



**Ispapa**

Instituto Universitário  
de Ciências Psicológicas,  
Sociais e da Vida

DEVELOPMENT AND VALIDATION OF THE COLONIAL  
MENTALITY SCALE FOR WHITE PEOPLE (CMS-W):  
THE IMPACT ON CONTEXTS OF MENTAL HEALTH

LILIANA DE JESUS CASACA CARDOSO

Orientadora de Dissertação:  
PROF.<sup>a</sup> DOUTORA MARIANA PIRES DE MIRANDA

Co-orientador de Dissertação:  
DOUTOR EMERSON ARAÚJO DO BÚ

Professora de Seminário de Dissertação:  
PROF.<sup>a</sup> DOUTORA MARIANA PIRES DE MIRANDA

Dissertação submetida como requisito parcial para a obtenção do grau de:

MESTRADO EM PSICOLOGIA CLÍNICA

Especialidade em Psicologia Clínica

2024

Dissertação de Mestrado realizada sob a orientação da Prof.<sup>a</sup> Doutora Mariana Pires de Miranda e co-orientação do Doutor Emerson Araújo Do Bú apresentada no Ispa – Instituto Universitário para obtenção de grau de Mestre na especialidade em Psicologia Clínica.

## **Agradecimentos**

Em primeiro lugar, quero agradecer ao Universo - por não tornar as coisas tão difíceis que eu não consiga suportar, nem as tornar tão fáceis que me faça perder a perspectiva. Muitas vezes desejei, e provavelmente continuarei a desejar, que o caminho fosse mais fácil, mas sei também que, em muitas dimensões da minha vida, sou uma privilegiada. E por todas elas só posso sentir humildade e gratidão.

Em segundo lugar, um agradecimento – o mais especial - à minha mãe, a pessoa mais importante da minha vida. És a minha âncora em todos os momentos. Sem o teu apoio e colo, sem o teu exemplo, e sem os teus ensinamentos este momento não seria possível. Por me teres apoiado quando decidi embarcar nesta aventura, por todas as vezes que me deste força nos momentos de exaustão, por me continuares a amparar num momento em o futuro parece pouco previsível e torna tão difícil fazer planos... Obrigada por sempre me fazeres sentir que acreditas em mim, e que estarás sempre aí se eu precisar. Obrigada por tudo o que foste e continuas a ser, por tudo o que me deste e continuas a dar.

Um agradecimento à minha família - ao meu avô João, ao Jorge, à Salete, à Lia e à Dona Rosa – por serem casa e conforto, por nunca me deixarem sentir só. Um especial à Dona Joaquina e ao Sr. Manuel, que eram também tudo isto e que foram demasiado cedo, antes que eu sentisse que os tinha compensado pelas minhas ausências dos últimos cinco anos. Fazem-nos falta, mas continuarão sempre aqui.

Um agradecimento ao meu pai por sempre me ter incentivado a perseguir o conhecimento e sempre me ter feito sentir que, querendo, poderia o fazer o quisesse.

Um agradecimento ao Luís por me apoiar no final desta jornada e pela paciência quando eu entro em estado imersivo de trabalho. Obrigada por me ajudares a recarregar baterias e por tornares o presente (e o futuro) num sítio mais risonho e sereno.

Um agradecimento aos meus amigos. A todos os que compreenderam que a escolha de voltar a estudar não me deixava o mesmo tempo de antes, e que sempre me receberam de braços abertos (como se nenhum tempo tivesse passado) quando eu voltava.

Um agradecimento especial ao meu grupo de trabalho – à Sandra, à Bárbara, à Kika e à Catarina – que me acompanharam nesta jornada. Que partilharam os desafios e o cansaço, mas também os sucessos e alegrias. Obrigada por me terem encontrado no primeiro dia e por terem feito este caminho comigo, não escolheria outras companheiras de viagem. Obrigada, também, por aturarem a minha exigência e perfeccionismo provavelmente exagerado (e o mau feitio que aparecia com o cansaço).

Um agradecimento à Carlota por tornar o meu mundo mais vasto e interessante, por me ajudar a desconstruir as minhas crenças e pressupostos, por me introduzir à maravilha que é fazer trilhos e pelas melhores sugestões de livros. Obrigada, ainda, por provares que sermos diferentes uma da outra só nos enriquece às duas. Já não imagino o meu mundo sem ti.

Um agradecimento à turma 8. Uma turma que é puzzle de histórias, conhecimentos e motivações, e que confirmou desde o primeiro ano que estava no sítio certo.

Um agradecimento especial ao Prof. Filipe Loureiro, por ter acreditado no meu potencial e me ter ensinado tantas das coisas que foram recursos indispensáveis para a realização desta tese. Sem esses ensinamentos provavelmente este trabalho não seria o mesmo.

Um agradecimento à Ju, a minha parceira de tese. Quando a Mariana sugeriu que trabalhássemos em pares nunca pensei que pudesse ser tão bom. Obrigada por partilhares comigo as dores e as dúvidas. Mas acima de tudo, obrigada por me inspirares com a tua simplicidade e sensibilidade. És uma pessoa bonita e sinto-me uma sortuda por ter partilhado este caminho contigo.

Um agradecimento à Anna. Não só pelo excelente trabalho que permitiu que o meu trabalho existisse, mas, e principalmente, pelo apoio que foste. Aturaste os meus desabafos, ajudaste-me a encontrar “grandes figuras” para suportar as minhas pequenas ideias, fizeste-me sentir que estava no caminho certo. E fizeste sempre tudo isto com uma doçura e bondade inspiradoras. Obrigada!

E deixo para o fim as duas pessoas que possibilitaram todo este trabalho. Um agradecimento enorme ao Emerson que me acolheu como co-orientada e que foi incansável na sua orientação, na ajuda e nos ensinamentos. Obrigada pela dedicação a este trabalho. Obrigada por me ensinares mais sobre psicométrica. Obrigada pelas gargalhadas, boa disposição e generosidade que te marcam. Obrigada!

E obrigada à Mariana. Por me teres confiado a tua visão - que é a base desta tese – e teres acreditado que eu podia fazer um bom trabalho. Pela paciência com as minhas várias tentativas de entender como endereçar este tema da melhor forma. Pelos conselhos sobre como o fazer. Por me dares uns minutos do teu tempo, mesmo do outro lado do mundo, para me ajudares neste caminho. Por me inspirares a pensar sobre estes temas. E – aproveito para dizer – obrigada por alertares e contribuíres, todos os anos, para que centenas de estudantes reflitam sobre como as questões raciais e de nacionalidade estão inevitavelmente presentes no consultório e se refletem na prática clínica. Essa foi uma das razões que me levou a escolher o teu seminário, e não poderia ter escolhido melhor. Obrigada!

## Abstract

Racism is a complex and pervasive phenomenon across societies. In this paper we propose a new conceptualization and operationalization of racism, based on the concept of colonial mentality, and, thus, bringing the perspective of racialized people to the forefront. We developed and validated the Colonial Mentality Scale for White People (CMS-W) in four online studies. Studies 1a and 1b ( $n = 36$ ) addressed the development of the CMS-W's items, their content and semantic validity. Study 2 ( $n = 255$ ) showed that CMS-W's items are organized into three dimensions (colonial debt, physical characteristics, and cultural shame and inferiority), that colonial mentality is closely tied with biological racism and social dominance orientation, and that most items demonstrated strong discriminatory power. Study 3 ( $n = 306$ ) showed that a bifactor structure presents a better fit for CMS-W, suggesting that it can be effectively conceptualized as having both a global factor of colonial mentality and the three distinct dimensions. Also, colonial mentality shares some degree of conceptual overlap with luso-tropicalism, having however significant distinct aspects. Study 4 ( $n = 244$ ) demonstrated CMS-W ability to capture different response patterns based on patients' race, with higher colonial mentality scores being associated with lower perception of suffering of the Black (vs. White) patient. Taken together, these studies provide comprehensive evidence for the validation of the CMS-W's construct validity, establishing it as a valuable tool for studying and measuring colonial mentality in White populations within post-colonial contexts, and in particular in clinical settings.

*Keywords:* racism, colonial mentality, internalized racial oppression, scale, decolonial

## Resumo

O racismo é um fenómeno complexo e altamente pervasivo na nossa sociedade. Neste artigo, propomos uma nova conceptualização e operacionalização de racismo baseada no conceito de mentalidade colonial, e que traz a perspectiva das pessoas racializadas para o centro da discussão. Desenvolvemos e validámos a Escala de Mentalidade Colonial para Pessoas Brancas (CMS-W) em quatro estudos. Nos Estudos 1a e 1b ( $n = 36$ ) desenvolvemos os itens da escala. No Estudo 2 ( $n = 255$ ) demonstramos que os itens estão organizados em três dimensões (dívida colonial, características físicas e vergonha cultural e inferioridade), que a mentalidade colonial está correlacionada com o racismo biológico e a orientação para a dominância social, e que a maioria dos itens tem alto poder discriminatório. No Estudo 3 ( $n = 306$ ) avançamos com uma estrutura bifatorial, sugerindo que a escala pode ser conceptualizada como tendo um fator global de mentalidade colonial e três dimensões distintas. Além disso, a mentalidade colonial evidenciamos alguma sobreposição conceptual com o luso-tropicalismo, embora com aspetos distintos. No Estudo 4 ( $n = 244$ ) verificamos boa validade de critério da escala, com pontuações mais altas de mentalidade colonial a resultarem, de facto, numa menor perceção de sofrimento em pacientes Negros (vs. Brancos). Em conjunto, estes estudos fornecem evidências de validade da CMS-W, que se mostrou uma ferramenta valiosa para o estudo e mensuração da mentalidade colonial em populações Brancas em contextos pós-coloniais, particularmente em ambientes clínicos.

