# How Structural Oppression Has Shaped the Physical Therapy Profession and Access to Rehabilitative Services

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## Abstract

Physical therapy has been practiced in the United States for over 100 years. In this article, we analyze the development of the profession and the influences of a US society built on the oppression of Black, Brown, and Indigenous People. The forces of structural racism have led to the exclusion of these people from the US healthcare system. We explore history from the perspective of those who have been oppressed due to race to better understand structural racism within the US. The implications of historical events that led to racialized oppression regarding housing, education, and personal finances are explored to better understand how racialized persons have been excluded from healthcare. The physical therapy profession has excluded Black, Brown, and Indigenous People from educational opportunities as well as rehabilitative services. Progress to remove barriers within the physical therapy profession have been minimal. It is important to understand the historical influence of structural racism in the nation before we can address problems of structural racism that are evident in physical therapy. The US healthcare system is flawed and also needs to address many barriers to Black, Brown, and Indigenous People. This article seeks to serve as a first step in better understanding this history.

## Introduction

The SARS-COVID-19 pandemic has amplified healthcare inequities within the United States healthcare system.[1] The pandemic has also illuminated exclusionary tendencies of non-white persons in physical therapy (PT) within the US. To better understand how PT came to be exclusionary, we decided to analyze the history of the PT profession alongside the history of the US told by persons who were racially oppressed. Before any solutions are offered, we must first analyze the current and historical influences of racial exclusion in PT.[1-6]

### OPPRESSION AND EXCLUSION OF RACIALIZED PERSONS

Persons in the US who have been oppressed based on their race, since European colonization, include

Indigenous, Black, Latinx, and Asian Americans or Pacific Islanders and other immigrants. The presumption of race is built on theories of biological superiority and inferiority.[2-3,6-7] In reality, these biased claims have been disproved scientifically.[4,8,9] Throughout history, race has been defined by those in power and has been fluid in its definition to fit the needs of the time.[10,11] Therefore, race is a socially-constructed phenomenon used for the elevation of some and the subjugation of others.[12-16] For this article, we employ the definition of racism as: *the assumption of superiority of one human group over another based on skin color, which has been disproven.*[8-9,11] In this article, we use the term *racialized persons* to denote people who have been affected by racism in the US, which are people who identify as Black, Brown, Indigenous, Latinx, Asian American, or Pacific Islander.

### STRUCTURAL RACISM AND PHYSICAL THERAPY

Healthcare, including PT, has historically paralleled societal trends and has been subject to new laws and judicial rulings.[17] Without explicitly acknowledging systemic structural racism and institutional systems of racial oppression, the institution of PT has complicity operated within a system of racial oppression.

We define *structural racism* as the totality of ways in which societies foster racial discrimination through mutually-reinforcing systems of housing, education, employment, earnings, benefits, credit, media, healthcare, and criminal justice; these patterns and practices, in turn, reinforce discriminatory beliefs, values, and distribution of resources.[12] Structural racism is a less overt, albeit pervasive, form of racism, which creates a hierarchy that elevates whiteness. This centering of whiteness leads to the exclusion and marginalization of non-whites. Institutional racism, conversely, refers to racially-adverse discriminatory policies and practices carried out within an institution (eg, a company) as opposed to society.[12] Our meaning of the institution of PT encompasses the entirety of PT. This includes but is not limited to: PT education, including universities and regulatory bodies; professional associations; licensure and other testing and regulatory bodies; PT research; and businesses where physical therapists practice.

This article addresses the ways in which society has been exclusionary to racialized persons and how PT was created and exists within an exclusionary society. In the body of this article, we revisit history predominantly through the lens of Black American racialized persons, to illuminate how society and PT have perpetuated exclusionary practices. The World Health Organization defines social determinants of health as the conditions in which people are born, grow, live, work, and age.[18] Persons who are negatively impacted by social determinants of health due to racialization have poorer health.[19,20] In the discussion, we present a current-day analysis of issues persisting in rehabilitation that maintain exclusionary practices.

## Approach to Analysis

There were 3 reasons why we embarked on writing this article: 1) To learn and unlearn for ourselves many values, behaviors, and knowledge. This goes along with our personal goals of improving social justice within healthcare. 2) To strive to help make the world a better place for our family and friends, as well as our current and future colleagues. We want to help create a better

society where the institution of PT is not exclusionary. 3) To fulfill a need for this type of historical narrative in the literature within PT. The amount of material covered in this article would be difficult for one person to cover in a reasonable amount of time; we wanted to collate and share this knowledge in a targeted article to reach a wide audience.

