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Racism and sexism in access to physical activity: breaking down (in)visible barriers throughout life

Racismo e sexismo no acesso à atividade física: desvendando as barreiras (in)visíveis ao longo da vida

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ABSTRACT

Introduction: It is estimated that half of the Brazilian population does not reach the minimum recommended levels of weekly physical activity (PA). Although the relationship between PA and health has been widely explored, few studies analyze how racial, gender, and socioeconomic barriers interact intersectionally in shaping access to and adherence to PA throughout life. Objective: This study discusses how structural racism, sexism, and necropolitical devices, under an intersectional perspective, impact the prevalence of physical inactivity and the unequal access to bodily practices among the Black Brazilian population. Development: Levels of PA are understood here as expressions of the historical and social inequalities that shape bodily experiences and movement. Structural racism, articulated with sexism and income barriers, restricts access among Black populations, especially women, to spaces and opportunities for self- care. These visible and invisible barriers reveal how PA also reflects power dynamics that devalue certain bodies and territories. Thus, this study reaffirms the urgency of rethinking corporeality and movement as political dimensions of life and health, beyond their instrumentalization for productivity and economic purposes. Final considerations: Low levels of PA should be understood as a direct outcome of the intersections between racism and sexism, which shape unequal access to bodily practices and the right to movement. The study calls for the strengthening of anti-racist and decolonial policies and research that integrate critical theories, such as intersectionality, whiteness, and necropolitics, into the promotion of PA and physical literacy, ensuring a universal and equitable right to an active life.

Keywords: Structural racism; Social inequality; Physical inactivity; Mental health.

RESUMO

Introdução: Estima-se que metade da população brasileira não atinja os níveis mínimos de atividade física (AF) semanal. Embora a relação entre AF e saúde seja amplamente explorada, poucos estudos analisam como barreiras raciais, de gênero e socioeconômicas interagem de forma interseccional na conformação do acesso e da adesão à prática de AF durante a vida. Objetivo: Este estudo discute como o racismo estrutural, o sexismo e os dispositivos de necropolítica, sob uma perspectiva interseccional, impactam a prevalência de inatividade física e o acesso desigual a práticas corporais na população negra brasileira. Desenvolvimento: Os níveis de AF são compreendidos como expressão das desigualdades históricas e sociais que atravessam o corpo e o movimento. O racismo estrutural, articulado ao sexismo e às barreiras de renda, restringe o acesso da população negra, especialmente das mulheres, a espaços e oportunidades de cuidado corporal. Essas barreiras, visíveis e invisíveis, revelam como a AF reflete dinâmicas de poder que desvalorizam determinados corpos e territórios. Reafirma-se, assim, a urgência de repensar a corporeidade e o movimento como dimensões políticas da vida e da saúde, para além de sua instrumentalização produtivista. Considerações finais: Baixos níveis de AF devem ser compreendidos como produto direto das intersecções entre racismo e sexismo, que moldam o acesso desigual às práticas corporais e ao direito ao movimento. Propõe-se o fortalecimento de políticas e pesquisas antirracistas e decoloniais que integrem teorias críticas, como interseccionalidade, branquitude e necropolítica, à promoção da AF e ao letramento corporal, assegurando o direito universal e equitativo à vida ativa.

Palavras-chave: *Racismo estrutural; Desigualdade social; Inatividade física; Saúde mental.*

Introduction

Physical inactivity is a significant modifiable risk factor for physical and mental conditions, such as depression and anxiety. For example, it was found that inactive individuals are 47% more likely to experience suicidal ideation and 23% more likely to attempt suicide compared to those with an active lifestyle, particularly women and adolescents[1]. According to a recent meta-analysis by Stephan et al.[2], physical inactivity is the fourth largest modifiable risk factor for demen-

tia, along with low education level, hypertension, and hearing loss. Luo et al.[3] reported that global deaths due to cardiovascular diseases, which include physical inactivity among their risk factors, increased from 371,042 in 1990 to 639,174 in 2019. According to the authors, this impact appears to be greater in women and in the older population (80-84 years of age). Therefore, it is necessary to consider that barriers to access to physical activity (PA) also represent barriers to access to health and, in this way, are responsible for promoting a decrease in the life expectancy of the population.

Despite recognition of the importance of maintaining a physically active routine for physical and mental health, the majority of the world's population remains insufficiently active[4]; approximately 27.5% of adults, 80% of adolescents, and 70% of women worldwide are considered physically inactive[5,6]. Among the barriers to PA in Brazil, income inequality is a significant factor, as approximately 65% of the low-income population does not achieve sufficient levels of weekly PA[7,8]. Race/ethnicity is another factor to consider, given that, compared to white people, black people are 22% less likely to engage in regular PA. When social factors are considered together, black women who are poor and have lower levels of education are 18.8% less likely to be classified as physically active, compared to more privileged groups[4]. Personal barriers, such as lack of time and prior experience, as well as social barriers, such as social support and perception of safety, are also important factors related to physical inactivity.

These data indicate that the practice of PA in Brazil is strongly influenced by socioeconomic, racial, gender, and territorial barriers, which limit access to healthy habits for different groups. Structural racism, sexism, and urban violence are some of the factors responsible for restricting the participation of marginalized groups, such as the black population and women, in the regular practice of physical activity. Access to safe spaces for PA is limited, given that the majority of the black population is concentrated in the peripheral areas and favelas of the country. Time for leisure activities is also reduced in these groups, considering commuting time to work and daily working hours, when compared to white men[9]. Furthermore, women experience the phenomenon of the double shift, in which, during the day, they are required to work, as well as perform household chores and family care. Black women, in particular, who are also the largest users of public transportation in Brazilian metropolitan areas, dedicate more than twice the weekly time to unpaid domestic and care work compared to men. In this sense, it is necessary to recognize that the successful promotion of public policies for PA must address the construction of healthy habits from the perspective of access to fundamental rights such as health, security, income, and leisure. Furthermore, the roles that race/ethnicity and gender markers play in this relationship should also be questioned.