*Palavras-chave:* racismo, mentalidade colonial, opressão racial internalizada, escala, decolonial

## Index

<i>Introduction</i> .....	1
Racism: A Construct in Search of a Measurement .....	2
Recent Critics to the Study of Racism .....	4
Using Black Perspective to Inform the Measurement of Racism. ....	5
The Present Research .....	8
<i>Study 1. Development of CMS-W and Content Validation</i> .....	10
Study 1A. Evaluation by Experts .....	10
Method .....	10
Results .....	11
Study 1B. Population Evaluation .....	12
Method .....	12
Results .....	12
Discussion .....	13
<i>Study 2. Factorial Validity, Internal Consistency, Convergent and Discriminant Validity</i> .....	13
Method .....	14
Participants and Design.....	14
Procedure and Materials.....	14
Results .....	15
Exploratory Factor Analysis and Internal Consistency.....	15
Item Response Theory Analyses .....	16
Convergent and Discriminant Validity .....	20
Discussion .....	22
<i>Study 3. Confirmatory Factor Structure, Convergent, and Discriminant Validity</i> .....	23
Method .....	23
Participants and Design.....	23
Procedure and Materials.....	23
Results .....	24
Discussion .....	27
<i>Study 4. Criterion validity</i> .....	28
Method .....	28
Participants and Design.....	28

Procedure and Materials.....	29
Results .....	30
Preliminary Analyses .....	30
Moderation Analyses .....	32
Moderated Mediation Analyses .....	33
Discussion .....	33
<i>General discussion</i> .....	34
Theoretical Implications.....	35
Clinical Implications .....	37
Limitations and Future Directions .....	38
<i>Conclusion</i> .....	39
<i>References</i> .....	40
<i>Appendices</i> .....	54
Appendix 1. Supplementary information regarding literature review. ....	54
Assumptions regarding the new forms of racism.....	54
New forms of racism measure.....	54
Critical Race Theory and Scientific Knowledge.....	54
Relation between IRO and negative health outcomes.....	55
Appendix 2. Inter-raters' agreement coefficient (CVC) for the items' accuracy, pertinence and comprehensibility (Study 1 A).....	58
Appendix 3. Moderation analyses (Study 4).....	59

## Lista de Tabelas

Table 1. Item Loadings for the Three-Factor Solution (Study 2).....	17
Table 2. IRT Parameters (a, b1-b3) of CMS-W .....	19
Table 3. Bivariate correlations results concerning convergent and discriminant CMS-W's validity (Study 2 and Study 3).....	21
Table 4. Goodness-of-fit indexes for CFA models of CMS-W (Study 3). .....	25
Table 5. Bivariate correlations results concerning CMS-W's criterium validity (Study 4).....	31

## Lista de Figuras

Figure 1. Item and Test Information trace lines the CMS-W (Study 2).....	19
Figure 2. Bifactor model Structure of the CMS-W (Study 3).....	26
Figure 3. Estimated means for the target's race (Black vs. White) on the relation between colonial mentality and perception of psychological symptoms (right figure) and medical leave (left figure) .....	32
Figure 4. Unstandardized Estimated Parameters of Moderated Mediation Analyses in Predicting Medical Leave (Study 4) .....	33

## Introduction

Racism is a centuries-old global problem (Fredrickson, 2015). This form of oppression based on racial or ethnic belonging has legitimized slavery and colonialism throughout Western History (Bethencourt, 2015). Its complexity has allowed it to adapt and survive, as Vala & Cícero (2012) notes, like an evolving virus, continuing to permeate all spheres of society today (Bailey et al., 2017; Dovidio & Gaertner, 2008; Jones, 2000; Pattillo et al., 2023).

Research on racism has evolved from examining overt racist ideologies to exploring more subtle, indirect forms in response to changing social norms. Initially, if direct and blatant measures captured racial attitudes (e.g., Bogardus, 1933), as anti-racist norms emerged, new forms of racism led to the development of various scales and conceptualizations to better understand and quantify the complexities of racism (Kite et al., 2023). Recently made critiques have underscored that psychological research has been leaving the perspective of racialized people on the sidelines (Adams et al., 2015). In this paper we contribute to a conceptualization and measurement of racism that takes into account this decolonial perspective.

We start by referring to internalized racial oppression, a phenomenon that emerged in the dawn of the Social Sciences (Du Bois, 1989; Clark & Clark, 1939) and that has regained interest in the last decade (David et al., 2019; Gale et al., 2020; Pyke, 2010). The internalization of racial oppression<sup>1</sup> [IRO] refers to the acceptance and internalization of racist beliefs by Black<sup>2</sup> people and other members of racialized groups, which are perpetuated by the dominant White society about their racial/ethnic group. According to Fanon (2023), IRO could not be conceptualized as separate from the collective experience of Western colonization. Fanon dedicated his work to exploring this form of internalization of colonial and racist beliefs, a phenomenon he named *colonial mentality*. Racialized people with high levels of colonial mentality feel and believe that they are inferior, while at the same time fostering the notion that they should be grateful for the colonization of their countries. To study this construct, David and Okazaki (2006) developed the Colonial Mentality Scale with Filipino-Americans, which

---

<sup>1</sup> In line with recent literature, we refer to the term “internalized racial oppression”, instead of “internalized racism”, so as to emphasize that racialized people are not to blame in this process that they are involved, and that this internalization is one other facet of a system of oppression (Pyke, 2010).

<sup>2</sup> In this paper, whenever we use the terms White and Black, we will use capital letters, as they refer to social constructs (Kilomba, 2019).

has since been adapted to different contexts: Black people in Ghana (Utsey et al., 2015), and in Portugal (Ribas et al., 2024), and Puerto Ricans in the USA (Capielo Rosario et al., 2019).

If colonialism resulted in racist oppressive system carried by White people and White institutions, and if one of the levels in which racial oppression operates is that the racialized people mirror the phenomenon (Pyke, 2010), then – we argue – we can refer to the IRO as a valid reflection into racial oppression in the first place. As such, in this paper we revisit the measurement of interpersonal racism to inform an alternative that directly builds from the experiences of racism as experienced by racialized people.

### **Racism: A Construct in Search of a Measurement**

Racism precedes any theory of race. Bethencourt (2015) argues that, even though prejudice and discrimination can be traced throughout History, the modern concept of racism emerged in response to social, economic and political pressures. The author's historical research pointed to the introduction of the construct around the Crusades' period, being reinforced during the maritime expansion and colonialism. More concretely, Bethencourt defends that racist ideologies were created and promoted in order to justify the exploration and domination of non-European people.

The idea that racial superiority associated to a power and wealth agenda, legitimizing massacres and imprisonments of racialized people, the limitation of native culture, and appropriations of goods, territories, has indeed echoed disciplines and beyond academia (Alexandre, 1999; Fanon, 2023; Loomba, 2015; United Nations, 2011; Vala, 2021). Psychology has had a particular role in the pseudo-scientific substantiation of racially based differences (for a review see Miranda & Ribas, 2024). This culminated in a colonial establishment, in which institutions were designed to benefit the colonizers and continually subjugate all others (Fanon, 2023; Young, 2016).

Racism is a complex, multilayered phenomenon with a dynamic and pervasive nature, that spreads to the various levels of society (Neblett, 2022; Perry et al., 2021). The effort to conceptualize it has, indeed, been widespread and, since measurement is the link between the conceptualization of the construct and the possibility of monitoring the effect in social contexts (Babbie, 2021), the efforts to measure racism have been equally at the forefront of the concerns of researchers on racism. Here, we take stock of Jone's (2000) three-fold typology to present a

brief summary of measures developed and identify the gap from which “Colonial Mentality Scale for White People” [CMS -W] comes to light.

Starting with the macro dimension of racism, research has consistently shown how racism is embedded at a structural level and present in societies’ institutions. A growing number of studies seek to document and study the impact of structural racism, using measures adapted for the health care context (Ahmed et al., 2023; Hailu et al., 2022; Pattillo et al., 2023), education (McGee, 2020; Miller, 2021), justice (Rucker & Richeson, 2021; Yi et al., 2023), etc. Recently new ways of measuring structural racism have emerged (e.g., Groos et al., 2018; Hardeman et al., 2022; Hing et al., 2024), that capture its complex, interconnected and institutionalized nature. For instance, Brown and Homan (2024) suggested a latent measure of structural racism that accounts for its manifestations across different societal domains.

In this paper we will mostly focus on the personally mediated level of racism, understood as the prejudice and discrimination against an individual or a group of individuals based on ethnic-racial membership (Costa-Lopes, 2024; Jones, 2000). In the beginning of the 20th century, when racist ideologies were still legitimized, Bogardus (1933) developed the Social Distance Scale, in which individuals were asked to explicitly indicate their willingness to interact (e.g., marry, befriend, allow for citizenship, etc) with members of specific groups at varying levels of closeness. In the mid-20th century, colonialism was called into question and an anti-racist norm emerged in Western societies (de França & Monteiro, 2015; Ivarsflaten et al., 2010; Vala, 2021). However, the race-based social system was not dismantled, being only transformed to a more palatable fashion (Dovidio & Gaertner, 2004; Dovidio et al., 2017). If racist individuals are allowed to resort to an apparently non-prejudiced justification to legitimize their differential evaluation or behavior towards racialized groups (e.g., perceived threats), they will do so, even in an egalitarian context (Pereira et al., 2010). Thus, while traditional forms of blatant racism (e.g., Wilkerson, 2020) persisted, new forms of subtle and indirect racism began to emerge into and be studied, in what Adams and colleagues (2015) called the new post-colonial global order.

Among these new forms we find symbolic racism (Sears & Henry, 2005), modern racism (McConahay, 1986), ambivalent racism (Katz, 1981), subtle and flagrant prejudice (Pettigrew & Meertens, 1995), and aversive racism (Dovidio & Gaertner, 1986; Dovidio et al., 2004). Each of these theories have developed their own measurements (e.g., Modern Racism Scale from McConahay, 1986; The Symbolic Racism 2000 Scale from Henry & Sears, 2002;

The blatant and subtle prejudice scales from Pettigrew & Meertens, 1995), except for aversive racism that resorts to a combination between explicit and implicit measures (Do Bú et al., 2023; Son Hing et al., 2008). Aware of the mutating nature of racism, researchers have felt the need to continually develop new conceptualizations and measures of racism that capture the increasingly camouflaged and sometimes less conscious forms of this form of oppression (for an overview see Kite et al., 2023).

A common denominator in the development of these measures, however, is that they have been developed in reference to the experience of White participants and Western societies (see Appendix 1). In the following sections, we will 1) mobilize Critical Race Theory (Salter & Adams, 2013) to sustain this critique and 2) refer to the third level of Jones' typology – internalized racial oppression – to advance an alternative avenue to the measurement of personally mediated racism.

### **Recent Critics to the Study of Racism**

From an academic standpoint, Adams and colleagues (2015) have drawn attention to how racism has historically been discussed by and from the White dominant society point of view.

Psychological research has indeed come a long way, with contributions to intrapersonal characteristics of the racist individual (e.g. frustration-aggression, Dollard et al., 1939, and authoritarian personality, Adorno et al., 1950), the specificities of intergroup relations between the White and racialized groups (e.g., competition; Sherif et al., 1961; social categorization; Turner et al., 1979), and structural and institutional organizations (e.g., Groos et al., 2018).

However, Roberts and colleagues (2020), in a recent analysis of the papers published in various Psychology outlets, pointed out how research has been mostly conducted with White samples, by White researchers and published by White editors - arguing how psychological research might have inadvertently perpetuated Western society world views. These results have emphasized the need to rethink psychology research, with one possible avenue being referring to the perspectives of racialized people (Adams et al., 2015). In line with this perspective, Phillips and colleagues (2015) have pointed out how people subjected to racial oppression have a particularly relevant epistemological perspective, which can and should be used to inform

and better understand racism and its consequences at its multiple levels. Regarding measurement, Neblett (2022) argues that not only do the measures and methodologies used have limitations, but they also fail to capture the dynamic and interactive nature of individual and shared experiences of racism, as well as their effects over time (whether on the individual, the group, or systems such as families and couples). Additionally, the author argues that promoting multiracial and more diverse research teams, and putting in touch different disciplines, can foster innovation and a better understanding of racism and its implications.

