

ABSTRACT

Title of Dissertation: CREATING A SOCIALLY JUST
KINESIOLOGY: ADDRESSING ANTI-
BLACKNESS IN THEORY, RESEARCH,
AND PEDAGOGY

Tori Alexis Justin, Doctor of Philosophy, 2024

Dissertation directed by: Dr. Shannon Jette, Associate Professor,
Department of Kinesiology

Currently, the National Academy of Kinesiology (NAK) is striving to create a socially just kinesiology (DePauw, 2021). The NAK call to action is informed, in part, by emergent scholarship that examines how dominant approaches in kinesiology often discount the importance of developing anti-racist, critical, and equitable pedagogy (e.g., Armstrong, 2022). While this scholarship brings attention to kinesiology's centering of whiteness and the persistent stereotyping of (in)active Black bodies, what is missing is an examination of how/if anti-Black explanations of corporeality manifest across differing spaces in contemporary kinesiology and, if present, what form(s) they take. My

dissertation addresses the above-identified gap by using a three-manuscript model to examine three 'spaces' of kinesiology: theoretical, research, and pedagogical.

In manuscript 1 (Chapter 2), I engage Black feminist theory to critically evaluate the tenets of Physical Cultural Studies (PCS). In doing so, I identify a significant theoretical and empirical oversight in PCS scholarship, namely the tendency to reify white Eurocentric epistemo-logics and disregard Black feminist thought by emphasizing Black masculinity and white feminist imperatives in examinations of race and gender. To disrupt this practice, I propose a Black feminist informed reconceptualization of four principal PCS tenets (pedagogical, political, qualitative, and theoretical).

Manuscript 2 (Chapter 3) delves into research spaces by investigating how notions of “race” and “racial difference” are constructed in cardiovascular health (CVH) and cardiorespiratory fitness (CRF) research. I conducted a scoping review to systematically identify original research articles (N=236) that included “race” in their examinations of CRF and CVH and then analyzed the sample to ascertain how each article approached “race” and “racial difference”. Key findings include: the majority (77.5%) of the studies did not define race; more than half of the studies (58.6%) compared Black and white racial groups in their examinations; 45.2% of the studies positioned white research participants as the ‘average’ or ‘normal’ in comparison to other racial groups; and only one article discussed the possible role of racism in relation to their identification of racial difference in an outcome of interest. These findings illustrate the need for CRF and CVH examinations to engage scientific best practice on how to research “race” and “racial differences” in ways that avoid reproducing racialized stereotypes.

Manuscript 3 (Chapter 4) considers how Black women doctoral students experience pedagogical spaces of kinesiology departments. By conducting semi-structured open-ended interviews (N=10) with current and former Black women graduate students in kinesiology, I examine participants' perspectives on how/if anti-Black explanations of corporeality inform kinesiology research practice and curriculum, and how the participants experience these pedagogies. Key themes identified are: kinesiological research tends to employ "colorblind research methods"; these methods contribute to monocultural and ahistorical understandings of (in)active bodies and health; and participants experience resistance to institutionally-backed attempts to disrupt white normativity.

For kinesiology to transform into the socially just field that NAK is advocating, kinesiologists must consider how anti-Blackness can inadvertently manifest in their theories, research practices, and pedagogies. I provide practical suggestions throughout the dissertation on how to move toward change in each of these spaces.

CREATING A SOCIALLY JUST KINESIOLOGY: ADDRESSING ANTI-
BLACKNESS IN THEORY, RESEARCH, AND PEDAGOGY

by

TORI ALEXIS JUSTIN

Dissertation submitted to the Faculty of the Graduate School of the
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Advisory Committee:

Associate Professor Dr. Shannon Jette, Chair

Dr. David Andrews

Dr. Tara Blackshear

Dr. Kris Marsh (Dean's Representative)

Dr. Jennifer Roberts

Dr. Ronald Mower

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Dedication

This dissertation is dedicated to the Black scholars who have always thought their viewpoints weren't enough. To the PCS scholars of color who may struggle to find methods and theories that best relate to their lived experience. To the fearless Black woman doctoral and PhD scholars that bravely consented to take part in this study. To my family who continue to fill my cup with love. And most importantly, to my husband, Joey, who stood by my side for the past 11 years. You never let me give up, you encouraged my tenacity, and never let me get 'all worked up' about this PhD thing. You kept me grounded, smiling, and filled with hope during this process.

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I am deeply grateful to Dr. Jennifer Roberts for supporting me throughout my graduate career. More than a mentor, you acted as my sounding board. You not only allowed me to vent in your office as I was struggling to navigate the anti-Blackness in our department, but you also encouraged me to be my authentic self by not toning myself down to appease the Academy.

I have gotten to know Dr. Kris Marsh in her Critical Race Theory course. In this course Dr. Marsh helped me to 'tighten-up' my approach to sociological inquiry

and showed me that I have what it takes to work within a sociology department. In addition, she has written almost half a dozen letters of recommendation on my behalf and continues to notify me of opportunities to advance my professional portfolio. Her mentorship has been vital to my growth as a professional scholar.

I met Dr. Tara Blackshear, when she gave a talk at UMD that highlighted the perpetuation of racial inequities in kinesiology. The truth she spoke that day resonated with me to the point that I was brought to tears. Recognizing the pain I was feeling, Dr. Blackshear pulled me aside to ask why I was crying. I told her of a recent moment of racial inequity that I thought would derail the completion of my PhD. She offered me words of encouragement and quickly became my newest mentor. I am thankful that she agreed to serve on my dissertation committee.

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List of Abbreviations

AMA American Medical Associations

CRF Cardiorespiratory Fitness

CVH Cardiovascular Health

DEI Diversity, Equity and Inclusion

PCS Physical Cultural Studies

TA Thematic Analysis

Chapter 1: Introduction

Overview

Currently, the National Academy of Kinesiology (NAK) is striving to create a socially just kinesiology (DePauw, 2021). The NAK call to action is informed, in part, by emergent scholarship that examines how dominant approaches in kinesiology often discount the importance of developing anti-racist, critical, and equitable pedagogy (e.g. Armstrong, 2022). While this scholarship brings attention to kinesiology's centering of whiteness and the persistent stereotyping of (in)active Black bodies, what is missing is an examination of how/if anti-Black explanations of corporeality manifest across differing spaces in contemporary kinesiology—theoretical, pedagogical, and research—and, if present, what form(s) they take.

My dissertation addresses the above-identified gap by using a three-manuscript model, presented here as chapters two, three, and four, to examine three 'spaces' of kinesiology: theoretical, research, and pedagogical. In manuscript 1 (Chapter 2), I use Black feminist theory to re-define the tenets of Physical Cultural Studies (PCS), which is my area of specialization in kinesiology. In doing so, I address a significant theoretical oversight in PCS scholarship, namely the near lack of Black feminist theory which, I argue, contributes to the manifestation of anti-Blackness in PCS. My investigation of the next two spaces (research and pedagogical) is informed by the theoretical framework defined in manuscript 1.

Manuscript 2 (Chapter 3) delves into research spaces by investigating constructions of race in research pertaining to cardiorespiratory fitness (CRF). I examine how the notion of racial difference informs kinesiological approaches to CRF by conducting a scoping review of systematically identified original research articles. Of particular interest is how/if race is defined and how mechanisms behind racial differences are discussed.

For manuscript 3 (Chapter 4), I examine how Black women doctoral students experience pedagogical spaces of kinesiology departments. My use of the term ‘pedagogical’ is intended to capture not just graduate and/or undergraduate courses in which participants were involved but also the ‘lessons’ they learned in the research lab and at academic conferences. By conducting semi-structured, open-ended interviews (n=10) with current and former Black women graduate students in kinesiology, I explore participants’ perspectives on how/if anti-Black explanations of corporeality inform kinesiology research practice and curriculum, and the impact of such pedagogies on the participants. Using thematic analysis, participants’ understandings of kinesiology’s anti-Blackness are analyzed using a theoretical approach informed by Afro-Pessimism and Black feminist theory with the goal of illustrating the potential impact of anti-Black viewpoints on Black women students more generally.

Because anti-Blackness can operate through the unintentional privileging of particular ways of knowing, my dissertation provides a much-needed examination of how/if anti-Black understandings of corporeality inform kinesiology. Project insights

will be used to expand the ways kinesiologists approach the construct of ‘race’, with the goal of challenging systemic racism and anti-Blackness in kinesiology spaces. At the end of each empirical chapter, I offer recommendations that are informed by each project for making kinesiology more socially just.

The rest of this introductory chapter presents an overview of the theoretical and methodological approaches that inform chapters two, three and four, and discusses each chapter’s contribution to kinesiology’s transformation.

Research Statement and Research Questions

There is an emergent body of scholarship, that examines how kinesiology departments center whiteness, marginalize students of color, and stigmatize anti-positivist ways of knowing the body, health, and physical activity (Culp, 2020; Depauw, 2021; Douglas & Halas, 2013; Gill, 2022; Mower, 2023; Nachman et al., 2022). Much of this scholarship is critical of how traditional kinesiology reifies white supremacist logic as they disregard socio-cultural perspectives and discount the importance of developing anti-racist, critical, and equitable pedagogy. While I review this important body of literature in detail in the literature review of chapter 4, the salient point at this juncture is that much of this scholarship lacks a Black feminist approach and does not center Black women’s lived experience. I wish to contribute to this emergent movement of scholarship and move toward a socially just kinesiology by (1) theoretically contributing to the ethos/ character of PCS by articulating Black feminist and critical race theory; (2) investigating constructions of race in

examinations of cardiorespiratory health and cardiorespiratory fitness in relevant scientific journals; and (3) exploring how current and former Black women doctoral students experience the space of kinesiology departments, with a focus on how they experience kinesiology's anti-Blackness as constructed through monocultural and ahistorical approaches to the (in)active body and health. Thus, my research questions are as follows:

R1: How might Black feminist theory and critical race theory meaningfully come together as a lens for studying the active body in PCS?

R2a: How is race and racial difference constructed in scientific articles that are focused on cardiorespiratory fitness and cardiovascular health?

R2b: What are the various ways that 'race' and 'racial difference' are approached in the rationale sections of the scientific research papers? In the inclusion/ exclusion criteria for participants? In the analysis of findings?

R2c: Are these examinations attuned to socio-cultural or historical explanations of the significance of exploring racial differences in cardiorespiratory fitness and cardiovascular health?

R3a: What insights can Black women doctoral students provide to illustrate the operation of monocultural and ahistorical (i.e., white supremacy) approaches to the in(active) body and health? How do they experience these approaches?

R3b: What challenges, if any, have Black women doctoral students faced when countering the traditional (biophysical) kinesiological perspective?

Theoretical Approach

Below, I provide a broad overview of my theoretical approach to this project. In this section I discuss my understandings of Black feminist theory which ground and inform my imperative for this dissertation. This is not a genealogy or an excavation of Black feminist history; rather I provide an overview of my Black feminist influences and show the ideas and frameworks that inform my Black feminist viewpoint. What is particularly impactful on my Black feminist standpoint is the historic positioning of Black women's bodies. What I will articulate in the following section is how chattel slavery produced long-standing narratives about Black women's bodies that bolstered the race/sex hierarchy and how the "woman"/"unwoman" binary influenced Black/white discourses. I carry this viewpoint to the three spaces I investigate in chapters two, three, and four.

Black Feminist Theory

Black feminist thought is rooted in the everyday acts of resistance enacted by ordinary women of African descent in the United States. The combination of being Black and woman, in Western society, in particular, provides Black women a 'unique angle of vision' (Collins, 2002), or a group consciousness, that is ultimately overshadowed by dominant single-axis models of oppression such as race-based, class-based, or sex-based discrimination. The simultaneity of oppression faced by Black women has fostered a subjugated, but resilient, episteme that has been and persists to be routinely excluded and distorted by white male structures of knowledge

(Collins, 2002). Within this power structure, Black women are meant to be objects whose identities and realities are created by the dominant group in power (i.e., white men) (hooks, 1989).

However, Black feminist consciousness is not occupied with the “master’s concerns” (Lorde, 1984). Instead, Black feminist thought aims to cultivate a movement of self-discovery and self-reclamation that is divorced from the violent colonial suppression of Black people that was required for the establishment and maintenance of the institution of slavery.

The convergence of race, class, and gender within the system of slavery shaped all subsequent relationships that Black women had within society, but namely those with Black men and white women (I further detail the theoretical consequences of this relationship in Chapter 2). As hooks (1984) argues: “White women and black men have it both ways. They can both be oppressor and oppressed” (hooks, 1984 p.16). The simple categorization of being Black and woman allowed Black women to centrally contribute to Black liberation and gender equality movements, but neither movements recognized the complexity of Black femininity nor their own proximity to white male structures of power. hooks again articulates a compelling commentary regarding this omission: “No other group in America has had their identity socialized out of existence as have Black women” (hooks in King, 1988 p.45). For example, the master category of ‘woman’ does not consider how ‘women’ as a group are not segregated or oppressed in the same way. The master category of ‘woman’ has been constructed by the minds of white men who needed to standardize the bodies and

subjectivities of white women to further justify the ideology of white supremacy (Fausto-Sterling, 2002). In this regard, the category of ‘woman’ is intimately tied to whiteness which excludes non-white women from being considered proper women within white supremacist society. In response, Black women fashioned their own understanding of Black womanhood. These self-definitions were designed to resist the negative controlling images of Black womanhood advanced by white thought (Collins, 2002, p. 13).

Conceived from the need to draw attention to how “mainstream” white feminism and Black liberation disregards the experiences of women of color, the practical goals of Black feminism are to “explicate the relationship between race and gender, recover Black women’s stories, and challenge both feminism and antiracist projects to meaningfully include Black women” (Nash, 2008a p. 56). Black feminist thought accomplishes this feat by emphasizing the importance of producing counter hegemonic knowledge by means of “narratives”, “riddles”, and “proverbs” (Christian, 1987). Language, bell hooks (1989) argues, is a place of struggle where coming to voice, for some oppressed groups, is both an act of resistance and a site of transformation where the censored self-transitions from object to subject. For instance, Sojourner Truth’s (1851) *Aint I A Woman* is powerful oratory and a foundational moment in the history of Black feminist thought. Truth states, “Look at me! Look at my arm! I have ploughed and planted, and gathered into barns, and no man could head me! And ain’t I a woman”. In her speech, Truth not only transforms into a critical figure of Black feminist consciousness, but Truth’s voice became a tool,

or a weapon, in which she used to break-down white supremacist practice. By providing a series of visuals which simultaneously aimed to capture the complexity of being both Black and woman while also, and arguably more importantly, illuminating the vulnerability of the master category “woman”, Truth’s voice became what hooks (1989) refers to as a mechanism that redefines reality. And though white suffragettes of the time harken that Black women did not know of their oppression until white feminists voiced their sentiment (hooks, 1984, 1989) Truth’s oratory proves that is false.

Truth’s oratory also demonstrates that Black feminists do not have to be “intellectuals” in order to contribute to critical social theorization (Collins, 2002). Black women often rely on alternative knowledge validation processes, such as such as songs, stories, and proverbs to generate competing knowledge claims. Institutionalized forms of knowledge, especially as it regards the academy, privileges epistemologies that uphold white supremacy and Western hierarchy. Due to this, women of color may know something to be true, but are unable to legitimate claims using scholarly norms (Collins, 2002, p. 273). In doing so, the Academy becomes and remains a site of exclusion that works to erase subaltern thought and subjugated ways of knowing. In attempt to remedy their silencing of Black voices, the University in the mid-90’s recommitted their diversity initiatives by hiring Black feminist scholars to do ‘intersectionality work’ (Hong, 2008).

Intersectionality was originally coined to offer an oppositional way of thinking about discrimination within the judicial system. As a lawyer and law

professor at UCLA's School of Law, Kimberlé Crenshaw sought to investigate how the legal system handled cases of "doubly marginalized" women, specifically Black women. She coined the term intersectionality as a metaphor in her 1989 paper *Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics*. The purpose of her essay was to critique the juridical tendency to treat race and gender as mutually exclusive. Crenshaw (1989) suggests that this framework "marginalizes those who are doubly- burdened" and "creates a distorted analysis of racism and sexism because the operative conceptions of race and sex become grounded in experiences that actually represent only a subset of a much more complex phenomenon" (p. 140). However, Crenshaw is not the first to illuminate the intellectual need to analyze identity discrimination from a multi-axis lens.

The idea of "intersectionality" is profuse within the scholarship and praxis of Black feminists. For instance, Anna Julia Cooper, who was born enslaved and later earned her PhD, often spoke of the double enslavement of Black women as being "confronted by both a woman question and a race problem" (King, 1988 p. 42). Her famous statement, "only when Black women achieve emancipation will Black people achieve emancipation" which often goes unacknowledged due to W.E.B. Du Bois' lack of citation, reflects her attitude towards the interlocking matrix of domination that negatively impacted the lives of Black women (see Collins, 2019). Following Cooper's activism, Ida B Wells-Barnett, another Black feminist who goes unacknowledged by Du Bois (Itzigsohn & Brown, 2020) also took an intersectional

approach as she led anti-lynching campaigns in Memphis, Tennessee. Wells-Barnett analyzed how the interlocking systems of racism, heteropatriarchy, and class produced controlling images of Black masculinity that were essential to the formulation of Black men as “sexual predators” (Collins, 2004). This formal recognition of the oppression of sexuality influenced other social activists to call attention to how sexuality and gender identity operated as tools of submission.

Like her predecessors, Crenshaw’s objective was to reconceptualize the lived experience of the women who faced violence due to the multiple dimensions of their identities (i.e., race and class) and, more broadly, develop a framework that may be used to deal with other marginalizations as well: “For example, race can also be a coalition of straight and gay people of color, and thus serve as a basis for critique of churches and other cultural institutions that reproduce heterosexism” (Crenshaw, 1991, p. 1299). By coining intersectionality, Crenshaw (1989, 1990) aided in the substantiation of “multiple-jeopardy” as a site worthy of theoretical investigation. In this regard, intersectionality considers social categories such as race, gender, class, sexuality, nationality, (dis)ability, and religion as mutually constituted dimensions that underlie systems of power that foster complex social inequalities.

Due to its effectiveness, Leslie McCall (2005) argues that intersectionality is the most important contribution to women's studies (Davis, 2008; McCall, 2005). Intersectionality has become women's studies primary program building goal and is often referred to as the 'flip side' of white feminism (Nash, 2018). Unlike ‘mainstream’ white feminism, “intersectionality can be employed by any feminist

scholar willing to use her (their) own social location as an analytic resource, rather than just an identity marker" (Davis, 2008 p. 72). Though it is widely acknowledged that intersectionality is a knowledge project that aims to bring about change and that intersectionality is essential to contemporary activist-based endeavors, it remains unclear what intersectionality actually is, does, or maintains (Davis, 2008).

Methodologically, it is widely acknowledged that intersectionality is not simply additive, but many scholars, especially outside of women's studies, continue to add race, gender, and sexuality as if the intersectional experience can be reduced to a monolithic algorithm (Bowleg, 2012). The frequent misuse of intersectionality in this regard is arguably due to intersectionality's ambiguity as a method. While scholars such as Davis (2008) argue that the success of intersectionality lies in its vagueness and openness, intersectional critics claim that intersectionality's obscurity allows for its commodification by neoliberal regimes (Blige in Nash, 2018). In addition, intersectionality scholars must also grapple with the multiple identities of Black women and examine how Black women as subjects experience subjectivity (Nash, 2008b).

Intersectionality's popularity, ambiguity, and openness enables scholars who are not actually doing intersectional work to make intersectional claims which is a practice that disenfranchises the Black feminists who worked to cultivate the intersectional project. Although various PCS scholars have applied intersectionality to their examinations of physical culture (Cooky & Rauscher, 2016; McDonald & Cooky, 2013), an issue that I further detail in Chapter 2, few have explicitly linked

their intersectional analysis to Black feminist theorizing. Intersectionality is useful for understanding the complex nature of subjectification and how power relations act on the gendered subject, however, when intersectionality is theoretically divorced from its Black feminist epistemology it becomes *diluted* or *bland* as it is no longer linked to resistance, activism, or praxis—which are central to Black feminist thought.

Intersectionality informs various aspects of this dissertation. Firstly, it informs how I critique the tendencies of PCS scholars to center the bodies of Black men and the intellect of white feminist in their discussions of race and gender (Chapter 2).

Secondly, it underlines how I reconceptualize four PCS principal tenets (Chapter 2).

Lastly it informs my decision to examine the insights of Black women doctoral scholars, as I understand their kinesiological experience existing within interlocking oppressions (Chapter 4).

The Historic Positioning of Black Women's Bodies

As previously mentioned, the 2021 mission of the NAK is to make kinesiology more socially just. One question that is central to that mission is whether the benefits of physical activity are universally shared by *all* people (DePauw, 2021 p. 104). The short answer to this question is *no*, because the primary benefit of physical activity is improved health, and health is defined as a state of “complete mental, physical, and social wellbeing” (World Health Organization 1946, emphasis added). In a society that is built on anti-Blackness and is historically and contemporarily violent towards Black women’s mental, social, and physical health

(Harrison, 2021), it is unsurprising that Black women report having to navigate anti-Blackness when participating in physical activity (Ashdown-Franks & Joseph, 2021; Hornbuckle, 2021; Justin, 2023). As a result, there is additional burden of labor Black women undergo when engaging in physical activity. This additional labor is not a *benefit* of physical activity, nor is undergoing this labor an occurrence that is universally shared by *all* people.

Anti-Black socio-cultural discourses aide the exclusionary ethos of wellness spaces and arguably impede Black women's desire to take part in them. While many Black women are physically active and disrupt these oppressive regimes (see, for instance, Justin & Jette, 2021), I would like to take the time to discuss the discourses that historically and contemporarily persist to marginalize Black women's bodies, thus limiting their ability to truly be well.

Central to discussions of the body is Hortense Spillers' (1987) notion of 'flesh' as a type of origin discourse from which modern conceptions of Blackness, gender, and sexuality derive:

I would make a distinction in this case between "body" and "flesh" and impose that distinction as the central one between captive and liberated subject -positions. In that sense, before the "body" there is the "flesh", that the zero degree of social conceptualization that does not escape concealment under the brush of discourse, or the reflexes of iconography. Even though the European hegemonies stole bodies—some of them female—out of West African communities in concert with the African "middleman", we regard this

human and social irreparability as high crimes against the flesh, as the person of African females and African males registered the wounding. If we think of the “flesh” as a primary narrative, then we mean its seared, divided, ripped-apartness, riveted to the ship’s hole, fallen, or “escaped” overboard (Spillers, 1987 p. 67).

To be described as having “flesh”, and not a “body”, represents a middle passage discourse that restricted Black people from having the status of human, justifying their violent abuse and exploitation by the hands of their oppressors. “Flesh” is not a biological occurrence, rather, it “represents a racializing assemblage consisting of the calculated work of irons, whips, chains and knives” (Weheliye, 2014, p. 39) used during the era of chattel slavery. While all Homo Sapiens have “flesh” upon which meanings and practices are written, Black enslaved “flesh”, unlike white “flesh,” was viciously marked as unhuman, unable to operate as human, and incapable of possessing human thought. The scars left by chains and whips, referred to as a kind of “hieroglyphics of the flesh”, signifies the incapability of Black Homo Sapiens to be productive modern citizens, and signals their need to be, often violently, policed by society. In other words, the “flesh” functioned as a disarticulation of human form from its anatomical features and their claims to humanity were controverted in favor of the production of cultural institutions (Spillers in Snorton, 2017 p. 19). Opposing Black claims to humanity allowed for the power inscribed upon white “flesh” to flourish, as their bodies became cultural signifiers of humanity.

A “body”, then, is made intelligible through the embodiment of hierarchal race and gender roles constructed by cultural institutions whose purpose is to inform the “body” of how to become a productive citizen. Captive slaves did not have “bodies”, instead, their “flesh” was deemed ungendered, unhuman, and incapable of possessing value outside of chattel work. Spillers (1987) offers the following passage on how the grammar of captivity persists in contemporary discourses of “body” and “flesh”:

Even though the captive flesh/ body has been “liberated” [...] the ruling episteme that releases the dynamics of naming and valuation, remains grounded in the originating metaphors of captivity and mutilation so that it is as if neither time nor history, nor historiography and its topics, shows movement, as the human subject is “murdered” over and over again...(p. 68).

The end of de jure enslavement, then, does not eliminate the meanings and discourses that are transgenerationally carried by the descendants of the enslaved. Blackness as skin color is a permanent marker of captivity and mutilation which constructs a grammar that continues to symbolize Blackness as less-than-human status, and is exacerbated by institutionalized practices that are founded on middle passage epistemologies. Black women’s bodies, in particular, are discursive terrains where racism, sexism, and not-quite human standing converge to produce a subjugated subaltern position. Black women possess, what Spillers (1987) terms ‘ungendered flesh’, a status that disarticulates Black women from womanhood and equates them with an animalistic grammar. The discourse constructed from Black ungendered flesh

was not eliminated after the abolition of chattel slavery, nor was it limited to theoretical explanations. In fact, this discourse continues to *control* how Black women are *seen* in society.

Controlling images are constructed stereotypical portrayals of Black women that are designed to make racism, poverty, sexism, and other forms of societal injustice appear to be ‘natural’ parts of Black women’s everyday lives (Collins, 2002, p. 79). Portraying Black women as mammies, jezebels, matriarchs, welfare queens, and hot mommas helps justify their mistreatment in US society and subsequently bolsters the race/sex hierarchy. However, controlling images do not simply affect Black women exclusively. Controlling images also act on white women as the construction of proper ‘womanhood’ is fostered in opposition to the “unwoman”. The binary of “woman” and “unwoman” reflects the dominant group’s interest (i.e., white men) in maintaining both the subordination of Black women and white women.

The mammy, for example, was the first controlling image applied to Black women and its purpose was to represent Black women as domestic, obedient, and loyal servants to white families (Collins, 2002). Though the white husband held the true reins of power in the household, it was the responsibility of his second-in-command, his white wife, to work, supervise, and discipline her Black mammy (giving a false sense of control within the home). Contrarily, the jezebel was portrayed as a loose, voluptuous, and promiscuous Black woman that white women should fear losing their husbands to due to her powers of seduction and sexual willingness. The dynamic of servant/supervisor and wife/paramour established an

intense sense of mistrust between white and Black women and dominant ideologies of sexuality lay at the crux of their relationship. More current controlling images that plague Black women are ‘welfare queen’, ‘savage’, and ‘vixen’ to name a few.

Arguably, the contemporary exclusion and devaluation of Black women’s minds and bodies are due to their historic positioning as object and unhuman. Because of this, their bodies and intellectual epistemes are often Othered or not considered a valuable site of knowledge production. The consequence of this is a study of physical culture, the body, and movement that may bolster the anti-Blackness that underlines dominant field of kinesiology (a notion I further explore in Chapter 3). I counter this inequitable framing throughout this dissertation. In Chapter 2, I discuss the Eurocentric nature of PCS scholarship and the tendency to overemphasize the bodies and theories Black men and white feminists. In Chapter 3, I present a brief history of how anti-Black racism informs the physical cultural sciences of the 19th century and, based on the scoping review, demonstrate how CRF and CVH examinations have aided in the reproduction of white logics through their engagement of “race” and “racial differences”. In Chapter 4, I discuss the effects of anti-Black knowledge production and its impact on the institution on education.

Discourses of Black womanhood arguably contribute to how we understand Black women’s bodies in contemporary societies, including their perceived (in)ability to conform to modern standards of health, fitness, and physical activity (Berger, 2018). To that point, it is critical to centralize Black women’s subjectivities and

recognize how their ways of knowing can inform and ultimately cultivate a socially just study of movement and physical culture.

Methodology

In this section I provide an overview of the methodological underpinnings of this project. Before I detail my methodological approach, I would like to share this extract from *Black Feminism in Qualitative Inquiry: A Mosaic for Writing our Daughter's Body* by Black feminist scholar and educator Venus Evans-Winters whose research helped me to understand and express my own reluctance to “do” scientific research:

Many of us were introduced to the idea of "scientific research" by white women, while reading assigned texts of white researchers' interpretations of the social world and experiences. Consequently, our understanding of qualitative inquiry begins and too often ends from a white-centric lens. It is imperative that those committed to social and racial justice paradigms give attention to how non-white women make sense of contemporary and historical patterns. Moreover, it is equally important for us to consider the ways in which Black women seek to question, understand, and challenge, via the formal inquiry process, contemporary social injustice, like the imposition of deficit-thinking, white supremacy, and racialized gender bias in society as well as the research process itself" (Evans-Winters, 2019 p. 15).

Many scholars of color find themselves asking “What am I doing here?”, “Does my research matter?” The hesitations and self-doubt the scholars of color profess is due to the anti-Black nature of the US education system (a history I detail in Chapter 4). How the US education system teaches its students to think, comprehend, and research is through a lens that mobilizes white normativity. White normativity, here, refers to the institutionalized structures and practices that bolster the authority of white logic (Zuberi & Bonilla-Silva, 2008). White logic becomes operationalized through the mobilization of anti-Blackness, or the discounting of frameworks, theories, and methods that disrupt and challenge hegemonic approaches to knowledge that are often positioned as ‘common sense’. As such, the discomfort scholars of color may feel is, in part, due to the fact that the US education system was not developed for them to challenge white normativity, but to operate within its confines (a notion I further detail in Chapter 4).

I intend to work through some of these questions and discourses throughout this dissertation with the ultimate goal of contributing to the emergent scholarship that aims to reshape how we do research in kinesiology (see Culp, 2020; DePauw, 2021; Douglas & Halas, 2013, Gill, 2021; Hodge & Harrison, 2021). While the positivist ‘hard science’ scholars are central to my critique, this dissertation (in Chapter 2) will also discuss how sociological scholars of physical culture also reify white normativity as they tend to make invisible the (in)active bodies and voices of Black women as they over emphasize the bodies of Black men and the frameworks of white feminists in their examinations of physical culture. While there are many

feminist critiques of PCS (Adams et al., 2016; Birrell, 2000; Olive, 2017), there are few that explicitly utilize and advocate for the centering of Black feminist theory within PCS epistemology, ontology, and methodology.

Informed and empowered by the words of Black feminist scholar and educator Venus Evans-Winters (2019), this project seeks to question, understand, and challenge how anti-Blackness is embedded in the theoretical, research, and pedagogical frameworks of kinesiology. By centering a Black feminist ideology, this dissertation illuminates the kinesiological practices that cast a shadow over Black women scholars and their intellect, and aims to make visible the importance of Black women's standpoint if we are to transform kinesiology into a socially just field. To properly do so, this project operates from a non-white lens that is critically informed by and grounded in the social justice imperatives shared by Black feminist theory and physical cultural studies. In this section, I briefly describe my methods for chapters 3 and 4 and detail my philosophical approach to qualitative inquiry, including my ontological, epistemological, and reflexive statements. I conclude by stating how each chapter contributes to the transformation of kinesiology.

Chapter 3 Methods Overview

In chapter three I discuss and present the results of a scoping review which explored how contemporary examinations of cardiorespiratory fitness (CRF) and cardiovascular health (CVH) (N=232) construct “race” and “racial differences”. Scoping reviews are guided by broad research questions and are ideal tools for

systematically exploring the coverage of a particular topic across a breadth of literature (Arskey & O'Malley, 2005; Munn et al., 2018). A scoping review, with its positivist logic, is perhaps not a methodological tool typically utilized in Black feminist or PCS projects. In this way, a scoping review can be considered the 'master's tool' in that it is a highly systematic and rigorous approach to reading and analyzing a breadth of literature that further bolsters the white logic that underpins the scientific practices. While I recognize that this approach directly counters the Black feminist 'spirit' of this project and contradicts my goal of cultivating knowledge from *outside* the confines of whiteness, I have chosen to partake in a scoping review for various reasons. Firstly, I intend to publish this chapter in *Kinesiology Review*, a high impact journal that has the attention of kinesiologists that operate under a positivist paradigm. As part of my Black feminist praxis, it is not enough to simply identify and discuss how research practices reify race(ism). Rather, to enact change we must publish critically informed perspectives in journals such as the *Kinesiology Review* so they come into the sight of those who may not look otherwise. This necessitates the use of a method (i.e., scoping review) that will facilitate manuscript acceptance. Secondly, since a scoping review is a systematic process, it does provide instructions for *how* to identify literature in a systematic manner. Due to the volume of literature analyzed in this sample (N=232) a scoping review was the best tool, or rather, it was the most available tool due to the epistemo-ontological confines in which we exist. Because of these parameters, which are meant to maintain the dominance of

whiteness (I notion that I further explore in Chapter 4), we are seemingly limited in how we identify, code, analyze, and report sample findings.