In this sense, it is important to highlight the difference between PA, physical exercise, and sedentary behavior. PA is defined as any bodily movement produced by skeletal muscles that results in energy expenditure above resting levels, encompassing everyday actions such as walking, performing household chores, or work tasks[10]. Physical exercise, in turn, constitutes a subcategory of PA characterized by intentionality, planning, structuring, and repetition, with the goal of improving or maintaining one or more components of physical fitness, such as strength, endurance, and flexibility[10]. In contrast, sedentary behavior refers to waking activities performed in a seated, reclining, or lying position, associated with low energy expenditure, typically less than 1.5 METs[10]. The lack of studies that comprehensively address the themes of PA, gender disparity, and race/ethnicity is a limiting factor in understanding the social and cultural impacts on physical practices. Although the relationship between PA and health has been widely explored, few studies investigate how structural racism and the presence of other social inequities can influence access to, participation in, and the practice of PA for these individuals.

This invisibility prevents deeper analysis of the barriers faced and the implementation of public policies that promote equity in PA practices. Thus, this study aims, through a narrative review, to discuss the relationship between structural racism, sexism, intersectionality, and necropolitical practices and active lifestyles in the Black Brazilian population throughout their lives. Despite the relevance of investigating sedentary behavior, the current study prioritized the relationship between intersectionality and levels of PA.

Study development

Guiding concepts

What is structural racism?

According to the concept proposed by Silvio Almeida[11], structural racism can be defined as a historical and political process in which the conditions of subordination

or privilege of racialized subjects are naturalized and structurally reproduced. Thus, according to the author, racism is deeply rooted in our institutions, being present in all spheres of society, from the education system to the job market, politics, and public services, such as health and security. Therefore, PA, within the context of structural racism, can be seen as yet another sphere in which racial inequalities manifest themselves. Access to PA in Brazil, for example, is not distributed equitably, and the Black and poor population, often marginalized, faces barriers that prevent their full participation[9,12]. Inequalities in access to leisure and sports spaces, the lack of public policies aimed at inclusion, and the difficulty in accessing resources for PA, such as gyms or community programs, reflect the social and economic exclusion that characterizes structural racism[11].

Thus, the practice of PA becomes a manifestation of structural inequalities, where, on the one hand, those who have access to these spaces benefit and can more easily maintain a healthy lifestyle, while, on the other hand, those historically marginalized are prevented from enjoying its benefits, either due to lack of income or an adequate space. Here, it becomes important to understand the other side of the racial apparatus, which is the concept of whiteness[13]. Defined as a concept that explains white racial identity and the privileges this population has in societies structured by racism, whiteness is a set of expectations, behaviors, and practices that reinforce white hegemony and racism[13]. It is also linked to a lack of commitment to racial issues and a desire to maintain the status quo, in which racial inequality is naturalized and made invisible. Therefore, highlighting the concept of whiteness is to remember the existence of an absence of neutrality, in which the white Brazilian subject commonly constructs their identity. It is important to remember the need to deconstruct the pact of whiteness, described by Cida Bento as "an unspoken agreement aimed at preserving the privileges of the white population," and to highlight its importance in promoting equity in access to health and a healthy lifestyle[13].

What is intersectionality?

A joint analysis of other social markers, such as gender and access to income, is essential for the formulation of public policies aimed at access to PA and the promotion of a healthy lifestyle in Brazil, since structural inequalities related to these categories directly impact access to them. Intersectionality, a term coined by Kimberlé Crenshaw and explored in Brazil by researchers such as Carla Akotirene and Djamilla Ribeiro, is defined as the interaction/overlapping of social factors that define a person's identity and that can impact their relationship with society and their access to rights[14,15]. When we examine the main barriers to PA, such as lack of time and fear of violence, through the lens of intersectionality, we find that the underlying causes may not be the same when considering gender and race/ethnicity. In a country where two rapes are reported every minute[16] and which has the fifth highest rate of femicide in the world[17], fear will be a particularly important factor for women. When considering race/ethnicity, the violence experienced by black men and women in this country, which has high rates of police violence against this population, means that a simple errand can mean risking their own lives. Ray[18], evaluating an American cohort, reported that one of the main barriers for black men to engage in PA in their neighborhoods is the stereotypes that associate these individuals with criminality; this barrier was observed mainly when they lived in predominantly white neighborhoods. For black women, these barriers were compounded by the experience of fear of sexual violence. However, specific studies on the Brazilian population are still lacking.

Approaches to promoting PA among the Brazilian population need to consider intersectional data in order to develop strategies specific to each group[19]. Regarding the barrier to PA related to lack of time, black people have a heavier workload and a longer commute time around the city[20].

The intersection of racism, sexism, and poverty levels has a significant impact on access to PA and the maintenance of a healthy lifestyle, especially in the Brazilian context, where these structural social dynamics create deep and multifaceted inequalities. Structural racism and sexism contribute to the marginalization of black women and women from marginalized communities, limiting their access to adequate spaces for PA, as well as perpetuating barriers such as racial and gender discrimination, lack of quality infrastructure, and the normalization of inequality in access to leisure and health. These difficulties are not limited to physical access to these spaces but also manifest themselves in social representations that associate black bodies, especially female bodies, with stigmas of inadequacy or marginalization in sports and healthcare contexts. Some qualitative studies have explored this relationship between the control of bodies, from a Foucauldian

perspective of biopower, and its connection to the stigmas of active/healthy lifestyles[21], primarily with regard to promoting individual guilt and imagery of the bodies to which movement may be permitted.

Recently, Paiva et al.[22], when evaluating the PA profile of the Brazilian population from an intersectional perspective using the Surveillance of Risk and Protective Factors for Chronic Diseases by Telephone Survey (*Vigilância de Fatores de Risco e Proteção para Doenças Crônicas por Inquérito Telefônico* - Vigitel) database, which has 225,282 participants, it is demonstrated that the group of black women is the least engaged in leisure-time PA (6.3%). However, when analyzing data on PA levels related to domestic tasks and heavy work, black men and women had percentages of 21.3% and 17%, respectively, while for the group of white men and women, these values were 12% and 10.5%. It is worth noting that studies indicate that this type of PA is also associated with the presence of depressive symptoms[23,24]. One possible cause could be the stress inherent in these activities.

What is necropolitics?