### **Using Black Perspective to Inform the Measurement of Racism.**

Racialized people have indeed played a fundamental role in societal changes, particularly those concerning the phenomena of racism. In fact, Western society's norms did change in great part due to resistance movements headed by racialized people. This is the case of the Civil Rights Movement in the U.S., in which leaders like Martin Luther King Jr. and Rosa Parks used peaceful protests to challenge segregation, while Malcolm X advocated for self-defense and social justice (Garrow, 2015; Theoharis, 2015; Malcolm X & Haley, 1965). The Black Power movement, led by Stokely Carmichael and Huey P. Newton, promoted racial pride, and the "Black is Beautiful" movement celebrated Black aesthetics (Ture & Hamilton, 1967; Taylor, 2016). More recently, Black Lives Matter, founded by Patrisse Cullors, Alicia Garza, and Opal Tometi, fights police violence and systemic racism (Cullors & Bandele, 2018). In Brazil, Quilombos like Palmares, led by Zumbi, were refuges for escaped slaves, and the Unified Black Movement continues to fight discrimination (Carneiro, 1958; Rodrigues et al., 2019). In South Africa, the African National Congress, with leaders like Nelson Mandela, and the Black Consciousness Movement, led by Steve Biko, resisted apartheid (Mandela, 2008; Biko, 2015). Globally, the Haitian Revolution freed Haiti from colonial rule, while leaders like Patrice Lumumba in Congo and Amílcar Cabral in Guinea-Bissau were key in African independence struggles, alongside Pan-Africanism led by figures like Du Bois (Geiss, 1974; Roldão et al., 2023; Zeilig, 2015).

Academically, racialized contributions can be found in Philosophy (e.g., Fanon, 2022, 1967; Davis, 1981), Sociology (e.g. Du Bois, 1989), Political Science (e.g., Robinson, 2000), and Psychology (e.g., Clark & Clark, 1939), to name but a few.

The ongoing resistance of racialized people was analyzed by Fanon (2022; 2023), who argued that colonial violence has had to generate an equally violent response of resistance, as a means for decolonization and the recovery of human dignity. The author also discussed how racialized individuals may move from a phase of assimilation and denial of their racial identity to full affirmation and pride in their Black heritage. According to the author, initially, many might try to adjust to the standards of the dominant White society, but the confrontation with discrimination can provoke a re-evaluation and re-signification of identity, promoting an in-depth exploration of Black culture and history.

However, as Fanon himself has underlined, it is common to observe individuals facing racial oppression adopting strategies of assimilation (Araújo & Maeso, 2010; Cross, 1991; Gorjão Henriques, 2016) as a means of navigating and mitigating their experiences of racism (David et al., 2019). This behavioral adoption of the assimilationist norm is, however, often accompanied by psychological conformity and internalization of racist beliefs (David et al., 2018; Hipolito-Delgado et al., 2014; Leth-Sorensen, 2023).

It was at the beginning of the 20th century that the notion of internalization of racist beliefs by Black people started to appear (see double consciousness process by Du Bois, 1989), considered here as the acceptance of stereotypes and discriminatory beliefs that portray one's own racial group as inferior, with less capability and intelligence when compared to the racial majority group (Taylor, 1990; Williams & Williams-Morris, 2000). Later, in the late 30s, in what is considered the first empirical study on internalized racial oppression, Clark and Clark (1939), showed that, when facing the possibility of choosing between a White or Black doll, more than 60% of a sample of African American preschool children would prefer the White doll.

Since then, several other attempts have been made to empirically assess IRO throughout the years. Following the Nigrescence Model (Cross, 1971, 1991, 1995), which outlines the stages of Black identity development, two scales were developed: the Cross Racial Identity Scale (CRIS; Vandiver et al., 2000) and the Racial Identity Attitude Scale (RIAS; Parham & Helms, 1981). The CRIS follow the revised version of Cross' model (Cross, 1991) and include two dimensions, characteristic of the pre-encounter stage of Cross' model, that capture the internalization of racial oppression: Miseducation, which reflects a negative, stereotypical mindset towards the African American community; and Self-Hatred, which assesses an anti-Black identity based on negative views about being Black. In contrast, the

RIAS was designed to measure attitudes related to the stages of the Cross's Nigrescence model (Ponterotto & Wise, 1987). Additionally, we find the Nadanolitization Scale (Taylor & Grundy, 1996) and the Internalized Racial Oppression Scale (IROS; Bailey et al., 2011). Both scales focus on how Black individuals internalize negative beliefs and stereotypes from the dominant White society. However, the Nadanolitization Scale specifically measures the internalization of negative stereotypes and biases imposed by White people, while the IROS addresses a broader range of factors (stereotypes, beliefs, values and behaviors) that help maintain a social hierarchy that privileges whiteness.

Colonial Mentality is a specific conceptualizing of IRO as a product of colonialism, persisting in post-colonial contexts by the race based system of Western societies, advanced by Fanon in the 60s, (Fanon, 2023). Fanon's works, especially "Black Skin, White Masks" (in 1952) and "The Wretched of the Earth" (in 1961), delve into the psychological effects of colonization on the colonized, examining how oppressed people internalized the values and beliefs of the colonizers, leading to a sense of inferiority and self-alienation. Colonial mentality was described as the result of a process of disintegration and delegitimization of the culture of the peoples of the colonized territories, combined with mechanisms that forced the progressive adoption of the culture of the colonizing peoples, and reinforcing the view of the colonized peoples as inferior and dependent on the action, control and oppression of the colonial forces (Fanon, 2023). Studies on the colonial mentality (e.g. David & Nadal, 2013; Utsey et al., 2015; David et al., 2019) have demonstrated not only the success of this process, but also its continuity today.

The operationalization of colonial mentality was materialized with the Colonial Mentality Scale (CMS), developed with Filipino Americans in the USA, by David and Okazaki (2006) and later adapted specifically to Black people in Ghana (Utsey et al., 2015). In this conceptualization, four dimensions were formulated: a dimension of colonial debt, resulting from the view of the former colonized peoples as dependent on the former colonizing peoples; a dimension of physical characteristics, related to the inferiorization of the physical characteristics of racialized people in relation to White people; a dimension of cultural shame and inferiority, anchored in the disintegration and inferiorization of the cultures of the territories of the former colonies; and a dimension of differential discrimination of other racialized people, based on their level of adoption of Western culture. The scale has, since then,

been successfully adapted to the context of other racialized groups, (e.g., Capielo Rosario et al., 2019; Ribas et al., 2024), thus providing a unique epistemological perspective.

Recently, Gale and colleagues (2000) carried out a meta-analysis on the relationship between IRO and negative physical and mental health outcomes, with results showing a significant relationship between IRO and negative mental health outcomes ( $r = 0.26$ ), with CMS equality performing as to this predictive outcome.

Despite the growing body of knowledge associated with IRO, the link between the internalization of racial oppression by racialized people and the phenomena of racism perpetuated by the dominant White society still requires a more in-depth understanding. To the best of our knowledge, no measure of racism has considered in its conceptualization the experiences and perspectives of racialized individuals regarding internalized racial oppression.

### **The Present Research**

Colonial mentality is a form of IRO produced in colonial systems and persisting in Post-colonial contexts, maintained in racialized people by the race-based system of Western societies. This suggests that racist beliefs internalized by racialized individuals may also exist similarly in White people—a form of colonial mentality that reinforces and perpetuates racism, particularly internalized racial oppression (IRO) in racialized people. This hypothesized colonial mentality in White people would also be expected to contribute to discriminatory behavior, such as limiting the ability to provide anti-racist and culturally sensitive mental health care (Cénat, 2023; Mensah et al., 2021).

The aim of this study is therefore to develop a colonial mentality scale for White people in a post-colonial context having as reference the work on colonial mentality, with Portuguese society serving as the post-colonial study context.

In Portugal, it was only in the late 1970s—following the Carnation Revolution, the fall of the dictatorial regime, and the country's subsequent opening to the world— that the Universal Declaration of Human Rights was signed and that the racist ideology began to lose its power (Alexandre, 1999; Vala, 2021). This marked the adoption of anti-racist legal norms and facilitated the broader acceptance of these social norms by Portuguese people and institutions. The adoption of anti-racist norms (Vala, 2021) was influenced not only by the changes occurring over decades in Europe but also the impact of the liberation movements and

wars for independence of former colonies, and the action of Black movements (Roldão et al., 2023)

However, data from the European Social Survey-7 shows that almost 53% and 54% of the Portuguese population still endorse biological and cultural racism beliefs, respectively (Ramos et al., 2020). This apparent contradiction seems to be associated, on the one hand, with luso-tropicalist rhetoric - which defends the uniqueness of Portuguese colonial relations based on empathetic capacity and a natural talent for dealing with people from different cultures (Vala et al., 2008) - and, on the other, with the existence of a colonial past strongly anchored and legitimized by racist beliefs. In fact, Bilwani (2023) argues that this luso-tropicalist narrative favors the perpetuation of the denial of racism – also called colorblindness (Araújo, 2013) - while at the same time coexisting with the discrimination in Portuguese territory.

Since the adoption of anti-racist social norms, it has been assumed that even those who do not fully accept these norms are motivated to act in non-racist ways to avoid social criticism. However, this assumption may no longer hold in the current political climate. The resurgence of overt racism (e.g., Olmos-Alcaraz, 2022; Bernardino-Costa, 2023), the rise of biological racism, and increased political polarization in some European countries (Vala & Pereira, 2018) suggest that a decreasing motivation to avoid prejudice could be undermining the effectiveness of anti-racist norms (Vala, 2021).

Additionally, arising from the need to rethink the study of racism to further the understanding of Western reality as a colonial product and to consider the experiences of racialized people, this paper proposes a new and different way of operationalizing racism. Based on the perspective of racialized people present in the Colonial Mentality Scale, we intend to develop and validate an analogous measure of racism that allows us to study the colonial mentality in White people.

In order to develop and validate a measure of colonial mentality for White people (CMS-W), we carried out four studies in the Portuguese context.

In the first study, we developed the items and carried out a content validation with experts (Study 1A), and pre-tested them with the target population (Study 1B). In the second study, we gathered preliminary evidence of structural validity, using exploratory factor analysis, as well as evidence of reliability, convergent and discriminant validity. In addition, we applied Item Response Theory to evaluate the discriminatory capability of CMS-W items.

In the third study, we provided additional evidence of reliability, convergent validity and of structural validity, using confirmatory factor analysis and comparing different conceptual models. Finally, in the fourth study, we advanced the CMS-W's criterion validity in a mental health context. Specifically, we manipulated the race of patients in clinical vignettes, hypothesizing that higher levels of colonial mentality in White participants would lead to lower perception of psychological distress in Black (compared to White) patients. The studies were submitted to the Ethics Committee, and the inclusion criteria was that participants had to self-categorize as White.