To determine which studies were to be included in the scoping review ‘sample’, I worked with the University of Maryland public health librarian to develop a search string of key terms, determine inclusion and exclusion criteria, and ensure the project aligned with the [JBI Manual for Evidence Synthesis](#) (Chapter 11) and the [PRISMA-ScP extension](#). Studies were *included* if they met all of the following criteria:

1. Conducted in the United States,
2. Examined racial/ethnic groups in the United States,
3. Discussed racial differences,
4. Focused cardiovascular health and/or cardiorespiratory fitness, and
5. Physical activity, sport, and/or athletic performance was measured in a laboratory, clinical setting or via a specific intervention.

Studies were *excluded* if they were missing one or more of the inclusion criteria.

Once eligible studies were determined, I abstracted the following data items from each article (N=232): record identifiers (i.e., author, year, study title); study aims and objectives; participants (i.e., sample size, mean age/age range, gender, race/ethnicity); concept (i.e., “race,” “racial differences” approach); context (i.e., “cardiovascular health,” “cardiorespiratory fitness”); methodology/study design; socio-cultural or historical explanation of “race;” key findings; gaps in research. Included studies in the scoping review sample (N=232) covers years 1971-2023. Results were

synthesized using quantitative analysis (i.e frequency analysis) and qualitative analysis (i.e., content analysis). The qualitative analysis was specifically informed by an articulation of Black feminist and Foucauldian theory which provided methodological insight. Further explanation of how the scoping review was performed and analyzed is provided in Chapter 3.

Chapter 4 Methods Overview

Chapter 4 explores how/if current and former Black women doctoral scholars (n=10) experience anti-Blackness as they come to learn and teach about the (in)active body in kinesiology classrooms and research labs. In Chapter 4, I detail how I utilized a snowball sampling strategy— by which participants identified cases of other interested participants and recommended them to the study— and a semi-structured interview script of flexibly-posed, opened-ended questions. Transcripts were coded for emergent themes by identifying recurring phrases and commonalities using thematic analysis.

Thematic analysis is a useful qualitative analytic for identifying and interpreting patterns and themes across a data set (Clarke & Braun 2016; Braun & Clarke 2019). The thematic analysis I employed is unique because of how I articulated Black feminist inquiry and Foucauldian theory to “go beyond” participants overt narratives. More specifically, I situated patterns that were identified via thematic analysis in relation to their dominant discursive confines. Drawing on Foucauldian understandings of power and knowledge (i.e., how power is constituted

via knowledges deemed true and their related practices) I was able to critically analyze dominant discourses at play. In other words, I deconstructed discourses that simultaneously present us with a particular vision of the world while marginalizing others (Burr, 2003). This vision, I argue, is one that normalizes white logic which aides in the dismissal of “local” or provincial knowledge (Dotson, 2011). It is with this methodological articulation in mind that I interpret and report participant findings in relation to dominant kinesiological narratives.

Philosophical Approaches

Ontology

This project acknowledges that kinesiology, which has roots in the biological and medical professions, has a long and controversial history of involvement in utilizing scientific methods to legitimize racial hierarchy in the US. I interpret the nature of science, as it operates in the US by the human sciences, as being grounded in a long-standing white logic whose practice often goes undetected but whose aim is clear. The goal (intentional or not) is to maintain the power of white supremacy. My ontological position which views the nature of kinesiological science as reinforcing the normativity (and subsequently the authority) of whiteness. When I refer to whiteness, I am not talking about white people; rather, I am referring to a formation of power that is inextricably linked to and made possible by the institution of chattel slavery in the US and subsequent cultural institutions developed in the US. This power formation, however, does not simply result in privileges, opportunities, and

access, but it signifies a right to think, act, and live in varying degrees of unobstructed existence in US society where rules, policies, and behaviors may be modified and adapted for the benefit of whiteness. In this regard, to maintain the dominant social order is to maintain the power of whiteness. To better conceptualize whiteness, in this dissertation I begin with the influence of whiteness on the human sciences.

There is a plethora of research, some of which I detail in Chapters 2, 3, and 4, that describes the influence chattel slavery had on the practice of human sciences. To put it plainly, the authority of human science and its theories and methods were heavily influenced by the need to mark Black bodies as “animalistic”, “Other”, “abnormal”, and “unhuman” and white bodies as “intellectual”, “normal”, “average” and “ideal” (Braun, 2014; Couturier, 2005; Hammonds, 2013; Hammonds & Herzig, 2009; Roberts, 2014; Strings, 2019; Washington, 2006). This binary opposition has been, and remains, ontologically fundamental to the production of dominant scientific knowledge about the body and is a commonsense practice.

It takes a sort of critical awakening to counter and disrupt this hegemonic way of thinking about and doing science. Even fields of study who aim to center equity and social justice, can (re)produce knowledge and practices that reinforce the authority of whiteness (an issue I detail in Chapter 2). As such, this dissertation aims to not only illuminate the binary opposition of whiteness and Blackness that seems essential to practice of kinesiological science (which I further explore in Chapter 3), but to promote a way of thinking and doing kinesiological research that intentionally

counters the operation whiteness (these recommendations are provided in Chapters 2, 3, and 4).

Epistemology

Epistemology is how we think about the process of manufacturing knowledge (Daly, 2007, p. 20). Epistemology is concerned with how we, as researchers, deal with our assumptions about reality and how those assumptions inform our view of the realities we are trying to apprehend (Daly, 2007). According to qualitative methodologist, Kerry Daly (2007), there are two forms of epistemological conventions: objectivist epistemology and subjectivist epistemology.

Objectivist epistemology is rooted in the belief that there is a knowable reality that exist independently of our own predispositions and beliefs. The goal of the researcher, in this position, is to explain this external reality without influencing it: “this is science through a one-way mirror where the values and biases of the inquiry are prevented from influencing the outcomes of the research” (Guba and Lincoln 1994 in Daly 2007 p. 23). Contrarily, subjectivist epistemology acknowledges that there can be no separation between the knower and the known as all reality is a construction. The researcher, in this position, is unable to interpret reality objectively as reality is the product of multiple and various influences that cannot be accounted for. In this view, the term “bias” has no meaning because the reason to investigate is the result of the researcher’s reality. This is not to say that there is no such thing as fact, but subjective epistemology acknowledges how facts are subject to change based

on contextuality, time, and spatiality. With these two camps in mind, it is unsurprising that my epistemological position is located on the subjectivist end. Subjectivist epistemology speaks to the critical paradigm in which this project operates. According to Kuhn (1962), paradigms are a “prerequisite to perception itself” (p. 113) because *what* people see is dependent upon what their lived experience has *taught* them to see. As this project is focused on kinesiological practices and ways of knowing within the US, I take the epistemological stance that US researchers have been hegemonically taught to see the binary opposition of Blackness and whiteness since the beginning of chattel slavery (a history I describe in Chapter 3). This is not to say that researchers are docile automatons that cannot think independently. Rather, I argue that there is a way of knowing the (in)active body that is taught in the US that is inherently anti-Black and that too often goes unacknowledged (an issue I detail in Chapter 4). The result of this is a dominant production of knowledge that situates white logic as “default” and other epistemological frameworks as “alternative”. This project disrupts this positioning as it deploys Black feminist theory to address the concurrent operation of anti-Blackness and the substantiation of whiteness in the pedagogical, theoretical, and research spaces of kinesiology.

Reflexivity

PCS projects are inherently reflexive as PCS scholars are “motivated by subjective moral and political commitments, made explicit within and through the

choices and enactment of research” (Andrews & Silk, 2015 p. 89). In this view, the self is inextricably located within research and should be reflected upon as such. My passion for this project is rooted in my own desire to change how Black woman identifying students are being situated and represented within kinesiology spaces.

Black feminist scholar Venus Evans-Winters eloquently writes:

As more Black women, now more than ever, are entering the academy as undergraduate and graduate students, there is no doubt that they, like all students, will want to see themselves in research texts, and be able to conduct research that meets both their academic and personal needs. (2019 p. 7)

It was not until I read her writing that I became able to verbalize why I felt uncomfortable in my residential kinesiology department throughout the length of my undergraduate and graduate career. The constant positioning of the Black woman body as “risky”, “unhealthy”, “obese”, “inactive”, “low-income”, “single”, and “non-compliant” has continued to detrimentally affect my own understanding of self.

Thus, this project seeks to cultivate a more inclusive way of knowing the active body by centering the voices, theories, perceptions, and lived experience of Black women and Black feminists. Doing so will not only contribute to kinesiology’s current shift toward becoming a more socially just discipline (Douglas & Halas, 2012, Gill, 2021), but aides in the promotion of a kinesiology that ceases to reify anti-Blackness.

Lastly, as I reflect on my use of ‘Blackness’ and ‘whiteness’ throughout this treatise, I recognize that some readers may be of the mind that I am re-essentializing race by calling out the operation of racism. For instance, British cultural studies

scholar, Paul Gilroy (2000) has written at length about the importance of eliminating race-based thinking to go beyond the color line in advocacy of a non-racial humanism. While imagining a political culture that goes beyond the color line is critical, it is also premature in a U.S. context. In this current political moment, to simply ignore race is to weaponize a ‘color-blind approach’ which often results in the reification of whiteness (which I more fully theorize in chapter 4). One contemporary example of weaponizing color-blindness is the overturning of Executive Orders 10925, 11246, and 11375, implemented by Presidents John F Kennedy and Lyndon B Johnson, which urged government contractors to take “affirmative action” to realize and support the national goal of non-discrimination (James-Gallaway & James-Gallaway, 2022). These were race-conscious policies that acknowledged that recognized the systemic nature of racism and aimed to make society more equitable by requiring the inclusion of non-white individuals into spaces that were both covertly and overtly marked as ‘FOR WHITES ONLY’. Arguably then, race-conscious thinking is essential if the aim is to identify, correct, and ultimately eliminate the structural nature of racism in the United States.

Significance

I intend for this dissertation to contribute to debates regarding the operation of anti-Blackness and the subtle ways in which white normativity manifests within kinesiology. By utilizing Black feminist theory to examine the theoretical, research, and pedagogical spaces of kinesiology, I illuminate the (often unintended)

reproduction of whiteness. I argue that this reproduction of whiteness is the result of a lack of engagement with Black feminist frameworks. As such, this dissertation demonstrates the utility of Black feminist theory.

Chapter 2

Through my theoretical lens, I am able to analyze how certain discourses and practices perpetuate “white logic” (Zuberi & Bonilla-Silva, 2008) and reinforce white normativity. Regarding Chapter 2, I explicate how the scholarship of PCS tends to center Black men and white feminists in their discussions of race and gender. Doing so, I argue, reinforces the long-standing white logic that the bodies and intellect of Black women are inferior sources of knowledge. By centering Black feminist theory, I seek to contribute to the theoretical evolution of PCS scholarship by explicitly employing Black feminist theory to transform four of the principal PCS tenets. This contribution not only bolsters PCS’ theoretical toolkit, but it extends the usability and the relevance of PCS to Black women scholars who previously may have found the dominant theoretical frameworks of PCS ineffective for their analysis of the intersectional nature of the Black physical cultural experience.

Chapter 3

Black feminist theory also informed the scoping review that systematically identified original CRF and CVH studies (N=236) focused on race and examined how they reproduce and reinforce anti-Blackness. This scoping review contributes to the body of scholarship exploring the operation (and legacy) of 19th and early 20th century

scientific racism (Hammonds, 2013; Hammonds & Herzig, 2009; Gould, 1996) including within physical culture/kinesiology (see Braun, 2014; Couturier, 2005; Dyreson, 2001; Sailes, 1990, 1991; Wiggins, 1989), as well as the emergent literature that is critical of the continued centrality of whiteness in the research related aspects of kinesiology (see Culp, 2020; DePauw, 2021; Douglas & Halas, 2013, Gill, 2021; Hodge & Harrison, 2021). Chapter 3 extends how we understand the centrality of whiteness in kinesiology by exploring the anti-Black research practices that are conducted in examinations of CRF and CVH. To my knowledge, this is the first scoping review to examine the research practices of CRF and CVH that focuses on how notions ‘race’ and ‘racial difference’ are constructed. Findings from this chapter contributes to the NAK call to transform kinesiology into a socially just field because they highlight the research practices that inadvertently bolster notions of racial difference as being rooted in biology and individual lifestyle choices, rather than history, power, and politics.

Chapter 4

Chapter 4 is where I explicitly center the voices and perspectives of Black women. In this chapter, I acknowledge how the inerasable status of being Black and woman constitutes a special status in the US that makes their standpoints more useful for exploring how anti-Blackness is learned and manifest in kinesiology. Chapter 4 is informed by the studies that philosophically consider the development of epistemological systems (Dotson, 2011, 2014; Foucault, 2003; Weheliye, 2014) and

the studies that examine the consequences of centering white normativity in kinesiology classrooms (Armstrong, 2022; Burden et al., 2004; Nachman et al., 2021). By combining the two, Chapter 4 advances how we understand the mobilization of anti-Blackness in kinesiology. More specifically, Chapter 4 findings extend our knowledge of how white logic is performed in kinesiology research, how white logic effects the utility of commonly used methods and research practice, and how white normativity informs our teaching and learning practices.

These findings not only contribute to the call for social justice strategies in kinesiology, but Chapter 4 also offers participant informed recommendations for pushing kinesiology forward. It is my hope that my research can inform future discussions of kinesiology's operation of anti-Blackness and can help to illuminate the subtle (and often unintended) ways white normativity manifests. If kinesiology is to truly be more socially just, then kinesiologists must seriously acknowledge their long-standing (re)production of whiteness and its implications.

Chapter 2: Advancing Physical Cultural Studies with a Black Feminist Perspective

Introduction

The purpose of this chapter is to reconceptualize Physical Cultural Studies (PCS) with an explicit, critically informed Black feminist approach. In this chapter I

consider how key PCS scholars and scholarship inadvertently reify epistemic oppression through their exclusion of Black feminist thought. Epistemic oppression refers to the persistent epistemic exclusion that inhibits one's contribution to knowledge production (Dotson, 2014 p.115). While PCS is considered a dynamic field whose aim is to disrupt the privileging of objectivist understandings of the active body (Andrews & Silk, 2011), its white, Eurocentric epistemological location unintentionally hinders the production of Black feminist ways of knowing by placing undue emphasis on Black masculinity and white feminist imperatives, along with reliance on Eurocentric theories. I argue that to truly achieve the epistemological equity that PCS scholars desire, they must grapple with their reification of white Eurocentric epistemo-logics and cultivate an epistemological framework that emphasizes epistemic freedom for *all* people. Black feminist theory is such a framework.

In this chapter I begin by defining PCS. Secondly, I highlight PCS' tendencies to center Black men in their discussions on race/racism and the ideas of white feminists in their discussions on gender/feminist oppression. These tendencies, I argue, situate Black women's bodies and their ways of knowing as inferior and/or less credible. I conclude by presenting four redefined PCS tenets.

What is Physical Cultural Studies?

Physical Cultural Studies (PCS) is a transdisciplinary field that focuses on cultivating a form of critical pedagogy, challenging the quantitative and positivist

rationale of kinesiology, and examining how bodies are impacted by their social and cultural environments. PCS was conceived out of disciplinary struggles in kinesiology departments, where the ‘gatekeepers’ of kinesiology rarely considered the body as a sufficient site for social, cultural, and historical investigation which, consequently, led the moving body to be examined as a closed-system site of objective scientific knowledge (Andrews & Silk, 2015). This epistemological division, or what Ingham (1997) describes as ‘tribal warfare’, is split between two clans of thought—the ‘*technocratic intelligentsia*’ and the ‘*humanistic intellectual*’.

The ‘technocratic intelligentsia’ is time-bound, measurement-minded, and objectivistic, whereas the ‘humanistic intellectual’ is context-bounded, concept-minded, and value-referenced (Ingham, 1997, p. 163). Kinesiology heavily favors the technocratic, and, as noted by Ingham (1997), is blatantly irritated by the critical humanistic approach as they are often unwilling to think outside of their prescriptive and proscriptive knowledges. Kinesiology’s ‘technocratic intelligentsia’ are characterized by their steadfast grounding in science and technology-based methods, sport performance analysis, and their utilization of a medical base and disease model in pursuit of their ‘exercise is medicine’ philosophy (Vertinsky & Weedon, 2017). Andrews (2008) provides a fundamental critique of kinesiology’s ‘science-as-king’ approach as he states:

The ways of knowing associated with the active body/human movement are not the exclusive domain of the quantitative data-driven logical positivist...the active body is as much a social, cultural, philosophical, and historical entity as

it is a genetic, physiological and psychological vessel and needs to be engaged as such though rigorous ethnographic, autoethnographic, textual and discursive, socio-historic treatment. (p. 50)

Kinesiology, Andrews (2008) warns, is facing a crisis due to its hyperspecialized and hyperfragmented approach to the investigation of the body in movement. This is not to say that Andrews (2008) privileges one way of knowing over the other; rather, he is advocating for kinesiology departments to seriously acknowledge and engage with the active body as a fluid, open system that requires—in addition to its technocratic analysis—social, cultural, and historical investigation. The objective for PCS scholars, then, is to show that examinations of the active body are inextricable in formations of social, cultural, historical, and political power and to displace, decenter, and disrupt the objectivist understandings of active embodiment (Andrews & Silk, 2015). In other words, the active body should be recognized as a producer of knowledge, both object and subject, and a critical site of power formation.

Along with its overall emphasis on decentering and disrupting traditional kinesiological ways of knowing the active body, PCS scholarship is also empirical, contextual, theoretical, political, self-reflexive, qualitative, pedagogical, transdisciplinary, and activist-minded (Andrews & Silk, 2015). PCS scholarship renders inequities visible and works toward cultivating a socially just society. For example, PCS scholarship investigates and challenges: how Black male athletes are disproportionally funneled through the sport-industrial complex (Runstedtler, 2018); how urban Black communities are mined for athletic talent (Macaulay et al., 2019);

how women navigate their sexuality within masculine sporting spaces (Thorpe, 2008, 2009); the effects of locker room talk (Bruce, 2002); the (mis)representation of athletes in the media (Carter-Francique & Richardson, 2016); oppressive fitness regimes and diet culture (Duncan, 1994; Markula, 1995); how late capitalism fuels marginalizing mechanisms of sport (Andrews, 2013); the manner in which medicalized risk discourse is gendered and raced to regulate girls' and women's (in)active bodies (Jette, 2006, 2011; Jette & Rail, 2013; Jette & Roberts, 2016; Jette, et al., 2014; Justin & Jette, 2021), and so much more interact to create an unjust social system" (Andrews & Silk, 2015, p. 90). While the *promise* of PCS scholarship aims to expose unequal physical cultural power relations and produce knowledge that can enable intervention into the broader social world (Andrews & Silk, 2015), many PCS scholars do not engage with Black feminist theory that specifically emphasizes the importance of subaltern knowledge and/or positions Black feminist theory as an integral epistemological approach to exposing unequal power relations (for exceptions see, Ashdown-Franks & Joseph, 2021; Justin & Jette, 2021, Justin, 2021; Justin & Foltz, 2023). Arguably, PCS' lack of engagement with Black feminist theory reflects broader society's general disregard for the Black women's bodies and Black feminist standpoints. This is not to say that PCS scholars do not center the (in) active bodies of Black women in their analysis (later in this article I will detail those that do), but PCS scholars often use theories that do not capture the voices of Black women, position Black women's way of knowing as a legitimate source of

knowledge production, nor center anti-Blackness as the foundational concept and driving ideology upon which our modern society exists.

To contribute to the mission of PCS, in this chapter I specifically aim to articulate Black feminist theory and (physical) cultural studies to not only advance PCS investigations of the (in)active bodies of Black women, but to disrupt the unintentional centering of Eurocentric Western white epistemo-logic that perpetuate anti-Blackness.

Before I provide my definitional efforts, I will speak to some of the scholarship in which my reconceptualization of PCS is grounded. Firstly, my critique is mainly informed by the ways in which I was taught about PCS during my graduate career and the *Routledge Handbook of Physical Cultural Studies* (2017) that was published during my time in graduate school. I have had the pleasure of attending lectures of many of the scholars that have chapters in the *Routledge Handbook of Physical Cultural Studies* (Silk et al., 2017). However, due to their social-cultural locations, many emanated a white, Eurocentric perspective about physical culture. Due to this, I felt that the tools and frameworks that PCS equipped me with were unable to fully capture and explore the Black physical cultural experience in the US, and in a way, blurred my sociological vision. As a solution, I turned to the work of bell hooks, Kimberlé Crenshaw, Kristie Dotson, and Patricia Hill-Collins to provide theoretical clarity. bell hooks' *Teaching to Transgress: Education as the Practice of Freedom* (1994) was especially impactful as she described racial silencing as the intended purpose of institutionalized education in the US. This is not to say that I felt

silenced by PCS in my graduate career, but for a while my voice was not my own and at times inaudible. This chapter not only is a tribute to my sociological awakening but attempts to rectify PCS' unintentional silencing.

Physical Cultural Studies' Black Male Tendencies

Masculinity takes center-stage when it is time to theorize the operation of race and racism in (physical) cultural studies. Since PCS is, most notably, informed by the field of cultural studies this review illustrates how race has and is currently being examined in PCS, and how it has been engaged historically in cultural studies.

Frantz Fanon, for instance, is a foundational influencer of cultural studies, who de-essentializes 'race' and utilizes psychoanalytic models to theorize racial subject formation. In his first book, *Black Skin, White Mask*, Fanon positions male as the norm, or the "universal" subject. He writes, the Black man is laden with an "arsenal of complexes that has been developed by the colonial environment" (2008, p.35). The Black man, even if he gains the proper credentials, perfectly speaks the language of the colonizer, and fully assimilates to colonial society, will never be completely accepted by the white man (Fanon, 2008). It is within the subject formation of the colonized Black man, that Fanon (2008) (admittedly) re-essentializes women as women are considered subjects exclusively in terms of their (hetero)sexual relationship with men; this is not to say that Fanon completely ignores sexual difference (see hooks 1984, p. 41), but he does theorize the construction of race through a narrow (and arguably sexist) vision of gender that positions male and masculinity as the axle upon which the world spins. Fanon (2008), and his male-as-norm theories, are extended by contemporary scholars of sociology and sport (Carrington, 1998; 2017; Douglas, 2005) as his work offers a foundational critique

of how perceived sexuality is essential to the formation of the Black man's agency within a sporting context.

Similarly, cultural theorist Stuart Hall (1978) places emphasis on masculinity in his foundational text, *Policing the Crisis*, as he discusses how British media discourse operationalizes social anxieties about the 'immigrant problem', mugging, and Black youth in 1970's Britain. Hall (1978) retraces how the "black mugger" became a symbol of everything that was wrong in Britain and how black crime became the signifier of the crises in the urban colonies (p. 339). However, Hall did not theorize race as the central reason for the over policing and over sentencing of Britain's Black male youth. Instead, gender, class, and age played complementary roles in the production of British mugging discourse. Hall's analysis is seemingly intersectional, as he examines how race, class, gender, and age became politicized: "Policing the *Blacks* meshed with policing the *poor* and policing the *unemployed*: all three were concentrated in precisely the same area" (Hall, 1978, p. 325). He brings attention to how the politics of mugging continued to ravage the Black males within those poor areas, not the white ones. The protections that white male youth were, and continue to be, given from law enforcement is a consequence of how the world is ideologically structured around race; "race is the principal modality in which the Black members of that class 'live' experience, and come to a consciousness of their structured subordination" (Hall, 1978 p. 340). It is through race, then, that people come to consciousness of their social (in)abilities.

Cultural studies, particularly, as a discipline, is the outcome of the wider sociopolitical process of education, aimed towards social transformation (Carrington, 2001). Initially concerned with the education of adult British workers, the key aim was a pedagogical praxis rooted in the day-to-day lived experiences of people for whom formal education had not been provided (Carrington, 2001, p. 278). The (racial) discourse that derived during and immediately after the 1935-1945 British war became the context for which cultural studies derived.

The postwar period brought a labor shortage and an infrastructure that was rebuilt by the migration of people from Asia, Africa, and the Caribbean (Carrington, 2001). This great migration transformed British racial discourse from a concept that was occurring “out there” across the sea, to a central issue that disrupted its imperial legacy and reputation. Britain’s economic downturn in the 1970’s, despite having an increase in labor, fueled a rise in unemployment and racial tensions that suddenly left Britain’s Black and Asian population as “enemy’s within” (Carrington, 2001 p. 280). In the late 1970’s Margaret Thatcher’s New Right Government utilized the rising racial tension and coupled it with a political narrative that correlated “race” with economic crises. The (mis)use of race by Thatcher’s administration fueled a movement within an activist minded Cultural Studies group informally led by Stuart Hall. Hall (1978) describes the heightening racial tension in British society as such:

There is, it seems to me, an overwhelming tendency to abstract questions of race from what one might call their internal social and political basis and contexts in British society—that is to say, to deal with ‘race’ as if it has

nothing intrinsically to do with the present ‘condition of England’. It’s viewed rather as an ‘external’ problem, which has been foisted to some extent on English society from the outside: it’s been visited on us, as it were, from the skies. To hear problems of race discussed in England today, you would sometimes believe relations between British people and the people of the Caribbean of the Indian sub-continent began with the wave of Black immigrants in the late forties and fifties...[Neither right nor left] can nowadays bring themselves to refer to Britain’s imperial and colonial past, even as a contributory factor to the present situation. The slate has been wiped clean. Racism is not endemic to the British social formation. It has nothing intrinsically to do with the dynamic of British politics... It is not part of English culture... it does not belong to the ‘English ideology’. (Hall 1978 in Carby 2009 p. 640)

It is important to note that Stuart Hall did not start his scholarly journey on a path to become a prominent theorist of race globally. Instead, he states in an interview that, “Cultural studies began... with my tussle to come to terms with that [England] experience, which is when I first discovered I was a black intellectual” (Alexander, 2009 p. 464). Hall’s identity as a racial subject led him to develop a scholarly practice that was grounded in his marginalized lived experience (Alexander, 2009). Hall’s ‘England experience’ led him to study power, ideology, subjectivity, and cultural resistance as it related to ‘Black settlers’ in British society. Simply put, Hall and cultural studies scholars analyzed and challenged the role of

culture in the construction of social relations, whereby, the political construction of 'race' became a key subject (Carrington, 2001).

Much of Hall's work talks through 'race' and grapples with what it *means* to be 'Black', how one *becomes* 'Black', and how Blackness is *lived*, all of which challenge and deconstruct racial essentialism, biological determinism, and popular representations of Blackness (Hall, 1978, 1996, 1997). The caveat, however, is that his discussions centers what Wallace (1999) refers to as Black "macho politics", as few of his examinations considered Black women and/or took a Black feminist approach.

Although Hall's, and subsequently the Centre's, extended focus on race did not wholly consider the impact of racial oppression on Black women, that is not to say Hall's later scholarship did not take a feminist turn or to discredit the importance of the Centre's feminist shift. In fact, several white women feminist students from Birmingham's Women's Studies Group, such as Angela McRobbie, Dorothy Hobson, and Charlotte Brunsdon to name a few, "erupted into the Centre" like "thieves in the night" (Hall, 1996) and strongly challenged the patriarchal politics of cultural studies. Feminism's insistence that "the personal is political" enabled cultural studies scholars to critically consider their "whereness" while drawing attention to issues of gender, sexuality, and power. However, the feminist turn primarily advocated for the advancement of white women, not *all* women (Schuller, 2021), a trend characteristic of many feminist interventions in male-centered academia during this time, and a point to which I return later in this chapter.

While Hall's scholarship on race remains integral to how many cultural theorists implement, engage, and understand 'race' (Carby, 2009; Carrington, 1998; Collins, 2002; Gilroy, 2000; Rose, 1991), what is absent in his work, is how race *and* gender discourse act on and oppress the Black women. Inspired by the scholarship of Stuart Hall, many PCS scholars endure to invoke Hall's notions of race, culture, and identity (Andrews, 2002; Carrington, 1998, 2017; Hawzen & Newman, 2017), but few have called attention to and/or discussed how a Hallian approach may be enriched by Black feminist theory.

Extending from Hall's work, many articulations of sport, race, and gender within the field of PCS center Black men whilst barely mentioning Black women. Even in the PCS handbook (Carrington, 2017) and special issues that focus on deracializing the sporting body (Adair & Rowe, 2010), little acknowledgement is given to the (in)active bodies of Black women and Black women's standpoint as a way of knowing the body. For example, Andrews (1996) seminally excavated the racial discourse that allowed Michael Jordan to become America's first "All-American" Black athlete. According to Andrews (1996) Jordan made basketball more accessible for white audiences who had previously been turned off from the NBA's overly Black demeanor. For instance, Jordan's bald head allowed him to distance himself from the negative discourse that was associated with Black hairstyles, such as afros and braids. In addition, Jordan's promotional material, marketed him as a "paragon of American virtue" (Andrews, 1996 p. 141). In this

way Jordan's care to not be perceived as "too Black" aided in the reinscription of Otherness on Black bodies that were particularly unpalatable to white audiences.

By limiting examinations of sport, Blackness, and masculinity to the 'spectacularized' lives of Jack Johnson (Farrad, 2019; Reiss, 2013), Muhammad Ali (Carrington, 2017), Michael Jordan (Andrews, 2001; Andrews & Mower, 2012) Tiger Woods (Cole & Andrews, 2000; Billings, 2003) and LeBron James (Wallace & Andrews, 2021) to name a few, sport sociology and physical cultural scholars exclusively investigate one dimension of Black masculinity that is derived from colonial Western notions of hegemonic resistance, class struggle, sexual hyper-aggression, and biological superiority. In other words, for these Black male athletes to *become* a site of scholarly interest, they, in a way, must operate within a dimension of Blackness that allows them to be seen and realized. Though scholars acknowledge that Black people struggle to escape the biologization and essentialization of their bodies which have been historically, socially, and politically constructed (Gilroy, 1987), many examinations of Black masculinity and sport center media sensationalization, muscular prowess, and corporeality.

Sport, then, is an institution that produces a sort of *imaginary* Black resistance, that allows Black men to *feel* as though sport is a liberatory space, when in actuality, it is a 'more-of-same' keeper of Western order as it manufactures a Black subject that persists to fulfill the role of subordinate laborer. (Radically, what would be truly emancipatory is to release Black men from the obligatory burden of participating in the institution of sport). While sport is considered critical to the racial and national

imaginary, Black resistance too often becomes equated with the need for Black male emancipation. While Black males may be subject to racial biases, “their maleness often mediate the extent to which they will be attacked” (hooks, 1989 p. 66).

Centering the ‘crisis’ of Black masculinity as a panacea for the whole community silences the voices of Black women (Carrington, 1998).

While this scholarship offers critical insight into how hegemonic race and masculinity discourse intersect, act on, (mis) represent, and (mis)treat the Black male body, women feminist scholars have challenged PCS for their lack of feminist engagement and decentering of women’s bodies (Olive, 2017).

Physical Cultural Studies’ (White) Feminist Imperative

To rectify PCS’ lack of feminist engagement, in the last three decades feminist scholars of physical cultural studies have expanded ways of knowing sport, sex, and gender (Olive, 2017). Theoretically informed by the work of Pierre Bourdieu (Thorpe, 2009), Michel Foucault (Markula, 1995, 2003; Thorpe, 2008), and Judith Butler (Caudwell, 2011), and Gilles Deleuze (Markula, 2006), feminist scholars of sport and physical culture have championed a (white) feminist imperative that aims to position gender and sexuality as a marginalizing site in need of critical intervention.

For example, Jayne Caudwell (2011) utilizes Judith Butler’s work on feminism and gender to examine how gender is interpreted in critical football studies. In this article, Caudwell moves between different feminist emphasis to demonstrate to other

scholars the range of feminist approaches available for future research on critical football studies. Of the many feminist approaches that Caudwell describes, Black feminist theory is not one of them.

Similarly, sport sociologist Pirkko Markula (1995, 2003) examines how white physically active women's bodies navigate the contradictory nature of the fitness industry as fitness and health media often situate the ideal (white) female body as "sleek and sexy and "toned and trim". From a Foucauldian perspective, Markula posits that while fitness discourse is contradictory it is, simultaneously, a "technology of domination that anchors women into a discursive web of normalizing practices" (2003, p. 88). Interestingly, Markula (2003) admits that Foucault's theory is incompatible with the idea of women's resistance to ideological domination through physical activity participation (p. 95-97), but she does not suggest Black feminist theory (whose focus in the everyday resistance of Black women) as an approach to consider.