Necropolitics, a concept developed by Achille Mbembe, expands upon the concept of biopower, highlighting that vulnerable bodies are not only subject to limitations in space and practices, but that, under the tutelage of the State, their right to exist is also restricted[20,25]. Necropolitics refers to the control of life and death exercised by the State over vulnerable populations, such as black, indigenous, and marginalized people, and is intrinsically linked to how public policies in Brazil, particularly in the areas of health, security, and leisure, neglect these groups, hindering their access to PA and health services[11].

This dynamic of exclusion and violence, coupled with the criminalization of black youth and the lack of investment in public welfare policies, compromises the conditions necessary for these populations to adopt healthy lifestyles. In this sense, the formulation of inclusive public policies that integrate the fight against gender and racial oppression is essential to guarantee equitable access to PA and health promotion. This requires the creation of safe spaces, overcoming social stigmas surrounding black and female bodies, and the implementation of health and sports programs that consider the specificities of these groups, with an approach that recognizes the multiple dimensions of their experiences of oppression and resistance.

According to Achille Mbembe[25], the way out for a society in which race/ethnicity is placed as fundamental also involves a movement of "leaving the dark night," that is, a deconstruction of European epistemology, on which not only our histories, but also the way we approach health, leisure, and education is based. This movement of deconstruction has already been proposed in the field of mental health, through Quilombismo – a theory that highlights the importance of building territories, whether physical or not, that enable the creation of devices of freedom and non-hierarchical relationships – and disorientation – a theory that invites us to disorient ourselves, shifting our attention to other forms of knowledge beyond European geopolitics.

Some studies in the field of PA already highlight the importance of this decolonization and the break with the epidemiological knowledge of the Global North, so that we can advance in our understanding of the relationships between PA and health in the Brazilian population. The goal is to generate reflection that is not tied to the perspective of risk factors, but rather that listens to the demands of the populations and contributes to overcoming the inequities to which they are exposed[26].

We propose extending this concept of disorientation beyond research, as a practice in which we can think about new possibilities for movement beyond the individualistic medical discourse. A movement that rethinks the possibility of connecting with our bodies and our history. The use of bodily practices and cultural expressions such as jongo and capoeira can serve as an instrument for engaging in PA in the school context and improving executive functions[27]. Expanding this strategy could also be a good alternative for increasing active behavior in the general population, due to the greater possibility of promoting an environment in which motivators for behavior change, such as intrinsic motivation and identified regulation, are present[28,29].

Finally, it is important to emphasize that these movements of leaving the dark night, disorientation, and Quilombo formation also enable profound changes, such as the creation of communities open to the production of new relationships. In these places, perhaps it is possible to reshape a society and a way of life that promotes the construction of life reserves, in which the body is more than a machine or an object. Bodily movement is our way of feeling, experiencing, transforming, and connecting with others, with the environment, and with ourselves.

Thus, to understand more deeply the relationship between racism, necropolitics, intersectionality, and PA, it is necessary to situate the debate within the historical context of oppressions in Brazil and the racial dynamics that structure the unequal distribution of opportunities, spaces, and social recognition.

Historical contextualization

Brazil has the largest black population outside of Africa and was the last country in the Americas to abolish slavery. Its post-abolition trajectory reveals a lack of reparative measures capable of guaranteeing the full integration of the black population, while state and social actions proliferated, intensifying their criminalization, exclusion, and vulnerability[11]. Brazilian laws, for example, were riddled with artifices, such as the law against vagrancy and traditional medicine[30], always supported by the theories of Brazilian hygienist medicine of the time, which "scientifically" affirmed the existence of an inferiority (physical and moral) and dangerousness present in the phenotype and genetics of black people[31].

This is a story about a behavior that Brazil carries to this day. Structural racism manifests itself through our statistics, such as income, employment, education, violence, and health[32]. According to data from the 2022 National Household Sample Survey, the average household income of the white population is almost twice as high as that of the black and mixed-race/ethnicity populations. These data are even more disparate when viewed through a gender lens[32] . The black population also presents higher rates of illiteracy (Whites = 3.4%, Blacks = 7.4%) and mortality due to violence[19,32]. In the field of health, these disparities were revealed by a recent epidemiological bulletin (2023) released by the Ministry of Health, which reported lower vaccination rates, especially in relation to covid-19, a higher prevalence of HIV and tuberculosis, and higher maternal mortality in the black population[33]. Malta et al.[34] when creating an overview of chronic non-communicable diseases in Brazil, a higher prevalence was identified among women, older adults, people of black or mixed race/ethnicity, those who are illiterate or have incomplete primary education, and those who do not have health insurance. Studies also demonstrate an association between ethnicity and poorer mental health, with the black population having a higher prevalence of mental disorders such as anxiety, depression, and dementia. Recent data from the Ministry of Health also draws our attention to the growing prevalence of suicide rates among young black people in Brazil[33].

The aforementioned data demonstrate the need to broaden the discussion about racism and understand how racial prejudice can interact with other aspects of a person's identity, such as gender, sexual orientation, income, and age, increasing their social vulnerability. The World Health Organization draws our attention to the concept of health inequity, which refers to unfair and avoidable inequalities in health, promoted by the social conditions of the environment in which an individual lives. Among these, we can highlight inequalities related to income, gender, and race/ethnicity[35]. The idea of health inequity leads us to reflect on how race/ethnicity, gender, social class, and other identity dimensions interact in complex ways, intensifying health inequalities. Physical inactivity, when viewed from this perspective, is not merely an individual issue but a direct consequence of a system that marginalizes the most vulnerable populations and fails to guarantee equal opportunities in accessing a healthy lifestyle.

Racism, coupled with poverty and limited access to education and care, produces a cycle of exclusion that directly impacts the health of the black population. In the capitalist/neoliberal context, this process intensifies due to the weakening of the State and the privatization of essential services, such as healthcare. Thus, capitalism not only exploits the labor of the most vulnerable groups but also deepens the precariousness of their living conditions, reflected in the difficulty of accessing medical care and maintaining a healthy lifestyle, both marked by structures of racial oppression. In this sense, the philosopher Achille Mbembe[25] reflects how neoliberalism and biopower work with mechanisms for controlling bodies, not only with the idea of their use as a machine of labor, but with power structures capable of determining who should live and who should be left to die, mainly through precarious employment and the absence of public policies. The black population is at the center of this dynamic, being exposed to high mortality rates due to systematic exclusion from healthcare resources, police violence, and poverty. Therefore, it is possible to affirm that inequalities in access to education, work, and health—including PA—are not merely issues of a lack of infrastructure, but also a legacy of racial and social marginalization.