We began reading historical narratives that were focused on people marginalized in traditional US history textbooks. From here we dove deeper into articles, podcasts, and websites to further understand more nuanced topics that were not elaborated in the books. We note that our individual identities have steered our selection of reference sources and how we have written this article. We are two able-bodied, Christian, heterosexual male physical therapists from 2 different racial groups (Black and white)[1]*, which gives us a specific lens through which to view history and translate it into our writing.

When we started this journey, we intended for this article to be informative and accessible to all and steered away from politically-charged topics. During the revision of this article, we were encouraged to add a critical race theory (CRT) framework to our article to strengthen it. Initially, we were hesitant. However, when we analyzed CRT, we realized our content was already based in CRT. What CRT does is consider marginalized communities' history rather than centering on the history of only white Americans; CRT also analyzes how laws and other historical decisions affect racialized persons.[10,14,15,21] CRT is not the "extremist" viewpoint that the media would have you believe. We ultimately decided to use a CRT framework to contextualize our findings.

These are presented through 5 tenets of CRT:

Racism is normalized within the US and not aberrational.

Interest convergence, where white Americans temporarily help Black Americans due to mutual gain

Race is a social construct.

The use of storytelling and counter-storytelling is central to understand the perspective of racialized persons.[2*]

White Americans have been the main beneficiaries of civil rights legislation.[15,21]

This article primarily views history from a Black American perspective. It is not the authors' intention to victimize, blame, idealize, or idolize individuals,

[1]* In this article we decided to follow many of our cited sources' language to describe races within the US. The term white Americans is not capitalized due to the lack of common cultural thread to tie all white Americans together outside of being American. We chose to use and capitalize the term Black Americans over African Americans as it is more inclusive and has a common cultural thread due to the history of oppression. In the same light, we use the term Latinx Americans as this is more inclusive and also has a common history of oppression within the US. We chose not to use the word minorities unless it was used from a specific resource, as people of color in the global community make up the majority of people on this planet. We also acknowledge that the term Americans can mean anyone from North or South America, but in the context of this article, we are talking about those who live in the US.

[2]* This article focuses on telling stories from a counter narrative of racialized persons and we do not directly address this tenet until the discussion of this article.

institutions, places, or events in history, but to rather present history from the perspective of oppressed persons. We do this so we can accept this history together and move forward in productive conversations.

# Beginnings of the Profession

### THE FOUNDATION OF THE RACIALLY-EXCLUSIONARY PRACTICES WE SEE TODAY (1920-1941)

The birth of PT can be traced back to World War I, around 1917.[22] When the war ended a year later, reconstruction aides (white women only) entered the civilian workforce and began working with people injured in industrial accidents, and with children affected by polio.[22] The name "reconstruction aides" created confusion, so in 1921, the American Women's Physical Therapeutic Association was formed, and "physiotherapists" were born.[22,23] Shortly thereafter, an official journal and educational standards were created.[22,23] In 1936, the National Foundation for Infantile Paralysis, later known as "The Foundation," was established to further research in PT.[22,23]

During this time, racism was common across the US. Lynching was also common, and it devastated racialized communities.[24,25] Black soldiers returning home from war were targeted because of their newly-elevated social status.[24] If injured in the war or on the job, Black Americans were likely excluded from most healthcare systems as they were still segregated at that time. The hospitals serving Black Americans and other racialized persons were limited across the US.[26] Medical education was also segregated. Healthcare remained segregated until 1965.[26] Until this time, there were no non-white physical therapists. It was beyond taboo for a white PT to treat non-white persons. In 1910, "The Flexner Report" issued recommendations for the advancement of medical education that all but condemned Black medical schools at the time.[26] By 1923, only 2 of the nation's 7 Black medical schools remained.[26] The polio epidemic affected Black Americans in greater numbers when it spread across the US as they were largely neglected in polio care.[27] The debility from this disease was again compounded by exclusion from PT. Additionally, the legacy of unethical and inhumane experimentation on racialized persons continued. The most infamous example is the Tuskegee Syphilis Study starting in 1932. Black men with syphilis were promised treatment and never given any, to study the progression of the disease. Despite treatment being available in 1947 and other ethical concerns being voiced along the way, the study continued for a total of 40 years.[17] Unfortunately, many other racially-biased experiments were commonplace in the US during this time, affecting Latinx Americans and Asian Americans as well.[13,17]