In a similar vein sport sociologist and critical influencer of feminist theory, Holly Thorpe (2008) uses Foucault's concepts of technologies of self to examine the "relationship between young women and the media via a case study approach based on the discursive constructions of femininity in the snowboarding culture" (p. 200). In her research, Thorpe engages a feminist critique to discuss how contradictory the notion of femininity is to men and women snowboarders. The contradictory understanding of feminism, Thorpe (2008) posits, is a result of third wave feminism which advances notions that women can be both pretty and strong, and that there is

no reason to choose between either. Similarly, Thorpe (2009) utilizes Bourdieu's conceptions of capital, field, and habitus to investigate and reconceptualize how femininity is negotiated within snowboarding culture with women snowboarders. In this article, Thorpe interviews various snowboarders, both men and women, to analyze their perception of femininity when on the mountain. Some participants encouraged the use of sexual appeal to enhance their popularity which will lead to financial gains as it regards sponsorships, while others limited or disguised their femininity to become 'one with the boys'. Thorpe does not state the race of the women snowboarders that she examined—so whiteness is assumed by default. In addition, Thorpe's theoretical aim was to utilize Bourdieu to reconceptualize "femininity" which implies, again, that white femininity is the default.

I am critical of the above scholarship because they are touted as seminal PCS scholars in the *Routledge Handbook of Physical Cultural Studies* (Silk et al., 2017). Authors that are in a handbook or manual are selected and/or invited to contribute a chapter due to their expertise on a certain topic. For example, the chapter on "Raced Bodies and Black Cultural Politics" was written by Ben Carrington which suggests to the reader that he is an authority on Black cultural politics in sport; however, Carrington's chapter primarily focuses on Jack Johnson, Muhammad Ali, Joe Louis, John Carlos, and Tommie Smith. He briefly mentions Althea Gibson and Naomi Campbell but does not use of Black feminist theory to discuss how their social location (due to the intersection of their gender and race) may foster a cultural politic that is distinguishable from his male main characters.

In a similar manner, the chapter on “Gendered Bodies” is written by Clifton Evers (who writes in the contributor notes that his research interests primarily focus on masculinity) and Jennifer Germon. In this chapter they articulate Bourdieu, Butler, Foucault, and Deleuze to discuss different perspectives of the gendered experience. While they do discuss the racialization of the Black gendered body and its operation under conditions of racial terror in the US, they also do not note how raced and gendered terror is experienced differently by Black women and men in the US.

What both chapters have in common is that they do not engage Black feminist theory and they do not take the time to illustrate how social, cultural, and historical processes are enacted upon Black women. As such, both chapters inadvertently suggest to the reader that Black women’s bodies and Black feminist theory are not worthy of mention, and that discussions of Black masculinity and Eurocentric theoretical frameworks are more appropriate in PCS.

While examples like those above are multiple in the PCS handbook, I would be remiss if I did not mention the scholarship of Black women sport sociologists who *do* engage Black feminist theory in their examinations of Black women, but may not be considered, by themselves or others, as falling under the PCS umbrella. For example, Amira Rose Davis (2016) conducted a historical review on ideas about Black femininity and physicality in the 1950’s. Specifically, she examines three Black women who played baseball in the Negro leagues and explores how Black press and

Black male sportswriters used varying, but often hostile, representations of athletic Black womanhood to generate business.

Ashdown-Franks and Joseph (2021) examine vilified representations of fat Black women, and explore how fat Black women runners resist this mischaracterization. Informed by Black feminist theory, they employ Collins (2004) notion of controlling images to discuss the historical objectification of Black women's bodies. In true Black feminist fashion, though, Ashdown-Franks and Joseph do not stop their theoretical framework at objectification, they also take the time to mention the importance of Black feminist resistance to oppression. Informed by the Black feminist scholars Mikki Kendall and Kamille Gentles-Peart, Ashdown-Franks and Joseph discuss how Black women runners challenge the overvalued European aesthetic through everyday acts of corporeal resistance.

In a similar vein, Akilah-Carter Francique (2011) discusses the factors that contribute to the adoption of physical activity behaviors by Black college women. Using Black feminist theory to capture their 'multiple jeopardies' (King, 1988) and intersectionality, Carter-Francique discusses how predominately white institutions (PWIs) may not offer recreational facilities that encourage Black college women's participation. Findings suggest that Black college women are physically active but prefer to exercise in environments that are more conducive to their sociocultural location (i.e., athletic teams, Black Greek sororities, Black dance troops). These are the spaces that influence Black college women's relationship with physical activity and obesity.

Thus, despite the lack of engagement with Black feminist theory in PCS publications such as the handbook, there is a notable amount of sport studies research that centers the (in)active bodies of Black women and/or utilizes Black feminist theories to examine how Black women resist and navigate the colonial practice of lynching (Carby, 1985), white recreational spaces (Justin, 2023; Smith-Tran, 2020, 2021), athlete activism (Brown, 2023), effects of Title IX on athletic participation (Flowers, 2015; Justin & Foltz, 2021; Quash & Beale-Tawfeeq, 2023), and the role of media on Black women's sport participation (Carter-Francique & Richardson, 2016; Douglas, 2005). This list is not exhaustive but illustrates some of the sport studies scholarship that centers the Black women and employs Black feminist theory. Arguably, the fact that all these pieces take a Black feminist approach may speak to the authors' dissatisfaction with the ability of Eurocentric social theory (i.e., Bourdieu, Deleuze, Gramsci, Foucault) and mainstream feminism's ability to capture the complex social location of those who face 'multiple jeopardies' (King, 1988). Building on the latter point, there are many critiques of the effectiveness/usability of white feminist theory for the examination of structures that oppress non-white women (Carby, 2009; hooks, 1984; Nash, 2008a, 2008b). My critique is mainly informed by women's studies scholar Kyla Schuller (2021) who states:

White feminism is an active form of harm, not simply a by-product of self-absorption. Gender equality, for contemporary white feminists, means advancing individual women up the corporate ladder; protecting reproductive freedom,

which it defines solely as the ability to prevent and terminate pregnancy; and heightening prison sentences for rapists and abusers. These objectives discount entirely the gross disparities of capitalism, the barriers to pregnancy and healthy child-raising that poor women face, and the violence perpetrated by cops, courts, and prisons. White feminist objectives work to liberate privileged women while keeping other structures of injustice intact. (p. 4)

Schuller (2021) argues that white feminism began with Elizabeth Cady Stanton in 1848, as she fostered an ideal that framed white civilization as imperiled until provided opportunities for white women leaders. She also fought against the 15th amendment that aimed to prevent states from denying the right to vote based on race. Abolitionist Frederick Douglas who advocated for the elimination of slavery and voting rights for Black men, was considered a threat to Stanton's movement. Thus, Black freedoms were seen as structurally antagonistic to white feminist ideals since its conception. White feminism is, and has always been, heavily invested in maintaining white power structures as gender justice and equality shrinks to defending white women's qualities and value. In addition, white feminism here is a feminist logic that, according to Schuller, is explicated primarily by white women who are uncritical of how they benefit from the utility of Eurocentric logics. Schuller (2021) continues to describe three issues with white feminist theory:

First, white feminist politics promotes the theory that women should fight for the full political and economic advantages that white men enjoy within capitalist empire. Second, it approaches the lives of Black and Indigenous people, other

people of color, and the poor as raw resources that can fuel women's rise in status. Finally, white feminism promises that women's full participation in white-dominated society and politics will not only improve their own social position; thanks to their supposedly innate superior morality, their leadership will redeem society itself. (p. 4).

Feminism is not a monolith. While there are various feminist frameworks, the hegemonic (re)production of mainstream white feminism, as mainly promoted by white feminist scholars in PCS, is problematic because it bolsters a Eurocentric¹ white logic upon which PCS is rooted. Thus, its continued use, along with its positioning as the "mainstream" or dominant way of knowing feminist approaches, aides in the suppression and denigration of Black feminist thought. In addition, the functionality of white feminism is particularly limited because it is rooted in anti-Black logics that are meant to dissipate gender oppression while still preserving the power that comes with whiteness (Hobson, 2016).

The function of white feminism becomes more visible when we consider the main benefactor of gender-focused policies. Title IX, for instance is white feminist's

¹ Eurocentric, here, refers to the geographical and socio-political location in which these theorists are located. These frameworks may not be sufficient to theorize the interlocking systems of oppression that act on Black women in the US, for example, due to their Eurocentric standpoint. Applying these Eurocentric theorists over Black feminist (or even critical race or Afro-pessimist theories) arguably add to the positioning of Black feminist standpoints as illegitimate.

most commonly used example of how “white feminism” has leveled the playing field and decreased the gap in sport participation between women and men athletes (Birrell, 2000). However, Title IX is a piece of legislation that does little to improve the active and sporting bodies of Black women and girls (Justin & Foltz, 2023). For example, research shows that the benefit of Title IX is not equally shared between Black and white high school girls (Pickett, Dawkins, & Braddock, 2012). White high school girls are more likely to attend federally-funded schools that have the resources required to add sports such as soccer, rowing, crew, and softball. These “growth sports” offer direct paths to NCAA and other collegiate scholarships. As Black girls are more likely to attend underfunded high schools, due to historical acts of racial neighborhood segregation, gerrymandering, redlining, and predatory tax lending (Rothstein, 2017), they have less access to growth sports that result in upward social mobility. Title IX, then, is limited because it uncritically centers gender and gender equality as its imperative while simultaneously ignoring the larger social structures that hinder non-white, middle class, cis gendered women from participating in sport. To put it plainly, Title IX does not address racial barriers to women’s sport.

Even when the bodies of active Black women are the focus of these conversations, many examinations are primarily focused on iconic bodies such as Venus and Serena Williams (Douglas, 2005; Ifekwunigwe, 2009; Tredway, 2020), Marion Jones (Cole & Mobley, 2005; Douglas, 2014), and Caster Semenya (Bekker & Posbergh, 2021; Dworkin et al., 2013; Schultz, 2011) and often rely on Judith

Butler, Michel Foucault, Antonio Gramsci, and Pierre Bourdieu to inform their theoretical approach. This is problematic because it reifies that bodies of active Black women are scarce or uncommon, while simultaneously positioning Black women's bodies as invisible (when motionless) and hypervisible (when active). In addition, the precise focus on bodies of iconic Black women athletes enables a unitary or monolithic view of Black women. That is, differences between Black women and their lived experiences are often obscured to present Black women as a category that opposes white men and/or women, rather than individual subjects (Nash, 2008b). To negate these anti-Black tendencies, what I present in the next section are four reconceptualized PCS tenets that are reimagined and explicitly center my Black feminist standpoint.

My Black Feminist Approach to PCS

According to Andrews and Silk (2015) the key tenets of a PCS project are: Empirical, Contextual, Transdisciplinary, Theoretical, Political, Pedagogical, Qualitative, and Self- reflexive. When I read the existing tenets through a Black feminist lens, four tenets particularly stood out as needing a Black feminist approach if one of the aims of PCS is to decenter white supremacy and address anti-Blackness. I present four PCS tenets— Pedagogy, Theoretical, Qualitative and Political— and their original descriptors. After presenting their original descriptions I provide their implications which are informed by bell hooks (1994), Paulo Freire (2000), and Venus Evans-Winters (2019). I conclude by showcasing my new definitional efforts.

Pedagogy

Original Pedagogy Tenet

PCS represents a form of public pedagogy designed to impact learning communities within the academy, in the classroom, and throughout broader publics. Whether teaching, writing, presenting, consulting, advocating, protesting, agitating, mass communicating, and/or mentoring, PCS scholars utilize the products of their research labours in circulating knowledge to – and oftentimes co-producing knowledge with – wider constituencies. This pedagogical commitment is motivated by the aim of enabling individuals and groups to discern, challenge, and potentially transform existing power structures and relations, as they are manifest within, and experienced through, the complex field of physical culture (Andrews and Silk, 2015 p. 89).

Implications: This original tenet does not recognize that the University and its dominant pedagogical practices are grounded in white supremacist logic and anti-Black structures. Although academies in the United States were founded to secure and justify colonial practices of Indigenous genocide and Black chattel slavery (Wilder, 2013), education has the power to free the mind, body, and spirit, which speaks to why Black enslaved and Black free people were the only population in American history to be federally banned from reading, writing, and even owning a book due to anti-literacy laws (Hannah-Jones, 2021). Enslavers were fearful of the revolutionary fire that literacy would ignite in Black communities. As such, pedagogy is essential to disrupting, and ultimately eliminating, anti-Blackness. Here I specifically turn to hooks' (1994) *Teaching to Transgress: Education as the Practice of Freedom* to inform my standpoint. Below are a few points that hooks (1994) makes about pedagogy and liberation which particularly complements and informs my understanding of the two.

1. **Pedagogy is not only for students;** “When education is the practice of freedom, students are not the only ones who are asked to share, to confess. Engaged pedagogy does not simply seek to empower students. Any classroom that employs a holistic model of learning will also be a place where teachers grow” (hooks, 1994 p. 21). There is a tendency to position professors as the authority on knowledge, but Black feminist strategies take the stance that you do not need to be an intellectual to theorize (Collins, 2002) and that the learning process is dynamic and multifaceted. The classroom provides space

for both teachers and students to learn from one another. Our significantly different lived experiences in combination with our intersecting identities allow us to understand the world in various ways. Science, or the “hard sciences” are no exception. The scientific method, as we know it in the United States, is a transmitter of white supremacy and white dominant culture (see Gould, 1996). As such, when teachers are so adamant that there can be no alternative way of knowing science, they simultaneously disregard counter hegemonic perspectives and reify white supremacy.

2. **Learning should be a pleasure, sometimes even ‘fun’.** Excitement in higher education is often viewed as disruptive and an inhibitor to the serious atmosphere that many think is a fundamental aspect to learning (hooks, 1994). To make learning ‘fun’ is not to make jokes and disregard rigor, but means to make learning relatable by considering the student as a whole human and acknowledging the complexities in their lives (rather than simply seeing them as knowledge seekers or university customers). Doing so not only emancipates students from the pressure of conforming to the white dominant norms upon which modern higher education sits, but requires that educators possess an inkling of cultural competency and care for what it means to be human. Students do not learn in a vacuum! The real life experience heavily influences how they consume knowledge, and as such, may require some unconventional fun.

New Pedagogy Tenet

PCS represents a form of public pedagogy designed to impact learning communities in the academy, in the classroom, and throughout broader society. **PCS recognizes the emancipatory power of knowledge. As such, PCS scholars are mandated to teach, write, present, consult, advocate, protest, agitate, mass communicate, and mentor in a manner that disrupts oppressive onto- and epistemo-logical frameworks that disregard the masses and center Western, Eurocentric, white supremacist logic.** As such, PCS scholars utilize the **co-created** products of their research labor to circulate to wider constituencies. **Co-created, rather than created, is used here because PCS recognizes that knowledge production is a collaborative process. Pedagogy is not only for students or the public masses, but in the classroom, or in classroom adjacent environments (such as seminars, conferences, panel discussions) educators can learn from students as well. This pedagogical commitment** is motivated by the aim of enabling individuals and groups to discern, challenge, and potentially transform existing power structures and relations predicated on oppression, as they manifest within and are experienced through the complex field of physical culture.

Political

Original Political Tenet

PCS is a political project, in that it is committed to the advancement of the social formations in which it is located. As such, PCS researchers adhere to an unequivocal understanding of politics of intellectual practice as being concerned with discerning the distribution, operations, and effects of power and power relations. PCS is based on the assumption that societies are fundamentally divided along hierarchically ordered lines of differentiation (i.e., those based on class, ethnic, gender, ability, generational, national, racial, and/or sexual norms), as manifest within the existence of socio-cultural inequities or injustices; advantages or disadvantages; enablements or constraints; empowerments or disempowerments. For this reason, and as part of their broader commitment to progressive social change, PCS researchers critically engage physical culture as a site where such social divisions and hierarchies are enacted, experienced, and at times contested. The sites of political struggle – or problem spaces – within physical culture, through which social power becomes manifest and operationalized, are changeable and necessitate an equal dynamism in PCS's strategic emphases.

Implications: While this definition states that “PCS is a political project, in that it is committed to the advancement of the social formations **in which it is located**”, it should explicitly state the social formation in which it is most concerned—colonial power formations. Cultural studies, and subsequently PCS, is concerned with how power operates in the modern world. Du Bois argues that modernity and global

capitalism are rooted in the historical process of labor exploitation and social exclusion made possible by the ideology of racism (Morris, 2017). The color line, Du Bois contends, is the central organizing structure of our modern lived experience (Itzigsohn & Brown, 2020). The origins of PCS are mainly tied to Great Britain and the United States. While other countries such as Brazil, Canada, and New Zealand, to name a few, have adopted the PCS project, it remains a political endeavor primarily concerned with the consequences of colonialism on Western power formations. Not calling out our decolonial imperative (re)centers whiteness and the experiences of those who benefit from their proximity to whiteness, while simultaneously overlooking/ignoring how marginalized individuals experience their subaltern positions.

1. **Colonialism produced the social formation in which our current political endeavors exist.** This PCS tenet should bring explicit attention to colonialism, and subsequently, racism. Colonialism and racism exist in a reciprocal relationship where one enables the other. As such, disregarding colonialism is to disregard racism and its effect on the modern world.

New Political Tenet

PCS is a political project, that is committed to the advancement of social formations **that are ultimately rooted in colonialism. PCS research acknowledges that power relations and social formations are the products of colonialism and made possible through the operation of racism², anti-Blackness in particular. As such, PCS researchers adhere to a central understanding of politics and intellectual practice that disrupts power relations that are (re)produced and made credible through the reification of anti-Black discourse and the marginalization of the oppressed class.**

PCS is based on the assumption that societies are fundamentally divided along hierarchal ordered lines of differentiation **made possible through the process of Black and Indigenous erasure and white supremacy** (i.e., those based on class, ethnicity, gender, ability, nationality, race, and sexual norms), that manifest within socio-cultural disparities; advantages or disadvantages; enablements or constraints. As part of our broader commitment to social change, PCS researchers critically engage physical culture as a site where social divisions and hierarchies are enacted, experienced, and at times contested. The sites of political struggle, where social power becomes manifest and operationalized, **are transformable, disappearable, and even able to be destroyed.**

² Gilmore (2007) defines racism as “the state-sanctioned and/or extralegal production and exploitation of group differentiated vulnerability to premature death” (p. 247)

Qualitative

Original Qualitative Tenet

PCS is a predominantly (yet necessarily exclusively) qualitative project, which seeks to interpret and understand (as opposed to predict and attempt to control) the diverse realm of physical culture as a social, cultural, political, economic, and technological construct. Acknowledging the value of considered quantitative work, PCS nonetheless provides a largely qualitative counterpoint to the blinkered positivist quantitative dogma that dominates ever more swathes of academic life. Qualitative research encompasses a diverse array of interpretive (as opposed to predictive) methods designed to elicit representations of the social world, through which that world, and experiences of it, are interpreted. PCS's value-laden approach to qualitative inquiry is rooted in a humanist intellectualism – a pathway paved by many who have put their heads above the parapet in a variety of disciplines – motivated by the identification and elimination of disparities and inequities, the struggle for social justice, and the realization of universal human rights (Andrews & Silk, 2015 p. 89).

Implications: Missing from this tenet is an acknowledgement of the linkage between whiteness and the quantitative positivist paradigm that is highly valued within the academy. PCS researchers should acknowledge how the value of quantitative positivist work is rooted in Eurocentric, Western white logic. A logic that is “based on the values, views, and interests of oppressive power holders” (Lewis, 1997, p. 49) and actively devalues interpretative ways of knowing. The devaluation of qualitative

anti-positivist inquiry is especially problematic for Black women and other marginalized subjects.

Dominant views of data analysis in qualitative circles, however, are also dominated and policed by the white educated elite, and reflective of white middle class culture; “White men scholars are apotheosized as founders of qualitative inquiry in general and white women as “doers” of feminist qualitative research (Evans-Winters, 2019 p. 17). More specifically, the former (i.e., white men scholars) developed a qualitative approach that was objective, hierarchal (clear distinction between the researcher and the researched), primarily served the researcher’s agenda, and believed to be (falsely) extricable from the researchers personal life; the latter (i.e., white feminists) are often credited for developing a methodology that is reflexive, avoids objectifying the participant, and concerned with the examination of injustice (i.e., challenging patriarchy and eliminating women’s oppression in the home; Daly, 2007). The issue, then, is that both views are built on the epistemological (with regards to white men scholars) and axiological (with regards to white feminists) assumptions that the reality in which people live are best examined in a methodological framework that are founded in white logics. The result of doing so is a disappearing and/or dismissal of knowledge due to the privileging of white Eurocentric epistemological practices (Dotson, 2011).

To address this disappearing, qualitative PCS scholarship should explicitly center the voices that are traditionally silenced, and invoke methods that are rooted in unsilencing such as storytelling, testifying, poetry, and narrative. There are many PCS

scholars that employ such methods in their work (Fitzpatrick; 2017 Rinehart, 2010; Smith; 2017). However, few precisely state that their rationales for doing are to center voices from the margins, disrupt white logics, and/or uphold Black feminist traditions. For example, in the *Routledge Handbook of Physical Cultural Studies*, Fitzpatrick (2017) argues that research poetry “challenges *conventional* measures of research [...] which preclude particular ways of knowing” (p.525-526). Conventional indicates white logic, as white logic is default—this should be overtly stated to make clear to the reader PCS’ social justice and human rights imperative.

The tenet should call PCS researchers to utilize methods such as storytelling, poetry, testifying, metaphor, and narrative, which represent cohesion and shared understanding amongst oppressed groups (Delgado, 1989). Talking and testifying, for Black women especially, is how we educate our community, pass along traditions, and protest against our oppressors. To ignore stories is not only to disregard how the oppressed make sense of the world, but it reifies the realities of the oppressors. As such, privileging predictive positivist methods over the interpretative, and relying on feminist methods alone to address and advance social justice bolsters anti-Blackness.

1. **(Feminist) Qualitative research alone is not liberating.** As noted above, feminist qualitative research, at its core, was primarily developed to address white patriarchy and transform the lives of white women. As such, it does not provide women of color, Black women in particular the freedom we desire. In

fact, it remains to be oppressive as it is unable to know oppression from all other axis of burden (i.e., race and citizenship status³).

2. Qualitative research should not be taken language lightly or as apolitical.

In Black feminist methodology, written and oral speech is considered a creative and divine act, that requires a dialogical voice (the act of listening, writing, and conversing in one's cultural point of reference) as opposed to scientific language (Evans-Winters, 2019 p. 22). Scientific qualitative language is filled with jargon, which can be exclusionary as it privileges Eurocentric styles of speech. As such, narrative, storytelling, analogies, metaphors, and testimonies allow the researched to illustrate their perceptions of the social world and how they respond to (dis)order.

New Qualitative Tenet

PCS is a predominantly (yet necessarily exclusively) qualitative project, which seeks to interpret and understand (as opposed to predict and attempt to control) the diverse realm of physical culture as a social, cultural, political, economic and technological construct. **PCS considers the value placed on positivist quantitative dogma in the Academy as a direct reflection of Western society's tendency to center white Eurocentric ways of knowing by hierarchizing methodology. The result of this**

³ While Black individuals have been granted citizenship, in various institutional circumstances, such as the carceral and penitentiary, they are most likely to lose this status. It is important to acknowledge the burden of almost always being on the verge of second-classness.

hierarchy is the devaluation of subaltern thought, a practice that is especially problematic for marginalized subjects (i.e., people of color). Anti-positivist qualitative research encompasses a diverse array of interpretive (as opposed to predictive) methods designed to elicit representations of the social world, through which that world, and experiences of it, are interpreted. However, PCS also recognizes that anti-positivist qualitative circles are not inherently liberatory as they have historically been dominated by white educated men and white feminists; the former privileged a hierarchal distinction between the researcher and the researched which suggested that objectivity is the key to credible scholarship, while the latter was primarily concerned with white women's oppression. The goal of PCS, then, is to cultivate an anti-positivist qualitative project that is grounded in the ontological assumption that social justice transformations must decenter Eurocentric, Western white logic in order to identify and ultimately eliminate disparities and inequities.

Theoretical

Original Theoretical Tenet

PCS is characterized by a commitment to social and cultural theory as important frameworks informing empirical engagement and interpretation. However, this does assume a slavish adherence to a singular theoretical position, since the empirical diversity of the PCS project precludes the adoption of such a totalizing approach. PCS research requires a critical engagement with theory: a grappling with specific theories to see what is useful and appropriate within a particular empirical site, and discarding/re-working that which is not. Hence, PCS requires the development of a broad-ranging and flexible theoretical vocabulary able to meet the extensive interpretive demands of its diverse empirical remit (Andrews & Silk, 2015, p. 88).

Implications: This statement implies that theory is not something to be *done* but something that is *learned* through “critical engagement with theory”. In my experience, PCS scholars, at the graduate level, learn theory in conventional, unsurprising ways. We read the work of seminal scholars (who often do not occupy a multiple burdened position) then engage in rigorous dialogue for two hours each week. This process, however, has been disregarded by some of my peers (sometimes myself included) as simply rhetoric. After the dialogue someone asks, “now what?” or “so what are we going to *do* about it?” This stance is problematic. Not only does it typically deflate and spoil the dialogic process of a group of critical intellectuals, but

it assumes that there is a dichotomous relationship between theory and practice, dialogue and action. hooks (2014) argues that we often assume that theory is not practice because theory is frequently assumed to be decoupled from our lived experience; “When our lived experience of theorizing is fundamentally linked to processes of self-recovery, of collective liberation, no gap exists between theory and practice” (p. 61). To theorize is to make sense of everyday life experiences. The process of thinking and doing is reciprocal, as each enables the other.

This definition also does not speak to an important element of critical theorization—liberation. Theory can encourage us to see things differently, to do things differently. With regard to white logic, PCS theorist should actively engage in a process of thought, practice, and critique that works to resist the restrictive boundaries of white Western Eurocentric thought. The PCS project is, or should be, dedicated to social justice, social change, and freedom. PCS should explicitly denounce white supremacist logic, as it is predicated on institutionalized and internalized anti-Blackness which keeps us all in captivity. “Us”, here, encompasses the oppressed (those who are not granted full membership into society or are considered incomplete humans) *and* the oppressors (those who exploit by virtue of their own power and are unable to fully destroy the chains of their own creation; Freire, 2000). According to Paulo Freire (2000), freedom must be obtained by the oppressed for who are better prepared than the oppressed to understand the terrible consequence of an oppressive society? Who suffer the effects of oppression more than the oppressed? Who can better understand the necessity of liberation (p. 45)?

Freire (2000, p. 44) posits that when oppressors attempt to break chains, they internalize their actions as a form of false “generosity” which bolsters the savior complex that has been and remains integral to the formation and perpetuation white supremacist logic. In fact, in order to continue their “generosity” they must continue to be unjust as well. As such, their ability to liberate is weak, diluted, unauthentic, and unable to create real and lasting social change.

1. **Theory should focus on liberation.** In my interpretation, to liberate is to be free from the historical white colonial norms and constructs that were invented to exploit, rape, and oppress non-white, non-Western, and non-European, and non-male bodies. The oppressed and the oppressors remain captives of these constructs. How would society benefit from the eradication of relationships based on the binary of domination and subordination? The haves and have nots? These dynamics immortalize pain and struggle which are seemingly unable to be stripped from our modern society. However, if we focus our theoretical efforts on liberation explicitly, would we be better suited to prevent the reification of white supremacist logic in our everyday lives?
2. **Theory is a social practice (a product of everyday life).** Theory requires us to make sense of our everyday life experiences. Theory is not limited to the classroom or solely learned in the Academy. It is a process that requires us to open our eyes and acknowledge the anti-Black ball-and-chain that we carry with/ drag behind us. We come to know success, failure, health, wellness, pain, and oppression through the winded state of exertion that is the product of

dragging, lifting, and carrying our ball-and-chains. How much better would we feel, if our successes and failures were no longer experienced through the lens of fatigue?

3. **Theory is not only for intellectuals.** Since theory is a process of thinking and doing that requires us to make sense of our everyday life experiences, it is important to note, then, that theory is not only for intellectuals, but for everyday people as well. Assuming that the Academy is where “proper” theory is done, privileges institutionalized forms of knowledge and epistemologies that uphold white supremacist logic. Sojourner Truth (1851), as described in my literature review, reminds us of that. Her powerful oratory, which is an early intersectional analysis of her life, problematizes one-dimensional frameworks that examine identity (i.e., race, gender, class). In addition, she is evidence of why freedom, is dependent on the oppressed, Black women in particular. The white women suffragettes of her time were unable and unwilling to understand what true liberation meant for *all* women in the United States, and those who could comprehend, did not want to be released from the comfort that their whiteness afforded them (Schuller, 2021).

New Theoretical Tenet

PCS is characterized by a commitment to a social and cultural theory as important frameworks for informing empirical engagement and interpretation, and social change.

PCS is obligated to adhere to a theoretical position whose fundamental mission

seeks to examine the structures and systems that maintain the power relation between the oppressors and the oppressed. The many theoretical perspectives that PCS scholars engage should consider how we all become free by disrupting, and eventually eliminating, oppressive formations. Oppressive formations exist in the mundane and are experienced daily. As such, PCS scholars need not go far to observe the consequences of living in an oppressive society and, therefore, do not need the jargony/ institutionalized language that academic elites often use to in their theoretical discussions. PCS acknowledges that theory is a reciprocal process of thinking and doing that requires us to make sense of our everyday life experiences. Due to the vast and varying lived experiences of PCS researchers, the PCS project is required develop a broad-ranging and flexible theoretical vocabulary that is both able to embrace the diversity of its cohort and meet the extensive interpretive demands of its diverse empirical remit.

Conclusion

As emphasized, PCS is a political project driven by the need to confront disparities and injustice. To properly do so, however, PCS as a specialization should place greater importance on decentering whiteness by exposing the operation of anti-Blackness. We live in an oppressive society, and many oppressive factors (such as anti-Black racism, sexism and classism to name a few) are reified and bolstered

through physical culture. Oppression has many faces and is enacted through various discourses (such as gender ideologies, patriotism, neoliberalism, capitalism, colonialism, imperialism). However, by utilizing Black feminist theory, which methodologically relies on Black women's standpoints and lived experiences, I argue, PCS may be better equipped to consider, address, challenge, and theorize oppressive power structures. These new tenets are not meant to be prescriptive or serve as an instruction manual; rather I intend for them to spark critical conversations amongst PCS scholars with the objective of developing a collective understanding of how whiteness is frequently and inadvertently operationalized in PCS scholarship.

By focusing on the pedagogical, theoretical, qualitative, and political tenets of PCS, this chapter advances physical cultural studies by adapting a Black feminist sensibility that explicitly focuses on disrupting white normativity as it manifests in physical culture.

Chapter 3: How “Race” is used in US Peer-Reviewed Studies of Cardiovascular Health and Cardiorespiratory Fitness: A Scoping Review

Introduction

Kinesiological science, which has roots in the biological and medical professions, has a long and controversial history of involvement in efforts to measure and explain “racial” differences in human movement and physiological capacity in the United States. “Race” here is displayed between quotations because racial categories are not natural, rather they are political tools that are historically and nationally specific that have been deployed in different ways over time (Braun et al., 2007). While there is variation in how “race” is constructed, utilized, and examined in kinesiological studies, kinesiologists have generally concluded that Black people in the US experience lower levels of fitness and health than their white counterparts (see Adams-Campbell et al., 2016, Braun, 2014; Couturier, 2005; Duey et al., 1997). How these conclusions are rendered in contemporary studies has yet to be investigated. As such, the purpose of this scoping review is to explore how “race” is used in examinations of cardiorespiratory fitness (CRF) and cardiovascular health (CVH). More specifically, our goal is to answer the following research questions:

1. How is race defined and racial differences constructed in the United States in published peer reviewed articles that are focused on cardiovascular health and

cardiorespiratory fitness, with specific regard to fitness, physical activity, and sport and athletic performance?

2. What are the various ways that “race” and “racial differences” are approached in the rationale sections of the peer-reviewed research papers? In the inclusion/exclusion criteria for participants? In the analysis of findings?
3. Are these examinations attuned to socio-cultural or historical explanations of the significance of exploring racial differences in cardiorespiratory fitness and cardiovascular health?

Literature Review

The purpose of this literature review is to explore how “race” and “racial differences” have been historically examined in US research related to health and fitness. Highlighting this history is critical because scholars have argued that the physicians of the 19th century were the single most important group involved in the biologization of racial categories (Hammonds & Herzig, 2009). The physician scientists that I will discuss developed an anti-Black curriculum about physicality and physiology that was adopted by American medical schools, and thus heavily informed the epistemo-ontological frameworks of the first physical educators in the US.