So, what do all these concepts have to do with access to physical activity?

Understanding PA from the perspective of structural

racism, intersectionality, and necropolitics shifts the focus from individual behavior to the historical and sociopolitical conditions that shape access to movement and body care. These references demonstrate that the black body, especially the black female body, faces not only material exclusions but also symbolic ones, which limit its legitimacy in public spaces and its possibilities for existence in movement. Thus, behaviors such as active/healthy lifestyles cannot be interpreted in isolation, but as expressions of racial and gender inequities that permeate the entire course of life (Figure 1). Unequal access to PA therefore emerges as a marker of the structural inequalities that define who can enjoy care, leisure, and, ultimately, the very right to life.

Access to physical activity in childhood and adolescence

The development of children and adolescents can be affected by the absence of quality PA in the school environment, generating long-term consequences[36–38]. A lack of PA is linked to poorer academic performance, reduced concentration, and a higher incidence of chronic diseases[38-40]. Data from the Basic Education School Census and the Socioeconomic Level Index (2021) show that 69% of schools with the best infrastructure in Brazil are predominantly white. The same census found that 50% of schools with a majority of black students lack sports courts, libraries, and computer laboratories[41]. These data highlight structural inequality in the school environment, particularly in Physical Education classes. Based on IBGE data, and considering the profiles of girls, black students, and public school students, we see a lower total time spent actively participating in Physical Education compared to boys[42,43].

In addition to resource scarcity and socioeconomic inequality, aspects that are very important for the learning and academic performance of young people and adolescents are neglected[44]. In this sense, Ribeiro et al.[44] highlight the role of PA, sleep, and nutrition as the main bottlenecks in learning. According to the authors, for a good educational process, the school needs to offer time for PA and meals, and opportunities for sleep/naps; the findings also emphasize how limited these resources are in environments of extreme poverty. Based on the theory proposed by Angela Davis, in which race/ethnicity indicates class[9], and applying this to the Brazilian context, we find that income data and data on families in vulnerable situations confirm this theory, indicating that black families have the lowest incomes, especially those headed by black women[9,12] (for example, data indicate that 51% of these families experience some level of food insecurity[12]). We can try to advance the understanding of how much these factors hinder learning and serve as a social limitation for black children and adolescents. Therefore, the Brazilian school of the future needs to look to the past and transform the present, through actions whose foundations are anti-racist.

During childhood and adolescence, physical inactivity is associated with obesity, heart disease, and a higher prevalence of mental health disorders[45]. Several studies have pointed to an association between obesity, low levels of PA, and depression in Black American and Latino children and adolescents[45]. It is known that in Brazil the risk of suicide among young black people is almost 50% higher compared to young white people, and research also indicates a higher prevalence of obesity in this same group. The impact of the absence of PA during this period can also be observed in the profile of active behavior throughout life, since physical literacy promotes competence, confidence, and motivation for the individual to remain physically active throughout life[46] (as demonstrated in Figure 1). In this sense, black girls face the impact of the intersectionality between racism and sexism on sports opportunities, perpetuating these inequalities[40,47]. Implementing programs to encourage increased PA in schools can increase youth participation by up to 30%, especially among historically marginalized groups[48]. In Brazil, programs that integrate sport and education should be expanded, ensuring that black girls and young women have the same right to the comprehensive development provided by PA, creating improvements in public policies and teacher training that transform this scenario[42], in addition to encouraging integrated and transdisciplinary work in schools and across all levels of education[49,50].

Access to physical activity during adulthood

To discuss leisure-time PA in the adult population, it is important to expand on the central idea regarding the behavioral habits that constitute a lifestyle. Behaviors such as PA, eating habits, stress management, and sleep quality tend to interact synergistically with each other, promoting a cycle of habits that can be considered more or less healthy[51]. Given the synergy of these factors, maintaining a physically active lifestyle is also influenced by the economic and social environment[52–54]. Especially regarding the adult population, there is