In this era, there are likely some examples of interest convergence, but due to segregation, these examples are not as relevant to this topic. Race, on the other hand, was used to exclude racialized persons via 'redlining'.[11,28] Redlining is the practice of coding metropolitan maps to help mortgage lenders determine where it is safe to insure mortgages. Redlining resulted in a broadening of the racial wealth gap between white Americans and racialized persons that exists to this day.[28] This wealth gap continues to force racialized persons to decide on paying for food or paying for healthcare, and excludes many racialized persons from attending higher education. During this time-period, there were no opportunities for racialized persons to train as physical therapists. The 13th amendment was

racialized to create a free labor force for farmers that lost slaves.[11,24] It worked in this way: Black Americans were cited for misdemeanor crimes; following their conviction, they were returned as prisoners to the fields as free labor.[11,24] Latinx Americans were taken from the fields they worked and deported; if they returned to those fields to seek desperately-needed work, they were picked up a second time, imprisoned, then brought back to the fields as convicts, to serve as free laborers.[24]

The great depression hit racialized communities harder as the majority of Black and Latinx American families worked in agriculture but could not benefit from government assistance.[24] White farmers and investors were profiting while the working conditions were worse for racialized persons than in slavery.[24] These farmers were also excluded from accessing the benefits from the Fair Labor Act and the Social Security Act. This legislation did not protect the 30% to 40% of Black and Latinx Americans working in agriculture.[24,29] Not only were racialized persons excluded from healthcare due to segregation; many did not have the financial means to travel to a segregated hospital.

In 1938, as part of the "New Deal," Fannie Mae (Federal National Mortgage Association) was created to increase homeownership by making low-cost loans widely available. Between 1938 and 1962, 98% of the $120 billion in new housing subsidies went to white Americans.[30] During this time roughly 15% of the US population was non-white,[31] which demonstrates the inequities of government assistance. Racialized persons were widely excluded in society as well as in healthcare during this era.

# The Transformation of the PT Profession

## THE TRANSFORMATION OF EXCLUSIONARY PRACTICES OF STRUCTURAL RACISM (1941-1993)

The attack on Pearl Harbor brought the US into World War II. This propelled physical therapists into the war effort again. Emma Vogel created an emergency 6-month didactic program for reconstruction aides, followed by a 6-month supervised clinical experience.[22,23] Two years later, in 1943, this program was expanded to include Black Americans.[23] The American Physiotherapy Association established its House of Delegates (HOD) in 1944.[22,23] In 1947, the Women's Medical Specialist Corps was established, and the professional association was renamed the American Physical Therapy Association (APTA).[23] The Korean War called on physical therapists again from 1950 to 1953, but only 300 served.[23] In the time between World War II and the Korean War, US healthcare remained segregated. The Black Americans trained as reconstruction aides likely did not continue in this line of work as failing segregated hospitals would likely not have been able to pay these women. A large number of the initial women trained were not likely called back to the small number of PT jobs retained in the Korean War. This meant that PT likely still remained exclusionary to racialized persons.

By 1955, APTA updated the minimum standards of PT education, which remained in place for the next 20 years.[22] In 1960, the baccalaureate degree was now the minimum standard in PT education.[22] Case Western Reserve University launched the first 2-year graduate

program in PT.[22,23] Physical therapists served throughout the war in Vietnam.[22,23] Medicare legislation was enacted in 1965, and what followed was a healthcare boom, which benefited PT.[22] In 1969, the first class of PT assistants graduated.[22,23] APTA employed its Political Action Committee to have an impact on legislation and ensure the profession continued to grow.[23] In 1973, the first PhD in PT was offered at New York University.[22,23] This era ended with a post-baccalaureate degree being the minimum standard for PT education.

Racialized persons who aspired to become physical therapists remained excluded until 1974. That is when the PT program at Howard University was established, the first at a Historically Black Colleges and Universities (HBCU) facility.[23] For the 41 years prior to this groundbreaking event, and despite the desegregation of undergraduate universities, there had not been many opportunities for racialized persons to receive PT education. Still, this was only one PT program in the entire US; therefore, most racialized persons were still excluded from educational opportunities in the field of PT. This exclusion was reported by APTA in 1983, noting concern for the lack of non-white representation in the profession.[23] Its Council on Minority Affairs worked to create and award the first minority scholarship in 1988, to compete with other medical fields supporting racialized students in their respected fields.[23,32]

Over the broad time frame of 1941 to 1993, we see overt racism transform to its contemporary mechanism—one of 'color blindness,' as time progresses through the civil rights era. Color blindness, the belief that discrimination does not occur based on skin color, allowed racism to become more surreptitious—where it remains today.[11] Structural racism asked the question, "How could there be racism or structural racism if there were laws against discrimination?" However, structural racism continued despite enacted laws as unintentional and intentional consequences of the white-dominated culture and politics.[16,33] If you know where to look, you can still see the structural inequalities that are commonplace today like mass incarceration, poverty, home ownership percentage and location, education, and healthcare access.