There is an abundance of literature that describes the history of American scientific racism and the relationship between race, science, and health. To fully cover and contextualize such a complex topic would require the full attention of this dissertation. As such, this literature review intends to help the reader comprehend

how historical racist ideas, concepts, beliefs, and attitudes have been perpetuated by the biomedical and health sciences and, more so, how key kinesiology figures have conducted research from within these racist anti-Black frameworks.

Pseudoscience Justifies Chattel Slavery in Antebellum America

Seventeenth century Western medicine and biology laid the foundations of racial inferiority and tainted the field of European and American biomedical sciences from their early beginnings (Byrd & Clayton, 2001). The scientific legitimization of the notion of inferior races by towering physicians such as Petrus Camper (1722-1840), Johann Blumenbach (1752-1840), and George Louis Leclerc de Buffon (1707-1788) appealed to European feelings of superiority and American ideals about the utility of chattel slavery. To this point, Byrd and Clayton (2001) argue that the better trained European and American physicians from the 17th to 19th centuries were likely to participate in the Atlantic slave trade, and medical school trainees were trained to become prejudice based on the medical school curriculum.

One well known contributor to the mounting “evidence” of Black intellectual and biological inferiority was the ‘father’ of modern biology and comparative anatomy, Georges Cuvier (1769-1832). Cuvier is best known for his mistreatment of Saartjie Baartman, a Khoi Khoi woman from what we now call South Africa, who was forcibly removing her from her home and placed on display in London in the nude (Anderson et al. 2018; Ashley, 2021; Bailey and Peoples, 2017; Mothoagae, 2016). Baartman is widely known for having a large protruding buttocks and

elongated labia which later became symbolic of racial variation and the justification of the hypersexualization of Black women (Ashley, 2021). British culture was consumed with exoticizing physical features that were divergent from dominant notions of white femininity, and frequently paid to see, poke, and prod at Baartman's body. Tragically, Baartman is unable to tell her own story, as all accounts that have investigated and examined her life are not her own.

Cuvier was particularly curious about Baartman's anatomy and the general corporeality of the Khoi people (Kistner, 1999). Unlike the theories of natural history, Cuvier's biology theorizes that there are integral functions of the body that are not visible to the eye (Kistner, 1999). Using techniques of comparative anatomy which allowed him entry to the interior of the body, Cuvier laid the theoretical foundation which posits that animal organisms are reliant upon the functional unity, coordination, and connection between their internal processes. Cuvier believed that there was a complex relationship between internal parts of organisms which made change impossible (Bowler, 1989; Dewbury, 2007). Thus, he believed there to be a fixity of animal species. Meaning that, in his view, races are genetically predetermined to be inferior or superior, and this cannot be changed. To validate this line of anatomical and biological thinking, Cuvier shifted his attention from Egyptian animal mummies (Bowler, 1989) to the Khoi women, Baartman in particular, which he deemed so abnormal that she warranted his 'expert' biological examination (Snorton, 2017; Strings 2019). In a publication which depicts Baartman's nude body, Cuvier notes, "The most disgusting part of this woman was her face, which displayed

the characters of both the negro and the Mongole countenance in its different features” (Schrire, 1996 in Kistner, 1999 p. 181)

Cuvier determined that Baartman’s large buttocks, jaws, and labia were clear markers of her ‘savage’ sexuality, and even examined Baartman’s menstrual blood which he concluded was less "pure" than white women because, at the time, increased blood flow was associated with a higher rank in nature (Fausto-Sterling, 2002).

Baartman often denied Cuvier the chance to examine her genitals, but after her death Cuvier was able to fully dissect Baartman’s vagina, in an ultimately pornographic anatomical study, in which he is noted as having a dissection table loaded with vaginas belonging to “bushwomen”, “Negresses” and white women, laid side-by-side and concluded that “bushwomen’s” vaginal structures resembled those of monkeys (Fausto-Sterling, 2002). In addition, Cuvier made a plaster cast of Baartman’s body, pickled her genitals and brain, and reserved her skeleton for public display in Paris’ Museum of Man. Baartman’s body was not laid to rest until 2002. Cuvier’s findings are said to have catalyzed a flurry of investigations of Khoi women, where the image of Black and Native women as sexualized Other, as validated by their anatomical ‘peculiarities’, became to represent their innate pathology. The work of Cuvier is important to note, because one of his pupils, Samuel George Morton went on to spearhead the “American School” of anthropology.

In the 19th century, the American School was a prominent producer of scientific knowledge that justified and defended chattel slavery. Samuel George Morton (1799-1851) was a Philadelphia physician, leader of the American School,

internationally known University of Pennsylvania School of Medicine faculty member, and served as president of the Academy of Sciences (Byrd & Clayton, 2001; Dewbury, 2007; Gould, 1996). Morton provided the "facts" of Black inferiority through his use of phrenology and comparative anatomy (Dewbury, 2007). Between 1820 and 1851, Morton collected and measured over one thousand human skulls (Gould, 1978). By measuring the cranial cavity that held the brain, Morton theorized that the greater the cavity the larger the brain, thus the increased capacity for intelligence (Rusert, 2012). He ranked each skull based on its size. When assembling his most influential work, *American Golgotha*, Morton presents "a quantitative argument not only for racial hierarchies of intelligence, but also for the separate origins of the races, elevating racial differences among humans to racial differences among species" (Mitchell, 2018, p. 3). Interracial differences, according to Morton, were so vast that intermixing could have harmful effects which he relates to dangerous hybridity in animals (Mitchell, 2018). Unsurprisingly, Morton ranked "whites on top, Indians in the middle, and blacks on the bottom" (Gould, 1996, p. 85). Among whites, Morton ranked "Teutons and Anglo-Saxons on top, Jews in the middle, and Hindus on the bottom" (Gould, 1996, p. 86). In this regard, Black people were considered indisputably inferior based on the largest collection of skulls in the world. Morton was regarded a renowned data gatherer and is an early example of an objectivist approach to American science. His work was so influential to the scientific and social narratives of anti-Blackness and slavery that after his death, the South's leading medical journal proclaimed, "We of the south should consider him as our

benefactor, for aiding most materially in giving to the negro his true position as an inferior race" (Gould, 1996, p.101).

Other members of the American School included the nation's academic leader of biology and paleontology Louis Agassiz (1807-1873); Penn medical school graduate and international authority on race and ethnology Josiah Nott (1804-1873); and Samuel Cartwright (1793-1863) who was a towering leader in the field of "Negro Disease," a faculty member at several Southern medical schools, and lecturer on the medical inferiority of African Americans (Braun, 2014; Byrd & Clayton, 2001; Gould, 1996; Willoughby, 2018).

Of these individuals associated with the American School, southern physician Samuel Cartwright merits focus given the nonsensicality of his claims about the respiratory function of enslaved Black people. Cartwright suggested that the problem with Black people was the inadequate decarbonization of blood in the lungs, and if left free, the lungs of Blacks cannot "vitalize the blood" (Braun, 2014, p. 29). Cartwright named this disease dyesthesia, a disease of inadequate breathing frequently found in enslaved Black people:

When driven to labor... he performs the task assigned to him in a headlong and careless manner, treading down with his feet or cutting with his hoe the plants he is put to cultivate-- breaking the tools he works with, and spoiling everything he touches. (Gould, 1996, p.103)

Cartwright proposed that this "lack of vitality" was a racial characteristic that could only be "cured" through forced labor:

The liver, skin, kidneys should be stimulated to activity... to assist in decarbonizing the blood. The best means to stimulate the skin is, first, to have the patient well washed with warm water and soap; then to anoint it all over with oil in with a broad leather strap; then to put the patient to some kind of hard work in the open air and sunshine that will compel him to expand his lungs as, chopping wood, splitting rails, or sawing with the crosscut or whip. (Gould, 1996 p. 103)

Cartwright “proved” that enslaved Blacks consumed less oxygen by use of the spirometer. With the precision of a spirometer of his own design, Cartwright sought to show how the “expansibility of the lungs considerably less in the black than the white race of similar size, age, and habit (Braun, 2005, p. 29). Using the spirometer, Cartwright proved objective, quantitatively, and without a doubt that there is a pathological “deficiency in the negro” that affected “hebetude of mind and body”. The (false) belief that enslaved Blacks consumed less oxygen than whites did not consider the effects of chattel slavery on the physiology of the enslaved, yet there remained a firm belief that deficient respiration was a result of biologically determined anatomy and physiology. The consequences of this thinking were “justified” torturous brutality against enslaved Black people, scientific reasoning to further explore and formulate knowledge about Black inferiority, and a fostering of whiteness that determined the “typical man” was of the Anglo- Saxon variety.

Physical anthropology (i.e., what was studied at the American School) was primarily concerned with race comparison studies (Braun, 2005). Contrarily, the early field of physical education rarely made direct racial comparisons; rather, “anthropometry in physical education was a project of whiteness, centered on cultivating Anglo-Saxon manhood and womanhood” (p. 74). Leaders like professors Edward Hitchcock (1838-1911) and Dudley Sargent (1849-1924) believed that they could determine and improve the “strength of man” using anthropometry. For instance, Sargent argued that the main goals of anthropometric charts were to motivate students to compare themselves to others and judge the success of their physical training (Braun, 2014). Sargent believed that the ultimate purpose of measurement and physical training was to “improve the condition of the race, and better the quality of future humanity to raise the normal or mean standard of mental and physical development” (Sargent 1890 in Couturier, 2005, p. 27). Arguably, the field of kinesiology reflects these early ideas as there remains a practice of referring to “norms” and “averages” (which are the products of examinations that aimed to cultivate whiteness) to compare groups of people.

Driven by misinterpretations of Charles Darwin’s (1809-1882) evolutionary theories, the pseudoscientific literature in both the biological and social sciences on Black intellectual and corporeal inferiority grew intensely in volume and influence (Byrd & Clayton, 2001). By the late 19th early 20th centuries, American journals and textbooks were laced with pseudoscientific racist principles, insulting and disparaging racial character references, and proclamations of the impending Black racial

extinction (Jones, 1993). The field of physical education (PE) was in its infancy in the last half of the 19th century. To establish its validity as a scientific field, early PE leaders were well versed in the (anti-Black) science of the time, which aimed to keep white supremacy intact.

Fostering Whiteness: Early Physical Education Leaders, Anthropometry, and Eugenics pre -1936

The 1859 publication of Darwin's *On the Origin of Species* ignited a spectrum of new discourses that articulated fitness, degeneration, the body, and bodily control that were embedded in evolutionary theory (Braun, 2014). Darwin's work introduced the theory that populations would evolve over the course of generations leaving only the fittest to survive and justified European imperialism and colonialism. This idea was accepted in the US particularly because it supported policies and practices that aligned with national interests (namely the less-than-human treatment of the poor, non-Anglo-Saxon immigrants and enslaved Black people). However, the last two decades of the 19th century saw an increase in narratives that articulated the belief of natural selection, racial purity, and racial struggle (Dennis, 1995). Francis Galton was vital to this resurgence of interests in Darwinian thinking.

On the Origin of Species heavily influenced the ideas of Francis Galton (1822-1911), the father of the eugenics movement. Galton adamantly argued that heredity determined individual characteristics, and vehemently advocated that eugenics was the most efficient tool for reproducing the "fitter stock" of Western society (i.e.,

wealthy Anglo-Saxons) (Braun, 2014). Galton obsessively conducted scientific tests to “prove” physical and intellectual differences between social classes, and his efforts influenced the creation of the “intelligence quotient” or IQ test by Alfred Binet and Théophile Simon in 1916.⁴ The accuracy of these tests are irrelevant; rather, what is more important is that they confirmed the ideologies of the racial superiority of white Anglo-Saxons. Thus, in the US, the belief in science and scientific methodology as a producer of objective truth served as an important tool to confirm preconceived notions of white American superiority (Dennis, 1995). After the abolition of overt chattel slavery, science then, became critical to the legitimizing social and political practices that upheld white supremacy.

In the early 20th century, the US desperately yearned for stability as the rise of industrialization, urbanization, immigration, women’s rights, and Black liberation threatened the peace of the white supremacist social order (i.e., the power of white

⁴ It is also important to mention that Galton thought breathing capacity, combined with height and weight, would be the “best general test of bodily efficiency” and that capturing this metric would be a “valuable guide” for selecting the occupation for which one is best naturally suited (Braun, 2014 p. 99). Here Galton demonstrates the how anthropometry and statistics can be applied to ranking bodily efficiency. By correlating variables such as lung capacity with height and weight, Galton could determine how efficient a man could be and the labor that would best suit his corporeal capacities. Galton intertwined political ideas about labor with the scientific notion of bodily efficiency and the social fears of ‘race suicide’ and degeneration.

Anglo-Saxon protestant men) (Braun, 2014; Couturier, 2005). Evolving from the practice of anthropometry, Social Darwinism, and the development of the science of genetics, the scientific expertise of the eugenics movement was believed to be a panacea to societies new social ills. Eugenicists promoted the “perfectability of man and society” through “good breeding”. The scholarship of Lynn Couturier (2005) and Lundy Braun (2014) is particularly useful here, as they shed light on how the eugenics movement influenced physical education in the late 19th and early 20th centuries.

According to (Couturier, 2005) the principal tenet of the eugenics movement was that the pinnacle of evolution was white, heterosexual, wealthy, and male; other groups were seen as less evolved and therefore less desirable. Eugenicists also considered individuals with physical defects and intellectual disabilities immoral. The eugenics movement provided a scientific justification for reducing undesirable populations. While some notable scientific leaders pointed out the external environment is also cause for deleterious health conditions (such as syphilis and tuberculosis), the eugenic idea race-related biological predisposition persisted and the desire for “national strength” remained a top priority in the late 19th and early 20th centuries.

In its beginning, the field of PE was mainly comprised of physicians who were strongly influenced by Darwinian and eugenic ideas that explicated the goal of

obtaining “national strength” and “fitness”. For instance, Amherst College⁵ professor and physician Edward Hitchcock, was a well-known anthropometrist who promoted the identification of superior specimens for the purpose of learning how to “continue this perfect form and beauty, how to pass it along down the line of coming posterity, and if possible, improve it” (Couturier, 2005, p. 27). Hitchcock championed the idea of capturing the “typical” and/or “average” man, and believed that recording the girths, breadths, lengths, pilosity (amount of hair), and lung capacity of young white college men would provide the ideal measurements of a supreme specimen (Braun, 2014).

Unlike Hitchcock who believed in the fixity of the human species, other leading physical educators like Harvard professor of physical training Dudley Sargent (1849-1924) and YMCA physical training instructor Luther Gulick (1865-1918) believed that the body is adaptable, and that strength could be improved through physical training (Braun, 2014). Gulick particularly touted the idea that physical training could improve one’s moral and intellectual development. In addition, Sargent, who would later become a three-time president of the American Association for Advancement of Physical Education (AAAPE; which is now called the Society of Health and Physical Educators or SHAPE America) strongly posited that

⁵ Amherst College in Massachusetts was the first university to establish a program of physical culture (Braun, 2014).

anthropometric work should allow us to measure strength adaptations in the body (Couturier, 2005). The urgent need to capture the changes in men's strength, however, is underlined with 19th century concerns about the "fitness" of the white Anglo-Saxon race. For example, in 1890, Sargent published "The Physical Test of a Man," in which he discussed potential applications for anthropometrics in which he concluded:

The only way to produce the highest specimens of the individual, improve the condition of the race, and better the quality of future humanity is to raise the normal or mean standard of mental and physical development. This cannot be accomplished by cultivating the extremes alone as represented by athletes and invalids. The former cannot hope to transmit at the best but one-fourth of his superior energy, and it would be better for the future of the race, if the latter did not transmit it all. (Sargent 1890 in Couturier, 2005 p. 27).

While Sargent is not explicitly promoting Galton's work, the language of his scholarship aligns with the dominant theme of eugenics. We can see a stronger theme of eugenics in Sargent's 1914 address at the first national conference on Race Betterment:

Long experience and careful observations have shown us that physical education, in its best and broadest sense, is one of the most important factors in race betterment. Through improving the structure and function of various parts of the human organism, it tends to make such functions natural and normal from the moral and mental, as well as from the physical point of

view...Above all, through this individual improvement in the physical condition of men and women there results a better race of children, so that we may consider physical education an agent in our modern sciences of eugenics and eugenics. (Sargent, 1914, p. 104-106)

This address illustrates how prominent early physical educators linked anthropometry and physical training to eugenic ideas. Early PE leaders posited that through physical training, not only can the condition of the (white) race be improved, but it will better the quality of future humanity (Couturier, 2005, p. 26).

By aligning with the eugenics movement, the position of early PE leaders was reinforced amongst the scientific elite and credibility was lent to the new field. Due to concerns about the future of the American 'race,' PE leaders sought to invest their research efforts in improving the physical, intellectual, and moral conditions of white men and women. Ideas about racial difference, then, became common sense knowledge. What Braun (2014) and Couturier (2005) do not detail, however, is how early PE leaders maintained the epistemo-ontological view of white superiority when faced with mounting opposing evidence. In the next section, I detail subtle shifts in kinesiology's early research that functioned to maintain the illusion of racial difference.

How Whiteness is Maintained in Physical Education Post Berlin Olympics

The 1930's marks a crucial moment in the field of physical education. While racial thinking and white superiority undoubtedly underlined the premise, methods,

and practice of human science since the 1800's (Braun, 2014; Couturier, 2005; Gould, 1996), the 1936 Berlin Olympic victories of Jesse Owens catalyzed a paradigmatic shift in how physical educators produced knowledge about the relation of race to athletic performance and the body (Dyreson, 2001). To put it plainly, Jesse Owens created such a stir that PE leaders began to include Black athletes in their studies to examine mechanisms of their biological physical "strengths" rather than their physical weaknesses (Dyreson, 2001).

Though the feats of Jesse Owens shattered Nazi racial ideology, they had little impact on America's version of white supremacy and, some scholars even posit that his victories simply shifted thoughts about *what* made Black people inferior which entrenched the racist ideologies of the US (Dyreson, 2001).

For instance, in 1939 Dr. Eleanor Metheny, a prominent physical educator and philosopher of human movement conducted a study that compared Black and white college males, and concluded that Black men's body types provided them athletic advantages over white men. Based on anthropometric measurements, Metheny suggested that Black men were at an advantage in throwing and jumping events due to their longer and heavier forearms. Her results encouraged other physical educators to measure and compare athletic performance between racial groups, mainly Black and white males (Sailes, 1991; Wiggins, 1989).

Several years later, clinical psychiatrist Laynard Holloman asserted that Black men's athletic success stems from their "savage" desire to beat the white man; "In the

squared ring, Black boxers expressed their pent-up emotions, discharged latent energies, satisfied their restless ego, and healed their wounded narcissism” (Wiggins, 1989, p. 163). It is only natural for Black athletes, then, according to Holloman, to find success in athletics, as their innate jealousy for the white man drives their physical prowess. British physician, James Tanner, like Metheny and Holloman, also suggested that Black men’s bodies are well-suited for pole vaulting and sprinting, due to their slimmer calves and long arms. However, Tanner did not provide scientific reasoning as to how having long arms and slim calves directly benefits the track and field athlete when performing a specific event (Wiggins, 1989). While researchers such as W. Montague Cobb, the first African American to receive a PhD in physical anthropology, provided evidence that there are no anatomical differences between Black and white athletes, there remained a desire to racially compare and a practice of positioning white athletes as most superior.

Although this research acknowledged the victories and athletic abilities of Black athletes, by comparing their athletic performances to white athletes, PE leaders maintained common sense anti-Black assumptions of white superiority (see Rhoden, 1974; Sailes, 1990, 1991 for discussions about the myth of the natural Black athlete). Common sense is powerful as it intricately weaves fact, opinion, myth, impression, analysis, and intuition together in a compelling description of racial formation. Common sense is an epistemological and ontological junction. It refers to both what we know, how we know and think, and our ability to acquire particular thoughts (St Louis, 2004). While there have been shifts in how kinesiology researchers have

discussed and examined racial differences in relation to fitness, what remains constant is the common sense idea that racial differences impact fitness and health related outcomes, and that to best examine them, we must compare other races to the white race. As such, the purpose of this scoping review is to explore how “race” is used in contemporary examinations of cardiorespiratory fitness (CRF) and cardiovascular health (CVH).

This is a timely examination because there is a push for researchers in the physiological sciences to be more critical of how they engage race and conduct research on racial differences. For instance, in one of the leading exercise physiology journals, Wolf, Jablonski, and Kenney (2020) argue that despite their being no biological distinction between races, there persists “continued examinations of mechanistic differences in cardiovascular and cerebrovascular function between racial groups” (p. H1410) which reifies the false narrative that “race” and “racial differences” are the result of biology not society. In a similar vein, the American Medical Association (AMA) is also encouraging researchers who submit to their journals to acknowledge that while race has no biological meaning, race(ism) has long influenced how medical and health research is conducted. Both pieces acknowledge that the term “race” is ill defined and built on faulty, politically charged foundations, calls for researchers to be more critical of how they engage “race” and “racial difference”, and offers recommendations for future research. As such, this scoping review is a direct contribution to this emergent movement in the medical and physiological sciences and is guided by the following research questions:

R3a. How is race defined and racial differences constructed in the United States in published peer reviewed articles that are focused on cardiovascular health and cardiorespiratory fitness, with specific regard to fitness, physical activity, and sport and athletic performance?

R3b. What are the various ways that “race” and “racial differences” are approached in the rationale sections of the peer-reviewed research papers? In the inclusion/exclusion criteria for participants? In the analysis of findings?

R3c. Are these examinations attuned to socio-cultural or historical explanations of the significance of exploring racial differences in cardiorespiratory fitness and cardiovascular? If so, what are these explanations?

Methods

Scoping reviews are ideal tools to determine the scope or coverage of a body of a given topic (Munn et al., 2018). Whereas a systematic reviews focus on a well-defined question, scoping reviews address broader topics (Arskey & O’Malley, 2005). Because scoping reviews are guided by broader research questions, the aim of the scoping review is not to assess the quality of the studies in the sample . Arskey and O’Mally (2005, p. 21-22) provide reasons for why scoping reviews are conducted:

1. To examine the extent, range, and nature of research activity: this scoping review examines the nature of CRF and CVH research that focuses on “race” and “racial differences.”
2. To summarize and disseminate research findings: often scoping reviews are conducted with dissemination to those who may lack time or resources to undertake a scoping review themselves in mind (i.e., policy makers, practitioners, and consumer in mind). As such, this scoping review provides a summary of key findings with the intent of publishing in *Kinesiology Review*.
3. To identify gaps in the existing literature: scoping studies may take the process of dissemination one step further by drawing conclusions from existing literature to discuss the overall state of the research activity. This is not done to critique the quality of research in the sample, but to bring attention to areas of inquiry that benefit from a full systematic review. As such, this scoping review summarizes patterns in the research sample that may require future investigation, and concludes with recommendations for practitioners.

To ensure that this project aligned with the [JBI Manual for Evidence Synthesis](#) (Chapter 11) and the [PRISMA-ScP extension](#), the methods for this scoping review were heavily guided by the University of Maryland’s public health librarian. The librarian developed the search string, the inclusion and exclusion criteria, and pulled all of the articles needed and exported them to an excel spreadsheet for me to examine and code.

Protocol and Registration

The protocol for this scoping review was published on the Open Science Framework platform (Justin et al., 2023). The review was conducted in accordance with JBI Manual for Evidence Synthesis (Peters et al., 2020) and the PRISMA Guidelines (Preferred Reporting Items for Systematic reviews and Meta-Analyses) (Tricco et al., 2018) - see Supplemental Material S1.

Inclusion and Exclusion Criteria

For this scoping review the Population, Concept and Context (PCC) framework was used as outlined by Peters et al. (2015):

Population (P) – Racial/ethnic groups people in the United States. The search focused on United States because US science has a long-standing tendency of using race to rationalize their methods, justify their conclusions, and develop their interventions (Roberts, 2014; Washington, 2006). How researchers in the US engage race in their CRF and CVH studies may be different in comparison to other countries because of the long-standing and turbulent history of racism in the US. In addition, while the literature that examines race and racial differences regarding Blackness was explored, all race populations in the US were included because the objective for this scoping review was how “race” is used and applied, not solely “Blackness.” For example, if a study examined Asian-American CVH risks, an analysis was performed to identify if those

authors explicitly defined “Asian-American” and why “race” was an essential category to include in their study.

Concept (C) – Race and racial differences. The search aimed to find studies about race and racial differences (as opposed to gender for example) and how they explain differences in CRF and CVH studies. The reason is because not only has health and physical/physiological capacity been used to justify the mistreatment of Black bodies in both scientific and societal practices (Braun, 2014; Roberts, 2014; Washington, 2006), but it has also been used to rationalize racial hierarchies, and their subsequent power structures in the United States (i.e., white patriarchy). While it is well-documented by the Human Genome Project, that all humans are biologically 99.99% the same (Cooper et al., 2003; Roberts, 2011), CRF and CVH research that utilizes the concept of race persists. As such, this scoping review aims at investigating the rationales underpinning such research and how race and racial differences are understood.

Context I – Cardiovascular health and cardiorespiratory fitness. The aim is also to scope CRF and CVH studies because, as indicated in the literature review, antebellum notions about lung function, respiration, blood vitality, and oxygen consumption are rooted in racist pro-slavery imperatives (Braun, 2014). In addition, anthropometric techniques that often accompany respiratory fitness assessments were created with the measurements of white

men as the standard (Couturier, 2005). Scientific textbooks that discuss these physiological and anatomical concepts have been shaped by racial hierarchies since the 18th century and further bolstered white supremacy. Contemporary CRF and CVH is molded by this anti-Black legacy and may persist to aide in the reification of racial difference with regard to health, fitness, physical activity, and sport and athletic performance.

A preliminary search in Google Scholar was conducted to find benchmark articles. An analysis of text words found in titles, abstracts, author supplied keywords, and index terms was conducted to collect terms for building the search strategy. The search terms and search strategy will be adapted and/or modified according to each database's-controlled vocabulary and syntax. A sample search string limiting to titles, abstracts and subject terms is included in Table 1.

Table 1. Sample search string for the Academic Search Ultimate (EBSCO) database.

Query #	Sample search
"1	"African Americ"n*" "R "African Continental Ancestry Gr"up" "R "Alaska Nati"e*" "R "American Nati"es" "R "Asian Americ"n*" "R "Asian Continental Ancestry Gr"up" "R "Continental Population Gro"ps" "R "European Continental Ancestry Gr"up" "R "Hispanic* Americ"n*" "R "Indian Americ"n*" "R "Indigenous Americ"n*" "R "Mexican Ameri"an" "R "Native Americ"n*" "R "Native Hawaii"n*" "R "Oceanic Ancestry Gr"up" "R "Pacific Island"r*" OR(("people"of" "R "student*"of" "R "person"of" "R "individual*"of" "R "woman"of" "R "women"of" "R "man"of" "R "men"of") N3 (color OR colour)) OR Black* OR Caucasian* OR ((ethnic* OR marginalized OR racial) N3 (difference* OR group* OR population*)) OR Latino* OR Latina* OR minorit* OR Negro OR White*
"2	"white domina"ce" "R "white po"er" "R "white privil"ge" "R "white superior"ty" "R "white suprem"cy" OR ancestor* OR anthropometr* OR anti-Black* OR bias OR biocultural OR bio-cultural OR divers* OR epistemilog* OR eugenic* 96bstrac96nic* OR hegemony OR monocultural OR ontolog* OR prejudice OR race OR racial OR racism OR racist OR racialized OR supremacist* OR whiteness
#3	(breath* OR cardiopulmonary OR cardiorespiratory OR cardiovascular) AN" ("physical activ"t*" "R "physical cultu"e*" "R "physical educ"t*" "R "riding a b"ke" OR aerobic 96bstraclet* OR basketball OR capacity OR cycling OR endurance OR exercise OR

	fitness OR jogger* OR jogging OR jumper* OR jumping 97bstract97gylog* OR paddl* OR runner* OR running OR skating OR skiing OR sport* OR swim OR swimming OR training OR walk*)
#4	#1 AND #2 AND #3

The inclusion and exclusion criteria applied to studies during the screening process are presented in Table 2.

Table 2. Inclusion and exclusion criteria .

Characteristics	Inclusion Criteria	Exclusion Criteria
Population (P)	Racial/ethnic groups in the US	Racial/ethnic groups from non-US countries
Concept (C)	Race and racial differences	N/A
Context (C)	Cardiovascular health and cardiorespiratory fitness	Self-reported physical activity
Species	Humans	Non-human/animals
Language	English language studies	Non-English language studies
Study type	All types of peer-reviewed studies (e.g. literature and systematic reviews, quantitative and qualitative studies, mixed methods studies, and primary and secondary studies that report empirical research data).	Grey literature (e.g. pre-prints, theses, dissertations, conference proceedings, abstracts, books, book chapters, book reviews, reports, blogs, news, videos, etc.)

Information sources

A literature search was conducted on April 17, 2023, in eight databases from their inception: Academic Search Ultimate (EBSCO), CINAHL (EBSCO), Education Source (EBSCO), SPORTDiscus (EBSCO), PsycINFO (EBSCO), PubMed (National Library of Medicine), Scopus (Elsevier), and Web of Science - Science Citation Index and Social Sciences Citation Index (Clarivate). Considering the wide

scope of the research questions, the literature was explored in standard healthcare databases (PubMed and CINAHL), but also databases related to sports medicine (SPORTDiscus), psychology databases (PsycINFO), education databases (Education Source), and multidisciplinary databases (Academic Search Ultimate, Scopus, Web of Science) allowing a comprehensive view of the literature's spread.

Search strategy

To explore various terms to build the search strategy, a preliminary search in Google Scholar was conducted. Benchmark articles were analyzed for text words found in titles, abstracts and author supplied keywords. Specific controlled vocabulary terms were explored for inclusion in the PubMed searches. The search terms and search strategies were adapted and/or modified according to each database's-controlled vocabulary and syntax. The searches were unrestricted by publication year and filters were applied for peer-reviewed and English language. The search strategies for all databases are provided in [Supplemental Material S2](#). Manual searches were performed in Google Scholar and references list of included studies to identify relevant studies not retrieved from database searches.

Selection of sources of evidence

The results from database searches were exported into Zotero in separate files in order to keep track of the number of records per database. Duplicates were removed, and a preliminary cleanup was performed by the public health librarian to remove any study type that at first glance did not meet some of the inclusion criteria (e.g. letters to the editor, posters, abstracts, non-English studies, animal studies, etc.).

The unique records were exported to Rayyan for title/abstract screening. Prior to screening title/abstracts, three reviewers completed a calibration exercise to ensure inclusion/exclusion consistency. Once calibration was completed, two reviewers independently screened records for inclusion/exclusion and any discrepancies in the decision-making process was resolved through discussion. The librarian pulled up the full text of the studies identified through the title/abstract screening. The same screening process was performed for the full-text screening.

Studies were ***included*** if they met all of the following criteria:

1. Conducted in the United States,
2. Examined racial/ethnic groups in the United States,
3. Discussed racial differences,
4. Focused cardiovascular health and/or cardiorespiratory fitness, and
5. Physical activity, sport, and/or athletic performance was measured in a laboratory, clinical setting or via a specific intervention.

Studies were ***excluded*** if they were missing one or more of the inclusion criteria. In order to ensure that studies were excluded for the right reason, Excel spreadsheets were developed for the reviewers to independently notate their exclusion reasons for each article.