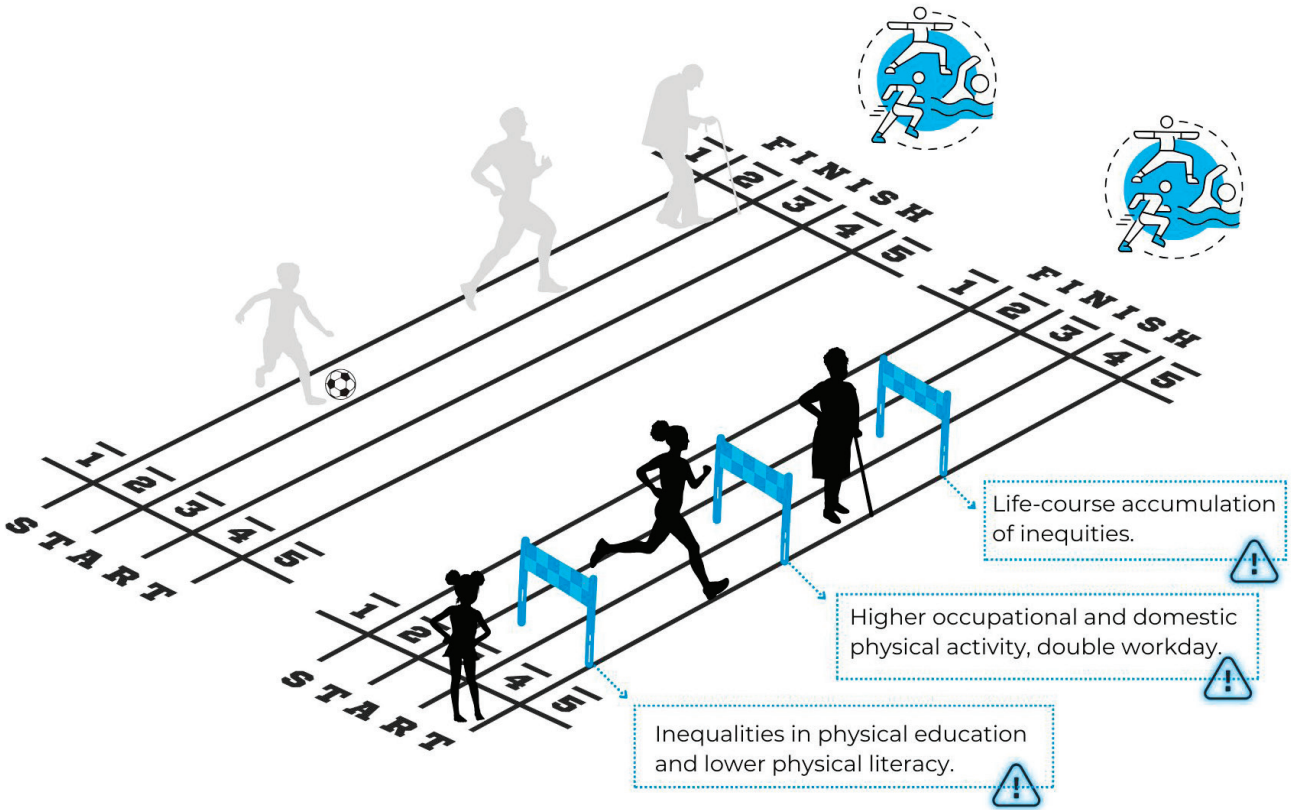

Figure 1 – Summary of the main barriers to physical activity faced throughout life by historically marginalized people

a simplistic idea in society about individual freedom of choice regarding lifestyle habits; that is, it is up to the individual to choose to have a regular PA routine, a diet rich in fruits and vegetables, and quality sleep. This reductionist idea places a burden of individual responsibility on the subject, disregarding the complexity of social and economic factors that impact a healthy lifestyle[55,56]. Furthermore, reducing the problem from a macro to a micro level increases the blame placed on the individual, which also has negative impacts on their mental health[57,58].

Studies with adult university students indicate that the transition from school to university can involve alterations resulting from the impacts of financial changes and social interactions, including a reduction in leisure-time PA, worsened sleep quality, increased stress, and use of psychoactive substances[59,60]. A recent study conducted with Brazilian university students and using cluster analysis identified that the group classified as "at-risk" of having a poorer lifestyle was predominantly composed of black and mixed-race/ethnicity women, with a family income below two minimum wages and a diagnosed mental disorder[61]. The impact of intersectionality on the mental health of this population was also highlighted, with black, non-heterosexual women, from low-income backgrounds being almost nine times more likely to experience severe depressive symptoms and seven times more likely to experience severe anxiety symptoms[62]. This finding illustrates the potential association between lifestyle habits, social disparities, and the impact on mental health in this population.

Despite the impact of social determinants on lifestyle behaviors, PA guidelines until now have disregarded these aspects, considering behaviors only at the individual level[63]. In 2017, for example, the American College of Sports Medicine (ACSM) published a report acknowledging that, up to that point, the association's approach had prioritized individual factors influencing physically active behavior, due to the difficulty of addressing social and environmental factors that modify this behavior[63]. This individual-centered approach reinforces a series of social stigmas associated with sedentary lifestyles and blames the individual for their adopted lifestyle habits[56,58].

Few studies address the impact of intersectionalities on PA[57]. In Brazil, a study that used a vulnerability index to classify the sample in relation to the sum of characteristics of possible social oppression, identified

that white men, who were highly educated and had a high income, represented 48% of the prevalence of people who engaged in leisure-time PA. Despite comprising almost half of the sample of people who engaged in recreational PA, this social group represented only 3% of the total study sample[64]. In line with these findings, a recent epidemiological study conducted in the city of Pelotas – in southern Brazil – identified that although there was an increase of approximately 10% in the prevalence of leisure-time PA between 2004 and 2021, the disparities between different s ocial g roups remained practically unchanged over almost two decades analyzed, with men, white people, and those with higher socioeconomic and educational levels representing the highest prevalence rates[4].

These results reinforce the need for public policies that encourage PA in an equitable manner, since inequalities in gender, race/ethnicity, and socioeconomic status directly impact participation in PA during leisure time[4,64]. To reduce inequalities in leisure-time PA, it is necessary to develop a national plan for implementing strategies[63].

Access to physical activity in old age

According to data from Brazil's National Human Development Report, only 24.3% of the elderly black population engages in PA and sports, while among their white counterparts, this percentage is 56.7%[65]. When investigating the effect of intersectionality on access to leisure-time PA among Brazilians, Mielke et al.[64] reported that 9,8% of older, low-income black women have access to these practices, while on the other side of the pyramid – among white men with high incomes – the prevalence of practitioners is 48%. Black women face a heavy workload and burden of domestic chores[9], a factor that can be crucial for their engagement in regular PA (Figure 1). In many communities, older black women are primarily responsible for the care of grandchildren, children, and families, which limits their time and energy for self-care.[20]. Lélia Gonzáles[66], in her analyses, she alerts us not only to how the structures of race/ethnicity, gender, and class are capable of placing black women in a process of double marginalization and increasing their vulnerability in the social and public policy spheres, but also how this place is maintained by mechanisms of control over these bodies. Based on stereotypes of mulatto women, domestic workers, and black mothers, the bodies of black women are imagined and constructed to serve, care for, and be strong[66]. This stereotype contributes to a neglect of their health needs, not only individually, but also in collective and social thinking. This situation, coupled with the absence of public policies that encourage free or facilitated access to PA programs, may explain the phenomenon of inactive lifestyle in this population.

It is worth noting that, in the older population, physical inactivity is the fourth largest modifiable risk factor for dementia, and is also associated with an increased risk of cognitive decline and depression in these individuals[2]. Low levels of PA in this population can also directly impact the reduction in life expectancy and the increase in days lived with disability[67]. During aging, regular PA also plays an important role in maintaining levels of functionality, lower limb strength, gait ability, and dual-task skills[68,69]. Previous studies also demonstrate the protective effect of PA on the risk of frailty and falls[70]. Factors associated with cognitive and physical decline in the Brazilian older population include education level, poorer health conditions (self-assessment of health and presence of multimorbidities), and gender, with women showing a worse profile[71,72]. Black women show twice the risk for cognitive impairment, gait decline, and poorer intrinsic capacity, as well as being identified as having a higher risk of depressive symptoms[73].