**Race as a social construct.** During this era, media outlets initially remained segregated and continued to portray Black Americans poorly.[34] Little had improved in the media's portrayal of racialized persons, and with desegregation over time, white media outlets still survived and thrived. In the late 1960's the Republican party used coded language in their infamous "Southern strategy" to win white voters in the south. Reagan created false narratives such as the Chicago Black "welfare queen" that the media propagated across the country.[11] Yes, fake news is probably just as old as politics. It was therefore no surprise when a 1990 survey found white Americans perceived Black Americans as lazy, less intelligent, less patriotic, and preferring welfare to work.[24] Many of these stereotypes were not new, but further entrenched biases of racial inferiority. This false stereotype likely led to greater exclusion of racialized persons in admissions to PT schools, and still might today.

**Interest Convergence.** This era was full of "interest convergence" between racialized communities and white Americans. Namely, this was in politics, with

Democrats working toward civil rights legislation to gain racialized voters. Another example was in housing. The Fair Housing Act outlawed housing discrimination in 1968. Instead of stopping exclusion, however, this legislation simply altered the method in which racialized persons were excluded. Racial steering, predatory lending, and other exclusionary methods became the norm—and continue to this day.[30]

The concept of racial hierarchy persisted beyond this decade due to the legacy of biased scientific racism that came out of the slave era and persisted during segregation. This socially-created hierarchy did not change with any laws being passed as social norms generally do not change from legal actions. During this era, racialized persons were still segregated and paid less than white Americans for the same work.[24,35] Then in 1947, the federal government passed the Taft-Hartley Act, giving more power to employers than employees. Unions also moved to exclude racialized persons from the union and their jobs.[24,30] This created a wage gap that has not been rectified today.[24] As previously mentioned, this wealth gap further excludes racialized persons from access to quality healthcare and education in PT.

Segregated hospital systems slowly became integrated as racialized persons were admitted at previously white-only hospitals. However, the loss of segregated hospitals led to a decline in the number of Black physicians, due to the loss of facilities in which to practice and train.[33] Then in the 1970s, the cost of healthcare skyrocketed, further reducing access for racialized persons.[24] We again note that in the US, the better your finances are, the less you are excluded from education and healthcare.

**Civil Rights Era Beneficiaries.** The civil rights era ushered in many new laws and actions meant to improve the liberties of marginalized and racialized people. However, these laws did not always produce their intended outcome, allowing for white Americans to become the major benefactors. For instance, Affirmative Action did not improve employment rates or wages as intended for racialized persons, but rather helped white women achieve greater employment rates.[24,33]

In 1956, the Federal-Aid Highway Act drove freeways through the poor areas of cities, more directly affecting racialized communities.[36] This led to the suburbanization of major US cities and "white flight." Suburban neighborhoods developed covenants that excluded racialized persons from purchasing houses within those communities. This occurred despite the ruling that outlawed redlining and other race-based housing discrimination in *Shelley v Kraemer (1948)*.[30]

**Legislation and Its Repercussions.** In 1949, the National Housing Act authorized urban redevelopment, which led developers to tear down parts of urban areas and rebuild. Ninety percent of the houses destroyed were not replaced, and two-thirds of those displaced were Black and Latinx Americans.[30] After World War II and the Korean War, racialized veterans could not take advantage of the GI Bill to assist with low-cost mortgages.[11,24] HBCUs also had to turn down veterans wanting to use the GI Bill. This was due to losing money on these loans, and HBCUs

were already among the poorest universities in the US.[24]

Several important civil rights rulings in the Supreme Court continued, with probably the most famous ruling in the 1954 case *Brown v The Board of Education of Topeka (BvB)*. Over the next decade, there were many attempts at desegregating schools that were met with resistance.[37] This also resulted in many racialized educators losing their jobs, and education was primarily taught by white Americans.[15] Later, *Milliken v Bradley (1974)* determined that suburbs would not be accountable for segregation in urban areas.[37] The decision prevented inter-district busing, making it impossible to integrate highly-segregated school districts.[37] Another legal precedent was set in *Regents of the University of California v Bakke (1978)*, in which the Supreme Court upheld Affirmative Action but invalidated the use of racial quotas.[38] This ruling continues to result in further exclusion of racialized persons in healthcare professions.[38] Then *Riddick v School Board of the City of Norfolk (1986)* allowed districts to dismantle their desegregation efforts once they were integrated.[37] Many of the other exclusions discussed in the previous paragraphs allowed white Americans to prosper financially and to increase their generational wealth via housing—which again excludes racialized persons from physical therapy as customers and aspiring clinicians.