### **Study 1. Development of CMS-W and Content Validation**

The aim of this study was to develop items to assess colonial mentality in the White population and to check their content validity with experts and the target population. To this end, three steps were followed. Firstly, we used the existing items in the CMS - Portugal (Ribas et al., 2024) and adapted them to the White population. The CMS – Portugal was initially adapted to the Portuguese from on the Colonial Mentality Scale – Ghana (Utsey et al., 2015), as it was the CMS with greater fit to context of Black-White relationships following the colonization past in the Portuguese speaking African countries. Secondly, we used a panel of experts to evaluate the items (Study 1A). Finally, we pre-tested the items on a sample of the community, to ensure that the wording of the items was compressible (Study 1B).

#### **Study 1A. Evaluation by Experts**

##### ***Method***

**Participants.** We recruited a panel of six experts in the field of racism and discrimination, all Portuguese native-speakers and with a doctorate in Social Psychology (Age:  $M = 40.00$ ;  $SD = 9.78$ ; Years of experience:  $M = 19.80$ ;  $SD = 14.50$ ), were invited to assess the items of CMS-W.

**Procedure and Materials.** To develop the items for the colonial mentality scale for the White population, we started from the items present The Colonial Mentality Scale – Portugal (CMS – Portugal; Ribas et al., 2024). The CMS-Portugal (revised version) is

composed of 16 items organized in a four-factor structure, with four items in each factor: colonial debt, physical characteristics, cultural shame and inferiority, and within-group discrimination. For each of the items in the CMS - Portugal, we developed a homologous item for the CMS - White (sample item with change: from “I would like to have a lighter skin color than the one I have.” to “I prefer people with light skin color to people with black skin).

We then invited five colleagues to provide qualitative comments on the items developed. Based on this qualitative feedback, we adjusted the items, resulting in a first version. Following the experts feedback, we excluded all items related to the theoretical dimension of within-group discrimination<sup>3</sup>. The final version of the instrument was, thus, composed of 12 items, theoretically organized in three remaining dimensions.

This first formal version was then presented to the panel of experts, in an online questionnaire, distributed via email. The experts were asked to rate the items on a rating scale from 1 = Not at all to 5 = Totally, regarding their accuracy, comprehensibility, and relevance.

## ***Results***

To assess the content validity we calculated the inter-raters’ agreement coefficient (CVC) for the items’ accuracy, pertinence and comprehensibility (Aiken, 1980). The CVC for content expert judgment (CVCj) was calculated for each item (CVCi) and for the entire scale (CVCt) (Aiken, 1985). The results of the experts’ evaluation showed excellent agreement

---

<sup>3</sup> Firstly, the original CMS-Portugal referred to *Within-group discrimination*, changing this dimension to *Out-group heterogeneity and discrimination* would significantly change the underlying construct, as these two concepts are very distinct (Judd et al., 1991). Secondly, Members of an out-group tend to be perceived as being alike (meaning with reduced variability among individuals) (Quattrone & Jones, 1980), and one of the mechanisms underlying discrimination is precisely stereotyping (Devine, 1989). Introducing items that referred to heterogeneity between Black individuals (for instance, assimilated vs. non-assimilated) could even prime subjects to perceive greater group variability, which is known to reduce prejudice (Brauer et al., 2011). Therefore, if, in one hand we, could expect that people with higher levels of colonial mentality would perceive lower variability in Black subjects - scoring lower in *Out-group heterogeneity and discrimination* -, on the other hand, the mirroring hypothesized effect between colonial mentality in racialized people and colonial mentality in White people would leads to expect a positive relation between colonial mentality and perceived out-group variability. To avoid this theoretical confound, we decided to eliminate the dimension.

between the evaluators about the pertinence (CVCt = .88) and comprehensibility (CVCt = .86) of the items, and satisfactory values with regard to relevance (CVCt = .81). The suggestions were once again taken into consideration, resulting in minor changes to a few items (the results are available for consultation in Appendix 2)

## **Study 1B. Population Evaluation**

### ***Method***

**Participants.** In this study, 32 participants filled-in an online questionnaire, with the sample size being determined according to the recommended guidelines for the scale development and adaptation (DeVellis, 2016). After two participants were excluded for not meeting the inclusion criteria (one not of Portuguese nationality and the other didn't identified as being White), the final sample was constituted by 30 participants, who were mostly female (86.7% females; 13.3% males), with ages ranging from 21 to 55 years old ( $M = 34.47$ ,  $SD = 10.19$ ).

**Procedure and Materials.** The participants were asked to rate each item resulting from Study 1A according to a five-point rating scale, ranging from 1 = Not comprehensible at all to 5 = Totally comprehensible.

### ***Results***

The mean of the rating results was calculated to determine the intelligibility of each item (Dimitrov, 2012; Streiner et al., 2015). Since, according to the Shapiro-Wilk test, the data for each item did not show a normal distribution, a Wilcoxon test was carried out to assess whether the average comprehensibility reported for each item was lower than the midpoint of the scale (3.0). All items scored above the midpoint of the scale (3.0), with items' scores ranging from 3.83 (item 4) to 4.83 (item 10). Thus, as expected, the reported comprehensibility for all the items was equal to or higher than the midpoint of the scale, confirming that the items were considered clear enough to be understood by the target population (Dimitrov, 2012; Streiner & Kittner, 2014).

## *Discussion*

The findings from Study 1 provide important preliminary evidence for the development of CMS-W within a post-colonial context. Indeed, through expert evaluations and feedback from the target population, we established that the CMS-W items are both theoretically sound and comprehensible, laying a solid foundation for the subsequent validation steps. However, while Study 1 offers significant contributions in developing and refining CMS-W, it is limited in scope. Further investigation is necessary to determine whether the CMS-W reliably captures the latent dimensions of colonial mentality in White populations. Additionally, while expert reviews and population pre-testing provide initial validation, they do not assess how the CMS-W relates to other constructs associated with racism. To overcome these gaps, we developed Study 2.

### **Study 2. Factorial Validity, Internal Consistency, Convergent and Discriminant Validity**

Study 2 goals are threefold: 1) to gather preliminary evidence of factorial validity and internal consistency of CMS-W, 2) to evaluate items quality by resorting to Item Response Theory (IRT; Samejima, 1968), and 3) to demonstrate CMS-W convergent validity with another racism measure, a measure of social dominance, and demonstrate discriminant validity with the motivation to avoid prejudice.

Given the forefront nature of CMS-W items in terms of racist and colonial beliefs, the racism measure used to assess convergent validity was the biological racism scale (Vala et al., 2012; Study 3), which evaluates beliefs regarding the biological basis of differences between groups. To capture the power dimension associated with colonial mentality, the measure used to test convergent validity regarding social dominance was the social dominance orientation scale (Ho et al., 2015), which evaluates preferences between group-based hierarchy/inequality and equality. Finally, to assess motivation to respond without prejudice toward Black people and test for discriminant validity, we used the external motivation to avoid prejudice measure (EME; Palma & Marôco, 2009). Specifically, we hypothesized that CMS-W would show moderately positive correlations with the biological racism scale and the social dominance orientation scale, and would have weak correlations with the measure assessing the external motivation to avoid prejudice.

## Method

### *Participants and Design*

In this study we followed a cross-sectional research design. A sample of 268 participants completed an online survey. The participants younger than 18 years old, who did not self-identify as White and/or were not Portuguese, were excluded from the sample, resulting on a final sample of 255 participants (59.2% females, 39.2% males, 1.6% other gender;  $M_{age} = 31.67$ ,  $SD_{age} = 12.24$ ). The sample size was determined based on Nunnally's (1978) guideline of having a minimum of ten participants per scale item. Additionally, the number of factors expected for the scale, the number of indicators, and their loadings were also taken into account (Jak et al., 2021; Wolf et al., 2013).

### *Procedure and Materials*

Participants were invited, via social media (e.g., Instagram, linkedin, WhatsApp) to fill in an online questionnaire on “perceptions of social groups” (created on Qualtrics platform). The participants were selected using a nonprobabilistic convenience sampling method. They accessed the survey only after agreeing to the informed consent terms, which specified that participation was voluntary, anonymous and could be withdrawn at any point before completing the questionnaire. The informed consent was followed by the CMS-W items resulting from Study 1, the biological racism scale, the social dominance orientation scale, the external motivation to avoid prejudice, and sociodemographic questions (age, gender, nationality, and racial self-categorization). The items in each scale were presented in random order. At the end participants were debriefed and thanked and invited to enroll in two lotteries of 25€ vouchers.

**Colonial mentality scale for White people.** The version of the scale used in this study resulted from Study 1. Participants rated each item on a five-point rating ( $1 =$  Totally disagree;  $5 =$  Totally agree).

**Biological racism scale (Vala et al., 2012; Study 3).** This instrument consists of seven items (e.g., “Some racial groups have physical characteristics that are not typically human”). Participants rated each item on a five-point rating scale ( $1 =$  Totally disagree;  $5 =$  Totally agree). A biological racism index was computed from the average of all items, with greater values indicating stronger racism levels ( $M = 1.70$ ,  $SD = .62$ ,  $\alpha = .81$ ;  $\omega = .84$ ).

**Social dominance orientation scale (SDO; Ho et al., 2015).** This scale consists of eight items (e.g., “An ideal society requires some groups to be in superior positions and others to be in inferior positions”). Participants rated each item on a five-point rating scale ( $1 =$  Totally disagree;  $5 =$  Totally agree). A social dominance index was computed from the average of all items, with higher scores indicating a preference for group hierarchy and inequality ( $M = 1.76$ ,  $SD = .71$ ,  $\alpha = .84$ ;  $\omega = .85$ ).

**External Motivation to Answer Without Prejudice (EME; Palma & Marôco, 2009).** The EME is composed of four items (sample item: “Considering the current pressure to be politically correct, I try to appear non-prejudiced towards Black people.”) Participants rated each item on a five-point rating ( $1 =$  Totally disagree;  $5 =$  Totally agree). An external motivation index was computed from the average of all items’ means ( $M = 2.26$ ,  $SD = .96$ ,  $\alpha = .82$ ;  $\omega = .82$ ).

## **Results**

### ***Exploratory Factor Analysis and Internal Consistency***

To gather preliminary information regarding the factorial structure of CMS-W, an exploratory factor analysis was conducted on JASP (version 0.18.3 for Apple Silicon), using the principal axis factoring method for factor extraction, with promax rotation with Kaiser normalization.

The Kaiser-Meyer-Olkin (KMO) measure of sampling had a value of .867 and the Bartlett’s sphericity test was significant at the .001 level, indicating that the sample was adequate for exploratory factor analysis (Pestana & Gageiro, 2014). To determine the number of factors we used the Guttman–Kaiser criterion of eigenvalues higher than 1.00 (Guttman, 1954; Kaiser, 1960), resulting in three factors retained, which explained a total of 45.10% of the data variance. Considering loading factors where acceptable if equal or greater than .30 (Brown, 2015), two items (item 3 and 12) were excluded. To assess internal consistency, Cronbach’s alpha ( $\alpha$ ) (Cronbach, 1951) and McDonald’s omega ( $\omega$ ) (McDonald, 1999) coefficients were calculated, and values equal to or greater than .70 were considered acceptable.