Data Charting, Data Items

As recommended by the JBI Manual for Evidence Synthesis (Peters et al., 2020), a predefined Excel spreadsheet for each reviewer was developed to extract

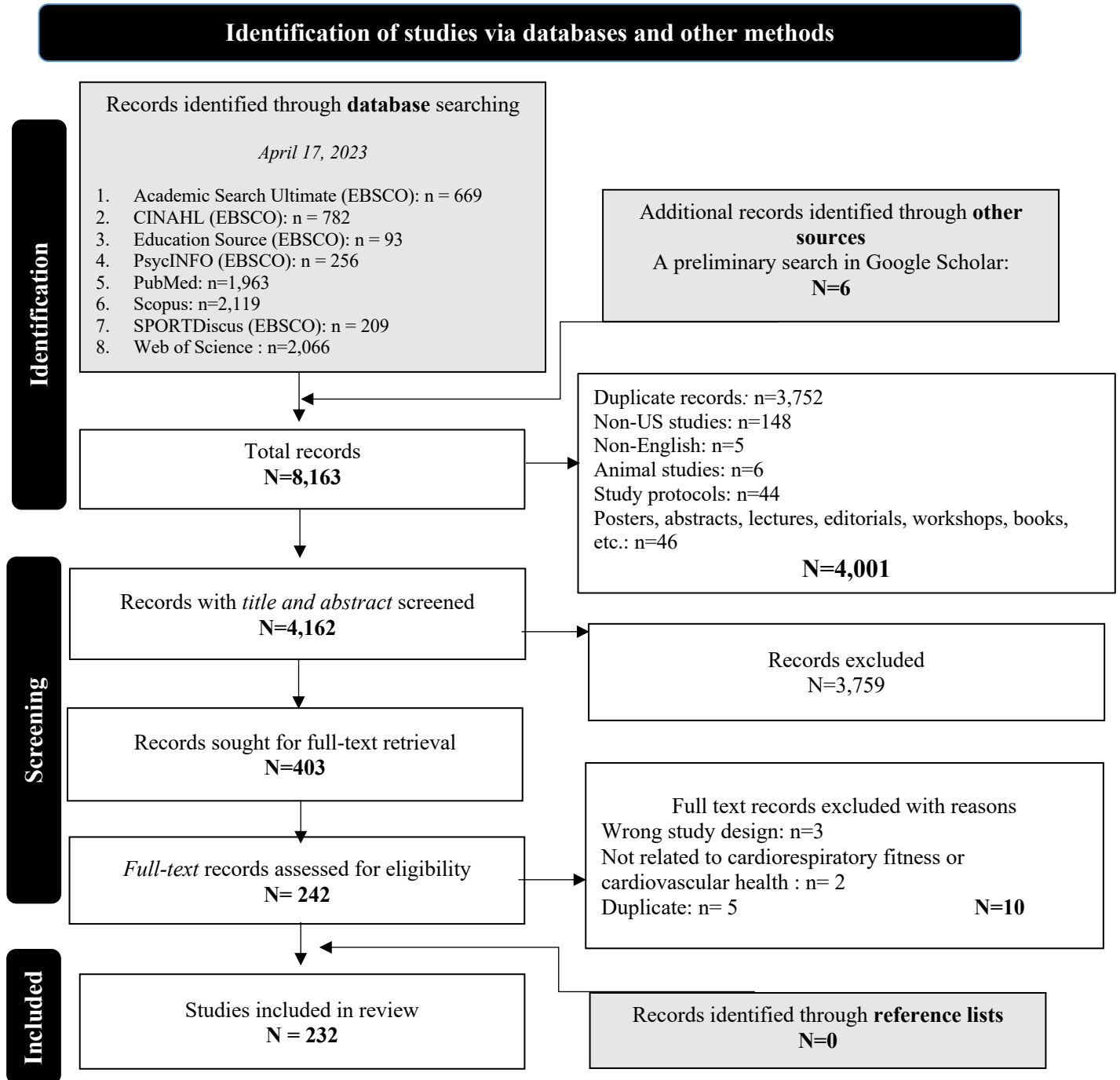
data from included studies. Based on the PCC concepts, the following data was abstracted: record identifiers (i.e., author, year, study title); study aims and objectives; participants (i.e., sample size, mean age/age range, gender, race/ethnicity); concept (i.e., “race,” “racial differences” approach); context (i.e., “cardiovascular health,” “cardiorespiratory fitness”); methodology/study design; socio-cultural or historical explanation of “race;” key findings; gaps in research.

Synthesis of Results

Synthesis included quantitative analysis (i.e., frequency analysis) and qualitative analysis (i.e., content analysis). With regards to frequency, I utilized an Excel workbook to count the number of occurrences for the following: times race was defined, times race was compared, how race was captured, times white race was used as a baseline reference, and how often a socio-cultural explanation was used to discuss racial differences. For the content analysis, I reviewed the introductory rationales for examining the target population(s), the results of studies that compared Black and white racial groups, and analyzed how studies that compared Black and white racial groups discussed potential mechanisms for racial difference. Both quantitative and qualitative analysis were informed by the research questions noted above and were structured around the PCC framework. Results and findings are presented in narrative format with combination of tabular or diagrammatic forms that responds to the research questions for this scoping review. A summary is also

provided of how data were coded to a particular category (i.e., defined race, discussed racial differences).

Figure 1. Flow Diagram of Search



Results

As indicated in Figure 1, the database searches retrieved a total of 8,163 records. After scanning all study titles for eligibility and eliminating duplicates in databases, as well as protocols, conference abstracts, editorials, etc., the title and abstract of 4,162 unique records were screened. After following the first round of screening whereby two reviewers independently screened records for inclusion/exclusion (see page 96 “Selection of sources for evidence”), 403 articles were identified as relevant for review. The same independent screening process was applied to the 403 full text articles located by the librarian and 232 eligible records were identified and included in this scoping review. The publication year of the earliest eligible record was 1971 and the latest was 2023.

Race and Ethnicity Categorization

One goal of this study was to explore how studies constructed race and racial difference. As such, one aspect we coded for was if race was defined. As shown in Table 3, the majority of the studies (n=181, 77.5%) did not define race. Of the studies that did define race (n=51, 22.4%), race was often defined by having two parents and/or grandparents of the same race. For example, in their 2006 examination of genetic factors that explain VO₂max, Roy and colleagues (2006) defined African American (AA) and European American (EA) race as the subject’s self-identification in addition to the “indication that both parents and grandparents are of the same

ethnicity” (p. 455). Twenty two percent of the sample, then, constructed race as being determined by immediate kin.

The racial categories used to examine race, however, are inconsistent. To categorize Black race, terminologies used included “African American,” “Afro American,” “Black,” “Negro,” “non-Hispanic Black,” or a combination of the four. To categorize white race, terminologies used included “Anglo-European,” “Caucasian,” “European American,” “non-Hispanic White,” and “White.” Ethnicity categories primarily utilized in the sample were Hispanic and Latino. Other racial categories such as Asian and American Indian or Alaskan Native were often included in multiracial studies and were categorized as “Other,” “Minority,” or “Non-white.”

Table 3. How many studies defined race?

Race not defined	181 (77.5%)
Race defined	51 (22.4%)

The terminologies used to describe Black and white racial categories are specifically emphasized here because it reflects the racial comparisons that were most investigated by researchers in this sample of CRF and CVH studies. As displayed in Table 4, the majority of the studies (n=136, 58.6%) utilized Black/white comparisons to investigate racial differences. Twenty-six percent of the studies examined racial differences amongst three or more racial categories.

Table 4. Race comparisons most examined.

Black/ AA White	94 (69.12%)
Black/AA Caucasian	35 (25.7%)

Black/AA European Americans	6 (4.41%)
Total Black/White comparisons	136 (58.6%)
Total Multi Racial Comparisons (3 or more races included)	60 (25.8%)

Table 5 summarizes how researchers in this sample (N=232) captured race. In 37.9% of the studies, investigators did not state their methods of racial categorization. In 35.7% of the studies, the subjects self-reported their own race. An additional 20.2% determined race from medical records and another 6% assumed race based on the specific recruitment methods and protocols.

Table 5. How race is captured

Not stated	88 (37.9%)
Self-reported	83 (35.7%)
Electronic health record or Database	47 (20.2%)
Assumed based on study population	14 (6.03)

I extracted the study design type to capture the frequency of methods used (i.e., quantitative or qualitative) to examine race and racial differences. As summarized in Table 6, 94.8% percent of the included examinations utilized quantitative methodologies to measure the effects of race on CRF and CVH.

Table 6. Study design type

Study design	
Quantitative	220 (94.8%)
Mixed-Methods	8 (3.4%)
Qualitative	4 (1.7%)

Rationales for Exploring Racial Differences

Another aim we had for this study was to explore the various ways that “race” and “racial differences” are approached in the rationale sections of the peer-reviewed research papers. Displayed in Table 7 are the researchers’ rationales (N=232) for why they decided to examine the CRF and CVH of their target populations. Forty-five percent (n=105) of the rationales positioned the white participants as the standard for which the CRF and CVH of other races were compared (see Vella et al., 2013 example below). Even studies that examined participants from one non-white racial category typically justified their examination of their target population by stating that their poor health, in comparison to their white counterparts, warranted investigation. For example, when Vella and colleagues (2013) conducted a pilot study with a rural Latina population, their rationale for doing so was that, “Hispanic women have a lower insulin sensitivity and higher prevalence of metabolic syndrome, type 2 diabetes, and cardiovascular disease risk factors compared with non-Hispanic white women (p. 1377).” Such rationales suggest that white Americans demonstrate ideal health and “normal” levels of CRF and/or CVH. Ten percent of the studies stated their desire to explore racial differences was because race-related outcomes had not been studied before or were not confirmed. Lastly, 29% of the studies did not have rationales for investigating racial differences in their introductions. That said, while some studies did not discuss why they were exploring racial differences in CRF and CVH, they did report their findings by race.

Table 7. Rationales for why target racial groups should be examined

Target population(s) have CRF and/or CVH outcomes compared to white racial group	105 (45.2%)
Racial differences/ race-related outcomes not studied before or confirmed	23 (10%)
Other (i.e., data on non-white groups are sparse; general race data collected due to known racial differences in health outcomes)	36 (16%)
No explanation for exploring racial differences	68 (29%)

As stated above, 45.2% (n=105) of the rationales in the sample positioned the white participants as the standard for which the CRF and CVH of other races were compared. Table 8 offers six illustrative examples of *how* white research participants were constructed as “average,” “normal” or demonstrations of ideal health within the 105 articles that justified the examination of their target group by comparing their CRF and CVH outcomes to the white racial group. These rationales were found in the introduction of each article. For instance, in their introduction Duey and colleagues (1997) rationalized their examination of cardiovascular and plasma catecholamine response to static exercise in normotensive Black and white men as such:

“Hypertension is a serious health problem in the US, particularly for black Americans. Epidemiological studies have shown that in persons 18-74 years of age the prevalence of hypertension for blacks (38.8%) far exceeds that of whites (28.8%)” (p. 127). Similarly, in their pilot examination of culturally tailored physical activity and nutrition programs for Hispanic women, Seguin and colleagues (2019) state, “While 53% of non-Hispanic US adults meet the guidelines, only 43% of Latino

adults do [4]. Similarly, Latino adults typically have poorer diets and higher rates of obesity than non-Hispanic whites” (p. 2). In their introductions, both research groups justified the examination of their target population by stating how the health of their target population was inferior to the health outcomes of white research subjects. Doing so implies that the health outcomes of white research participants is the “norm” by which subjects of other racial categories should be compared, *and* suggests that in order to validate the study of participants of other racial categories researchers tend to expound on previous studies that note “racial difference.”

Table 8. Summary of introductory rationales for examining the CRF and CVH of their target population(s).

Article Title	Journal Name	White as Standard: Illustrative Quotes (n=105, 45.2%)	Target Population(s)
Cardiorespiratory Fitness and Metabolic Syndrome in Postmenopausal African-American Women.	International Journal of Sports Medicine	Previous research has shown racial differences in CRF between African-Americans and Caucasians with lower CRF levels in African-Americans, particularly African-American women (Adams-Campbell et al., 2016, p. 2).	African American women
Cardiovascular and plasma catecholamine response to static exercise in normotensive blacks and whites.	Ethnicity & Health	Hypertension is a serious health problem in the US, particularly for black Americans. Epidemiological studies have shown that in persons 18-74 years of age the prevalence of hypertension for blacks (38.8%) far exceeds that of whites (28.8%) (Duey et al., 1997 p. 127).	Black and white men
Racial differences in energy expenditure and aerobic fitness in premenopausal women.	American Journal of Clinical Nutrition	Obesity is more prevalent in African American women than in white women; almost 50% of African American women are identified as overweight, whereas 33% of white women are overweight (Hunter et al., 2000, p. 500).	African American and white women
Progressive Aerobic Cardiovascular Endurance Run and Body Mass Index Among an Ethnically Diverse Sample of 10-15-Year-Olds.	Research Quarterly for Exercise & Sport	In addition, the prevalence of at risk of overweight and overweight youth from ethnic backgrounds are increasing at greater rates than among White non-Hispanics (Beets et al., 2005, p. 389).	Asian-Pacific Islander, Black, Hispanic and white men and women
Associations of Insulin Resistance With Cardiovascular Risk Factors and Inflammatory Cytokines in Normal-Weight Hispanic Women.	Diabetes Care	Hispanic women have a lower insulin sensitivity (11) and higher prevalence of metabolic syndrome (12), type 2 diabetes (13), and cardiovascular disease risk factors (14,15) compared with non-Hispanic white women (Vella et al., 2013, p. 1377).	Hispanic women
Mujeres Fuertes y Corazones Saludables, a Culturally Tailored Physical Activity and Nutrition Program for Rural Latinas: Findings from a Pilot Study.	International Journal of Environmental Research and Public Health	While 53% of non-Hispanic US adults meet the guidelines, only 43% of Latino adults do [4]. Similarly, Latino adults typically have poorer diets and higher rates of obesity than non-Hispanic whites (Seguin et al., 2019, p. 2).	Hispanic women

Results Indicating Racial Differences for Black/White Comparison

This section describes the mechanisms that were typically used to examine differences in CRF and CVH outcomes between Black and white research participants. Categorized by CRF and CVH outcomes, Table 9 summarizes a list of key findings from sample articles where Black and white research participants were compared (n=136). Table 9 firstly illustrates that a majority (61.8%) of the examinations resulted in findings that suggested racial differences between Black and white research participants. In this sample, Black participants were determined to have lower levels of CRF (n=24, 17.6%), higher blood pressure and/ or greater blood pressure stress responses (n=18, 13.2%), lower maximal heart rates (n=8, 5.9%), lower VO₂max (n=7, 5.1%), greater arterial stiffness (n=7, 5.1%), higher BMI scores and levels of obesity (n=5, 3.7%), and higher occurrence of angina (n=4, 2.9%) than their white counterparts. In the following section of the analysis (‘sociocultural explanations of racial differences’) and the discussion section, I further engage the significance of this finding in terms of how the research articles understood/explained these differences.

Secondly, 26.5% of the 136 studies did not report any racial differences related to CRF and CVH in their key findings. While researchers in this sample recruited a Black/white participant pool, and some hypothesized that their results would illustrate racial differences, racial variance was not recorded as a “finding.”

However, this does not mean that the researchers explicitly stated, “there are no significant racial differences to report.” In fact, only 23 (16.9%) of the Black/white comparison studies reported in their conclusions and key findings that either “no racial differences were observed,” “no racial differences in studied parameters,” and/or “could control for racial differences by adjusting particular variables.” This leads me to infer that while 26.5% did not report any racial differences there may be a hesitancy or reluctance to explicitly state, or admit, that racial differences were not evidenced.

Table 9. Results indicating racial differences

CRF and CVH Outcome	# of Key Results (n=136)	Illustrative excerpts
Lower [CRF] fitness levels indicated in Black/ AA racial group [compared to white racial group]	24 (17.6%)	AA men and women had a significantly higher prevalence of being unfit compared with their C counterparts. The adjusted mean estimated maximal METs were 10.9 vs 11.7 and 8.8 vs 9.8 for AA and C men and women, respectively. Despite comparable higher SES, lower CRF existed among AA men versus C men. These results suggest that CRF may not be mediated strictly by environmental factors related to SES (Howard et al., 2013 p. 2286) Children in the low body fat group had significantly higher aerobic fitness ($P < 0.05$) regardless of BMI percentile classification. Higher African genetic admixture was associated with lower aerobic fitness ($P < 0.05$), [...] In conclusion, aerobic fitness levels differ by percent body fat and genetic admixture irrespective of BMI classification, and such differences should be taken into account when evaluating outcomes of health interventions. (Willig et al., 2011 p. 2222) African American children have significantly lower levels of CRF as measured by VO2max and exercise time compared to Caucasian children. This racial disparity is independent of gender. African American females show the worst aerobic capacity as measured by VO2max, exercise time and METS. The findings of our study suggest that the racial disparity in the CRF levels seen in the adult population may begin early in childhood (Bansal et al., 2019, p.1188).
“No significant racial differences observed”; “No racial differences in studied parameter”; “could control for racial differences by adjusting particular variables”	23 (16.9%)	African-American and Caucasian women respond the same physiologically to weight loss intervention. The higher prevalence in obesity for African-American women is not due to a different physiological response to diet and exercise. (Glass et al., 2002, p. 56) A graded increase in mortality risk was noted with decreasing CRF for both black and white patients. In multivariate Cox regression, CRF was a predictor of both myocardial infarction and mortality, with no significant interaction between race, fitness, and outcomes. CRF is a strong predictor of all-cause mortality in both white and black patients, with <u>no</u> significant interaction observed between race, fitness, and outcomes. (Al-Mallah et al., 2016, p. 1449)

		African Americans who are normotensive at rest do not exhibit a greater BP response to static exercise or dynamic exercise than do Caucasian Americans or Asian Americans. (Wright, Swain, & Branch, 1999 p. 1793)
Higher blood pressure and/or blood pressure increases indicated in Black/ AA racial group [compared to white racial group]	18 (13.2%)	Even after adjustments were made for levels of baseline characteristics (age, weight, resting systolic blood pressure, smoking, low density lipoprotein cholesterol, physical activity, and alcohol intake), black men responded with a 7-mm Hg higher systolic blood pressure during exercise than white men (p<0.01). [...] The findings suggest a higher systemic vascular resistance during exercise in the selected sample of black men, which is consistent with the higher incidence of hypertension in black men. (Ekelund et al., 1990 p. 1568) Black children tended toward larger BP responses than whites. In black boys of the high BP stratum (n = 25), systolic supine or stressed BP were higher than for other race-sex groups [...] These findings indicate that multiple mechanisms operate to control BP at different intensities for black and white children. (Voors, et al., 1980, p. 686) Exercise produced reliably greater systolic blood pressure (SBP) increases in Black women than in Black men or White women. Men showed significantly greater SBP and DBP changes than women during the video game. These findings suggest that the pattern of physiological reactivity elicited by challenge is related to the race and sex of the subjects. (Tischenkel et al., 1989, p. 503)
Lower maximal heart rate/ pulse rate indicated in Black/ AA racial group [compared to white racial group]	8 (5.9%)	The principal finding of our study is that black race is a major determinant of mass/volume ratios in college football athletes. We have also found that differences in diastolic parameters between black and white football players are associated with differences in mass/volume ratios (Haddad et al., 2013, p. 132). We concluded that the comparatively low maximal heart rate of black females may be partially explained by a significantly lower cardiovascular fitness level relative to white and Mexican-American females. (Farrell et al., 1988 p. 99)
Lower VO₂ max indicated in Black/ AA racial group [compared to white racial group]	7 (5.1%)	AA women had significantly reduced VO₂max, Hb levels, and muscle oxidative capacity (longer ADP time constants, P 0.05) than EA women. [...] These results suggest that mitochondrial muscle oxidative capacity and oxygen delivery capabilities, as determined by O ₂ Psubmax, account for most if not all of the ethnic differences in VO ₂ max. (Roy et al., 2006, p. 454)

		Directly measured VO ₂ peak was significantly lower in B-AA compared to Caucasians with HF (Canada et al., 2022, p. 2)
Greater arterial stiffness/ arterial resistance in Black/AA group [compared to white racial group]	7 (5.1%)	The results of the current study show that there are differential effects of AOX supplementation on macrovascular and resistance vessel function, and this is impacted by both race and age (Kappus et al., 2017, p. 2006).
Higher BMI; Greater waist to hip ratio in Black/AA group [compared to white group]	5 (3.7%)	Across sports team participation categories, African American girls were taller, weighed more and had greater BMI scores than the White girls (Sirard et al., 2008, p. 202). African-Americans were older, taller, weighed more, and had a lower waist to hip ratio (WHR) than Native Americans. Weight and BMI were higher in African-Americans versus Caucasians. Caucasians were taller, had a lower BMI, and lower WHR than Native Americans (Drowatzky et al., 2001, p. 17)
Abnormal ECG; higher occurrence of angina, cardiac arrest, cardiac death in Black/AA group [compared to white group]	4 (2.9%)	Within this large forensic registry of competitive athletes, cardiovascular sudden deaths due to genetic and/or congenital heart diseases were uncommon in females and more common in African Americans/other minorities than in whites. Hypertrophic cardiomyopathy is an under-appreciated cause of sudden death in male minority athletes (Maron et al., 2016 p. 1170) Minority student-athletes with exercise-related SCA on high school campuses have lower survival rates than white non-Hispanic athletes , but this difference is not fully explained by SES markers of the school (Schattenkerk et al., 2022 p. 1)
N/A	36 (26.5%)	N/A indicates key findings that did not report “racial differences” or provide justifications for why racial differences no longer relevant. I assume that these studies intended to explore racial differences due to their examinations of Black and white research participants, but their findings did not support their hypothesis so racial differences were not discussed in the findings.
Other	11 (8.1%)	Topics include nasal airways, metabolic syndrome, lipemia, and familial effects on training response.

Socio-Cultural Explanations for Racial Differences

Our last goal was to investigate if and how articles in this sample were attuned to socio-cultural or historical explanations of the significance of exploring racial differences in cardiorespiratory fitness and cardiovascular health. Firstly, none of the studies acknowledged the historically racist upbringings of the methods, tools, or physiological approaches they employed. In other words, none of the studies explicitly considered, for example, the antebellum motivation behind the development of the spirometer and how that history shapes the way lung capacity and CRF is understood (Braun, 2014). Secondly, none of the studies acknowledged how the influence of eugenics shaped the field of anthropometry or were critical of why past studies consistently position the CRF and CVH of white research participants as most “normal” or “ideal” (Couturier, 2005). Lastly, none of the studies spoke to how Jesse Owens catalyzed a paradigmatic shift in how early physical educators produced knowledge about the relation of race to athletic performance and the body (Dyreson, 2001).

Regarding socio-cultural explanations, it is important to mention that of the 232 studies in this sample, 70 (30.1%) of the articles measured one or more SES factor in their examinations of CRF and CVH (e.g. income, education, employment status). However, only nine articles provided *socio-cultural explanations* for how SES may have impacted the racial differences that their results yielded. In other words, nine of the 70 articles employed SES language to discuss possible

mechanisms for racial differences. For example, as shown in Table 10, in Farrell and colleagues (2019) investigation of cardiorespiratory fitness levels in African Americans, they reported that:

While it is also important to acknowledge that many of the health disparities in the AA population occur among individuals with low SES, we have previously found significantly lower levels of CRF in AA Cooper Clinic patients with high SES as compared with our Caucasian patients with similar SES. These results indicate that health disparities among AA adults are not limited only to those with low SES. (p. 1089)

Here, Farrell and colleagues (2019) discuss how racial differences between Black and white research participants can persist when reporting high levels of SES. They do not, however, go a step further by noting the intersectional research that discusses, for example, the disproportionate persistence of Black infant mortality that occurs in the US regardless of SES (see Hauck et al., 2011).

In another instance, SES was employed to explain racial differences in physical activity performance. For example, as displayed in Table 10, in their examination of physical activity and aerobic power in African American and Caucasian boys and girls, McMurray and colleagues (2003) reported that:

There were more low SES African-American boys than Caucasian boys. Potentially, these **lower SES African-American boys may have seen physical prowess as a way to improve their status (possibly for professional sports or university admissions)**. Regardless of ethnicity, and

for Caucasian boys to migrate toward lower activity groupings as they aged.

This may possibly be related to societal or pressures on the girls, or a

tendency for the Caucasian boys to diversify their interests (p. 1920).

Here, McMurray and colleagues (2003) associated SES with the internal motivation of African-American boys and suggested that their “physical prowess” may be a result of their low SES status. Again, researchers here did not connect “physical prowess” to scientific racism, specifically the myth of the natural Black athlete (Dyreson, 2001; Rhoden, 1974; Sailes, 1991), nor did they explicate how “physical prowess” may be seen as a way to improve status amongst those living in under-resourced neighborhoods due to the federally regulated and (racist) practice of redlining (see Rothstein, 2017)

A total of 17 of 232 articles provided socio-cultural explanations to discuss mechanisms of racial differences. The language of SES (n=9), social determinants of health (n=2), community-based participation (n=2), sociocultural factors (n=2), and the socioecological model (n=1) were used to describe possible mechanisms for racial difference. Racial discrimination was mentioned by one article as a potential mechanism of racial difference. Table 10 offers nine illustrative excerpts of the socio-cultural explanations employed by researchers in the sample and are categorized by the language used to discuss the impact of sociocultural factors on racial differences.

Table 10. How sociocultural factors are discussed

Language Used to Discuss the Impact of Sociocultural Factors on Racial Differences	# of Sociocultural Explanations (n=17)	Illustrative excerpts
Socioeconomic Status (SES)	9	Proposed mechanisms for these racial pain response differences encompass diverse areas including underlying physiologic responses, ethnocultural differences, the subject's psychological state, socioeconomic differences, and experimenter bias (Sheffield et al., 199, p. 107). There were more low SES African-American boys than Caucasian boys. Potentially, these lower SES African-American boys may have seen physical prowess as a way to improve their status (possibly for professional sports or university admissions). Regardless of ethnicity, and for Caucasian boys to migrate toward lower activity groupings as they aged. This may possibly be related to societal or pressures on the girls, or a tendency for the Caucasian boys to diversify their interests (McMurray et al., 2003 p. 1920). While it is also important to acknowledge that many of the health disparities in the AA population occur among individuals with low SES, we have previously found significantly lower levels of CRF in AA Cooper Clinic patients with high SES as compared with our Caucasian patients with similar SES. These results indicate that health disparities among AA adults are not limited only to those with low SES (Farrell et al., 2019, p. 1089)
Social Determinants of health (SDoH)	2	Additional contributors to the racial disparity in CKD include clinical factors, such as higher prevalence and severity of diabetes and hypertension, and social determinants like education, healthcare access, and neighborhood conditions (Paluch et al., 2019, p. 73)
Community Based Participation/ Interventions	2	One promising channel for delivering weight control and other health promotion programs to AAs is the black church. Many black churches include health as part of their overall mission, offering health services and programs through special committee (Resnicow et al., 2005 p. 1740) The challenge is to reduce barriers to exercise participation in black women and other “at-risk” population subgroups (e.g., Hispanic women) via increasingly accessible community-based exercise interventions , so that many more women with disparities in cardiovascular health and traditional risk factors may realize the benefits these programs can provide. Better health care (lower mortality and a higher

		level of functioning) will, in all likelihood, not be achieved without increasing emphasis on those population subsets that are disproportionately affected by the actionable determinants of health (Bowdon et al., 2018, p. 1355)
Racial Discrimination	1	Many older African Americans are exposed to a variety of chronic psychosocial stressors, such as age and race discrimination , socioeconomic hardship, and caregiving, that may contribute to their increased cardiovascular and metabolic disease (Waldstein et al., 1999, p. 221).
Sociocultural Factors	2	Sociocultural factors contribute relatively little to exercise capacity compared to modifiable factors such as BMI and immutable variables such as age and sex (Brown et al., 2012, p. 1154)
Socioecological Model	1	The present study applied a socioecological approach understanding that health-related changes are not happening only on the intraindividual (child) level but also occur on the interindividual (e.g., family), organizational (e.g., family), and community (e.g., primary care) level. (Yli-Piipari et al., 2018, p. 133)

Discussion

According to Dorothy Roberts, “science is the most effective tool for giving claims about human difference the stamp of legitimacy” (2011, p. 27). In the literature review, I sought to historically trace several examples of how the biological sciences have established race as an indisputable biological variable since the 1800’s. Historians argue that scientists and physicians of this time were the single most important group involved in the biologization of racial categories (Hammonds, 2013; Hammonds & Herzig, 2009). Their examinations simply assumed racial difference, and no other explanation was required.

I would be remiss if I did not mention, however, the research of Dr. W.E.B. DuBois which countered the dominant scientific idea of homogeneity in the Black race. In his 1906 examination entitled, *The Health and Physique of the Negro*, that he conducted during his tenure at Atlanta University, Du Bois disputed the notion that differences in mortality and morbidity were simple manifestations of racial capacities. In this scholarship, Du Bois not only illustrated how “all great people of the world are a mixture of races” (Du Bois 1906 in Hammonds 2013, p. 307), but he considered the material effects of climate, fresh water access, sanitation, infant care, housing conditions, medical access, population density, and several other factors on health and mortality. Due to his combined use of epidemiological, anthropometrical, and sociological methodologies, he was the first to show heterogeneity of the Black race

and to equate health disparities with external socio-cultural conditions (Hammonds, 2013). His work was praised by Dr. William Montague Cobb, the first African American to receive a PhD in anthropology, as such:

Neither the Negro medical profession nor the Negro educational world was ready for it. Its potential usefulness was not realized by Negroes. Whites were hostile to such a study which embraced the anthropology, psychology, and physical health of the Negro. This study, was an extraordinary forward pass that heaved the length of the field, but there were no receivers. (Du Bois, 1968, p. vi)

The desire to advance the ways in which the sciences utilized race and explained racial capacity continued well into the 20th century, and became the goal of the Human Genome Project. The Human Genome Project, which was completed in 2003, determined that humans are 99.9% genetically alike (Roberts, 2011). But, similar to the scholarship of Du Bois, this work has done little to push scientific researchers to engage race in a more nuanced manner (Flanagin et al., 2021; Wolf et al., 2020).

As indicated by this scoping review, kinesiological studies are also not immune to the general scientific logic that positions “race” and “racial difference” as rooted in biology, nor do they dispute the use of “race” by past studies. Instead, they continue to build on the epistemological and axiological understanding that racial differences are critical to understanding health outcomes and warrant continuous investigation.

In what follows, I present a discussion of how the sample engaged definitions of race, touted the long-standing idea that white health outcomes represent “normal” and/or “ideal” CRF and CVH, and employed SES to “control” and/or “adjust” for race.

Racial Definitions and Lack Thereof

Our first research question was: how is race defined and racial differences constructed in the United States in published peer reviewed articles that are focused on cardiovascular health and cardiorespiratory fitness, with specific regard to fitness, physical activity, and sport and athletic performance? One central finding of this scoping review is that a majority of the studies in the sample (77.5%) did not define their use of race. This is problematic for various reasons. Racial categories have always shifted and shaped scientific practice and thinking (Painter, 2010). Dictionary definitions of race, well into the 1980s, assumed that race reflected underlying genetic homogeneity rather than shared social experience (Braun et al., 2007). This idea of race as bonded to genetics and biology has been branded as “common sense” in legal, scientific, and social practices for centuries. Since 2001, NIH funded studies have been required to categorize study participants into five racial and one ethnic category⁶ (i.e., American Indian or Alaskan Native, Asian, African

⁶ The US has been using the same 5 category race schema since what Johann Blumenbach presented the 1775 treatise, *The Natural Varieties of Mankind* (i.e., Caucasoid, Mongoloid, Ethiopian (later

American or Black, Native Hawaiian or Other Pacific Islander, White, Hispanic or Latino, Not Hispanic or Latino) (Braun et al., 2007; Roberts, 2011). While institutions like the American Medical Association (AMA) are currently attempting to address the misuse of race and ethnicity in manuscripts that are submitted to the medical and science journals by providing updated reporting guidance on how race is captured and the terms used to refer to different races⁷ (Flanagin et al., 2021), the fact remains that these ill-defined, state sanctioned categories are problematic. One aspect of this issue is that many researchers may not know the history or politics behind race, and have seemingly adopted racial categorization as “natural”, even when there is nothing particularly “natural” about these categories.

For example, 25.7% of the studies in this sample, named their white participants “Caucasian”. This term was developed by German anthropologist and physician Johann Blumenbach in 1795, and became notably popular during the era of

termed Negroid), American Indian, Malayan; see Blumenbach, 1865). This further demonstrates the importance of historical excavation. It is clear that there remains a sort of “perceived importance” or need to categorize the human species. Future research may philosophically consider the implications.

⁷ The AMA specifically provides guidance for the collecting and reporting of racial demographics. For example, they encourage research to avoid using terms such as *minorities*, *BIPOC*, and *people of color*, as they disregard individual identities, eliminate differences between groups, and implies hierarchy among them. They also recommend the capitalization of races and ethnicities (such as Black, Hispanic, Alaskan Native) and discourage the referring to races in their noun form (i.e., Asians, Blacks, Hispanics).

American eugenics, and later during the Nazi regime in Germany in which the Germans described Caucasians as having the whitest skin, the tallest and most beautiful bodies, and are the Nazi's favorite intellectual ancestor (Painter, 2010). To this point, to be Caucasian was not to be akin to the generalizability or ordinariness of European whiteness, rather it represented the fittest, most prestige population that the human race had to offer. As such, this term is racist, antiquated, and perpetuates a history of racial hierarchy and discrimination.