When analyzed in an interconnected way, these factors reveal a complex picture of inequality, where the reduced practice of PA among the older black population, especially women, reflects a combination of structural racism, sexism, and necropolitics, creating barriers to access to a healthy lifestyle. The impact of this reality is reflected in inactive lifestyle levels, as well as in morbidity, mortality, and health rates among these individuals. Therefore, difficulty in accessing PA can also be seen as a fundamental barrier to the dignity, health, and lives of vulnerable bodies.

Future directions

Structural racism undermines the living conditions of the black population, especially black women, limiting their access to PA and reinforcing, through insufficient public policies, the necropolitical mechanisms that compromise their longevity and well-being (Figure 1). Thus, promoting a more active society requires health policies aimed at addressing structural inequalities and guaranteeing equitable access to leisure and health. Furthermore, physical education professionals must rethink practices that reduce movement to a tool for

productivity, valuing it instead as a fundamental form of existence, expression, and life production.

In this sense, culture and belonging are central elements in promoting an active lifestyle. Damschroder et al.[74] present the Consolidated Framework for Implementation Research, which integrates intervention characteristics, internal and external contexts, individual attributes, and implementation processes, guiding the translation of evidence into behavioral changes. The Consolidated Framework for Implementation Research highlights the importance of understanding participants' culture to foster engagement and self-efficacy. The role of the physical education professional is fundamental in promoting diverse and positive experiences, as a way to build healthy behaviors and experiences of pleasure and affection through PA[46]. Physical literacy suggests that this promotion should be carried out taking into account individual and environmental factors, such as gender, race/ethnicity, climate, and territory. Viana et al.[29] also propose, through self-determination theory, that interventions for an active lifestyle should be based on strategies that prioritize identified regulation and/or intrinsic motivation; that is, that individuals are aware of the importance of PA for health and that it is performed for pleasure, as a way to promote adherence to the practice.

In this sense, we suggest that Afro-Brazilian culture be explored as a strategy to develop belonging and affection, as well as movements that give new meaning to the experience of the black and female body in PA practices. Studies show that incorporating activities like jongo and Capoeira into the school environment increases class attendance, in addition to promoting physical benefits such as improved motor coordination and cardiovascular capacity, as well as cognitive benefits – increased executive function and better academic performance in children[75] and adolescents[76]. A few practical examples include Run Kilombo (*Corre Kilombo*) which began in 2022 with 10 people running once a week in Ibirapuera Park (São Paulo) now has 1,600 participants and includes other socially vulnerable groups, such as women and LGBTQ+ individuals, demonstrating the importance of building safe and supportive spaces in the development of an active lifestyle[77]. The *Wakanda Triathlon* group was also created due to the lack of racial representation in the sport, which, because of its high cost, is predominantly white. Within the group, black athletes come together for training, creating a space for representation and belonging, motivating their peers to begin participating in the sport[78].

These strategies embody what historian Beatriz Nascimento calls Quilombismo, which addresses the body as a territory, Q*uilombo-body,* and the racialization advocated by Neusa Santos in "*becoming black*" for the promotion and engagement of Black people in an active lifestyle[79]. While Neusa Santos advocates for the importance of identifying one's race/ethnicity as a way to overcome the effects of racism—that is, to remove black identity from subaltern and dehumanizing stigmas—making the racialized body that runs not an expression of danger, but rather an individual experiencing their body and its possibilities, and exercising their right to leisure and health, through her theory of Quilombismo, Beatriz Nascimento teaches us that the Quilombo is also a subjective, and therefore corporeal, experience.

Thus, promoting PA in Brazil is not limited to prescribing healthy behaviors, but involves recognizing memories, cultures, and affections as constitutive dimensions of living. Within this framework, thinking of the body as a Quilombo (a historical term referring to a settlement of escaped slaves) means affirming that movement is not merely biological, but also symbolic and political. It is a pedagogy of existence that challenges the mechanisms of necropolitics and establishes, in their place, the vital and emancipatory force—and therefore, the life-promoting force—of black and female bodies in movement.

Final considerations

The authors of this review propose a call for action to invest in research in the area of PA, integrated with theories of intersectionality, whiteness, and necropolitics. Anti-racist practices and policies should be promoted, based on evidence, so that recreational PA is no longer a field where racial inequalities manifest themselves, and physical literacy becomes a fundamental right of every individual. However, we argue that for these theories to be successful, they need to undertake a *transatlantic journey*, guided by a decolonial and anti-racist perspective.

Conflict of interest

The authors declare no conflict of interest.

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Author contributions

Plácido JSS: Conceptualization; Methodology; Research; Provision of tools; Data curation; Project administration; Writing the original manuscript; Writing - revision and editing; Approval of the final version of the manuscript. Lima JD, Oliveira L, Alves JV, Fernandes V: Conceptualization; Methodology; Research; Data curation; Writing - revision and editing; Approval of the final version of the manuscript. Cavalcanti MT, Deslandes AC: Conceptualization; Methodology; Research; Data curation; Supervision; Writing - revision and editing; Approval of the final version of the manuscript.

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The authors did not use artificial intelligence tools to prepare the manuscript.

Availability of research data and other materials

The content is already available at the time of publication of this article.

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Reviewers' assessment

The reviews of this article were originally conducted in Portuguese. This version has been translated using ChatGPT and subsequently reviewed by the Chief Editors.

Reviewer A

Anonymous

Format

- Does the article comply with the manuscript preparation rules for submission to the Revista Brasileira de Atividade Física e Saúde?
- No
- Regarding formal aspects, is the manuscript well structured, containing the sections: introduction, methods, results, and discussion (with the conclusion as part of the discussion)?
- Yes
- Is the language appropriate, and is the text clear, precise, and objective?
  Partly
- Was any indication of plagiarism observed in the manuscript?
  Not applicable
  Suggestions/Comments:
- Not applicable.

Abstract

- Are the abstract and the abstract in English adequate (containing: objective, information about the study participants, variables studied, main results, and a conclusion) and do they reflect the content of the manuscript?
  Partly
  Suggestions/Comments:
- Abstract
- The authors need to standardize the terminology used, choosing either physical activity or exercise.
- Sexism or intersectionality does not appear in the objective.
- The authors mention in the title and discuss the relationship between racism, sexism, intersectionality, and necropolitical practices with physical (in) activity, not with sedentary behavior. These are two different objects of study; although related, physical inactivity and sedentary behavior are not the same.