The factorial loads, communalities, averages, standard deviations of each item, as well as internal consistency for each factor are described in Table 1.

The first factor, which explained 35.4% of the total variance, had an eigenvalue of 4.680. It consists of four items that reflect a dimension of gratitude and debt that once-colonized African countries should feel towards the European countries that colonized them, considering that the latter were responsible for improving the African way of life by westernizing it. Thus, this dimension corresponded to colonial debt (CD;  $M = 1.90$ ;  $SD = .98$ ).

The second factor, that explained 6.3% of the total variance and had an eigenvalue of 1.194, was made up of three items that reflected dimensions of prejudice towards the physical characteristics of Black people by White people, as "For me, people with thin noses (like White people) are more attractive than people with broad, typically Black noses". This factor corresponded to physical characteristics (PC;  $M = 2.26$ ;  $SD = .96$ ). Finally, the last factor explained 3.3% of the total variance, and had an eigenvalue of 1.071. The three items that saturated here reflected an Eurocentric view of culture, devaluing and demeaning African culture and traditions. This dimension corresponded to cultural shame and inferiority (CSI;  $M = 1.45$ ;  $SD = .57$ ).

Following recent data with racialized populations in Portugal (Miranda et al., 2024), we have also considered operationalizing the construct of colonial mentality as unidimensional. We decided to further calculate a global index of the CMS-W. This global index, resulting from the average of the 12 items ( $M = 1.87$ ;  $SD = .68$ ), presented strong internal consistency results ( $\alpha = .85$ ;  $\omega = .86$ ).

### ***Item Response Theory Analyses***

We applied Item Response Theory (IRT) using the Graded Response Model (Samejima, 1969) to evaluate the 10 CMS-W items extracted from the EFA (see Figure 1). The discrimination ( $a$ ) values, which indicate how well items distinguish between respondents, ranged from 1.05 to 8.65, with most items demonstrating strong discriminatory power (refer to Table 2).

For example, "In general, I consider people who have one White parent more attractive than those who are Black with both parents" ( $a = 2.72$ ) performed particularly well. However, item 6 (i.e., "In my opinion, Black people should feel privileged and honored that White people have had contact with them"), while still within acceptable parameters, exhibited weaker discrimination ( $a = 1.05$ ) compared to other items.

**Table 1***Item Loadings for the Three-Factor Solution (Study 2)*

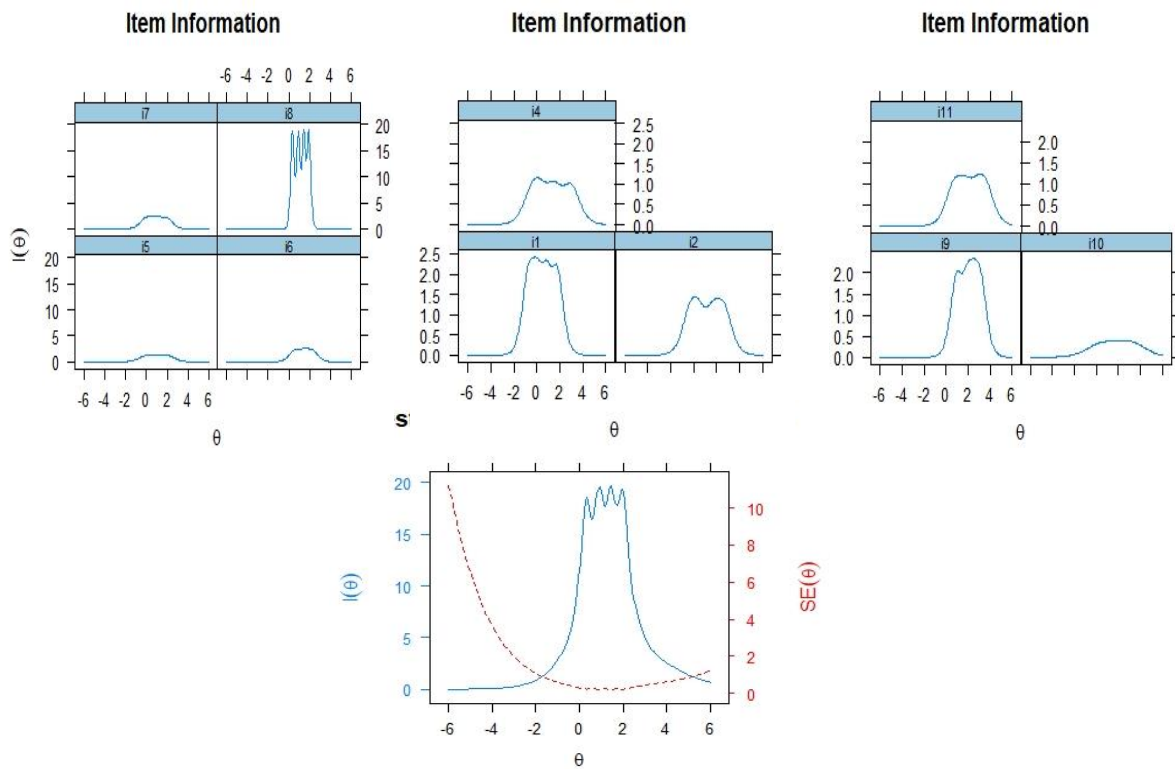
CMS-W Items	Factor loadings				<i>M</i>	<i>SD</i>
	1	2	3	h2		
<b>7. I believe that White people in Europe are responsible for civilizing Black people in Africa and improving their way of life.</b> <i>Considero que as pessoas Brancas da Europa são responsáveis por civilizar as pessoas negras em África e melhorar o seu modo de vida.</i>	<b>.786</b>	.109	-.065	.660	2.08	1.22
<b>5. I don't think Black people should feel grateful that Africa was colonized by White people. (R)</b> <i>Não considero que as pessoas Negras devam sentir-se gratas pelo facto de África ter sido colonizada por pessoas Brancas. (R)</i>	<b>.715</b>	-.177	.100	.474	1.97	1.17
<b>8. In my opinion, Black people should be grateful to White people for transforming the African way of life into a more White/European way of life.</b> <i>Para mim, as pessoas Negras deveriam ser gratas às pessoas Brancas por transformar o modo de vida Africano num modo de vida mais Branco/Europeu.</i>	<b>.703</b>	-.052	.314	.827	1.67	1.04
<b>6. In my opinion, Black people should feel privileged and honored that White people have had contact with them.</b> <i>Na minha opinião as pessoas Negras deveriam sentir-se privilegiadas e honradas pelas pessoas Brancas terem tido contacto com elas.</i>	<b>.559</b>	-.014	.297	.607	1.59	1.00
<b>4. In general, I find people who have one White parent to be more attractive than those who have both Black parents.</b> <i>Em geral, considero as pessoas que têm um dos pais Brancos mais atraentes do que as que são Negras de pai e mãe.</i>	-.129	<b>.807</b>	.007	.548	2.19	1.13
<b>1. In my opinion, people with bridged noses (like White people) are more attractive than people with the typically wide Black noses.</b> <i>Para mim, as pessoas com nariz fino (como o das pessoas Brancas) são mais atraentes do que as pessoas com narizes largos, tipicamente negros.</i>	.126	<b>.779</b>	-.093	.646	2.54	1.23
<b>2. I prefer people with light skin color over people with black skin.</b> <i>Prefiro pessoas com cor de pele clara comparativamente a pessoas com pele negra.</i>	.069	<b>.559</b>	.156	.507	2.05	1.08
<b>9. I consider black culture and traditions something to be ashamed of.</b> <i>Considero a cultura e as tradições negras motivo de vergonha para quem as pratica.</i>	.009	-.014	<b>.704</b>	.492	1.29	0.63

<b>11. Black people should prefer to be members of a different ethnic/cultural group over the one they belong to.</b> <i>As pessoas negras deviam preferir ser membros de um grupo étnico/cultural diferente daquele a que pertencem.</i>	-.050	-.031	<b>.621</b>	.327	1.42	0.74
<b>10. Black people should feel that, in general, their ethnic/cultural heritage is just as good as a White ethnic/cultural heritage. (R)</b> <i>As pessoas Negras deviam sentir que, em geral, a sua herança étnica/cultural é tão boa como a herança étnica/cultural Branca. (R)</i>	.003	.032	<b>.341</b>	.132	1.64	0.98
<b>3. I prefer typically Black hairstyles to the way White people typically use their hair. (R)</b> <i>Prefiro penteados tipicamente negros à forma como as pessoas Brancas tipicamente usam o cabelo. (R)</i>	.275	.055	-.083	.068	3.44	0.82
<b>12. In general, I think that being a Black person is not as good as being a White person.</b> <i>Em geral, considero que ser uma pessoa Negra não é tão bom como ser uma pessoa Branca.</i>	.027	.166	.193	.117	2.01	1.23
% of total explained variance	35.4	41.8	45.1			
Eigenvalues	4.68	1.19	1.07			
Cronbach's Alpha ( $\alpha$ )	.858	.783	.511			
McDonald's Omega ( $\omega$ )	.860	.788	.516			

*Note.* h<sup>2</sup>= communalities; R = reversed items. Factors loadings in bold indicate to each factor the items are related; answers were given in a 5-point scale (from 1 = Strongly disagree to 5 = Strongly agree). CMS-W = Colonial Mentality Scale for White portuguese populaion

**Figure 1**

*Item and Test Information trace lines the CMS-W (Study 2)*



**Table 2**

*IRT Parameters (a, b1-b3) of CMS-W*

Colonial Debt	a	b1	b2	b3	Decision
i7	2.85	-.105	.585	1.17	Retained
i5	-2.13	2.06	1.62	0.92	Retained
i8	8.65	.330	.899	1.91	Retained
i6	1.05	-.098	.459	1.00	Not Retained
Physical Characteristics	a	b1	b2	b3	
i4	2.72	-.322	.212	1.51	Retained
i1	2.89	-.727	-.009	.842	Retained
i2	1.14	-.235	.372	1.74	Retained
Cultural Shame and Inferiority	a	b1	b2	b3	
i9	2.76	.952	1.93	2.51	Retained
i11	-1.14	3.39	2.91	.427	Retained
i10	2.02	.737	1.67	2.84	Retained

The difficulty (b) parameters, which measure the threshold for endorsing each item, ranged from -.322 to 3.39, capturing a broad range of colonial mentality levels. The Test Information Curve (TIC) indicated that the CMS-W is most reliable for individuals with moderate levels of colonial mentality, with the highest precision between approximately -2 and +2 standard deviations.

Overall, the CMS-W demonstrated strong discrimination, reliability, and coverage, particularly for moderate levels of colonial mentality. However, item 6 performed slightly weaker than others, and its lower discrimination value suggests that it does not contribute as much to distinguishing between different levels of colonial mentality compared to other items. Additionally, the relatively lower performance of item 6 could affect the parsimony of the CMS-W, as including items with lower discriminatory power may not add meaningful information and could unnecessarily lengthen the instrument. Thus, we decided to not retain item 6 in further studies to improve the efficiency of the scale and increase its precision.