The use of the term African-American is also problematic. This terminology suggests that anyone with brown skin, or "one drop" of African blood, is African American, and assumes that an individual who identifies as "white" has no ancestral "black blood" (Braun et al., 2007). Assuming that "African" origin can capture the complexities of ancestral migration and gene drift is scientifically unsupported (Braun et al., 2007). Nonetheless, researchers in this sample frequently utilized racial disparities, such as hypertension, as an indicator of genetic difference. If researchers want to continue to examine "racial differences" they must do so in a way that explicitly considers ancestry and heritage, social determinants of health, the complexities and nuances of SES (which I detail later in this chapter), as well as structural, cultural, social and institutional factors which are indivisible from health outcomes (see Krieger, 2005 for a discussion on how race-based structural, cultural, social and institutional factors "get under the skin").

White (Supremacy) as Norm and Baseline

The biological, physiological, and the medical professions are deeply rooted in a “white logic”; a context in which white supremacy has defined the techniques and processes of reasoning about social and scientific facts (Zuberi and Bonilla-Silva, 2008 p. 17). Zuberi and Bonilla-Silva (2008) state that:

White logic assumes a historical posture that grants eternal objectivity to the views of elite whites and condemns the views of non-whites to perpetual subjectivity; it is the anchor of the Western imagination, which grants centrality to the knowledge, history, science, and culture of elite white men and classifies “others” as people without knowledge, history or science, as people with folklore but not culture. (Zuberi & Bonilla-Silva, 2008, p. 17)

One example of the manifestation of white logic in this sample, is how the CRF and CVH outcomes of white participants are used as the standard or baseline measures for which participants of other racial categories are compared. This point speaks to our second research goal of exploring how racial difference is constructed and approached in US examinations of CRF and CVH. In this regard, racial difference is constructed as non-white racial groups, particularly the Black racial group, having different CRF and CVH outcomes than their white counterparts. This is another key finding of this scoping review.

Based on the rationales that were examined, 45.2% of the sample used the CRF and CVH outcomes of white participants as reference points and baseline values. The positioning of white Americans as the standard of health has been a long-

standing political tradition in the biological, physiological, and medical professions (Gould, 1996). Some of the first population studies of race-based averages and norms were driven by the political and social need to legitimize the biological superiority of the white population over other races (Cryle & Stephens, 2019). This is the function of science under the veil of white supremacy.

Mills (1997) argues that, under white supremacy, a vital part of the scientific process is to promote, normalize, and objectify or make certain. This influences what problems warrant scientific investigation, how hypotheses and research designs are selected, and how data are collected and analyzed (Goar, 2008). Thus, white supremacy disguises the scientific process as unbiased, neutral, and unaffected by broader social relations.

While it is unsurprising that many of the studies in this sample situate white participants as the norm, what deserves our attention is how these studies imply that white participants are genetically predisposed to better health and/or represent “normal” levels of CRF and CVH (Wolf et al., 2020). While 45.2% of the studies used white participants as reference points, there was no consensus within the findings that illustrated white participants as having better CRF and CVH outcomes. In fact, 42.5% of the articles that compared Black and white participants (n=136) did not report significant racial differences. As such, there continues to be a common desire to explore racial differences, although there is no clear scientific consensus that racial differences in CRF and CVH exists. This tendency further illustrates the

operation of white logic and serves to promulgate the false narrative that “racial” differences are inherent (Wolf et al., 2020ndu).

Socio-Economic Status (SES) Cannot “Control” for Race

Our third goal was to explore if scoping review examinations were attuned to socio-cultural or historical explanations of the significance of exploring racial differences in cardiorespiratory fitness and cardiovascular health. A central finding of this scoping review is that none of the studies acknowledged the historical origins and implications of the methods, tools, and frames of thinking they employ. Many studies (n=70, 30.1%), however, utilized SES to control for research participants in attempt better compare subjects of different races. If there remained a difference in CRF and/or CVH outcomes, then the researchers typically attributed the unexplained variance to the biological distinctions of the racial group. As such, I assume that some researchers infer that SES is a good (enough) indicator of the effects of racism on health outcomes.

But this practice and frame of thought is methodologically inaccurate as it fails to account for unmeasured aspects of SES. Researchers in this sample typically measured occupation, income, and education as SES factors; however, these variables alone do not capture the social and economic factors that determine social status. For example, ample evidence shows that Black patients receive poorer medical care than their white counterparts, and this trend persists regardless of income (Ndugga & Artiga, 2021). This poor care is not solely due to their interactions with medical

professionals and staff, but due to the structural race-based protocols and policies that plague the US healthcare system.

In addition, SES does not account for the fact that Black participants are likely to live in predominately Black neighborhoods with fewer services, more air pollution, and poorer water quality than white neighborhoods (Roberts, 2011). The health outcomes that stem from this combination of issues is not biological, rather structural and political. Any of these unmeasured factors may help to explain racial differences in CRF and CVH studies.

Conclusion and Recommendations

In the past two decades, there has been burgeoning literature focused on how racial discrimination harms health. This “boom” in research was catalyzed in 2003, when the National Institute of Health held its first meeting on the subject Racial/Ethnic Bias and Health (Cain & Kington, 2003). That same year, the Institute of Medicine published its first major report on racism in healthcare (Smedley, Stith, & Nelson, 2003). Since then, studies on racial discrimination in public health have increased rapidly, inciting new debates about concepts and methods (Krieger, 2012).

For instance, the concept of ‘weathering’ considers Black people’s early health deterioration as a consequence of anti-Black racism they experience; "The stress inherent in living in a race-conscious society that stigmatizes and disadvantages Blacks may cause disproportionate physiological deterioration, such that a Black individual may show the morbidity and mortality typical of a white individual who is

significantly older" (Geronimus et al., 2006 p. 826). Weathering, while evidenced in both men and women, is particularly profound within Black women between ages 35 and 64. Geronimus and colleagues (2006) suggest that the weathering difference between Black men and Black women, is due to Black women bearing much of the social and economic responsibility needed for the survival of Black families, kinship networks, and communities. Here Geronimus and colleagues take an intersectional approach to examining the how racism, not race, effects health.

Similarly, Krieger (2005) puts forth the concept of ‘embodiment’ as a way theorizing the effects the external environment has on biological expression. Whereas disembodied approaches consider health outcomes as the result of “behaviors”, “exposures” and individual “lifestyle”, embodied approaches consider that bodies “tell stories cannot be separated from the conditions of their existence” (p. 350). Krieger’s scholarship illustrates that food insecurity, food deserts, pollution, sexual abuse, inadequate healthcare and sanitation all leave their mark on the body, thus, embodiment is the literal process that describes how social inequalities ‘get under the skin’.

Concepts like ‘weathering’ and ‘embodiment’ are just two ways that the effects of race(ism) have been theorized and explored in public health literature. Other theories include life course theory (Kuh et al., 2003), (bio)psychosocial theory (Krieger 2011), fundamental cause theory (Link & Phelan, 1995), and intersectionality (Bowleg, 2012) to name a few. Although these concepts and theories have been employed in public health literature, the findings of this scoping review demonstrate that these

frameworks are rarely being employed in research pertaining to ‘race’ and ‘racial differences’ in CRF and CVH research.

Based on the breadth of literature that I have discussed in this chapter, I conclude by offering the following recommendations to researchers in the movement and physiological sciences to disrupt and ultimately eliminate the white logic that plagues CRF and CVH studies

- **Shift your paradigm.** Informed by the principals established by public health and critical race theory scholars to achieve health equity and eliminate racial health disparities (see Ford & Airhihenbuwa, 2010), scientific research must operate from within a realm of thought that is responsive to the impact that structural racism has on health. A graduate course on the history of physiological research in the US may assist with cultivating this knowledge. This course should explicitly draw connections between scientific physiological methods and the dominant social, cultural, and political desire to position whiteness as the ‘norm’ or ‘ideal’. To do so, researchers must ease their grasp on the positivist sentiment that science must operate within a realm of certainty and objectivity and acknowledge the influence of socio-cultural factors on research approaches, methods, tools, and interpretations of findings.
- **Define race** when it is in use and provide a detailed rationale for making racial comparisons. This rationale should explicitly state that race is not a biological construct and briefly discuss the origins of racial categorization (Flanagin et al., 2021; Wolf, Jablonski & Kenney, 2020).

- Rather than exploring race, intentionally discuss how your research is **examining the effects of racial discrimination of health outcomes**. This should include a discussion of how *all* health outcomes are influenced by exposure to structural racism.
- **Acknowledge researcher positionality**; the idea of race neutrality restricts our knowledge about racial groups (Goar, 2008). Race, and more specifically the racial experience, is important to how we perceive phenomena (Goar & Sell, 2005). Therefore, researchers should explain how their social location may influence their understanding of perceived racial differences. In a sense, early physical educators were able to be less race neutral due to the social, cultural, and historical circumstance of the US during that time (i.e., overt racism was socially acceptable, so their position on white supremacy was made clear through their research). As such, modern researchers must be more intentional with addressing their positionality due to the subtlety and nuance in which white supremacy permeates dominant scientific thought and practice. This recommendation is not just meant for quantitative scholars, but qualitative scholars as well. As highlighted in Chapter 2, white supremacy also plagues dominant qualitative circles as qualitative research historically has operated within a positivist paradigm where white logic underlines the concepts of objectivity and certainty (Evans-Winters, 2019). If social justice transformations are the goal, then researchers, both quantitative and

qualitative, must acknowledge the role they play in reifying racial inequities.

Chapter 4 further explores how we can foster a socially just kinesiology.

Chapter 4: Anti-Blackness in Kinesiology: Interviews with Black Women Doctoral Scholars

Introduction

Currently, the National Academy of Kinesiology (NAK) is striving to create a socially just kinesiology (DePauw, 2021). The NAK call to action is informed, in part, by an emergent body of scholarship that examines how dominant approaches in kinesiology often discount the importance of developing anti-racist, critical, and equitable pedagogy. Arguably, the glacial integration of equitable theory, method, and practice in kinesiology is rooted in its long-standing centering of whiteness.

There is a dominant culture of whiteness that informs the operation and function of kinesiology curriculum, research, and praxis (Armstrong, 2022; Nachman et al., 2021). Whiteness, here, is not synonymous with white people; rather, it stands for a system that promotes a lack of interdisciplinarity and collaboration between faculty and research subjects; (re)asserts unmarked values that bolster and maintain white Western racial domination; places undue emphasis on the scientization and objectification of the body; and disregards or devalues the variety of social, cultural, and historical conditions that enable (and disable) the active body (Douglas & Halas, 2013). Kinesiology's dominant culture of whiteness can be viewed as a longstanding practice that is a product of, and further produces, the dominant order of broader Western society, specifically in the United States.

The operation of whiteness within kinesiology is not unique to this field of study in higher education. White people and white agendas have historically and intentionally controlled US education since its inception (Weilbacher, 2012; Wilder, 2013). Regarding the biological and physiological sciences, specifically, various scholars have discussed how antebellum colonial interests, which justified the power and privilege of the white dominant class by positioning Black and Indigenous people as intellectually and physiologically inferior, are the roots by which modern understandings of and approaches to physiology are born (Braun, 2014; Gould, 1996; Roberts, 2011; Willoughby, 2018). This history is important to consider because the contemporary “spirit of science” requires and expects modern-day kinesiologists to rely on past scientific studies to rationalize their methods, inform epistemological understandings, and guide their ontological practices (Wiggins, 1989, p. 185).

While blatantly racist research and teachings are typically not practiced, the field of kinesiology, more broadly, maintains the fingerprint of anti-Black coloniality as it often teaches about health and the (in)active body in a ‘colorblind’ way (Flintoff & Dowling, 2019). Adapted from Bonilla-Silva’s (2013) definition of colorblind ideology, colorblind pedagogy teaches students that health, physical activity, and sport performance outcomes are the products of non-racial dynamics. Colorblind health-based pedagogy assumes that racial disparities in health are naturally occurring and/or not impacted by the structural inequities (Flintoff & Dowling, 2019). This approach is problematic because it does not offer an adequate explanation of

racialized/ race-based health disparities, and it ignores the history by which modern kinesiological studies are rationalized.

Various scholars have explored the effects of kinesiology's colorblind and ahistorical pedagogy on Black students, with a particular focus on Physical Education (PE) which is the field from which kinesiology arose (see Armstrong, 2022, Blackshear & Culp, 2021; Culp, 2020; Fitzpatrick, 2013; Flintoff, 2015; Flintoff & Doling, 2019). For instance, Flintoff (2015) conducted semi-structured interviews with 25 students that self-identified as being Black and/or belonging to an ethnic minority (BME) group and explored their perceptions of a physical education teacher education (PETE) program in England. Findings from this study report that the BME students felt that the curriculum constructed them as "Other" and different which reinforced racial stereotyping. Similarly, Armstrong (2022) argues that kinesiology's centering of whiteness and colorblind pedagogy reinforces that Black male students are naturally gifted athletes, while Black women students are "angry" and "aggressive". As such, Black students do not have the freedom to learn as their white peers because, while learning, they must cope with racial oppression by exerting a mental resolve that distracts from the learning process.

There is a movement that is encouraging kinesiology departments to be more socially just by creating more diverse, equitable, and inclusive classroom environments for its students, and a convincing body of scholarship that focuses on interpersonal experiences of racism and anti-Blackness in kinesiology classrooms (Armstrong, 2021; Culp, 2020; DePauw, 2021; Douglas & Halas, 2013; Gill, 2021;

Hodge & Harrison, 2021; Wiggins & Wiggins, 2011). What has yet to be considered, and what this chapter examines, is how these ahistorical and monocultural approaches to health and physical activity impact Black women doctoral students' kinesiological understandings and inform their subjectivities. This project explores how/if current and former Black women doctoral scholars (N=10) experience anti-Blackness as they come to learn and teach about the (in)active body in kinesiology classrooms and research labs. To date, there are no qualitative examinations informed by this history that center how Black women doctoral scholars experience/ and or learn about kinesiology, and even fewer that explicitly consider how/if these explanations bolster anti-Black rhetoric.

Building from the theoretical (re)conceptualization postulated in Chapter 2, I argue that it is essential to center the voices of Black women doctoral scholars because there is a history of exclusion that plagues the US institution of education (Justin & Foltz, 2023). The function of whiteness has benefitted and grown from this exclusion. As such, my focus on Black women doctoral scholars is driven by Patricia Hill Collin's (2002) assertion that "it is more likely for Black women as members of an oppressed group to have critical insights into the condition of our own oppression than it is for those who live outside those structures" (p.33). The oppressive structures of whiteness are felt more heavily by those on the margins and therefore their insight is better equipped to reveal how monocultural and ahistorical (i.e., white supremacy) approaches are operationalized in kinesiology.

In this chapter, I also seek to make a theoretical contribution by articulating Afro-Pessimism and Black feminist scholarship with Foucauldian insights about discursive structures and practices. More specifically, I am interested in analyzing the ‘pedagogical’ space of the research lab and academic conference (as well as the classroom) to examine the epistemic boundaries in kinesiological research that normalizes whiteness and situates “alternative” ways of knowing as “Other” and/or “inferior”. I consider kinesiology’s ‘pedagogical’ spaces in relation to Foucault’s (2003a) writings about a ‘regime of practice’ where practices are understood “as places where what is said and what is done, rules imposed and reasons given, the planned and the taken-for-granted meet and interconnect” (p. 248). With this interest in how ‘rules’ and practices intersect, this chapter is less concerned with the interpersonal microaggressions that Black women doctoral scholars navigate in kinesiology, and is more focused on the pillars of white supremacy upon which kinesiological research is constructed and maintained. The following research questions guide this chapter:

(R3a) What insights can Black women doctoral students provide to illustrate the operation of monocultural and ahistorical (i.e., white supremacy) approaches to the in(active) body and health? How do they experience these approaches?

(R3b) What challenges, if any, have Black women doctoral students faced when countering the traditional (biophysical) kinesiological perspective?

Theoretical Foundation: Anti-Blackness, Education, & Knowledge

Production as a ‘Regime of Practice’

What is Anti-Blackness?

While anti-Black is a relatively new term to many within higher education, it has been the central concern and proposition within the intellectual project known as Afro-pessimism (Dumas, 2016). Afro-pessimism theorizes that Black people exist in a structurally antagonistic relationship with humanity. Anti-Black exposes the technologies and imaginations that simultaneously allow the social recognition of the humanness of others while systematically excluding this possibility for Black people (Dumas, 2016). Hence, Black people are not considered human, and are not simply considered Other; rather, they are constructed as other than human (Dumas, 2016). Therefore, anti-Black does not signify a mere political struggle, rather it marks an incompatibility between Blackness and Western civility.

Afro-pessimist scholars contend that the colonial practice of chattel slavery marks the ontological position of Black people. This is not meant to suggest that Black people are currently enslaved, but that slavery “is how Black people’s existence is imagined and enacted upon and how non-Black people—particularly white—assert their own right to freedom, and right to the consumption, destruction, and/or simple dismissal of the Black [people]” (Dumas, 2016 p. 13). Dancy, Edwards, and Davis (2018) argue that this Black/white social arrangement is a result

of settler colonialism in the US which functioned to solidify the binary opposition that distinguishes white and Black, human and non-human.

For instance, while the US settler colony saw a period of white indentured servitude, Blackness became a formal marker of chattel slavery. Indentured servitude did not descend to offspring, but Black children inherited the enslaved status of their mother (Dancy et al., 2018). This dynamic locked US society into a social contract, what Charles Mills (1997) refers to as the “racial contract”, which creates a caste system of morality and order predicated on an understanding that white is human and deserving of humanness, while non-white is not (Mills, 1997).

This subjugating arrangement allowed the beneficiaries of the racial contract to eliminate Indigenous people and pilfer land to create new economic and social systems that suited their ontological and epistemological endeavors. The institution of slavery was built on said stolen land and became not simply an economic system, but a social system undergirded by power relations that rendered Black bodies socially void of relationality (Dancy et al., 2018). These are the fundamental organizing principles of the settler colonial project (Wolfe, 2006). Chattel slavery, then, is a critical site to consider when discussing the organization of US society. “Through chattel slavery,” Wilderson (2010) insists,

The world gave birth and coherence to both its joys of domesticity and to its struggles of political discontent; and with these joys and struggles the Human was born, but not before it murdered the Black, forging a symbiosis between the political ontology of Humanity and the social death of Blacks (p. 20-21).

While some may argue that a focus on slavery has no place in the current moment, scholars of race, culture, and politics have written at length of the legacies of slavery and how antebellum power relations presently remain intact (see Hannah-Jones, 2021; hooks, 1994; Weheliye, 2014; Wilder, 2013). While there are many institutions to consider, this chapter focuses on the institution of education as the academic model is still essentially a colonial one.

Anti-Blackness and Education

Many scholars have explicated the contentious history that US society has with educating Black people (Givens, 2021; Justin & Foltz, 2023; Wilder, 2013; Woodson, 1990). Education was a mechanism employed to validate oppressive antebellum practices, uphold the national political-economic system based on transgenerational chattel slavery, and define the parameters of racial capitalism (Givens, 2021). Since 1619, anti-literacy laws were established by the dominant white class (Givens, 2021; Hannah-Jones, 2021). Prior to the signing of the Emancipation Proclamation in 1863, acquiring knowledge was deemed a criminal offense which resulted in whippings and lashing at the discretion of any justice of the peace (Givens, 2021). Both the privileged white class and the enslaved recognized the value of education and regarded knowledge as a means of escape, a way to freedom (Woodson, 1990). Carter G. Woodson (1990) recounted many times in his writings of how the enslaved would gain their education by “snatching learning in forbidden fields” or by “playing school” with white children. For Black people in bondage,

learning to read was more than a pathway to economic mobility; it was also an assertion of their own humanity, an act of resistance to being labeled property (Anderson, 1988). The enslaved who were able to learn reading and writing, what Givens (2021) refers to as a fugitive pedagogy, were able to teach others who would later become our first Black teachers, the “embodiment of fugitive spirit” (p. 21).

Following the abolition of slavery, Black people actively sought the leadership of Black teachers and began to build schools where Black students could feel empowered. For instance, bell hooks (1994) described her experience learning in an all-Black school before integration:

For black folks teaching—educating—was fundamentally political because it was rooted in antiracist struggle... We learned early that our devotion to learning, to a life of the mind, was a counter-hegemonic act, a fundamental way to resist every strategy of white racist colonization...my teachers were enacting a revolutionary pedagogy of resistance that was profoundly anti colonial... Teachers work with and for us to ensure that we would fulfill our intellectual destiny and by doing so uplift the race. My teachers were on a mission. (hooks, 1994 p. 2)

However, hooks mourned the loss of these racially affirming spaces for Black students after schools began to desegregate (Armstrong, 2022; hooks, 1994). During school desegregation, Black children faced white mobs filled with parents and elected officials who were infuriated by and fearful of white children sitting next to Black children. They worried that Black children would spoil white children’s learning

opportunities; this is the essence of anti-Black education. Before integration was even in full swing, Black people were already considered a problem, inherently unteachable, and unworthy of education.

Attending predominantly white institutions meant that Black students had to assimilate and change their way of knowing to fit the mold of “white logic” (see Zuberi & Bonilla-Silva, 2008). In many ways, Black students were miseducated (Woodson, 1990) as white schools with their white agendas did not desire Black empowerment, cultural affirmation, nor spiritual or intellectual emancipation (Armstrong, 2022; Love, 2019). hooks (1994) described how learning and education became a tool to bolster the contemporary racial project:

Knowledge was suddenly about information only. It had no relation to how one lived, behaved. It was no longer connected to anti-racist struggle...Too much eagerness to learn could easily be seen as a threat to white authority...Now we were taught by white teachers whose lessons reinforced racist stereotypes. For Black children, education was no longer about the practice of freedom. Realizing this, I lost my love of school. (hooks, 1994 p. 3)

Conceptualizing anti-Blackness in education allows one to capture the transgenerational depths of suffering of Black children and educators in predominately white schools and expose a long-standing connection between the (mis)education of Black students and the residuals of slavery. The institution of education can be considered one of the first institutions (the first being the

family/home) where youth will be expected to learn and abide by certain power formations. The teacher, as the authority, is to be revered and heeded at the front of the room, while they teach lessons that aim to develop students that will become productive citizens. But to cultivate a classroom of productive citizens, they must be taught the social arrangement of their society upon which notions of morality and civility are structured—they are taught under the veil of anti-Black. Ultimately, then, the saying that “knowledge is power” is not figurative speech, but a fact. Those who have authoritative power control the knowledge that is considered ‘truth’. I turn to Michel Foucault to explore the relationship between knowledge, power, and truth.

Anti-Black Knowledge Production as a Regime of Practice

In the previous sections, I shared theoretical (and historical) insights that establish the white supremacist and anti-Black logic of higher education. In this section I seek to place Michel Foucault’s ideas pertaining to knowledge-power into conversation with Black feminist and anti-Black scholarship. Foucault (2003a) was concerned about knowledge production in the human and social sciences, and theorized that what constituted “knowledge” was not necessarily related to the finding of ‘truth’. Rather, through his detailed histories of madness (psychology), incarceration (criminology), and sexuality (biology/psychology) he examined how humans developed knowledge about themselves and how that knowledge shapes the way individuals make sense of and engage in the world (Markula & Pringle, 2006). For example, his historical studies of the development of human sciences investigates

the “rules of formation” around “what needs to be done” and “what is known” in social institutions, and the effect of such ‘regimes of practice’ on both individual bodies and the social body (i.e., the population) (Foucault, 2003b, p. 248). In other words, he was interested in the conditions and social structures that manufacture certain forms of knowledge, and how these knowledges or discourses influence social practices.

Discourse is integral to the work of Foucault. In his early examinations of the human sciences (his archaeological studies) he was primarily concerned with the discursive rules and structures that produced scientific knowledge. He aimed to identify the set of rules that allow for a discourse to construct its field in particular ways and not others (Locke, 2004). However, Foucault was not solely interested in *what* and *why* discursive formations were being constructed, but *how* their construction effected behaviors and *practices*.

Through his archaeological and genealogical studies, Foucault provides insights for the scholar seeking to understand the function and operation of knowledge in relation to discourse and practice. His discussion of discourse provides insights to understand the how the discursive structures (identified via archaeological analysis) become associated with the non-discursive (i.e., how they are materialized via practices). Stated differently, a Foucauldian genealogy entails analyzing a ‘regime of practice’ by examining “programs of conduct that have both prescriptive effects regarding what is to be done ... and codifying effects regarding what is to be known” (Foucault, 2003b, p. 248). In relation to this project, I begin from the premise

(justified by the literature reviewed in the previous two sections and Chapter 3) that anti-Blackness in education and science heavily inform the ‘programs of conduct’ in kinesiology spaces. I therefore approach the participant interviews with an interest in how/if anti-Blackness (white supremacy) informs what is to be done, what is to be known, and who can say it.

Power/knowledge also become especially important when we consider the operationalization of racism and its effects— although Foucault has been critiqued for his relative silence on the central role of plantation slavery and (settler) colonialism in his genealogies of modern power, a point to which I return below (Howell & Richter-Montpetit, 2019; Legg, 2007; Mbembe, 2003; Moreton-Robinson, 2015; Weheliye, 2014).⁸ During a lecture series in 1975-76 later published in English under the title *Society Must Be Defended (SMBD)*, Foucault provides a genealogical account of biological forms of racism at certain points in history (Taylor, 2011). He explains that Medieval European society defined race by language, habits, and religion. Racism during this period was not based on one race being inferior to another; instead, one race had conquered or stolen the land of another’s (Taylor, 2011). It was not until the

⁸ He has also been called out for his failure to reference Black activist-scholars in his work (see Howell & Richter-Montpetit, 2019; Weheliye, 2014). More specifically, during Foucault’s antiprison activism he engaged the Black Panther Party (BPP) and the ideas of Black American scholars (including Angela Davis). This work arguably contributed to Foucault using the analytic of war to conceptualize of modern power, but he provides no acknowledgement.

18th century that physicians began categorizing populations based on phenotypical traits (Painter, 2010).

The discourse that arose from the anatomical categorization of races influenced scientific notions about other biological and social aspects such as mental capacity and character traits (Garrod, 2006). As a result, Foucault argues that “modern race no longer refers to different qualitatively neutral cultures, but to hierarchically ranked biological groups” (Foucault 2003c in Taylor, 2011, p. 752). Race is a variable used by scientific experts to rank groups biologically and results with one race being constructed as physically superior to another. Through his genealogical account of race, Foucault argues that race discourse is often used as a tool wielded by the biopolitical state against its marginalized members (Taylor, 2011).

Individuals marginalized by the State (homosexuals, non-able-bodied people) are believed to be ‘carriers of stigmata’. Focused on the eugenics movement, Foucault explains how these individuals are ostracized by members of their own racial group and terms this form of prejudice internal racism (Taylor, 2011). Internal racism is a biopolitical strategy by which members of the same race work to eliminate abnormal qualities from the race’s ‘gene pool’ (Taylor, 2011). Later in his thinking, Foucault expands on his earlier concept of internal racism by distinguishing how modern racism is simultaneously substantiated by scientific knowledge and political discourse in order to control other ‘inferior’ racial populations by positioning them as *abnormal* or *risky* (Foucault, 1980; Taylor, 2011).

However, and as noted above, while Foucault explicates the operation of racism as the biopolitical strategy to “make live and let die” in *Society Must Be Defended*, he only briefly alludes to the role of colonialism in this process. He thus grants biopolitical status exclusively to racism as it played out in Europe—particularly the Nazi state, and thus reinscribes ‘race’ (as per colonialism) as a “‘real object’ or a ‘primitive notion’” (Weheliye, 2014, p. 7). As Howell and Ritcher-Montpetit (2019) succinctly observe “Foucault neglected the constitutive role of (settler) colonialism in the production of modernity, as well as the fundamental role of the Black or savage Other in the ontological consolidation of man or “the human” necessary for biopower” (p. 5). They go onto explain that “Foucault’s origin story for biopower remains sanitized of colonial domination and violence” (ibid). Weheliye (2014) notes that the absence of Foucault’s concerns about (settler) colonialism and racism are also apparent in his archeological study *The Order of Things* in which he maps how ‘Man’ became an object of knowledge in the modern age without thought to the central role of racialization or colonialism in the construction of ‘Man’.

With these critiques in mind, Foucault’s understanding of racism is clearly insufficient when we consider the relationship between anti-Black racism and knowledge in the US, and how it is intimately tied to the rules that structure the boundaries of what is knowable, what is truth in Western society, and who can contribute to knowledge production. While it is tempting to discard Foucault given his omission of the operation of anti-Blackness in his genealogies of modern power (and, thus, his complicity in perpetuating it), I continue to see the utility of some of

his ideas, particularly concerning the operation of power-knowledge and ‘regimes of practice’. By engaging Black feminist theory to help explore anti-Blackness and power-knowledge in kinesiology, I hope to make an important empirical contribution while also helping to broaden the scope of PCS scholarship that draws upon Foucault.

I turn to the scholarship of Black feminist philosopher Kristie Dotson⁹ who employs Spivak’s (1998) account of “subaltern classes” and “epistemic violence” to track the epistemic exclusion that hinders one’s contribution to knowledge production. Dotson (2014) defines epistemic exclusion as the “unwarranted infringement of the epistemic agency of knowers” (p. 115). A consequence of colonialism that Dotson explores is the “disappearing” of knowledge, where “local or provincial knowledge is dismissed due to the privileging alternative, often Western [read: white/ Anglo-Saxon] epistemic practices” (Dotson, 2011, p. 236). For example, the privileging of some epistemic practices and the devaluing of others has been long discussed in the work of Black feminist scholars. In her book *Black Feminist Thought*, Patricia Hill Collins (2002) discusses how Black women in the US are systematically undervalued knowers and less likely to be considered competent or

⁹ While writing this chapter I found there to be a lack of Foucauldian informed Black feminist scholarship. Weheliye (2014) argues for the need to address elisions in Foucault’s account of biopolitics and racism by drawing on the work of Black feminist scholars such as Spillers and Wynter. In the future I intend to further explore these articulations in relation to the operation of power and kinesiological knowledge and practice in the United States.

credible due to the “controlling images” that stigmatize Black women as a collective. However, Spivak suggests this does not mean the subaltern cannot speak, “as they can speak and know their conditions” (1988, p. 78), but rather their voices are *not heard or made audible* (Ratna, 2017).

At this juncture, the Chapter 1 discussion about the historic positioning of Black women’s bodies, particularly Spiller’s (1987) notion of flesh, becomes central to my understanding of how anti-Black theories of corporeality inform ‘regimes of practice’ in relation to the construction of kinesiological knowledge and practices. I posit that long-embedded notions of ‘flesh’ and ‘unhuman’ inform what are now taken-for-granted rules, rationales, and reasons that relate the (in)active body and health in kinesiology.

With these theoretical sensibilities in mind, this chapter draws upon participants’ experiences in pedagogical spaces to begin to map out what has “been said” in kinesiology and how anti-Blackness is written in the “rules” or is used to control kinesiology’s knowledge landscape. By centering the voices and knowledge of Black women doctoral scholars, this project works to not only unsilence and make audible those who have been conventionally gagged (a practice referred to as “talking back”; see hooks, 1989), but uses their testimony to identify anti-Black practices and patterns of knowledge.

Methods

Recruitment and Sample

Following approval from the University's Institutional Review Board, participants were recruited using a snowball sampling strategy by which participants identified cases of other interested participants and recommended them to the study. This method was useful for this project because the population of study (i.e., current and former Black women doctoral students in kinesiology) is a hard-to-find population. Kinesiology is not a diverse field, so there is a small pool of participants to pull from. Snowballing did not only shorten recruitment time, but it also ensured a sufficient sample size. To begin the snowball effect, I contacted a current faculty member of a kinesiology department who was also eligible for the study (email address was found on the University's faculty directory website), and asked them if they would like to participate in the project. Whether the participant agreed to the study or not, they were asked to identify other interested participants. The snowball effect continued until the target number (10) was reached.

Eligible participants had to self-identify as "Black" and "woman" and be over 18 years of age. In addition, participants had to be current or former doctoral students in kinesiology. At the time of recruitment, former participants had already received their PhD from a kinesiology department and were kinesiology faculty. Current participants were students working towards their PhD. The participant sample included professors, clinical researchers, faculty members, and PhD students.

Because the target population was small, maintaining confidentiality required that I limit the level of detail that I provide in this chapter. Providing a detailed sub-analysis of the target population will likely increase participant identification. Thus, participant characteristics such as university, university state, title, time in department, and major/ concentration are not provided.