Introduction

- Was the research problem clearly stated and delimited?
  Partly
- Is the research problem adequately contextualized in relation to existing knowledge, moving from the general to the specific?
  No
- Are the reasons justifying the need for the study (including the authors' assumptions about the problem) well established in the writing?
  Partly
- Are the references used to support the presentation of the research problem current and relevant to the topic?
  Partly
- Was the objective clearly presented?
  Partly
  Suggestions/Comments:
- Penultimate paragraph: Why was the search conducted only in PubMed? Why were other databases outside the medical field and/or Latin American databases not included? In addition, the date on which the search was conducted must be reported.
- Last paragraph: Once again, I reiterate the need to standardize the terms physical activity and exercise. The authors again failed to include sexism in the study objective.

Methods

- Are the methodological procedures, in general, appropriate for studying the research problem?
  No
- Are the methodological procedures adopted for conducting the study sufficiently detailed?
  No
- Was the procedure adopted for selecting or recruiting participants appropriate for the problem studied and described in a sufficient, clear, and objective manner?
  Not applicable
- Were information provided about the instruments used for data collection, their psychometric properties (e.g., reproducibility, internal consistency, and validity), and, when relevant, about the operational definition of variables?

Not applicable
- Is the data analysis plan appropriate and adequately described?
  Not applicable
- Were the inclusion and/or exclusion criteria for sample participants described and appropriate for the study?
  Not applicable
- Did the authors provide clarification about the ethical procedures adopted for conducting the research?
  Yes

Suggestions/Comments:
- Not applicable.

Results

- Is the use of tables and figures appropriate and does it facilitate adequate presentation of the study results?
  Partly
- Is the number of illustrations in the article in accordance with the journal's manuscript submission guidelines?
  Yes
- Are the number of participants at each stage of the study, as well as the number and reasons for losses and refusals, presented in the manuscript?
  Not applicable
- Are the characteristics of the participants presented and sufficient?
  Not applicable
- Are the results presented appropriately, highlighting the main findings and avoiding unnecessary repetition?
  Not applicable

Suggestions/Comments:
- No comments.

Discussion

- Are the main findings of the study presented?
  Partly
- Are the study limitations and strengths presented and discussed?
  No
- Are the results discussed in light of the study limitations and the existing knowledge on the topic?
  Partly
- Are the potential contributions of the main study findings to scientific development, innovation, or real-world intervention discussed by the authors?
  No

Suggestions/Comments:
- Guiding concepts (general considerations):
- The concepts of structural racism, whiteness, intersectionality, and necropolitics are well defined; however, several paragraphs revisit the same ideas without critical advancement.
- There is a lack of a diagram or matrix explaining how these theories specifically connect to physical (in)activity.
- The transition from "guiding concepts" to "historical contextualization" lacks a connector that demonstrates argumentative continuity.
- There is a mixture of colloquial language (song lyrics) with academic jargon without transition; that is, the selected excerpts are neither mentioned nor discussed in relation to the arguments being developed. As presented, they appear to function merely as artificial embellishments.
- Some terms (e.g., whiteness, necropolitics) are repeatedly used but not reapplied in concrete examples of bodily practices or physical activity in Brazil.
- On page 8, lines 11–13: "It should be noted that studies indicate that this type of physical activity is also associated with the presence of depressive symptoms[22]." Subsequently, the authors cite only a single study.
- On page 12, line 24: I believe the authors intended to refer to epistemological rather than epidemiological.
- On page 17, lines 6–8: "Data from the School Census (2021) show that 69% of schools with better infrastructure in Brazil are predominantly white […]". The sentence is confusing. I recommend rewriting it.

Conclusion

- Was the study conclusion presented appropriately and is it consistent with the study objective?
  No
- Is the study conclusion original?
  No

Suggestions/Comments:
- The conclusion almost entirely repeats the initial objective and does not offer concrete proposals beyond "investment in research" and "anti-racist policies." After everything that has been presented, what are the authors' actual recommendations? What research pathways should be pursued? What practical

directions exist for those working in, or interested in, physical activity for people in these situations? What collectives and movements already exist within the field of Physical Education—specifically Physical Activity and Health—addressing this topic?

References

- Are the references up to date and sufficient?
  Partly
- Is most of the reference list composed of original research articles?
  Yes
- Do the references comply with the journal's standards (quantity and format)?
  No
- Is citation in the text adequate, that is, do the statements in the text cite references that actually substantiate such statements?
  Partly
  Suggestions/Comments:
- No comments.

Comments to the authors

- It was a pleasure to review the manuscript entitled "Racism and Sexism in Access to Physical Activity: Unveiling (In)Visible Barriers Across the Life Course."The manuscript addresses a highly relevant topic in the field; however, it presents several theoretical and methodological inconsistencies. Below are my considerations aimed at contributing to improvements in the quality of the manuscript.

General comments

- The authors consistently use the terms physical activity and exercise, as well as sedentarism and sedentary behavior, as if they were synonymous, which is a major theoretical error and may directly compromise the arguments and discussions throughout the manuscript. I strongly suggest that each term actually used be conceptually defined to clearly situate readers.
- In addition, it is unclear what type of study this manuscript represents. Although the term "review" is mentioned at times, RBAFS reserves this section for systematic reviews (properly registered in PROSPERO) and/or scoping reviews (registered in OSF, for example). If the manuscript is a theoretical essay, the authors will need to substantially reduce the manuscript length (as the maximum word count for theoretical essays is 3,000 words) and the number of references (72 references are used, whereas the RBAFS limit for theoretical essays is 15). This lack of definition results in a relatively long and repetitive text, in which new concepts are gradually introduced but without theoretical advancement. The discussion remains superficial, repeating similar information without deeper analysis of the impacts on physical (in)activity or bodily practices.