### ***Convergent and Discriminant Validity***

To test convergent and discriminant validity, we used bivariate correlations to assess CMS-W shared variance with the social dominance scale and the biological racism scale (convergent validity), and the motivation to avoid prejudice (discriminant validity). Results are shown in Table 3.

Regarding convergent validity, values between .40 and .70 were considered good (Damásio & Borsa, 2017). The results indicated that colonial mentality (CMS-W) was strongly positively associated with biological racism levels ( $r = .58$ ), as well as, with social dominance orientation ( $r = .68$ ). Regarding the dimensions of CMS-W, all presented a moderated to strong correlation with biological racism and social dominance orientation, with values between .40 and .66.

With respect to discriminant validity for CMS-W values below .30 show evidence of discriminant validity (Damásio & Borsa, 2017). Regarding external motivation to avoid prejudice, CMS-W global and colonial debt dimension presented a moderately positive association with EME, slightly over .30. The dimensions of physical characteristics and cultural shame and inferiority presented correlations with EME below .30.

**Table 3 2***Bivariate correlations results concerning convergent and discriminant CMS-W's validity (Study 2 and Study 3)*

<b>Convergent Validity</b>	CMS-W		CD		PC		CSI	
	Study 2	Study 3	Study 2	Study 3	Study 2	Study 3	Study 2	Study 3
Biological racism	0.58 ***	0.54 ***	0.54 ***	0.51 ***	0.40 ***	0.39 ***	0.45 ***	0.48 ***
SDO	0.68 ***	0.70 ***	0.66 ***	0.62 ***	0.45 ***	0.50 ***	0.52 ***	0.57 ***
Lusotropicalism	-	0.52 ***	-	0.58 ***	-	0.35 ***	-	0.29 ***
Political orientation	-	0.54 ***	-	0.51 ***	-	0.43 ***	-	0.31 ***
<b>Discriminant Validity</b>	CMS-W		CD		PC		CSI	
	Study 2	Study 3	Study 2	Study 3	Study 2	Study 3	Study 2	Study 3
EME	0.35 ***	-	0.27 ***	-	0.31 ***	-	0.25 ***	-
ESS	-	-0.16 **	-	-0.15 **	-	-0.16 **	-	-0.04

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; CD = colonial debt; PC = physical characteristics; CSI = cultural shame and inferiority; EME = external motivation to avoid prejudice; ESS = Epworth sleep scale

## Discussion

Study 2 provided key insights into the psychometric properties of the CMS-W. The exploratory factor analysis supported the hypothesized three-factor structure of the scale, reflecting the distinct dimensions of colonial debt, physical characteristics, and cultural shame and inferiority. These findings suggest that colonial mentality in White individuals can be captured through these interrelated but distinct constructs, each representing a different aspect of the colonial mindset. The IRT analyses confirmed that the majority of CMS-W items effectively differentiate between respondents, with strong reliability for moderate levels of colonial mentality, though item 6 showed weaker discrimination and was thus excluded to improve the scale's overall precision. Convergent validity was established through the significant correlations of CMS-W with both the biological racism scale and social dominance orientation scale, suggesting that colonial mentality is closely tied to broader racist ideologies and preferences for hierarchical social structures. These associations align with the theoretical expectations that colonial mentality reinforces beliefs in racial superiority and social inequality. Discriminant validity was also supported, as CMS-W showed weak to moderate correlations with external motivation to avoid prejudice, indicating that colonial mentality operates somewhat independently of individuals' motivations to appear non-prejudiced. This suggests that the CMS-W captures deeper, more ingrained beliefs rather than surface-level behaviors influenced by social desirability.

However, while Study 2 provided preliminary evidence for the CMS-W's three-factor structure and initial validity, several key limitations emerged that must be further addressed. First, the factor structure identified in Study 2, although supported by exploratory factor analysis, requires further confirmation using more robust confirmatory factor analysis (CFA) techniques. Indeed, while good internal consistency was found for two of the instrument's dimensions, the cultural shame and inferiority dimension showed weaker reliability, which warrants further investigation and validation. Study 3 will build on these findings by testing alternative measurement models, including a bifactor model, to better understand the dimensionality of colonial mentality. Moreover, Study 3 aims to expand the convergent and discriminant validity of the CMS-W.

### **Study 3. Confirmatory Factor Structure, Convergent, and Discriminant Validity**

The aim of this study was to gather additional information about CMS-W. Firstly, we replicated the CMS-W structure obtained in Study 2 through confirmatory factor analysis and to test other alternative measurement models. Secondly, we aimed to replicate the convergent validity results of the CMS-W with the biological racism scale and the social dominance orientation scale. Additionally, we provided further evidence of convergent validity by examining the shared variance between the CMS-W and the luso-tropicalism scale, and political orientation. Regarding these two associations, we hypothesized that CMS-W would have moderately positive correlations with luso-tropicalism beliefs and with (right-wing) political orientation. Finally, we provided additional evidence regarding discriminant validity, by exploring the relation between CMS-W and a sleep measure. Since from a theoretical perspective constructs related to social attitudes, such as colonial mentality, are not expected to correlate with physical states, such as sleep (Nery et al., 2023), we hypothesized that the two measures would have no significant correlation.

## **Method**

### ***Participants and Design***

In this cross-sectional research designed study, 350 participants were recruited on social media to complete an online survey. We excluded participants younger than 18 years old, who did not self-categorize as White and/or were not Portuguese, resulting in a sample of 306 participants, with a mean age of 33.85 years (range: 18-79 years old;  $SD = 14.59$ ). Participants were predominantly women (68.3%) and 2.3% identified as neither male, nor female. We used the same criteria of determining the minimum number of participants as in Study 2.

### ***Procedure and Materials***

Participants were invited, via social media (e.g., Instagram,) to fill in an online questionnaire on “perceptions of social groups” (created on Qualtrics platform). The sample was nonprobabilistic (convenience sample) and the participants only accessed the survey if in agreement with the term of informed consent. As in Study 2, after the informed consent

participants were presented with the scales of interest, sociodemographic information, ending with a 25€ voucher lottery and a debriefing.

The measures used in this study comprised the CMS-W scale, with the items selected at the end of the Study 2, and the biological racism Scale (Vala et al., 2012; Study 3;  $M = 1.77$ ,  $SD = .58$ ,  $\alpha = .76$ ;  $\omega = .78$ ), and the social dominance orientation scale (SDO; Ho et al., 2015;  $M = 1.76$ ,  $SD = .64$ ,  $\alpha = .80$ ;  $\omega = .84$ ), both used in Study 2. We added for the first time the luso-tropicalism scale (Madeira et al., 2023), the Epworth sleep scale (ESS; Boari et al., 2004), and a measure of political orientation.

**Luso-tropicalism Scale (Madeira et al., 2023).** The luso-tropicalism scale consists of 12 items, organized into a bifactor structure with four specific factors and one general factor. For the purpose of testing convergent validity we decided to use in this study only its general factor. Participants responded to the items using a five-point rating ( $1 =$  Strongly disagree;  $5 =$  Strongly agree). A luso-tropicalism index was computed from the average of all means ( $M = 2.93$ ,  $SD = .72$ ,  $\alpha = .90$ ;  $\omega = .90$ ).

**Political Orientation.** We used a single item: “In politics, it's common to talk about left and right. Where would you position yourself on a scale of 1 to 7, where 1 means the most left-wing position and 7 means the most right-wing position?” ( $M = 3.34$ ,  $SD = 1.44$ ).

**Epworth Sleep Scale (ESS; Boari et al., 2004).** The ESS is composed of 8 items referring to different situations when people may fall asleep (e.g., “Watching TV.”). The participants answered each item using a four-point rating (from  $0 =$  no probability to fall asleep;  $3 =$  big probability to fall asleep). A sleep index was computed from the average of all means ( $M = 2.05$ ,  $SD = .46$ ,  $\alpha = .71$ ;  $\omega = .72$ ).

## Results

We begin by using confirmatory factor analysis (CFA) to test the trifactorial structure obtained in Study 2, using JASP (version 0.18.3 for Apple Silicon), followed by other alternative models. Specifically, to compare the trifactorial structure, obtained in Study 2, we tested the unifactorial structure and a second-order structure - a bifactor model - that would allow for a global factor of colonial mentality. The estimation method used for these analyses was Robust Diagonal Weighted Least Squares (RDWLS), which is considered particularly useful for ordinal data (DiStefano & Morgan, 2014; Li, 2016). To assess models' adjustment,

we used the following fit indices (Brown, 2015): Chi-square test, in which a non-significant result ( $p > 0.05$ ) suggests a good fit between the model and the data; Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) (with acceptable values equal or above .90); Standardized Root Mean Square Residual (SRMR) (with acceptable values below .08) and Root Mean Square Error Aproximation (RMSEA) (with recommended values between .05 and .08). The Goodness-of-fit statistics for each model can be found on Table 4.

The unifactorial structure was discarded since its adjustment indices were considered inadequate. Both the trifactorial and bifactor models showed good fit indices; however, the bifactor model demonstrated the best overall fit (Brown, 2015). In fact, the bifactor model, which posits a general colonial mentality factor, alongside three specific domains (colonial debt, physical characteristics, and cultural shame and inferiority), provided the most robust representation of the CMS-W's structure. This model allowed for the use of both a global colonial mentality index and its specific dimensions, offering flexibility for future applications (see Figure 2).

**Table 43**

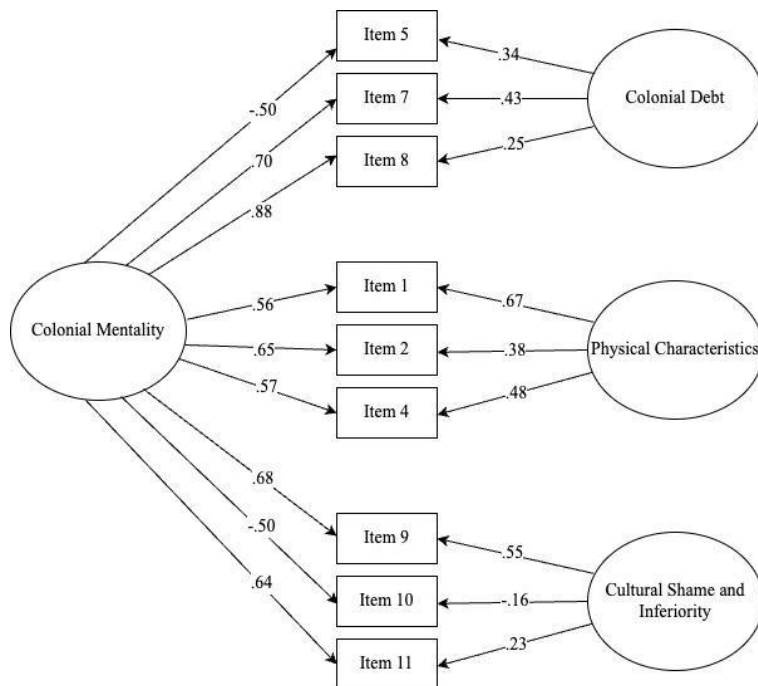
*Goodness-of-fit indexes for CFA models of CMS-W (Study 3).*

Models	$X^2/df$	CFI	TLI	RMSEA (CI 90%)	SRMR
Unifactorial structure	4.63***	0.86	0.82	.11 (.09-.13)	.06
Trifactorial structure	0.62	1.00	1.02	.00 (.00-.02)	.04
Bifactorial model	0.72	1.00	1.03	.00 (.00-.03)	.03

*Note.* CFI = Comparative Fit Index; TLI = Tucker–Lewis Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; \*\*\* $p < .001$

**Figure 2**

*Bifactor model Structure of the CMS-W (Study 3)*



To provide further evidence of CMS-W's reliability, we measured internal consistency using Cronbach's alpha ( $\alpha$ ) (Cronbach, 1951) and McDonald's omega ( $\omega$ ) (McDonald, 1999) coefficients. CMS-W global factor showed strong internal consistency results ( $\alpha = .79$ ;  $\omega = .81$ ), as well as colonial debt ( $\alpha = .68$ ;  $\omega = .72$ ) and physical characteristics ( $\alpha = .77$ ;  $\omega = .77$ ) dimensions. Cultural shame and inferiority, however, presented weaker internal consistency results ( $\alpha = .44$ ;  $\omega = .50$ ).