## THE DOCTORATE OF PHYSICAL THERAPY AND WIDENING INEQUITIES (1993 TO PRESENT)

The healthcare boom of the previous decades, as well as an early foundation on research, led to 1993's first Doctorate of PT (DPT) class, begun at Creighton University.[22,23] Leaders within PT saw the benefit of the DPT degree in defining the profession and leveraging nationwide autonomous practice. However, after the Balanced Budget Act of 1997 passed, many physical therapists experienced an economic downturn for the next several years.[39] Finally, in the 1990's, APTA made further efforts to increase diversity and inclusion within the profession. The Clinton Administration issued the following report in 1998:

*As a result of the association's initiatives, there have been significant results: Minority membership has increased from 2% to more than 10% since 1990, the number of minority students in PT education programs has increased from 6% to more than 12%, and more minority members are now serving in leadership positions and on committees (11.5%) than at any other time.*[40]

Progress in PT continued into the next 2 decades. In 2000, APTA's House of Delegates passed the landmark mission, "Vision 2020."[23] By 2003, licensure was obtained in every state.[23] PT assistants sat for the first advanced proficiency exams in 2005 and the first PT residencies and fellowships were initiated. By 2016, "Vision 2020" had been achieved, with all physical therapy programs adopting a doctorate as the standard degree. As membership in APTA hit 100,000 members, the profession once again acknowledged a need to improve diversity, equity, and inclusion.[23] In 2018, the National Association of Black Physical Therapy was formed independently of APTA.[3*] In

[3*] We are aware of this fact as close friends and colleagues formed the NABPT

2020, the SARS-COVID-19 virus hit the US. Physical therapists were asked to provide rehabilitation on the front lines of the global health pandemic; this revealed many racial inequities.[1] Many of the advancements in the profession as well as rapid growth of PT schools may have led to further exclusion of racialized applicants, which we further address in the discussion.

**Continued Racism.** Concurrently during this era, racism continued unopposed. Laws passed and policing practices made it easier to lock up racialized persons using drugs, despite Black and white Americans using drugs at similar rates.[11] Black and Latinx Americans now make up nearly two-thirds of the prison population.[24,41] Locking up this many people tore Black and Latinx communities apart financially, resulting in less homeownership, and poorly-funded education.[24] Increased prison expansion left fewer federal dollars allocated to public education, healthcare, and public sector employment, which in turn affected racialized communities greater.[24]

Taking money out of schools but funding police officers in those schools allowed for the criminalization of racialized communities.[24] This had a cyclical effect on these communities and has become known as the "school-to-prison pipeline."[24] Students who have darker skin and act out are more likely to be arrested in school compared to those with lighter skin who have the same behavioral issues.[33] In 1995, a researcher reported he used Black Americans as subjects for radiation research because they, "don't have any money, and they're Black, and poorly washed."[17] This and other racially-biased research influences US healthcare to this day.

Recently, an interest in improving racism and racist structures has once again seemed to align purely with a political cause. News sources used the phrase "Black Lives Matter" less than half as frequently between 2017-2019 as compared to 2014-2016 when it was created.[42] A few positive and mostly symbolic changes have come in the form of changing public symbols, such as: removing monuments to confederate soldiers, the Mississippi state flag, and Army barracks names. However, the push for improving racial equality has been dropped from the media following the election of Joseph R. Biden.

Gentrification continues to negatively affect racialized communities in urban areas across the country, which leads to increased segregated housing.[43] This results in US schools trending back toward segregation.[28,44] This is a direct effect of the failure to enforce fair housing practices, as racial steering still occurs.[28,30,44,45] In segregated white American communities, this leads to less empathy for racialized groups.[46] Even in schools with greater diversity, racial biases persist. For example, greater numbers of white children are in advanced programs compared to other racialized persons with similar test scores.[46]

The American Jobs Act in 2011 and the Lilly Ledbetter Fair Pay Act helped Black Americans close the unemployment gap, but not the wage gap. In 2019, the pay rate for Black Americans had increased; however, the pay rate gap compared to white Americans was worse that year than it was in 2000.[47] Real estate ownership has long been a way to accumulate generational wealth, which in part leads to the wealth

gap disparity seen between racial groups.[48] There is roughly a gap of 30% in home ownership with white Americans owning a higher portion, but white Americans' home valuation is also roughly $100,000 more.[48] The data is even more lopsided when you compare white Americans with Latinx Americans.[48] If these disparities in wealth continue at the same rate, it would take Black American families 228 years to amass the wealth of the average white American family today; and it would take a Latinx American family another 84 years.[33]

# Discussion

In this article, we have provided a historical framework of structural racism that excludes racialized persons in the US. We juxtaposed the development of PT with historical events and briefly discussed the connections leading to exclusion of racialized persons in the US and in healthcare. Structural racism affects the health of individuals oppressed through exclusion.