Table 10: Number of current and former Black women doctoral scholars

Former	6
Current	4

Semi- structured interviews were conducted between August 2022 and December 2022. During the interviews, I utilized a script of flexibly-posed, open-ended questions which allowed for participants to give uninterrupted in-depth responses. Interviews were conducted virtually via zoom. Interviews lasted approximately 60 minutes, were audio-recorded, and later transcribed and coded using NVivo, a qualitative data analysis software. Transcripts were coded for emergent themes by identifying recurring phrases and commonalities using thematic analysis.

Data Analysis

A three-step thematic analysis was used to analyze the interview data. Thematic analysis (TA) is a method employed to recognize and interpret patterns and themes within a data set, and is especially well-suited for analyzing interviews (Clarke & Braun 2016; Braun & Clarke 2019). The end result should highlight the

most significant “constellations of meanings” in a data set, hence the “theme” of the data (Joffe 2011, p. 209). Themes begin to come about in the coding process when the coder starts labeling certain segments of data. These labels can be determined inductively or deductively. The inductive way is data-driven, where the analysis is guided by the content itself. Contrarily, the deductive approach applies a theoretical framework from “beyond the data” (Braun et al., 2016 p. 192), during which interpretations of the data are tailored to a particular theoretical outlook. I utilized inductive and deductive approaches during this analysis.

The first step of TA is open-coding, a line-by-line process that requires the labeling of different segments of data and creating as many codes as possible (Emerson et al., 1997). During this stage text was coded based on content and overt meaning (Clarke & Braun 2016). After open-coding I created a codebook to help visualize what patterns were starting to form across participants responses, and how these patterns may start to answer my research questions. To create the codebook, I first determined my parent codes. Parent codes are first level codes that contain a series of second and third level child codes. For example, one parent code in the codebook was “methods”, its second level child code was “algorithms”, and it’s third level child code was “BMI”. After creating a codebook and establishing preliminary patterns, I closed-coded which required me to code and reorganize codes with my research questions in mind. Specifically, I looked to see which excerpts most aligned with my research objectives. This process is complex as I had to reorganize codes and cluster them into broader interrelated concepts (Jamison, 2019).

After coding I began naming and defining themes. During this phase I built my analytic narrative which is my interpretation of the data and explains the significance of the findings (Clarke & Braun, 2016). It is during this phase where I articulated Black feminist inquiry and Foucauldian insights about a ‘regime of practice’ to “go beyond” the verbatim narratives and consider the material conditions in which participants made their claims. For instance, some participants mentioned that Black women are more likely to be obese and Black men are more likely to suffer from stress; both groups, therefore, should engage in more physical activity. While these notions are (over) suggested by an excess of research studies, Evans-Winters 2019 argues, that this “discourse of deficiency and pathology simply has become a part of the popular imagination” (p. 49). In fact, (negative) attitudes towards Black women’s corporeality and Black men’s physiological response has been traced back to the 18th century (for detailed excavations see Gould, 1996; Strings, 2019; Roberts, 2014; Washington, 2006).

As such, I employed a Black feminist Foucauldian framework in my reviewing of themes to identify and deconstruct the dominant narratives in which participants are grounding their claims. While writing up the thematic analysis I re-engaged the relevant literature and highlighted commonalities and divergences. Although these steps were not linear and, rather, overlapped, thematic analysis was ideal for answering the research questions and underlining common formations of thought that guide and shape kinesiological practices. For confidentiality, participant names were changed. Moreover, it is important to note that confidentiality was a key

consideration in this study. The population of focus (i.e., Black women doctoral scholars in kinesiology) is a hard-to-find population leading to a small sample size. In addition, participant characteristics, such as school name, school location, subdiscipline, or years in the field were not fully explored due to confidentiality limitations. To increase accuracy of representation and reporting, participants were shown a draft of preliminary findings and offered feedback.

Findings and Discussion

This section presents the interview findings. Each section is organized by key themes and presents a summary table of key findings. Tables are organized by theme and presents indicator(s) that were mentioned by participants. Indicators are the tangible markers that participants identified and were then interpreted as tools and techniques of anti-Blackness. Based on participant insight, three themes were identified. The first theme, *Doing Science* explores how white logic is *performed* in kinesiology. The second theme, *The (Re)Creation of Normative Narratives: The Effects/ Consequences of Colorblind Science* examines what is sayable, and how sayability is rooted in *who* is making the claims. The final theme, *Resisting Solutions to the Disruption of White Normativity*, discusses how participants experience resistance to engaging in teaching and learning practices that disrupt white normativity.

Theme 1: Doing Science

The first theme, *Doing Science*, explores how kinesiology employs colorblind research methods. The research methods that participants expressly labeled as anti-Black were hegemonic recruitment practices that often exclude Black research subjects, and the utilization of algorithms (i.e., the BMI, Siri Equation) and validated questionnaires. The table below provides a summary of theme 1 and selected illustrative quotes.

Table 11. Summary of Theme 1 Findings

Theme 1: Doing Science		
Key Finding	Indicator(s)	Selected Illustrative Quote(s)
Kinesiology Employs Colorblind Research Methods	Participant recruitment	<i>“White males are the pioneers in the industry, or are doing the same type of research. So that's just kind of what's taught, like, ‘Oh, this is how we recruit’. So think nothing of it. It never came off as “exclusivity”, or “we are not recruiting black participants” to be specific. It's more like, “we've never done that”. So there is a lack of incorporation, because that's not what people have done in the past. So they don't know”.</i> <i>“I just remembered a comment that was made to me. I was doing or designing a high intensity interval study. And I was told by a superior a faculty member that, ‘Oh, black women won't sweat, they won't do that’. I was like, wait, what? And that comment made me want to do it more”.</i>
	Body Mass Index (BMI) Siri Equation Validated Questionnaires	<i>“The Siri equation is automatically programmed into the bod pod machine. So unless you're a young white man, the measurements it spits out doesn't really fit you.”</i> <i>“We more validation studies within black populations. Because again, these questionnaires, when you look at who they're used when they're developed, they don't include black people.”</i>

Colorblind participant recruitment: “They won’t come”

Participant recruitment for kinesiological research was reported as a primary site of anti-Blackness amongst participants. There was a consensus that white males are the “pioneers” of kinesiology, and as such, have primarily utilized white adult males in their research. In a Foucauldian sense, these kinesiology pioneers are following and thus perpetuating an unspoken rule by which much biomedical and scientific research adheres (Espstein, 2007). Participants suggested that contemporary kinesiologists followed in this tradition of utilizing white adult males as research subjects, not necessarily intending to be exclusive, but under the hegemonic premise that this is how recruitment “has always been done”. Shania articulated this viewpoint as such:

White males are the pioneers in the industry, or are doing the same type of research. So that's just kind of what's taught, like, ‘*Oh, this is how we recruit*’. So think nothing of it. It never came off as “exclusivity”, or “we are not recruiting black participants” to be specific. It’s more like, “we've never done that”. So there is a lack of incorporation, because that's not what people have done in the past. So they don't know.

In a similar vein, Terry mentioned that it is hard to recruit participants of color because all kinesiology subdisciplines are not concerned with diversity:

I think research participants are not diverse at all [...] **participants are typically always white, highly educated, affluent, like the same group of individuals**, which there is things to be learned, but then it doesn't apply to

everyone, which is a struggle. So that's been a struggle for me and some of my colleagues who are trying to diversify participants personally, and I've seen it in other areas, particularly like biomechanics. They don't seem to be concerned with diversity at all. Like it's not even an aim. I understand it's difficult, but I feel that they don't even try to do that.

Here, Terry describes one of the practices related to *how* knowledge is acquired in kinesiology: the long-established tendency to primarily recruit white participants for kinesiology studies. Thus, the ways in which we come to know kinesiological knowledge is by and through an examination of whiteness. In fact, common kinesiological tools and techniques such as the VO_2 max test and the BMI, were historically developed by white Western male scientists with the aim of measuring and examining the “average”, “normal”, and “peak” functions of the active body (Gould, 1996). To establish the *validity* of these tools, white male research participants were recruited. This ‘white as default’ approach has two consequences; it firstly assumes that the privileges of whiteness have no material effect on the active body and secondly reifies the notion that Black bodies cannot and/or should not be recruited to measure or examine mechanisms that result in *ideal* health outcomes. As noted above, this tendency, however, is not unique to kinesiology (Epstein, 2007). In fact, human sciences research in the US has a long-standing history of using white research participants to understand the ‘average’ or the ‘normal’ physiological function and using Black bodies (sometimes even against their will) to understand the function of disease or abnormality. Notable studies pertaining to the latter include the

Tuskegee Syphilis Study (Washington, 2006), the horrendous gynecological experimentations conducted by J. Marion Sims (Roberts, 2023), and early birth control (i.e., forced sterilization) trials (Davis, 2003).

The practice of recruiting white participants appears to be so heavily embedded within the kinesiology ethos that Black women doctoral scholars reported facing resistance to diverse recruitment. Jalia recollected her advisor urging her to not solely recruit Black women participants for fear of not having a big enough sample. Similarly, Zula mentioned that her advisor requested that she exclude a Black woman from her sample of premenopausal women due to her being “the only one”. While not explicitly stated by Jalia and Zula, I infer that their advisors were concerned that not enough Black women research subjects would engage in human subject research due to the well-documented mistreatment and mistrust between Black research participants and the health and human sciences (Schraff et al., 2010); or perhaps there concern was informed by the well-worn stereotype that most Black women do not exercise (Justin & Jette, 2021). What stood out most, however, is Tasha’s description of her recruitment experience:

I was talking to my advisor about recruiting my targeted population. And I said ‘*I want to target this age group with Black women*’, and they said ‘*they won't come*’. I said, ‘*Okay, What do you mean? Like, they won't come to the laboratory? You want me to change up my population? Like, they won't come?*’ They said, ‘*so with the weight, you need people who can get down to a 90-degree angle. These*

women can't get down to that angle because they have a big gut in their way'. It was discouraging for sure.

Coco describes a similar experience with a senior faculty member:

I just remembered a comment that was made to me. I was doing or designing a high intensity interval study. And I was told by a superior a faculty member that, *'Oh, black women won't sweat, they won't do that'*. I was like, wait, what? And that comment made me want to do it more.

The notion that Black participants will not show-up for exercise studies is a product of the “controlling image” that Black people are lazy (Collins, 2002), and that Black women, specifically, do not exercise because they are obese (Caprio et al., 2008; Justin & Jette, 2021). This narrative is not only falsely rooted in harmful stereotypes, but it ignores the historic and present contexts of violence, exploitation, and biomedical apartheid by which Black research participants are impacted (Roberts, 2014; Washington, 2006). Moreover, it does not acknowledge the violence and harm that Black exercisers face (see Roberts et al 2019 for a discussion of “Walking while Black” and Hornbuckle 2021 for a discussion of “Running while Black”). As such, exercise, physical activity, recreation, and outdoor spaces often reinforce the Jim Crow attitude of “FOR WHITES ONLY” (Justin, 2023)

Nina illustrates this point as she mentions that while Black people may see *certain* physical activities as a “white thing”, there is a history of mistrust between scientists and the Black population that researchers often forget. “The issue”, Nina continues, “is that researchers are not actively coming up with plans to recruit outside

of their white dominant pool of individuals.” Lack of diverse recruitment in biomedical research is an issue that the National Institute of Health (NIH) has been trying to address. For instance, Wright and colleagues (2022) recently published practical considerations for researchers who want to recruit and retain diverse populations. Some of their recommendations include 1) increasing the availability of the research team; 2) approaching potential participants in-person; 3) speaking openly about the potential barriers to research; 4) actively listening to participants’ hesitations; 5) building trust with participants; and 6) making an effort to address structural inequities that may act as barriers to participation (i.e., transportation, communication methods, unpredictable work schedules, housing). While this list is not exhaustive, Wright and colleagues posit that these are the practices that must be adopted to move away from strategies based solely on “the way it is usually done”. While these strategies are commendable, what must also be addressed, as suggested by interview participants, is the continued use of research tools that were developed *without* a diverse participant pool—what I call in the following section ‘colorblind equations.’

Colorblind Methods and Equations

Historically and contemporarily, white Western men have dominated the fields of science, engineering, medicine, and mathematics (Hammonds & Herzig, 2009; O’Neil, 2017). As stated previously, white supremacy is the dominant discursive formation in which knowledge is produced in the US. As modern science is predicated on the certainty that numerical algorithms seemingly provide, it

becomes increasingly important to be critical of the algorithms we use to create scientific knowledge and how the guise of objectivity that numbers provide allow for the perpetuation of white normativity. For example, O'Neil (2017) details how predictive crime algorithms disproportionately criminalize Black and Hispanic people. Through the use of predictive colorblind crime models like PredPol, a program that uses historical crime data to predict where crimes are most likely to occur, regions that are traditionally occupied by Black and Hispanic residents receive higher numeric criminality scores, thus, informing police officers of where their presence is most needed. Similarly, the work of Safiya Noble (2018) discusses how Google's search engine algorithm centers whiteness by depicting positive narratives and images when keywords like "white" are searched as opposed to "Black" or "Hispanic." These algorithms often go uncontested due to the common belief that numbers cannot be prejudiced and, as such, are untouched by societal racial biases. As a result, discriminatory practices that were already embedded in our social fabric get reinforced. The same can be said for particular algorithms commonly used in kinesiology.

For instance, many participants mentioned the flaws with the BMI and noted its crude and exclusionary development. The BMI was developed by Belgian statistician Adolphe Quetelet (1796 -1974) in the mid 1800's to mathematically define the "average man" (Cryle & Stephens, 2017). Quetelet developed the standard of the average man to be the "mathematical truth" of the ideal (white) male body (Cryle & Stephens, 2017). The average man was primarily a way to organize

knowledge about populations and served as a theoretical vehicle to mobilize the idea that “normal” health, intelligence, courage, morality, and criminal deviance could be statistically determined (Cryle & Stephens, 2017). Quetelet believed he could determine the “statistical law” that links one’s corporeality to their probability of committing a crime, getting married, way of dying, morbidity, courage, and intellect (Mosselmans, 2005) and the average man was the mathematical archetype of this social and physical perfection.

In order to mathematically fortify his ideas of the average man, Quetelet gathered head, chest, and height measurements of Belgian men. Once he collected their measurements, Quetelet employed the formula of kilograms (weight) divided by the square of meters (height) to establish the average stature of the Belgian man, and recorded the data in Quetelet’s Index (Eknoyan, 2008). Though Quetelet was determined to define the average man, he based his index primarily on white men, therefore, linking his idea of “normality” with white racial superiority (Justin & Jette 2021). As such, research shows that although Black women may not be entirely informed of the history of the BMI, there is an awareness that the BMI is a tool that was not created “for us”, but rather was built to scientifically legitimize the superiority of whiteness (Justin & Jette 2021). Notably, the BMI in turn bolsters the dominant obesity narrative that links slenderness with morality and whiteness, and purports fatness as visual and physical marker of deviance and Blackness (Strings, 2019).

In addition to the BMI, a few participants mentioned the use of the Siri equation. According to participants, the Siri equation is a body composition formula that mainly used the bodily measurements of white men to establish its validity, like the BMI. This equation, Samiya explains, “is automatically programmed into the Bod Pod machine. So unless you’re a young white man, the measurements it spits out doesn’t really fit you.” To rectify this miscalculation, Samiya states:

We now are able to pull out the actual body density measurement and put it in your own formula I've done that. I just make my own, pull out the actual measurement, and then plug it in to a formula that fits middle aged Black women if that's who I'm measuring.

Similarly, Tasha mentions that she uses a lot of questionnaires in her research, but she believes that there should be “more validation studies within Black populations. Because again, these questionnaires, when you look at who they're used when they're developed, they don't include Black people.” There is a history of racial exclusion and racial prejudice in the biological sciences that I previously detailed in Chapter 3. In addition, I have argued elsewhere that the operation of whiteness is ingrained within the BMI (see Justin & Jette, 2021; Justin & Jette, in progress). What is a novel finding here, however, is that these methods and techniques, which seem innocuous, operate in colorblind manner. The BMI, Siri equation, and some validated questionnaires, then, are the manifestation of colorblind research practices.

Eduardo Bonilla-Silva (2013) theorized the idea of colorblind racism as a rationale that justifies “racial minorities’ contemporary status as the product of

market dynamics, naturally occurring phenomena, and [Black peoples'] imputed cultural limitations" (p. 2). Bonilla-Silva describes that colorblind racism appears to be "racism lite," meaning that instead of explicit instances of racism like name-calling, "colorblind racism otherizes softly" (Bonilla-Silva, 2013, p. 3). In a Black feminist Foucauldian sense, the frequent use of colorblind research methods and strategies are arguably informed by the anti-Black discursive formation in which Western science is produced and practiced. These tools and recruitment practices were not developed nor validated by a diverse pool of researchers nor were they built with racial equity in mind. Instead, they were, and continue to be, employed in a monocultural and ahistorical (i.e., white supremacist) manner that bolsters the notion that Black people's ill health is a naturally occurring phenomena rather than a product of systemic racism.

Theme 2: The (Re)Creation of Normative Narratives: The Effects/ Consequences of Colorblind Science

The second theme, *The (Re)Creation of Normative Narratives: The Effects/ Consequences of Colorblind Science*, explores how normative narratives are (re)created in kinesiological spaces. The use of '(re)created' is intended to illustrate the synergistic and interconnected nature of the discursive (anti-Blackness) and the non-discursive (colorblind research practices). It thus reflects our interest in analyzing a 'regime of practice' where practices are understood as "places where what is said and

what is done, rules imposed and reasons given, the planned and the taken-for-granted meet and interconnect” (Foucault, 2003b, p. 248). As indicated in Theme 1, a dominant kinesiological narrative appears to be that Black women are most likely to be obese and thus least likely to exercise. Such a narrative shapes societal expectations related to physical activity behaviors, and influences the general field of physical activity research. As such, participant findings suggest that what is being said (i.e., Black women won’t exercise), and *who* is saying it (i.e., honored white male kinesiologists) has a primary influence over the operationalization of anti-blackness.

Table 12. Summary of Theme 2 Findings

Theme 2: The (Re)Creation of Normative Narratives: The Effects/ Consequences of Colorblind Science		
Key Findings	Indicator(s)	Selective Quotes
Creation of Normative Narratives	What is sayable: How the dominant literature/kinesiology research positions Black women and obesity	<i>“I definitely have read papers on [Black women and obesity]. I have not done any work on it personally, but I know, there has been papers on it about, you know, the barriers and determinants that adversely affects and impact African American women's engagement and movement and physical activity compared to other races. Like issues with hair, just not feeling culturally accepted, and gym facilities being mainly geared towards other races.”</i> <i>“You know, in a lot of cases, [the literature on obesity] should be motivational or encouraging, too. Because you hear the all the negativity. We have high risk of this, we have high risk of that. So in a way, use it a motivational tool so that you won't become one of those statistics [...] That should motivate you or encourage you to maybe eat healthier foods or to participate in physical activity.”</i>
	Who can say it: How are the leaders in the field producing knowledge	<i>“For years, those meetings just focused on one population because they were all the same individuals.</i>

		<i>“At different conferences I’ve been to it’s a lot more white. The people that speak at the conferences, or have like Professor titles or highly esteemed research, are white males.”</i>
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What is Sayable

When asked to describe if and how anti-Blackness is taught and learned in kinesiology, participants often spoke of obesity and how the literature situates Black women as more obese than white women. They were all familiar with the literature that dominantly reports Black women’s obesity rates and reasons for differences in obesity. For instance, Myah states:

I definitely have read papers on [Black women and obesity]. I have not done any work on it personally, but I know, there has been papers on it about, you know, the barriers and determinants that adversely affects and impact African American women's engagement and movement and physical activity compared to other races. Like issues with hair, just not feeling culturally accepted, and gym facilities being mainly geared towards other races.

This quote illustrates what is sayable in kinesiology, and broader health-based literature. The juxtaposition of Black and white women, in relation to obesity, is well-documented (see, Sanders, 2014; Shaw, 2005; Strings, 2019). Sanders (2014) argues that discourses “that racialize obesity contribute to a racial project of preserving white normativity, derogating black femininity, and rationalizing racial disparities in health, wealth and life chances” (p. 301). However, these are the monocultural and ahistorical (i.e., white supremacist) confines by which US society comes to

understand health and the (in)active body. It is through the establishment of white normativity and Black inferiority that we learn to self-surveil.

There were, however, differing approaches to how these obesity narratives should be taken up and acted on. For instance, some participants stated that the obesity rates that are reported in the literature should encourage Black women to exercise more. For example, Alicia stated:

You know, in a lot of cases, [the literature on obesity] should be motivational or encouraging, too. Because you hear the all the negativity. We have high risk of this, we have high risk of that. So in a way, use it a motivational tool so that you won't become one of those statistics [...] That should motivate you or encourage you to maybe eat healthier foods or to participate in physical activity.

Similarly, Coco acknowledged that while research shows that bigger bodies are more culturally accepted in the Black community, Black women should still work to improve their health by increasing their physical activity:

I think there's not the realization [in kinesiology] that curves are okay, even sought after and wanted by Black folks, men and women. I've had participants say, you know, *'oh, my man likes me thick'*, and *'I don't want to lose too much weight'*. And so I guess coming at it from the health standpoint, when I approach groups, I'm saying, *'I'm not asking you, you know, to get down to a size 2. that's not the goal here. The goal is to improve your health and your longevity'*. Decrease your risk of death because of XYZ that's related to lack

of activity that has perhaps contributed to obesity and, and something related to cardio metabolic disease.

Both Coco and Alicia supported the dominant notion that knowing about racial health disparities should “motivate” Black women to be more active. However, this rationale is confined to a monocultural and ahistorical view of health and (in)activity. While both women are Black, in some ways they ascribe to white normativity. White normativity describes the cultural beliefs and ideals that lead whiteness to be perceived as the norm, or as the “right way” (Ward, 2008). White normativity occurs through the institutionalization of whiteness, by which the thoughts, beliefs, and attitudes of those who present within the white racial identity are reflected in norms, policies, and practices (Humphrey, 2022). Dominant health and obesity discourses contribute to the reification of white normativity as they provide a monocultural and ahistorical language about fatness and fitness that pedagogize white body ideals (Azzarito, 2012). As such, white normativity does not require physical intentionality, rather it thrives on unconscious docility. This demonstrates that regardless of racial identity, one can operate unknowingly in a manner that oppresses and delimits their own emancipation from the bonds of white normativity.

While some participants reified white normativity in their comments about the Black/white obesity binary, there was a consensus amongst participants that kinesiology should move away from looking at individual responses and outcomes to considering the effects of systematic social, political, and cultural operations. For instance, Samiya mentioned that it is common for kinesiologists to teach and report

that Black women have higher rates of obesity and subsequent health conditions when compared to white women, “but the piece of the narrative that is missing is why.”

Samiya continues:

It's not just because like, *'Oh, we're eating that'* right. Because we always have this very simple narrative of like, *'you have excess weight gain, because you're eating too much and not exercising enough or moving your body enough'*. There are deeper systemic issues at play.

Here, Samiya reports a lack of regard for systemic operations such as racism, and their effects on health. This point is also illustrated by Terry who mentions that kinesiologists tend to focus more on individual lifestyle choices of research subjects rather than the influence of social determinants. One participant, however, was critical of *how* certain studies positioned underlying cultural narratives in relation to physical activity. Shania particularly mentioned that while there is research conducted on Black women's hair being a barrier to physical activity, this narrative “sends the message that Black women, rather their hair look good than be active.” Research has suggested that due to long-established Eurocentric beauty ideals, Black women may see their hair as a barrier to exercise (Joseph et al., 2015). Having straight hair in the US is seen as “professional”, “beautiful”, and more “feminine”, however, many Black women do not have naturally straight hair and must use chemical or heat straighteners to meet societal expectations. While this research makes a good attempt to consider how white normativity can impact Black women's engagement with physical activity, it still may operate within an anti-Black discursive formation as it does not critically

question how physical activities— such as jogging (Ashdown-Franks & Joseph, 2021), swimming, (Wiltse, 2014) and yoga (Justin, 2023) for example— have long been overrepresented as ‘white’ physical activity practices. Since kinesiology is the study of movement or physical activity, who is most likely to be represented in physical activity spaces may have a direct influence on which bodies are studied in the field.

Who can say it

Lack of diversity and representation in kinesiology were considered indicators of anti-Black by participants. As stated previously, participants acknowledged that kinesiology’s history as a field has been dominated by white men and noted that white men’s dominant presence in kinesiology is a reflection of the broader higher education system. When asked to speak more precisely about kinesiology’s lack of diversity, participants often mentioned kinesiology conferences. For instance, Zula acknowledges that “for years those meetings just focused on one population because they were all the same individuals.” Similarly, Nina stated that white males are frequently recognized and highly awarded at conferences: “The different conferences I’ve been to, are very white. The people that speak at the conferences, or have like Professor titles or highly esteemed research, are mainly white males.”

One problem that participants indicated regarding conferences, is that when these meetings take place and white researchers are asked about diversity in their examinations, some of their answers are dismissive or do not seriously consider diversity. Coco stated, “At kinesiology conferences, I’ve gotten the energy like, ‘it’s

hard to recruit Black people. Ok move along'. And it's like, can we talk about this a little more? Why is that? That doesn't mean we should just isolate the population."

This "energy" that Coco described is also illustrated by Samiya who spoke about feeling out of place due to her race and the type of type of research that she did:

[During this professional conference] I felt very much so out of place, I felt like it wasn't for me. At the time, research related to [my particular interests] it wasn't well received. Right? You need a more basic science. And so, it didn't feel like a space that was created for me or inviting to me [...] I think it's like any other sector of the world, or our society, white men were in power, they wanted to stay in power, when others are in power they feel threatened. And so, you definitely have that culture. I felt that at [the professional conference].

While some participants highlighted a lack of diversity at kinesiology conferences, Terry suggested that some professional conferences are making an effort to be more inclusive:

ACSM now, National as well as Regional, have built these programs to give a financial stipend, as well as to connect you with other advisors [...] I will say these conferences have done a good job of creating not just a Black space because it's not just Black people withing these programs, but they develop underrepresented moreso. So, they are doing something about it.

Regardless of the installment of gender equity legislation (i.e., Title IX) and racial equity legislation (i.e., Title VII) in the higher education sector, Black women are underrepresented, underpaid, and under-promoted when compared to their white

counterparts (Blackshear & Hollis, 2021; NCES, 2015). Data even shows that while Black women have increased the rate by which they earn advanced degrees (NCSES, 2022), within the academy there remains a not only a wealth gap, but a staunch difference in workplace treatment compared to white faculty (Blackshear & Hollis, 2021). As a result, in the academy Black women’s intellectual authority is often challenged which leads to a lack of visibility, representation, and acknowledgement at professional meetings.

Theme 3: Resisting Solutions to the Disruption of White Normativity

The last theme, *Resisting Solutions to the Disruption of White Normativity*, explores how participants’ kinesiology departments adopt (or not) equitable strategies that counter anti-Blackness. There was a general consensus that kinesiology departments and researchers are not concerned with racial equity and are reluctant to fully adopt diversity, equity, and inclusion (DEI) strategies. Some participants discussed how strategies to implement learning outcomes that focused on social justice and racism were swiftly dismissed, and others mentioned how DEI is not a central concern of their departments.

Table 13. Summary of Theme 3 Findings

Theme 3: Resisting Solutions to White Normativity		
Key Finding(s)	Indicator(s)	Selected Illustrative Quote(s)
Kinesiology is not concerned with racial equity	Curriculum and learning outcomes	<i>“We’re not even talking about it. I’m pushing for a required cultural course. I teach an exercise, physical health, and physical activity disparities course. And I would like it to be required of all graduate students, because I don’t understand how we’re educating graduate students, and they’re coming out with zero cultural competency training.”</i>

		<i>“No kinesiology didn't teach me this, because my research is more like physical activity and public health. And so, I started learning about it in my postdoc years, but then because the kind of research I do, which is really embedded within community settings, I had to self-educate myself.”</i>
	DEI approaches are not taken seriously	<i>“[my department] handpicked all the Black kids from different floors and put them on the DEI committee. [...] after these students shared their experiences, there was nothing, no change, no action.”</i> <i>“No faculty member, not one, volunteered.”</i>

Kinesiology learning outcomes and curriculum not concerned with racial equity

For instance, participants reported that while health is a critical component of kinesiology research and curriculum, there is a lack of emphasis on the relation between health and racial injustice, in addition to a hesitancy to address social issues in all kinesiology sub-disciplines. Alicia stated, “In kinesiology, we claim that we're health filled, but often fail to discuss racial injustice, in my opinion, that's anti-Black.” Alicia continues, “We have students that are struggling with what is going on in the world and expect them to function like their white peers.” In this regard, Alicia is critical of her kinesiology departments lack of consideration for the social and cultural issues that not only impact her Black student’s ability perform in the classroom but their health as well.

Relatedly, Jalia reported that her department is not fully on board with mandating a graduate course on health disparities whose objective is to produce culturally competent graduate students:

We're not even talking about it. I'm pushing for a required cultural course. I teach an exercise, physical health, and physical activity disparities course. And I would like it to be required of all graduate students, because I don't understand how we're educating graduate students, and they're coming out with zero cultural competency training.

The belief that kinesiology did not prepare graduate students to consider racial injustice and its effect on health and physical activity, is echoed by Zula who stated that she had to educate herself on the relationship between social determinants of health and physical activity:

No, kinesiology didn't teach me this, because my research is more like physical activity and public health. And so, I started learning about it in my postdoc years, but then because the kind of research I do, which is really embedded within community settings, I had to self-educate myself.

In a Black feminist perspective, it is critical to acknowledge that students do not learn in a vacuum, and that their social locations inform their learning and research practices. As kinesiology is concerned with health and fitness, it then becomes imperative that it recognizes and takes seriously the consequences and limitations of teaching and learning from an ahistorical and monocultural perspective. According to the above testimonies, kinesiology is not thought to be concerned with teaching, learning, and researching from a perspective that considers racial equity in a meaningful way.

DEI approaches are under-utilized

There was agreement amongst participants that kinesiology could do more to improve how students learned about racial injustice and health in the classroom. When asked to describe if there were other ways departments have tried to address racial injustice and health, participants often mentioned their departments DEI efforts. Several participants indicated that their departments' decision to be more conscious and active about employing DEI approaches, was influenced by the deaths of George Floyd and Breonna Taylor in summer 2020. Terry describes her departments response as such:

I think the thing was that summer 2020, we decided to have a whole semester seminar for our faculty and graduate student where we talk about health disparities, literally, a whole semester, where every single faculty, every single Master, and PhD student is required to attend. The whole entire semester, we talked about 30 different ideas on health disparity. We wanted our students understand that your you need to understand the impact of structural racism have on that health of Black individuals in within the context of the of this country.

While Terry's department made a conscious effort to educate their faculty and graduate students of the consequences racism can have on health, other participants described their departments' attitude towards DEI strategies as less-than-eager. Shania reported that her department "handpicked all the Black kids from different floors and put them on the DEI committee." However, after these students shared

their experiences, “there was nothing, no change, no action.” In the same vein, while Nina explained that her department’s DEI committee was open to all who would like to join, “no faculty member, not one, volunteered.”

Several participants voiced frustration with their department’s lack of emphasis on DEI strategies and spoke of how important it is for racial equity and cultural competence to be central aspects of kinesiology. If they do not, they run the risk of evoking anti-black sentiment. For example, Jalia mentioned that her advisor, who identifies as white, felt uncomfortable calling her study participants “Black”:

My adviser is a white lady. And when I first started, I told her my population is Black women, and she's fine with that but she definitely had a hesitation when it came to saying the word Black. And that kind of took me off guard. And I don't know if it's because African American has been more commonly used in literature, but me, I wanted to encompass Black women which encompasses more than just African American and she stuttered. She would say you know, a "*Black...Black woman*" and I was like, "it's okay to say Black". So not necessarily like any not necessarily saying they had any issue with my study population, but it was definitely uncharted territory.

Using inclusive language is important and had Jalia’s advisor participated in or been aware of more DEI focused approaches, she may have considered “Black” as an appropriate term for and descriptor of Jalia’s population. The importance of pushing DEI initiatives and addressing anti-Black in kinesiology is also illustrated by Myah who describes a racially insensitive moment at a kinesiology conference:

I was at a conference and a man did a study. He had like GPS on individuals looking at something. And someone called him out and was like, *‘so what about more racial diversity’?* And his response was, *‘well, that might be hard, because we'd have to talk them into letting us know where they're at’*. It was like they were doing criminal stuff. So, you know, why would we work with them? Because they might be criminals in itself. Even in his methods, he's already cutting out a whole group of people based on his prejudice. I wanted to walk out the room. It was bad. It was blatant. It was horrible.