Finally, for convergent validity, as in Study 2, we considered adequate values between .40 and .70 were (Damásio & Borsa, 2017) (see Table 3). The CMS-W and its dimensions showed moderate to strong positive correlations with the biological racism scale and SDO. Regarding luso-tropicalism, presented a strong positive correlation with CMS-W and with the colonial debt dimension, and a moderate correlation (below .40) with the physical characteristics and cultural shame and inferiority dimensions. Regarding political orientation, the CMS-W showed a positive correlation, while its dimensions presented mostly moderate correlations. In terms of discriminant validity, CMS-W showed no correlation or weak correlations with the ESS.

## Discussion

In this study, we provided further evidence for the factorial validity of the CMS-W. While the trifactorial structure identified in Study 2 was supported, our comparison with alternative models revealed that the bifactor structure provided the best fit. This finding suggests that the CMS-W can be effectively conceptualized as having both a global factor of colonial mentality and three distinct dimensions: colonial debt, physical characteristics, and cultural shame and inferiority. The bifactor model aligns with the structure found in the homologous CMS for racialized individuals (CMS-Portugal; Miranda et al., 2024), reinforcing the theoretical overlap in how colonial mentality manifests across different racial groups.

The internal consistency results for the CMS-W were largely consistent with Study 2. The colonial debt and physical characteristics dimensions showed good reliability, while the cultural shame and inferiority dimension continued to display weaker internal consistency. However, the global factor of colonial mentality demonstrated strong reliability, suggesting that the scale as a whole is robust, even if one dimension shows some limitations.

In terms of validity, Study 3 replicated the convergent validity of the CMS-W with measures of biological racism and social dominance orientation from Study 2, reinforcing that colonial mentality is strongly associated with hierarchical and racialized beliefs. Additionally, this study extended our understanding of CMS-W by demonstrating moderate to strong correlations with luso-tropicalism, particularly in the global index and the colonial debt dimension. The weaker correlations between physical characteristics and cultural shame and inferiority and luso-tropicalism suggest that, while related, these constructs represent distinct aspects of racial and colonial attitudes. The CMS-W taps into more overt and negative perceptions of Black individuals and African culture, while luso-tropicalism reflects a more ambivalent, subtle form of racism. This distinction emphasizes the unique contribution of the CMS-W in capturing colonial mentality. We also confirmed that CMS-W is positively associated with political orientation, indicating that individuals with right-wing political views are more likely to score higher on colonial mentality. Additionally, the CMS-W demonstrated good discriminant validity, showing weak or no correlations with a physical state measure (sleep), further supporting the specificity of the CMS-W to social and racial attitudes.

While Study 3 successfully confirmed the structure and validity of the CMS-W, the study did not yet explore how colonial mentality influences behaviors and judgments toward

individuals from different racial groups. Study 4 will address this gap by examining the criterion validity of the CMS-W.

#### **Study 4. Criterion validity**

In this study, we analyzed whether levels of colonial mentality could predict differences in perceived psychological distress and in help-recommending behaviors towards Black and White patients. Studies have shown that there is a racial bias in the perception of suffering in racialized people on the part of White people (Lin et al., 2023). This bias has practical consequences, such as differences in treatment recommendations provided to racialized people (Hamed et al., 2022; Stepanikova, 2012). Some of the explanations proposed for this phenomenon are based on racial stereotypes and beliefs about a greater pain threshold in racialized people (Hoffman et al., 2016), with possible origins in the colonial period (Trawalter & Hoffman, 2015). Additionally, there is evidence that disparities in pain perception and treatment can be unconscious (Mathur et al., 2014), and that they exist in lay people as well as in subjects with health education (Hamed et al., 2022; Hoffman et al., 2016).

In this study we show how colonial mentality can affect the perception of psychological suffering in Black (when compared to the White) patients, and the subsequent help recommendations. More specifically, we expect that White people with higher levels of colonial mentality, as measured with the CMS-W, will attribute lower levels of psychological symptoms to Black patients, then they will do to White patients. We also expect that the help-recommendations will be mediated by perception of suffering, thus resulting in lower help recommendations to the Black patient.

## **Method**

### ***Participants and Design***

This study followed an experimental procedure. A sample of 268 participants completed an online survey. Participants who were under 18 years old and/or did not self-categorize as White and/or were not of Portuguese nationality were excluded, resulting in a final sample of 244 participants (88.1% females, 10.2% male, 1.6% non-binary). Participants' age ranged from 18 to 60 years old, with mean age of 28.01 ( $SD = 9.61$ ).

## ***Procedure and Materials***

Participants were invited to take part in the study via social media (e.g., Whatsapp), and completed an online questionnaire built on the Qualtrics platform. The sample was nonprobabilistic, relying on convenience sampling. Participation in the survey was contingent upon agreement with the terms of the informed consent, which stated that participation was voluntary, anonymous, and could be withdrawn at any point before completing the questionnaire.

After reading and agreeing to the conditions of the informed consent, the participants filled in the CMS-W, with the items presented in random order. After completing the scale, the participants performed a memory distraction task. Next, participants read a clinical vignette:

Maria, 32, was born in [Lisbon vs. Luanda]. She is single and has no children. She consulted a general practitioner at the health center in her residential area (central Lisbon). She complains of low energy and reports crying alone at home. She mentions that she has thought about committing suicide in the past, but currently denies having any suicidal thoughts. She is concerned that she may be experiencing a nervous breakdown and is requesting a sick leave. Maria works as a secretary in a company where she feels undervalued and mistreated by her boss and colleagues. She has a good relationship with her family but does not want to worry them about her situation.

Participants were randomly distributed between the two experimental conditions, with half being cued that the patient was Black (born in Luanda) and the other half that she was White (born in Lisbon)<sup>4</sup>. At the end of the vignette, we asked some comprehension questions, to ensure participants had in fact read the vignette.

After we measured the dependent variables. We started with behavioral variables, namely, to what extent they agreed that doctor issued the sick leave ( $1 = \text{disagree}$ ;  $6 = \text{agree}$ ),

---

<sup>4</sup> In Portugal, the race of patients is never recorded in public institutions, whereas the place of birth is. Since the majority of people born in Luanda are Black and the majority of people born in Lisbon are White, the place of birth was used as an ecologically valid cue for participants to infer the race of the subject of the vignette.

that the patient should be referred to a psychologist or a psychiatrist (1 = disagree; 6 = agree), and the maximum time that patient should have to wait (1 = assistance on the day; 2 = assistance that week; 3 = assistance that month; 4 = waiting list). We continued with a scale of perceived psychological suffering (Schulz et al., 2010). Finally, participants answered an explicit manipulation check, having to indicate the place of birth of the patient. They finished the study answering a sociodemographic questionnaire (e.g., gender, age, self-categorization, nationality). At the end of the survey there was a €25 voucher lottery and participants were thanked and debriefed.

**Colonial Mentality Scale for White People (Study 2).** The version of the scale used in this study resulted from Study 2, and CFA confirmed the bifactor structure found in Study 3 (CFI = 1.00; TLI = 1.00; RMSEA (CI 90%) = .00 (.00-.02); SRMR = .03). A colonial mentality index was computed from the average of all items ( $M = 1.82$ ,  $SD = .52$ ,  $\alpha = .72$ ;  $\omega = .71$ ).

**The Psychological Symptoms Scale (PSS; Schulz et al., 2010).** Participants were asked to what extent they thought the subject had experienced a set of psychological symptoms in the previous 7 days. The participants rated 15 psychological symptoms (e.g., fear, hopelessness), in a four-point rating scales (0 = Never; 3 = Every day). A psychological symptoms index was computed from the average of all means ( $M = 2.16$ ,  $SD = .65$ ,  $\alpha = .87$ ;  $\omega = .86$ ).

## Results

### *Preliminary Analyses*

In Table 5, bivariate correlations between the study variables are presented for each of the experimental conditions. For the Black patient, colonial mentality was negatively correlated with the attribution of psychological symptoms and medical leave recommendation. Furthermore, in this condition, the attribution of psychological symptoms was positively correlated with the recommendation for medical leave and psychology referral. In contrast, for the White patient, colonial mentality did not significantly correlate with any of the study variables, suggesting it is not related to perceptions of White patients.

**Table 45**

*Bivariate correlations (Pearson's r) results concerning CMS-W's criterium validity (Study 4)*

	CMS-W	CD	PC	CSI	Psychological Symptoms	Medical Leave	Recommendatio n for Psychiatry	Recommendation for Psychology	Waiting Time
CMS-W		<b>.772**</b>	<b>.706**</b>	<b>.632**</b>	<b>-.241**</b>	<b>-.223**</b>	<b>-.140</b>	<b>.011</b>	<b>.149</b>
CD	<i>.847**</i>		<b>.209*</b>	<b>.323**</b>	<b>-.168</b>	<b>-.142</b>	<b>-.006</b>	<b>.126</b>	<b>.099</b>
PC	<i>.758**</i>	<i>.385**</i>		<b>.241**</b>	<b>-.127</b>	<b>-.236*</b>	<b>-.219*</b>	<b>-.020</b>	<b>.112</b>
CSI	<i>.639**</i>	<i>.377**</i>	<i>.326**</i>		<b>-.250**</b>	<b>-.070</b>	<b>-.097</b>	<b>-.151</b>	<b>.109</b>
Psychological Symptoms	<i>-.093</i>	<i>.004</i>	<i>-.097</i>	<i>-.187*</i>		<b>.291**</b>	<b>.056</b>	<b>.238*</b>	<b>-.120</b>
Medical Leave	<i>-.147</i>	<i>-.145</i>	<i>-.031</i>	<i>-.184*</i>	<i>.096</i>		<b>.184*</b>	<b>.111</b>	<b>-.035</b>
Recommendatio n for Psychiatry	<i>-.145</i>	<i>-.080</i>	<i>-.169</i>	<i>-.088</i>	<i>.113</i>	<i>.310**</i>		<b>.093</b>	<b>-.085</b>
Recommendatio n for Psychology	<i>-.131</i>	<i>-.043</i>	<i>-.114</i>	<i>-.202*</i>	<i>.061</i>	<i>.206*</i>	<i>.123</i>		<b>-.069</b>
Waiting Time	<i>.088</i>	<i>.119</i>	<i>-.007</i>	<i>.091</i>	<i>-.205*</i>	<i>-.254*</i>	<i>-.071</i>	<i>-.153</i>	

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; Bold values correspond to Black patient; Italic values correspond to White patient.