Final recommendation (decision)

- Major revisions required

Reviewer B

Anonymous

Format

- Does the article comply with the manuscript preparation rules for submission to the Revista Brasileira de Atividade Física e Saúde?
  Yes
- Regarding formal aspects, is the manuscript well structured, containing the sections: introduction, methods, results, and discussion (with the conclusion as part of the discussion)?
  Yes
- Is the language appropriate, and is the text clear, precise, and objective?
  Yes
- Was any indication of plagiarism observed in the manuscript?
  No
  Suggestions/Comments:
- A spelling and stylistic revision of the text is recommended.

Abstract

- Are the abstract and the English abstract adequate (containing: objective, information about the study participants, variables studied, main results, and a conclusion) and do they reflect the content of the manuscript?
  Yes
  Suggestions/Comments:
- No comments.

Introduction

- Was the research problem clearly stated and delimited?

Yes
- Is the research problem adequately contextualized in relation to existing knowledge, moving from the general to the specific?
  Yes
- Are the reasons justifying the need for the study (including the authors' assumptions about the problem) well established in the writing?
  Yes
- Are the references used to support the presentation of the research problem current and relevant to the topic?
  Yes
- Was the objective clearly presented?
  Partly

Suggestions/Comments:
- It is suggested to revise the wording of the objective on page 7, line 7—replace "pretende" (intends) with "tem por objetivo" (aims to).
- It is also suggested that the type of manuscript be indicated in the introduction, as it appears to be a theoretical essay; however, this is not clear to the reader.

Methods
- Are the methodological procedures, in general, appropriate for studying the research problem?
  Not applicable
- Are the methodological procedures adopted for conducting the study sufficiently detailed?
  Not applicable
- Was the procedure adopted for selecting or recruiting participants appropriate for the problem studied and described in a sufficient, clear, and objective manner?
  Not applicable
- Were information provided about the instruments used for data collection, their psychometric properties (e.g., reproducibility, internal consistency, and validity), and, when relevant, about the operational definition of variables?
  Not applicable
- Is the data analysis plan appropriate and adequately described?
  Not applicable
- Were the inclusion and/or exclusion criteria for sample participants described and appropriate for the study?
  Not applicable
- Did the authors provide clarification about the ethical procedures adopted for conducting the research?
  Not applicable

Suggestions/Comments:
- Not applicable.

Results
- Is the use of tables and figures appropriate and does it facilitate adequate presentation of the study results?
  Yes
- Is the number of illustrations in the article in accordance with the journal's manuscript submission guidelines?
  Yes
- Are the number of participants at each stage of the study, as well as the number and reasons for losses and refusals, presented in the manuscript?
  Not applicable
- Are the characteristics of the participants presented and sufficient?
  Not applicable
- Are the results presented appropriately, highlighting the main findings and avoiding unnecessary repetition?
  Yes

Suggestions/Comments:
- No comments.

Discussion
- Are the main findings of the study presented?
  Yes
- Are the study limitations and strengths presented and discussed?
  Not applicable
- Are the results discussed in light of the study limitations and the existing knowledge on the topic?
  Partly
- Are the potential contributions of the main study findings to scientific development, innovation, or real-world intervention discussed by the authors?
  Yes

Suggestions/Comments:
- The discussion provides relevant reflections and operational concepts for scientific production in the field of physical activity and health. Nevertheless, the authors did not address a sine qua non issue for reflection from a decolonial perspective, as presented particularly on pages 12 and 13. The authors

state: "a break with the epidemiological knowledge of the Global North" (p. 13, line 4); and that "bodily movement is our way of feeling, experiencing, transforming, and connecting with others, with the environment, and with oneself" (p. 13, lines 22–24). Such a rupture is understood to include the very concepts that colonize knowledge. In this sense, it is necessary to reflect on how concepts such as physical activity, active lifestyle, and risk reinforce a North-centered—and therefore colonial—epistemology. In Latin America, the term bodily practices has been sustained as an alternative within this decolonial perspective. I suggest consulting a recent article published in RBAFS itself: Recomendaciones de actividad física en América del Sur: un análisis decolonial (https://rbafs.org.br/RBAFS/article/view/15313

-). In other words, a decolonial agenda requires revisiting concepts in order to problematize them, thereby avoiding continued domination by the logic imposed by the colonizer.

Conclusion

- Was the study conclusion presented appropriately and is it consistent with the study objective?
  Yes
- Is the study conclusion original?
  Yes
  Suggestions/Comments:
- No comments.

References

- Are the references up to date and sufficient?
  Yes
- Is most of the reference list composed of original research articles?
  Yes
- Do the references comply with the journal's standards (quantity and format)?
  Yes
- Is citation in the text adequate, that is, do the statements in the text cite references that actually substantiate such statements?
  Yes
  Suggestions/Comments:
- No comments.

Comments to the authors

- See the comments provided throughout the sections.

Final recommendation (decision)

- Major revisions required

Reviewer C

João Gustavo de Oliveira Claudino
State University of Campinas, Campinas, São Paulo, Brazil.

General comments

- This study presents well-developed theoretical and practical approaches and may be instructive for professionals, researchers, public managers, and/or policymakers. However, some issues were not addressed in the manuscript. If these issues are adequately resolved, the manuscript may be accepted for publication after a second round of review.

Major issues

- **Abstract**
- MAJOR 01: The alignment between the TITLE, OBJECTIVE, and CONCLUSION can be improved. The method applied in the manuscript should be reported. The final take-home message for the reader can also be strengthened.
- **Introduction**
- MAJOR 02: Page 5, lines 9–10: Adding the percentage increase (%) would help improve reader comprehension.
- MAJOR 03: Page 7, lines 1–3: "A brief search in PubMed using the keywords 'Structural Racism' or Racism* and 'sedentary behaviour' and 'physical activity' returned only 83 studies over more than a decade (2004–2025) (Figure 1)." These findings should be explored in greater depth. Beyond reporting scarcity, the authors should apply inclusion criteria (e.g., selecting only original articles) to present the state of the art. A table summarizing the main findings of the selected studies would allow for a clearer presentation of the field and a more substantial contribution to knowledge advancement.
- MAJOR 04: Figure 2 is excellent. It should be discussed more extensively throughout the text. If possible, the authors should also convey to readers that, in addition to the barriers (very well represented), although the finish line may be the same, the starting point tends to be different—especially for Black women.
- MAJOR 05: REFERENCES — Please review and ensure compliance with the journal's guidelines.

Final recommendation (decision)

- Major revisions required