We employed CRT, which highlights the causes of structural racism and seeks equality for racialized persons, to frame how laws marginalize people of color.[3] In our article, we have discussed ways in which laws have led to exclusion in housing, finances, education, and other social determinants of health for racialized persons. We used 5 tenets from CRT to outline how racialized persons have been excluded from PT. Our narrative is the first to explore this exclusion of racialized persons from PT in the US, but it is similar to other literature regarding healthcare in Canada.[2]

## RACISM IS NORMALIZED WITHIN THE US AND NOT ABERRATIONAL

Overall, our article demonstrates consistent racism in the form of structural oppression to which all citizens of the US have become accustomed. The practice of colorblind racism started in the 1960's to create the illusion that individuals and institutions were not being racist and has led to greater racial inequities today.[12] Racism has become normalized or ordinary and is a daily occurrence for racialized persons.[21]

**Educational Inequities.** One example is in many PT programs' admissions policies. Colorblind policies only consider grades; these, however, are not unbiased in a school system where racialized persons enter behind most white Americans and are discriminated against within the system.[21] Even standardized test scores have been proven biased.[49,50] These structures lead to greater exclusion of racialized persons during admissions processes.

Another such norm in the US that leads to exclusion of racialized persons, is meritocracy. Financial inequality comes out of structural and institutional practices affecting racialized persons in the US. The allotment of grant and scholarship funds based on merit within PT is likely inequitable. When generational wealth and household income are lower, students may have to work to help their families, or to put themselves through school. It is hard to rise to the top based on skills, grades, abilities, and efforts when someone must work to support self or family. Other students with higher socioeconomic status can spend more time studying and volunteering. This affects

racialized persons negatively on admissions applications and for scholarships. Therefore, the majority of scholarships that are based on merit continue to create a widening opportunity gap between white Americans and racialized persons. We need to create new, need-based scholarships and other equitable ways to decrease the cost of obtaining a DPT degree.

## INTEREST CONVERGEENCE

**Needed Changes in the PT Profession.** Structural racism helps to keep white Americans atop the power heirarcy.[3] As we noted previously, the only time white Americans seem to act in support of racialized persons is when the cause is mutually beneficial. Hartlep notes that white Americans are at the top of the social hierarchy in the US, and if they sought to help racialized persons with no personal gain, it would feel like they were being oppressed.[21] Historically, interest convergence regarding racism has largely occured when politicians try to appease riots or get re-elected, or when other groups seek legislative changes, such as women's suffrage or persons with disabilities.[21]

Currently in PT, there is a push to increase the number of racialized persons in the profession.[51] We also saw this in the 1980's through 1998 due to interest convergence. However, after the goal of increasing the number of racialized persons in the profession was met in the 1980s and 1990s, the PT profession lost sight of sustaining that goal. For some reason (eg, focusing on the repercussions of the Balanced Budget Act of 1997, or the increased push for colorblindness in this era), the profession lost focus in maintaining a continued goal of making the profession more accessible to racialized persons. Now, we may be in a worse situation than we were in the 1990's when looking at the diversity of the profession.[5]

Racial representation matters for improving quality care in underserved communities; therefore, PT needs to change.[52,53] This change takes time but needs to start now if there is any hope of making improvements by the next decade. We must address other issues of exclusion and dismantle the institutional racism still within PT. Otherwise, it's like putting a band-aid on a pressure ulcer and then putting pressure back on the wound. The medical profession is succeeding in changing their admissions, where now roughly half of those admitted into medical schools are racialized persons.[54] In 2008, Black physicians comprised only 2.2% of the physicians in the US, which was lower than the rate in 1910 at 2.5%.[26] Admissions to medical schools over the last 5 years have increased in the number of racialized persons admitted as well as achieving equal gender representation in their admissions.[54] These students who identify as racialized now make up slightly more than half of medical school admissions across the country.[54] Why are PT programs, whose white Americans make up 70% of total admission,[55] slow to react to these changes and keep up with the rest of the medical field?

**PT Education Challenges.** Exclusion of racialized persons admitted to PT programs also stems from systemic racism's structure of the public education system. Where racialized persons live is currently becoming increasingly segregated. Historical trends have led to poorer housing values where property taxes fund the local public schools.[33] Therefore, the school systems in racialized ZIP Codes are less well-funded. Less funding results in greater turnover of teachers and thus lower-quality and disjointed education.[33] Before

entering the public school system, white children whose parents can afford preschools or childcare are ahead of many Black students.[33] It is no wonder that there are direct correlations between socioeconomic status and standardized testing scores, including the Graduate Record Examinations.[49,50] Students with lower standardized testing scores can become great physical therapists, but may need financial and other support structures.