Myah and Jalia's descriptions illustrate a dire need to embed DEI approaches and sensitivities into kinesiology classrooms, research, and conferences. Participants illustrate that kinesiology researchers are not immune to anti-Black attitudes, thoughts, and beliefs even if they are well-intended. If the goal of kinesiology is to improve physical activity and health more broadly, then their focus should be on populations most in need of wellness. As such, participants voiced their recommendations as to how kinesiology departments can address anti-Black and start moving forward.

Conclusion: Pushing us Forward

This project sought to explore what insights Black women doctoral students could provide to illustrate the operation of monocultural and ahistorical (i.e., white supremacy) approaches to the in(active) body and health, and the challenges they face countering the traditional (biophysical) kinesiological perspective. First, I employed a

Black feminist standpoint to conceptualize the inextricable connection between anti-Black (Dumas, 2016), education (Givens, 2021; Woodson 1990), power, and knowledge (Foucault, 1977) in US society. By bringing a Black feminist Foucauldian perspective to this topic I was able to identify examples of how anti-Blackness is operationalized in kinesiology research and research spaces. Doing so provided a framework for understanding the deeply embedded nature of anti-Black in the US education system, including kinesiology, and illuminated some of the structures and practices that maintain standards that privilege the white racial identity in kinesiological research and research spaces.

Interviews with Black women graduate students (current and former) in kinesiology provided insight into the operation of ahistorical and monocultural approaches to health via colorblind research practices. Specifically, the reluctance to recruit Black women to exercise studies and the use of colorblind research equations and tools (i.e., the BMI, Siri equation, and validated questionnaires) were considered anti-Black practices that are not only commonly conducted in kinesiological research, but are *expected* to be employed. This point aligns with the ‘common-sense’ nature of kinesiological research practices that were explored in Chapter 3.

Research practices and methods are important to consider because they are the techniques and tools we use to construct knowledge about the active body, and thus, inform and legitimize how we value certain bodies (i.e., white) over others (i.e., Black). The privileging of white bodies and positioning them as having “ideal” or “normal” physiological function was also explored in Chapter 3. Within the

theoretical framing of this chapter, however, I also sought to critically examine the effects/consequences of this inequitable framing (i.e., monocultural and ahistorical approaches) and identified the operation of normative narratives and practiced tethered to limits regarding what is sayable and who can say it. Due to the anti-Black epistemo-ontological confines in which kinesiology is embedded, when Black women doctoral scholars push against these boundaries, they are met with resistance from kinesiology leaders.

In this study, participants reported that the effects of monocultural and ahistorical practices and perspectives manifest in a general unwillingness to engage in diverse research practices. In addition, these effects also impact the classroom as participants reported a lack engagement with race and racial disparities in kinesiology curriculum. While the consequences of ‘colorblind’, ‘race silent’, ‘race-neutral’, and ‘white washed’ kinesiology curriculum and pedagogy are well-documented (see Armstrong, 2021; Azzarito, 2012; Douglas & Halas, 2013; Dowling & Flintoff, 2018; Culp, 2020; Hodge, 2014; Hylton, 2015), there remains a fear of promoting a system of researching, teaching, and learning in kinesiology that addresses the construct of race, attacks systemic racism, and eradicates anti-Black. Even when their kinesiology departments established a mission to emphasize diversity, equity, inclusion, and social justice, participants suggested that doing so was simply performative and not taken seriously by non-Black faculty.

The table below offers a summary of recommendations made by current and former Black women doctoral scholars in kinesiology and along with suggestions for

how transform the field. It is hoped that their insights can help us realize the NAK's 2021 mission of transforming kinesiology into a socially just field.

Table 14. Summary of Key Recommendations

Recommendations	
Key Recommendations	Illustrative Quotes
Diversify research practices	Some current researchers are repeating what was done in the past to get numbers for other diverse populations [...] The history is the history. You have to look at all age groups, gender, and then try to get in different racial groups.
Teach about race in the classroom	[Cultural sensitivities] have got to be embedded, like in specific course or courses. And it's just got to be in [courses] in the general. Like exercise testing and prescription, we need to talk about cultural competence. If we're talking about exercise prescription, we're going to have to talk about cultural competency when delivering a prescription.
Enroll and hire more faculty of color	I definitely think we should be trying to hire more faculty that are inclusive, not just race, ethnicity, but sex, their sexual orientation, or their disability. Across all of the statuses because I think that's critical to our field, because that's what society is based on. [Enrolling more students of color in Kinesiology] will enhance the type of research questions we ask. It will enhance the desire to study the impact that certain [interventions] have on Black and brown health. Anti-Black will reduce if we open the floodgates and we allow more Black students into Master and PhD programs [...] it will revolutionize the kind of science and the kind of people we're allowing into research and the questions we're asking. They're going to ask questions that impact their communities.

The first recommendation is to diversify research practices by recruiting research participants from various age, gender, and racial groups. For instance, Terry states that current researchers are often “repeating what was done in the past to get numbers for other diverse populations”. Terry suggests that there is a tendency for current researchers to employ similar recruitment practices of past researchers. The result of this reliance on past recruitment practices is a lack of diversity in health research samples. Although there may be barriers to recruiting and retaining diverse

research participants, especially African Americans, kinesiology researchers must acknowledge that this is due to the long-established history mistrust and mistreatment of non-white populations in human subject research (Yancey et al., 2006).

With regard to physical activity research participation, barriers to recruitment include factors like study design, participation fatigues, lack of adequate recruitment resources, and characteristics of the recruiter (Botchwey et al., 2020). In a review of health examination literature, Yancey and colleagues (2006) found certain recruitment strategies more effective for Black and Hispanic populations. For example, while most studies utilize personal contact as their primary recruitment vehicle, mass mailing was found particularly efficacious for the recruitment of middle and higher SES Black individuals. In addition, community involvement by project staff was suggested to be critical to the retention of Black and Hispanic participants. Timely incentive payments have also improved the retention of Black and Hispanic participants (Yancey et al., 2006). To diversify their research sample, then, kinesiology researchers should familiarize themselves with the growing literature that emphasizes diverse recruitment strategies.

The second recommendation is to teach about race in the classroom. Participants mentioned how important it is for students, both undergraduate and graduate, to learn that health outcomes are not solely the result of individual behavior but of learned social, cultural, and historical practices. These practices vary based on the collective shared experiences that people of the same racial category. As such, kinesiology students should learn of the various ways health, fitness, and physical

activity are taken up. Shania's response reflects the general consensus made by participants that kinesiology departments should expand how they teach about race in the classroom and stress the importance of being culturally competent. Shania states,

“[Cultural sensitivities] have got to be embedded, like in specific course or courses. And it's just got to be in [courses] in the general. Like exercise testing and prescription, we need to talk about cultural competence. If we're talking about exercise prescription, we're going to have to talk about cultural competency when delivering a prescription.”

Due to the invisibility of white logic, the idea of teaching about “race” is often associated with teaching about racial and ethnic “minorities” (i.e., Black, Asian, Hispanic, and Indigenous populations). In fact, various participants equated teaching about “race” with the experiences of people of color. However, ‘whiteness’ —and white supremacy—should be on the table when we discuss the operation of race in the classroom.

There is emergent literature that details the importance addressing the whiteness that is fostered in kinesiology by embedding more socio-cultural and perspectives in classroom curriculum. For example, an examination conducted by Nacchman, Joseph, and Fusco finds that when “predominately white faculty members draw from Eurocentric teaching models and materials, they normalize whiteness and research and teaching spaces” (p. 9). In doing so, they harm racialized students while enabling the privilege and safety of white students. In addition, the perpetuation of white logic in kinesiology curriculum then assumes that bodies can or should be

treated equally, and that their health is the product of lifestyle choices, rather than a result of the racist structures that cause ill health (Nacchman et al., 2021). This framing is too commonly presented in kinesiology curriculum and makes the field complicit in the broader operation of white supremacy. As a result, current and future faculty members should be encouraged (if not required) to undergo pedagogical training that may help shift their knowledge and understanding of white logic and to enact more diverse pedagogies and research.

The final recommendation that participants noted is that more faculty of color should be hired in kinesiology departments. For example, Myah mentioned that,

“I definitely think we should be trying to hire more faculty that are inclusive, not just of race/ethnicity, but sex, sexual orientation, or their disability [as well]. [Hire] across all of the statuses. I think that's critical to our field, because that's what society is based on.”

Research shows that there is an overrepresentation of white faculty in kinesiology departments in both the US and Canada (Blackshear & Culp, 2021; Douglas & Halas, 2013; Hodge & Harrison, 2021; Gill, 2022; Nacchman et al., 2021). A consequence of this overrepresentation is that white faculty members are more likely to be seen as the main authorities or experts on physical activity and movement topics, thus, their understandings of health and movement (which, as discussed in Chapter 3, were historically determined to legitimize their dominance) are taken as ‘truth’. However, if white faculty have no theoretical, pedagogical, or sociological understanding of the racist power structures that shape kinesiology, then their understandings of health and

movement are unintentionally tainted with a bias that reinforces white supremacy.

Hiring faculty of color may inhibit this operation because, as noted by Patricia Hill Collins (2002), they may have a greater awareness of how oppressive structures function in their everyday lives.

Hiring more faculty of color and listening to their diverse perspectives may also influence the number of diverse students that choose to study kinesiology in university. This point is mentioned by Jalia who states,

“[Enrolling more students of color in Kinesiology] will enhance the type of research questions we ask. It will enhance the desire to study the impact that certain [interventions] have on Black and brown health. Anti-Black will reduce if we open the floodgates and we allow more Black students into Master and PhD programs [...] it will revolutionize the kind of science and the kind of people we're allowing into research and the questions we're asking. They're going to ask questions that impact their communities.”

If students see “people like them” in kinesiology, they may see the field as a space where they belong. The feeling of belonging is critical to the participation of Black students, especially, because the educational experience in the US is replete with curricula and practices that perpetuate oppressive racial ideology (Armstrong 2022, p. 95). Informed by the Black feminist sentiment that emancipation from oppressive structures (i.e., white supremacy) requires that we pay particular attention to the voices of Black women who face “multiple jeopardies” (King, 1988), I argue that a space that benefits Black students will benefit *all* students as *all* students are

unequivocally influenced and impacted by the anti-Black white logics that plague Western society.

This disruption of anti-Blackness in kinesiology will require kinesiologists to “get active” (Hylton, 2015). We must look to the future and inspire students to be empowered for everyday assumptions (Hylton, 2015). We should be critical of the many ways in which the status quo of whiteness is maintained which will require an “ideological repositioning” of how kinesiologist think about and approach their research and scholarship (Hodge, 2014). Doing so, will transform kinesiology from a (re)producer of whiteness to a field that sincerely centers social justice.

Chapter 5: Concluding Thoughts on the Operation on Anti-Blackness in Kinesiology

This project was undertaken in response to the National Academy of Kinesiology's (NAK) call to create a socially just kinesiology (DePauw, 2021). I continue to signal the importance of this particular call because it was the first special issue I read that was dedicated to critically questioning and disrupting how inequities manifest within the field of kinesiology. Several of the papers constituting the special issue specifically focused on the Black student experience in kinesiology which put into words some of the discomforts, confusions, and disconnections I have felt over the years as a Black woman student learning from a traditional kinesiology perspective. There have been many times where I sat in a kinesiology classroom and have been taught about (on the token 'race' week) the 'less than average', 'ill', 'worsening', or 'compromised' health of Black people in comparison to white people. Black people's health outcomes were often situated as the result of the foods they ate, their lack of exercise, low/middle SE status, their lack of knowledge/education, or their unwillingness to comply with expert prescriptions. These narratives, while maybe not untrue given certain circumstances, do not paint the full picture regarding racial health disparities and, moreover, countered my general every day lived experiences growing up in a middle class predominately Black urban area.

In my everyday life I saw Black men and women physically active, eating well, and living long. While I saw a difference in the physical activities Black men

and women engaged in compared to their white counterparts (for example, I often saw Black people cycling in groups for exercise, but not cycling to work or using the bike as a form of transportation), I did not see the ‘disregard for physical activity and healthy living’ that my teachers implied. This disconnect between my everyday lived experiences and the viewpoints I was taught during my undergraduate years piqued my interest in sociological inquiry. I began to critically question the knowledge that countered my lived experience and my own understanding of health and physical culture. In doing so, I became interested in the construction of scientific knowledge and how ‘experts’ determine whose experiences or understandings are most credible. It is through this process of theoretical inquiry that I have come to understand how certain ways of knowing *become true* and others are ignored or deemed illegitimate. I began this project because I wanted to more fully comprehend how certain kinesiological knowledges *become true* and, more importantly, if/why their truth status relied on the standardizing of whiteness through the operation of anti-Blackness (what I refer to as a binary opposition in Chapters 1 and 4).

Theoretical-Empirical- Methodological Contributions

I am grouping together my theoretical, empirical, and methodological contributions together here because, in line with Black feminist scholarship, the empirical findings that suggest the perpetuation of anti-Blackness in kinesiology are linked to my “theoretical talk” which “emerges from my efforts to makes sense of everyday life experiences” (hooks, 1994, p. 70). The process of thinking and doing in

this project was a reciprocal one, wherein one enabled the other. Suggesting a split between my theoretical, methodological, and empirical contributions would put forth that my *doing* or my *making* a difference is unrelated to my testimony, my intellect, or critical consciousness (which would reify the idea that Black feminist thought is a second-rate framework). As such, I combine the three to illuminate the utility of Black feminist theory for uncovering and understanding how anti-Blackness is maintained in kinesiology.

My utilization of anti-Blackness is a contribution to the socio-cultural understandings of physical culture because it suggests that the relationship between whiteness and Blackness is structurally antagonistic (Dumas, 2016). It posits that due to the practice of chattel slavery and the Black/ white, unhuman/ human social arrangement, there exists a fundamental and long-standing requirement of Black denigration to uphold the utility of white supremacy in the US. A consequence, I argue, of this social arrangement is a way of knowing and approaching the (in)active body and physical culture that is intimately tied to the binary of Black subjugation and white normativity. Two important sites of anti-Blackness that perpetuate this anti-Black/ white normative binary and shape the field of kinesiology are the medical and biological sciences (Chapter 3) and the institution of education (Chapters 2 and 4). In other words, this dissertation suggests that the anti-Blackness kinesiology portrays is a result of its location within the university system *and* its roots in the medical and biological sciences. Kinesiology's contemporary anti-Blackness, then, is doubly

anchored by these parent sites whose legitimization in US society was determined by their ability to reflect the status quo of white normativity.

Theoretical/Empirical/ Methodological Contributions Informed by the History of the Medical and Biological Sciences

Chapter 3, *How “Race” is used in US Peer-Reviewed Studies of Cardiovascular Health and Cardiorespiratory Fitness: A Scoping Review* details how the antebellum medical and biological sciences, in which kinesiology (originally ‘Physical Culture’) is rooted, framed the Black body as diseased in comparison to the white body without considering the deleterious effects of chattel slavery and did not question how the practice of chattel slavery shaped how physiological research was performed, how researchers interpreted their findings, and how certain epistemological and ontological framings were legitimized over others.

After the Civil War and the abolition of slavery, the notion that Black people were physiologically and intellectually inferior to their white counterparts persisted. While important figures such as Drs. W.E.B. DuBois and William Montague Cobb provided evidence that the racial differences that were produced by leading white physicians and educators were flawed and erroneous, there remained a commonsense practice of inferring and investigating racial differences in the human sciences based on the notion of Black as pathological.

Informed by this historical framing, Chapter 3 is a scoping review that investigates how legacy of anti-Blackness is perpetuated within the contemporary

research spaces of kinesiology. Chapter 3 explores how contemporary kinesiologists have, and continue to, engage and construct “race” and “racial differences” in their examinations of cardiorespiratory fitness (CRF) and cardiovascular health (CVH) (N=232). This is the first scoping review to explore this topic. Scoping reviews are not concerned with assessing the quality of research in a sample, but rather investigate the *nature* of research activity. While the scoping review is the ‘master’s tool’ (Lorde, 1984) and counters the core of the Black feminist methodology that I describe in Chapter 1 (i.e., it aligns with more positivist ways of knowing), it provides a pathway for CRF and CVH researchers to *see* the trends and patterns that uncritically operationalize anti-Blackness. By reporting findings in a quantifiable way, this scoping review attempts to “speak the language” of CRF and CVH researchers who primarily operate under a positivist paradigm. In my view, this is a key methodological contribution to the PCS literature (although see Jette et al., 2017).

Informed by a literature review that explores the influence anti-Black racism had on the historical development of the field of kinesiology, this scoping review highlights the fact that there remain anti-Black tendencies in modern kinesiological practices. For example, one key finding of Chapter 3 is that 77.5% of the studies in the sample did not define their use of race and relied on the “common sense” use of racial categories. The issue, however, is that there is nothing “natural” about racial categories as they are the products of the socio-political needed to legitimize the authority of whiteness. In addition, 45.2% of the sample used the CRF and CVH outcomes of white participants as reference points and baseline values. Doing so

strengthens the dominant tendency to equate whiteness with normality, which again, is the product of the socio-political desire to validate the white normativity. It is unsurprising that whiteness was legitimized in this way because none of the studies acknowledged the historical origins and implications of the methods, tools, and frames of thinking they employ. Some researchers (30.1%) utilized SES to control for race and to serve as an indicator of the effects of racism on health outcomes, but SES alone simple cannot account for the many ways that racism effects an individual's health.

In sum, Chapter 3 demonstrates that anti-Blackness occurs when researchers 1) do not define race or explain the inaccuracy of the common use of race, 2) use white research participants as a baseline of reference for “normal” CRF and CVH outcomes, and 3) employ SES as a way to adjust for race or explain racial differences. These three tendencies often legitimize ideas of racial differences as being the product of biology, rather than history, power, and politics. These findings are significant because they make visible *how* anti-Blackness is embedded in the dominant epsitemo-ontological confines of CRF and CVH research.

Theoretical/Empirical/ Methodological Contributions Informed by the Institution of Education

The institution of education in the US is also a site of anti-Blackness. Chapter 4, *Anti-Blackness in Kinesiology: Interviews with Black Women Doctoral Scholars*, considers the long history of Black struggle for educational opportunity. During

slavery, Black people were often beat by their white slave owners for asserting their humanity by reading and writing. During Reconstruction all-Black schools were severely under resourced by state and federal governments. During Jim Crow, Black children had to face mobs of white parents who were furious about their white children learning in a classroom with Black children. This disregard for Black intellect has been embedded in the US education system since its conception and has resulted in a way of thinking and learning that bolsters white logic, thus, reproducing anti-Blackness.

Informed by the notion that the US education system operates within an inherent anti-Black paradigm, Chapter 4 examines how Black women doctoral students (n=10) experience the pedagogical spaces of kinesiology. The use of ‘pedagogical’ in this chapter intended to capture not just the graduate and/or undergraduate courses participants engaged in but also the ‘lessons’ they learned in the research lab and at academic conferences. In this regard, I explored participants’ perspectives on how/if anti-Black explanations of corporeality inform kinesiology research practice and curriculum, and the impact of such pedagogies on the participants. Chapter 4 articulated Afro-Pessimism, Foucauldian theory, and Black feminist theory to analyze not solely what participants were saying, but to better understand the white logics that structure and confine what is sayable and knowable in kinesiology.

Foucault’s (2003b) understanding of the “rules of formation” around “what needs to be done” and “what is known” in social institutions, and the effect of these

regimes of practice (i.e., discourses) on both individual bodies and the social body (i.e., the population) were particularly useful for thinking about how particular knowledge becomes constructed as 'truth' or 'natural' while obscuring others. Black feminist theory made clear, however, that Foucault's perspective on the "rules of formation" are primarily concerned with Eurocentric regimes of power (i.e., Nazism) that may not be sufficient examining the relationship between anti-Blackness and knowledge production in the US. What I theoretically contribute, then, is that the relationship between anti-Blackness and knowledge production in the US is intimately tied to power, sayability (Dotson, 2011), and the rules that structure the boundaries of what is knowable, what is truth in Western society, and who can contribute to knowledge production. To my knowledge there are few works that articulate Black feminist and Foucauldian theory to explore the epistemo-ontological confines in which kinesiological knowledge is dominantly produced (although see Jette & Roberts (under review) for such a corrective in relation to dominant discourses about wilderness and whiteness in the US).

From this novel theoretical articulation, Chapter 4 participant findings suggest that kinesiology tends to employ, what I refer to as colorblind research methods. Specifically, the hegemonic exclusion of Black women research subjects, and the utilization of colorblind algorithms (i.e., the BMI, Siri Equation) and validated questionnaires that participants mentioned operationalize anti-Blackness. These colorblind methods were not developed nor accredited by diverse pools of researchers nor were they built with racial equity in mind; rather they disguise and fortify the

operation of white normativity as they are employed in a monocultural and ahistorical (i.e., white supremacist) manner that bolsters the notion of Black people's ill health as a naturally occurring phenomena rather than a product of systemic racism. These colorblind research practices are important to consider because they are tools and practices that limit what is sayable and who can say it in kinesiology. Racialized notions of obesity (i.e., Black women experience higher levels of obesity and lower levels of physical activity than white women) were considered particularly sayable in kinesiology.

Another finding from this study, is that due the monocultural and ahistorical perspectives, there is a general disinclination to engage institutionally-backed diverse research and pedagogical practices in kinesiology. This may be due to the well-researched 'race neutral' approaches that kinesiology departments implore in the laboratories and classrooms (see Armstrong, 2021; Azzarito, 2009; Douglas & Halas, 2013; Dowling & Flintoff, 2018; Culp, 2020; Hodge, 2014; Hylton, 2015).

In Chapter 2, *Advancing Physical Cultural Studies with a Black Feminist Perspective*, I reconceptualized four tenets of PCS with an explicitly informed Black feminist approach. Chapter 2 considers how key PCS scholars and scholarship inadvertently reify epistemic oppression through their suppression of Black feminist thought and their bolstering of white Eurocentric epistemo-logics. Two ways in which PCS scholars tend to reify white Eurocentric epistemo-logics and suppress Black feminist thought is through their placing of undue emphasis on Black masculinity and white feminist imperatives in their examinations of race and gender. Arguably, these

tendencies are a product of the anti-Blackness that is embedded in the nature of the education system. To date, I am unaware of PCS articles that are critical of how PCS scholarship has the tendency to center the bodies of Black men and the intellect of white feminists (who, in turn, often look to Eurocentric theoretical approaches) to validate their examinations of race and gender. This is a significant contribution. By emphasizing these tendencies, I highlight an unintentional practice in PCS that does a disservice to the bodies and intellect of Black women and Black feminists.

Pinpointing these tendencies can assist in reshaping how PCS scholars explore the effects of race and sex on physical cultural practices and understandings. Moreover, and as I explained in Chapter 4, I illustrate how insights from Black feminist theory (and scholarship pertaining to anti-Blackness) can be used to address the colonial and anti-Black tendencies of Michel Foucault, a key theorist who informs the work of PCS scholars.

With specific regards to the principal tenets, Black feminist theory also provides a language that is better suited for capturing and exploring the physical cultural experience in the US. By calling attention to the anti-Black settler colonial location that shapes US physical culture, I highlight several implications of the original Pedagogical, Theoretical, Qualitative and Political tenets of PCS and provide four new definitional efforts. I revamped the Pedagogy tenet by stating how **PCS recognizes the emancipatory power of knowledge, and as such, PCS scholars are mandated to teach, write, present, consult, advocate, protest, agitate, mass communicate, and mentor in a manner that disrupts oppressive onto- and**

epistemo-logical frameworks that disregard the masses and center Western, Eurocentric, white supremacist logic.

Similarly, I re-defined the Political tenet to make clear that PCS is a political project, that is committed to the advancement of social formations **that are ultimately rooted in colonialism.** This tenet also acknowledges that PCS is based on the assumption that societies are fundamentally divided along hierarchal ordered lines of differentiation **made possible through the process of Black erasure and white supremacy,** that manifest within socio-cultural disparities; advantages or disadvantages; enablements or constraints.

The third tenet I re-conceptualized was the Qualitative tenet. In this tenet I make clear that **PCS considers the value placed on positivist quantitative dogma in the Academy as a direct reflection of Western society's tendency to center white Eurocentric ways of knowing by hierarchizing methodology.** This tenet argues that **the result of this hierarchy is the devaluation of subaltern thought, a practice that is especially problematic for marginalized subjects (i.e., people of color).** Thus, the aim of PCS is to cultivate an anti-positivist qualitative project **that is grounded in the ontological assumption that social justice transformations must decenter Eurocentric, Western white logic in order to identify and ultimately eliminate disparities and inequities.**

The final tenet, Theoretical, suggests that **PCS is obligated to adhere to a theoretical position whose fundamental mission seeks to examine the structures and systems that maintain the power relation between the oppressors and the**

oppressed. As such, this tenet encourages PCS scholars to take on theoretical perspectives that disrupt oppressive formations. By focusing on the pedagogical, theoretical, qualitative, and political tenets of PCS, Chapter 2 advances PCS by adapting a Black feminist sensibility that explicitly focuses on disrupting white normativity as it manifests in physical culture.

Praxis

Chapters 2, 3, and 4 also speak to my praxis (i.e., the lived merger of theory and practice). In each chapter I made a conscious effort to create a socially just kinesiology by providing recommendations for kinesiology scholars and researchers. I crafted these recommendations to speak to the various ways that kinesiologists can turn their current understandings of the (in)active body and physical culture towards a social justice imperative. In this way, the core purpose of these chapters is to mobilize the intellect of Black feminist frames to disrupt suppressive anti-Black regimes in kinesiology. By encouraging PCS scholars to reconsider how they approach their Pedagogical, Theoretical, Qualitative and Political viewpoints (Chapter 2), scoping how anti-Blackness is embedded in the research practices of CRF and CVH examinations (Chapter 3), and exploring how anti-Blackness is ‘taught’ and ‘learned’ in kinesiology classrooms and labs (Chapter 4) this dissertation creates a pathway that can lead current and future kinesiologist towards social justice.

Future Directions

This dissertation presents opportunities for future research. Informed by Chapter 3, future research may conduct a poststructuralist Black feminist informed archeology where anti-Black scientific discourses are deconstructed to conceptualize their re(production) as a biopolitical strategy rooted in pathologizing the Black to maintain the dominance of the white. There seem to be few, if any, pieces of scholarship that articulate Black feminist and Foucauldian theory that deconstruct the dominant discourses that are provided by the health sciences. One piece of scholarship that would be particularly useful here is Alexander Weheliye's (2014) book *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. In this book, Weheliye discusses how central 'race' is to understanding notions of humanity in Western civilizations. Through their development of "racial assemblages", Weheliye considers how homo sapiens are disciplined into the categories of human, not-so-human, and unhuman. From this perspective, Weheliye challenges Foucault's biopolitical theorization of population management by positioning race as a primary disciplinary apparatus for labeling strains of humanity in North America and Africa. By employing the work of Sylvia Wynter and Hortense Spillers, Weheliye theorizes how race, or flesh, is central to the preservation of biopolitical regimes. Informed by Weheliye's insertion of Black feminist theory to further understand the perpetuation of 'not-quite-human' status by the State, it would be interesting to explore how certain biopolitical tools or

discursive formations aide in the maintenance of “racial assemblages” that manifest within health science discourses.

Informed by the findings of Chapter 4, future research may also philosophically consider the implications of the US’ reliance on racial categories that were developed in the 18th century. There is a growing amount of literature in the medical and biological sciences that critique how researchers commonly capture and report race and racial differences in their examinations (Flanagin et al., 2021; Nieblas-Bedolla et al., 2020; Wolf et al., 2020) and even a few that advocate for the abandoning of racial categories to explain biological phenomena altogether (Duggan et al., 2021). What this research does not address, however, are the structures that shape the continued use of racial categorization in the health sciences. By utilizing the notion of epistemo-ontological confines that is explored in Chapter 4 future research may contribute to, and aide in the transformation of, researchers’ epistemological and ontological views of racial categories.

Appendix A: Participant Recruitment Email

Hello Dr. _____,

My name is Tori Justin and I am a doctoral candidate at the University of Maryland currently conducting a qualitative research study that may be of interest to you. I am examining how current and former Black women doctoral students experience the space of kinesiology departments, with a focus on how they experience kinesiology's anti-Blackness as constructed through monocultural and ahistorical approaches to the (in)active body and health. The purpose of this research project is to better understand how anti-blackness underlines dominant kinesiological notions of the body and health, and the effect that positioning has on Black women doctoral students.

Eligible participants must self-identify as "Black" and "woman", and be over 18 years of age. In addition, participants must be a current or former doctoral student in kinesiology. This includes professors, researchers, faculty members, and PhD students that are currently or have formerly studied in a kinesiology department.

Would you like to participate? If so, please see the attached consent form and recruitment flyer. If not, can you please provide me with the professional emails of individuals who may be interested in participating?

Tori Justin
Principal Investigator
1223 School of Public Health
torialex@umd.edu
(202) 507- 1348

Institutional Review Board
1204 Marie Mount Hall
(301) 405- 0678
irb@umd.edu

Appendix B: Participant Recruitment Flyer

Hello!

My name is Tori Justin, and I am a PhD student at the University of Maryland – College Park in the School of Public Health. I am conducting research on how current and former Black women doctoral students experience the space of kinesiology departments, with a focus on how they experience kinesiology’s anti-Blackness as constructed through monocultural and ahistorical approaches to the (in)active body and health.

The purpose of this research project is to better understand how anti-blackness underlines dominant kinesiological notions of the body and health, and the effect that positioning has on Black women doctoral students. If you are an adult who is interested in sharing your experiences for the purpose of this study, please contact me directly. Participants will be emailed a \$20 gift card for participating in this study.



Eligible participants are:

- 18 years of age or older.
- Identify as Black.
- Identify as a “woman”, a cisgender woman, a trans woman, a non-binary individual who is perceived by others as “female” or “woman” or whose birth certificate labels them “female” at birth (this study is inclusive of all genders and social orientation identities).
- Is currently or has been a doctoral student in a kinesiology department.

Participation in this research study will include:

- Formally consenting to the research study.
- Audio-recorded interviews (on zoom) that will take approximately 60-90 minutes.
- Recommending other potential participants (optional).

If you are interested or have any questions, please feel free to contact me directly.

Tori Justin
PhD Candidate
University of Maryland
(202)-507-1348 (mobile)
torialex@umd.edu

Appendix C: Participant Interview Guide

- 1) Can you tell me how you came to be a graduate student in a Kinesiology program?
- 2) What were/are your research interests? Why were/are interested in that work?
- 3) In your experience, is kinesiology a diverse field? Please explain?
- 4) During your time in Kinesiology, have you ever been made to feel like your body doesn't fit into health and fitness norms? Please describe the time you recall this occurring.
 - a) Prompt: Norms can be general ideas about physical activity such as "running a 12 minute mile" or having a normal BMI.
 - b) Prompt: If not about your own body (or yourself), can you tell me of a moment in your Kinesiology program that marginalized a body that did not align to some sort of norm whether that be in terms of, for example, body size, shape, gender, race?
- 5) Has there ever been a moment in your Kinesiology program that positioned Black men naturally athletic or stronger/ faster than white men?
 - a) If so, please describe.
- 6) Has there ever been a moment in your kinesiology program that positioned Black women as "obese" or more sedentary than white women?
 - a) If so, please describe. Has this positioning influenced how you've navigated PA or wellness.
- 7) What are your thoughts on kinesiology projects that are specifically designed to capture differences in physiological responses between Black and white men?
 - a) In your opinion, are these differences important to capture? Why or why not?
 - b) Do such studies have the potential to address racism? Do you think they could further substantiate social racial hierarchy? Please explain.
- 8) Anti-Blackness is defined as a form of systematic racism that is specifically rooted in the subjugation of Black people. In your experience, are there undertones of anti-blackness in Kinesiology research or scholarship?
- 9) How can kinesiology better engage these conversations in the classroom?
 - a) Are students *given* the space to have these conversations?

Appendix D: Interview Participant Characteristics

Name*	Current or Former
1. Shania	Former
2. Terry	Former
3. Jalia	Current
4. Zula	Current
5. Tasha	Current
6. Coco	Current
7. Nina	Former
8. Samiya	Former
9. Myah	Former
10. Alicia	Former

*Pseudonyms used for confidentiality.

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