist because we thought we were better than that--but everyone has biases and they cannot be overcome if they are not acknowledged."

"I think individual bias is overplayed as compared to systemic bias/policy change, similar to the climate change discussions about personal vs corporate responsibility (not 100% analogous but similar! Individuals should and need to take responsibility, but that alone will not change the systemic circumstances we find ourselves in)"
"I hear comments from coworkers, who would describe themselves as not biased, that are quite biased. People of color are often asked why they are in the building, all because of bias. I am actively working on my bias', by admitting to them and learning more about people."
"Everyone has bias and we could benefit from continued education on how to explore biases in the workplace."

8. What are your current thoughts relative to microaggressions as a member of the ASU community?

"These are especially challenging but so important to address because they are still happening in our community."
"Similar to bias, I've been exposed to training in my roles at ASU related to microaggressions and I've appreciated that such training exists to encourage faculty/staff to turn inward and reflect on how impactful their words can be on students as well as other colleagues. As someone who has been on the receiving end of microaggressions many times, it still feels relatively difficult to articulate to others--in the moment--why/how what is being said is hurtful or undermining."
"I want to better understand what micro-aggressions are in daily life so I can be more sensitive and inclusive with colleagues and students"
"Microaggressions exist here at ASU and many high-ranking people state them often. More awareness, training, and consequences need to take place to improve the climate from these things. We had a microaggressions training last year that was so watered down as to be insulting. Rather than speaking to microaggressions they presented on the "what color is the dress" exercise or talked about being bitten by sharks. While I understand what the intent may have been the presenter did not connect the dots and many people checked out soon

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after the presentation began. Opportunities to have real conversations are often missed because, again, the White people in power do not seem to see that a problem exists to begin with."

"They are a regular occurrence in my school. We need to educate ourselves as a community."

"They're a part of my daily discourse; again, as long as you're paying attention, it's hard to miss how prevalent they are."

"We are a huge institution We will never eradicate microaggressions, but I am noticing that people are much more willing to speak up now when they experience/see them at ASU."

"microaggressions may offend some while they don't offend others, it is important to be aware but it is also important to be understanding when you are on the receiving end of the microaggression, you do not need to be black to experience microaggressions

I believe all should go through training to gain perspective on microaggressions since most are unaware. Especially in a place of higher learning, so we can pass the information on to others."

"I need to get better at calling microaggressions out when I hear them."

"microaggressions happen every day, I hear them and often comment about them, trying to draw attention to the inappropriateness or harm done. I have caught myself before saying something that is/was a microaggression. It is easy to look up a saying to find the history and getting better meaning before saying the wrong thing."

9. What are your current thoughts relative to inclusive educational spaces as a member of the ASU community?

   "There are nowhere near enough of them, but a lot of the reason for this is that most faculty (I've heard this many times) don't feel as though they have the requisite knowledge or skills to create appropriately inclusive spaces, or facilitate the kinds of conversations that happen within them."

   "Faculty could benefit from more training and resources to help support all our underrepresented groups."

   "I have limited exposure to this, honestly. I am a staff member and have seen culturally sensitive interactions from that standpoint. There is a desire from students to be seen and acknowledged and to have people who look like them who they can aspire to be some day. Currently, again, this does not seem to be a priority for those in positions of power."