Since the Clinton administration, admissions of racialized persons to PT school have increased from 12% to roughly 30% and continue to slowly trend upward.[40,55] This is thankfully the case despite moving all schools to a doctorate program, which causes greater financial commitment and strain on racialized persons compared to the average white American. There is, however, even greater exclusion of racialized persons when we compare the statistics of applicants compared to those accepted into DPT programs. In 2018-2019, 65.2% of applicants identified as white Americans and 32.7% identified as racialized persons.[55] A greater percentage of white Americans were accepted into PT school, whereas racialized persons were excluded further (acceptance rates of 70.6% and 27.25% respectively, worse if you analyze specific racial demographics).[55] This likely stems from racial bias in the admissions process stemming from structural oppression. Part of the problem may have been the rapid expansion in the total number of PT programs in the US without having a greater commitment from the professional body of PT to address this disparity. The ruling in *Regents of the University of California v Bakke (1978)*[38] further complicates this issue. However, there are still ways PT programs can assess and improve their admissions processes.

Further exclusion happens once racialized persons are in PT school. Black PT students make up to 70% of the attrition rate from DPT programs.[5] Individual institutions need to recognize the barriers of getting into graduate school, challenges within school, value diversity to drive the profession forward and meet the needs of society and address all barriers for racialized consumers. The profession and individual institutions can and need to do more, now.

## SOCIAL CONSTRUCTION OF RACE

Science has, many times over, disproven that race can be defined genetically.[9] This is evident in how the concept of race has changed over time to fit the needs of racism.[10,11] Consider the example of someone who was defined by the "one drop rule."[21] This rule stated that if there was any lineage of non-white ancestry (even "one drop") it tainted that person's whiteness, and they were identified as the "inferior" non-white race. Historically, this social construction of race has led to many disparities in housing, wealth, education, and health, as we have detailed herein.

**Ongoing Financial Barriers.** The consequences of the many past actions in the US based on socially-defined race have made academic, hiring, and treatment practices exclusionary in PT. One reason consumers of PT are excluded is due to structural racism's impact on finances. In the second quarter of 2020, the insurance market in the US made a profit of more than $12 billion.[56] Today's average monthly cost of insurance is $413.34.[57] Families of low socioeconomic status or who are unemployed have to choose between paying for rent, food, or medical

expenses.[12,58] Most need to travel to their medical appointments, which costs more money.[58]

Medicare and Medicaid recipients bring additional complexity to this topic. In a recent report people with Medicare were found to be 2 times less likely to attend their first PT session, and those with Medicaid were 5 times less likely to attend, compared to private insurance recipients.[58] More white Americans are likely to have Medicare, and racialized persons are more likely to have Medicaid.[59,60] Black and Latinx Americans are less likely to discharge from the hospital to a rehab facility[61] and have worse outcomes at every level of rehabilitation.[19,20] The passing of the Affordable Care Act in 2010 led to significantly improved access to insurance for Latinx and Black Americans.[62,63] This also led to an increase in PT utilization from the lower middle class around the same time.[18] However, this law is under attack, which would again exclude more racialized persons from accessing healthcare.

**Dangers to Health and Wellbeing.** Exclusion of racialized persons within a healthcare system also persists due to the legacy of racism—specifically, the 'superiority and inferiority' beliefs. We highlighted studies showing racial bias and overt racism. There has been a large amount of racist research persisting into the 1990s.[16] This is reflected in current research that shows current medical students still hold the false belief that Black Americans have higher pain tolerances.[17,64,65] Not all blame for distrust of the medical community can be placed on historical events such as the Tuskegee syphilis study, as Black Americans and other racialized persons still experience discrimination and abuse within the field daily.[17,66,67] Black Americans and other racialized persons receive fewer pain medications for terminal cancer and undergo higher rates of amputation and other invasive procedures.[17,33,66,68]

While racial biases are becoming more well-documented in the medical field, they are not yet as clearly defined in PT. We do know that discrimination leads to higher stress, premature aging, and death.[33] In terms of PT, it may result in higher levels of disability. Explicit and implicit racial biases continue to propagate discriminatory practices within the PT field. If the profession of PT is truly investigating how we can transform society, then we need to address all areas of health, including ending discriminatory practices, as they lead to limited or inadequate access to healthcare. As stated previously, discrimination has a negative impact on social determinants of health, which in turn will lead to poorer outcomes.

## STORYTELLING AND COUNTER STORYTELLING

History in general is told and recorded from the dominant perspective. This was the Eurocentric philosophy through generations. Not until recently have US historians accepted storytelling from marginalized perspectives as legitimate sources. Our narrative overall highlighted a counter story narrative to typical history textbooks. It is also important to note that the media plays a large role in creating a white-focused narrative. Only when it suits the media, when there is interest convergence, do we typically see counter storytelling in mainstream media.

Research is just starting to illuminate the stories of

racialized persons within PT programs. Hughes et al[3] interviewed racialized students and former students and found several themes. Some of the themes uncovered were the following: 1) the PT program's centering on whiteness as the norm; 2) the connectedness of personally-mediated and institutional racism; 3) white oblivion to the experiences of racialized persons at all levels of PT education; 4) the harmful impact of the cumulative effect on racialized students of existing in an environment invisible to white faculty; and 5) the necessity to adapt survival strategies against the racism within the program.[3] Ultimately, these themes lead to the exclusion of racialized persons within PT programs.

Recently, the APTA House of Delegates adopted a new professional value of inclusivity and moved to declare that APTA is an anti-racist organization. This came through storytelling during the HOD caucus. Both actions are important for the profession to move forward. Without storytelling, the vote would not have passed. The only way to get rid of racism is to be anti-racist.[11] As previously mentioned, being colorblind or adopting a passive stance is a win for racism. Continuing to listen to racialized persons is an important value that needs to be valued more.

## WHITE AMERICANS HAVE BEEN THE BENEFICIARIES OF CIVIL RIGHTS LEGISLATION

Structural racism is cemented in the laws and judicial rulings of the US. Throughout history, white Americans have received the most benefit from civil rights legislation.[21] This is well established with the GI bill, Affirmative Action, and the Affordable Care Act. Although mild improvements were made throughout history regarding healthcare access for racialized persons, over time, racism adapts to find ways to exclude these people again.[21] As aforementioned, the Affordable Care Act helped both white Americans and racialized persons gain better access to healthcare.[62,63] Now structural racism via political means once again adapts and looks for ways to attack this improvement in access.

*The BvB ruling* was eventually a win for white Americans, especially with the following rulings such as *Millikin vs Bradly*. If you scrutinize the history following this Supreme Court decision, it took time to integrate racialized persons into white schools. For example, in 1956, an entire public school district shut its doors and all the white students went to private school, but Black students in that district did not have any options for school for 5 years.[69] Examining the history of redlining, white flight, covenants, and racial steering demonstrates why urban schools were more segregated and had greater financial concerns. Another result of *BvB* is the loss of racialized teachers. Jobs in desegregated schools went in favor of white Americans.[33] This may have led to the curriculum never being integrated, which upheld the principles of white-centered structural racism.

Also, desegregation will not be the only action needed to solve this issue and may not be the solution for all school districts. Funding in neighborhoods remains a large part of the issue due to home price inequality.[43] This has again been a win of structural racism over time, despite civil rights legislation. This is similar to what we see when redlining was made illegal, and the legal ruling did not stop racial segregation.[44] Neighborhoods are more segregated now than they have been in the past.[70] If the ruling against redlining

was a win for racialized persons, then you would not still see so many segregated neighborhoods. "Racism is illegal, so it does not happen" is the argument still heard today. This segregation benefits white Americans through greater generational wealth building and better educational systems placing them at the top of the power hierarchy in the US.[70]

### LIMITATIONS

As we conclude, we note that this article has several limitations. This is not an absolute or complete history of either the US, PT, or structural racism. We acknowledge our own positionality in writing this article and realize that racism is not the only form of oppression in the US. Therefore, this article may not adequately reflect or capture the experiences and intersectionality of all oppressed or disadvantaged persons within the US. We also recognize that other frameworks exist that may offer additional viewpoints such as post-colonialism or viewing US society as a class or caste system.[33]

## Summary and Conclusion

The development of PT in the US has been influenced by the structures put in place to oppress racialized persons. As demonstrated in this article, structural racism shapes exclusion of racialized persons from all levels of PT.[4,12] This is consistent with other previous reports demonstrating exclusion from PT in the US.[16] As Washington states, the history of the US:

*"race, culture, and economics have trumped medical and scientific truths at every turn...not because [physicians] were especially racist or unfair, although many were, but because the culture of American medicine has mirrored the larger culture."*[17]

Racism has been a powerful force throughout history in the US. At every turn when small progress was made, structural racism adapted. It is important that we get a better understanding of why and how this adaptation and return to the status quo occurs seemingly instantaneously with any progress that is made. As the PT profession continues to strive to become autonomous practitioners of choice, we must not only be able to self-reflect on our actions, but also be courageous enough to ask tough questions in our individual areas about how we move forward. Is it curriculum changes, policy changes within organizations, changes to standardized tests, or changes to admissions practices? We must acknowledge that racism does not just operate overtly, but rather, it is all around us.[15,16] Racism is not the shark, it is the polluted water that engulfs us.[3] Radical dismantling of the structures in place is needed to truly make lasting change.[4,21]

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