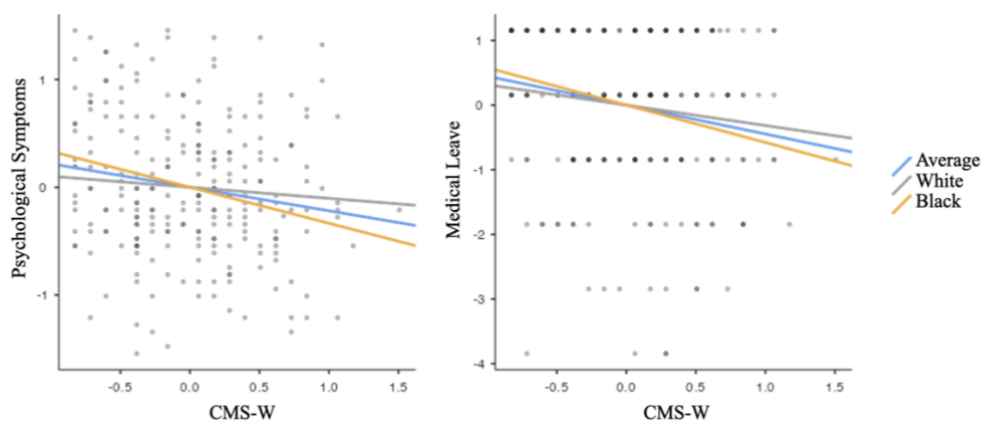
### Moderation Analyses

To evaluate whether the relationship between colonial mentality and perception of psychological symptoms and medical leave recommendation is moderated by the patient's race, we conducted moderation analyses (Model 1; Hayes, 2017). The results indicate that the main effect of colonial mentality on the attribution of psychological symptoms is not significant ( $b = -0.12$ ,  $SE = 0.11$ ,  $z = -1.09$ ,  $p = .278$ ), as well as the main effect of race ( $b = 0.37$ ,  $SE = 0.31$ ,  $z = 1.20$ ,  $p = .229$ ). However, when examining the relationship between colonial mentality and the attribution of psychological symptoms in both conditions, simple effects show that higher levels of colonial mentality are associated with lower attribution of psychological symptoms ( $b = -0.35$ ,  $SE = 0.13$ ,  $z = -2.81$ ,  $p = .005$ ) for the Black patient, but not for the White patient ( $b = -0.12$ ,  $SE = 0.11$ ,  $z = -1.09$ ,  $p = .278$ ) (see Figure 3 for estimated means). This pattern of results was not reflected by a significant interaction effect between colonial mentality and the patient's race ( $b = -0.24$ ,  $SE = 0.16$ ,  $z = -1.44$ ,  $p = .151$ ).

Regarding the recommendation for medical leave, the results are similar. Although the main effects related to colonial mentality ( $b = -0.27$ ,  $SE = 0.19$ ,  $z = -1.40$ ,  $p = .163$ ) and patient's race ( $b = 0.57$ ,  $SE = 0.55$ ,  $z = 1.03$ ,  $p = .303$ ) were not significant, the simple effects suggest that higher levels of colonial mentality predict lower medical leave recommendations in the Black patient ( $b = -0.27$ ,  $SE = 0.19$ ,  $z = -1.40$ ,  $p = .163$ ), and there was no significant relationship for the White patient ( $b = -0.61$ ,  $SE = 0.22$ ,  $z = -2.71$ ,  $p = .007$ ) (see Figure 3 for estimated means). Again, this pattern of results was not captured by the interaction effect between colonial mentality and race ( $b = -0.34$ ,  $SE = 0.30$ ,  $z = -1.16$ ,  $p = .246$ ).

**Figure 3**

*Estimated means for the patient's race (Black vs. White) on the relation between colonial mentality and perception of psychological symptoms (right figure) and medical leave (left figure)*



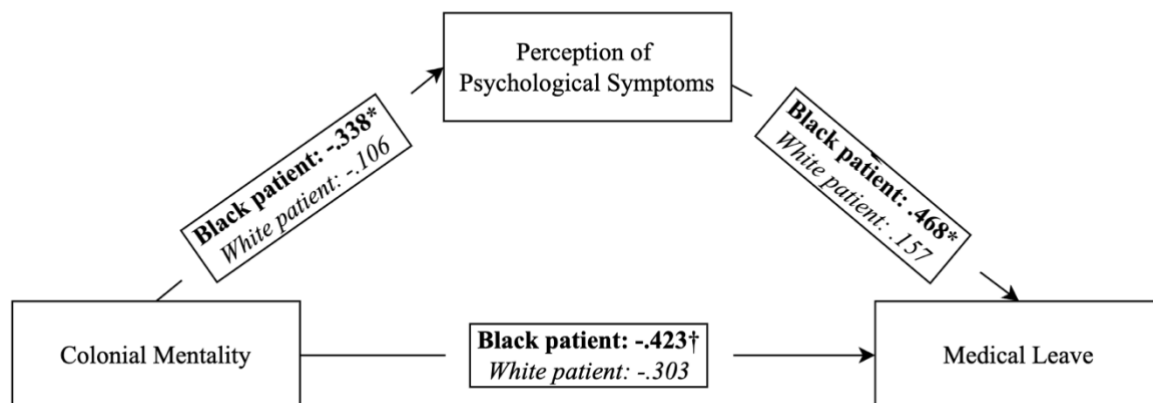
### **Moderated Mediation Analyses**

We further tested if the relationship between colonial mentality and the recommendation for medical leave was mediated by the lower attribution of psychological symptoms and moderated by the patient's race (Model 59; Hayes, 2017).

We found that, for the Black patient, the greater the colonial mentality, the lower the perception of psychological symptoms, resulting on a lower agreement with the medical leave for this patient (indirect effect:  $b = -0.16$ ,  $SE = 0.07$ ,  $z = -2.18$ ,  $p = .029$ ). For the White patient, this indirect effect was not significant (indirect effect:  $b = -0.02$ ,  $SE = 0.02$ ,  $z = -0.83$ ,  $p = .409$ ) (see Figure 4).

**Figure 4**

*Unstandardized Estimated Parameters of Moderated Mediation Analyses in Predicting Medical Leave (Study 4)*



Note. \* $p < .05$ ; †  $p < .08$ .

### **Discussion**

In Study 4, we examined how colonial mentality, as measured by the CMS-W, influences perceptions of psychological suffering and help-seeking recommendations for Black and White patients. Correlational findings suggest that colonial mentality distinctly affects how White individuals perceive others, depending on their race. Specifically, in the White patient condition, no significant correlation was found between colonial mentality and participants'

evaluation of the patient's suffering or the help recommended. However, in the Black patient condition, colonial mentality was associated with both the perception of suffering and the help recommendations. Moderation analyses confirmed that the relationship between colonial mentality and these outcomes depended on the perceived race of the patient. This fact highlights how colonial mentality in White people shapes different responses towards non-White patients compared to their responses to White patients.

Moreover, exploratory mediated moderation analyses further demonstrated that higher levels of colonial mentality were associated with lower perceptions of psychological suffering in Black (vs. White) patients, which, in turn, led to fewer help recommendations (i.e., medical leave). This suggests that colonial mentality not only biases initial perceptions of suffering but also impacts practical support decisions.

These findings provide robust evidence of the CMS-W's criterion validity, showing that it effectively captures differential responses to Black and White patients. This reinforces the value of the CMS-W as a tool for understanding how colonial attitudes continue to influence racism in contemporary settings.

### **General discussion**

Across four studies, we developed and validated the Colonial Mentality Scale for White People (CMS-W) within the Portuguese post-colonial context. In Study 1, we created CMS-W items based on the existing CMS-Portugal (Ribas et al., 2024) to specifically assess colonial mentality among White individuals. We consulted a panel of experts and gathered input from the target population, providing strong evidence for the content validity of these items. Study 2 provided initial evidence of the CMS-W's factorial structure and reliability. It also established convergent validity by demonstrating significant correlations with measures of biological racism and social dominance orientation. Importantly, the results showed that the CMS-W was not influenced by participants' motivation to appear non-prejudiced, affirming its robustness. Moreover, Item Response Theory analyses demonstrated strong discriminatory power for most items, particularly for individuals with moderate levels of colonial mentality. In Study 3, we further validated the CMS-W's factorial structure and reliability by replicating the trifactorial structure and conducting a bifactor analysis. This analysis confirmed the existence of a global factor alongside three specific dimensions: colonial debt, physical

characteristics, and cultural shame and inferiority. Additionally, we replicated the correlations from Study 2 and provided further evidence of convergent validity by linking CMS-W to luso-tropicalism and political orientation. Despite the conceptual overlap with luso-tropicalism, we demonstrated that the CMS-W captures distinct facets of racism. Furthermore, discriminant validity was supported by showing that the CMS-W is unrelated to irrelevant constructs, such as sleep measures. Study 4 focused on the criterion validity of the CMS-W, demonstrating its ability to capture different response patterns based on whether individuals were perceived to be Black or White. This study confirmed that higher colonial mentality scores were associated with differential perceptions of suffering and help recommendations, particularly when evaluating Black patients. Taken together, these four studies provide comprehensive evidence of the CMS-W's construct validity, establishing it as a valuable tool for measuring colonial mentality in White populations within post-colonial contexts.

### **Theoretical Implications**

Until now, colonial mentality has been measured in racialized people as a form of internalized racial oppression. In this research, we have taken a step forward by developing and validating a colonial mentality scale for White people, totally based on racialized people's internalized experiences of racism. This instrument therefore responds to some of the critiques leveled at racism studies regarding the reduced use of the knowledge and perspectives of racialized people in these studies (Adams et al., 2015; The Readsura Decolonial Editorial Collective, 2022).

Furthermore, in this paper we did not just put different perspectives on the phenomena of racism side by side. Instead, we initiated a new framework that allows us to bridge personally mediated and internalized levels of racial oppression. This approach is in line with some critiques by Critical Race Theory, which argue that multiperspectivism in postcolonial studies alone is not enough to break down the barriers of Eurocentrism and racism (Sahota, 2024). According to this critique, it is necessary to reconstruct knowledge in the light of the new perspectives identified, rather than just adding perspectives while trying to reach the same conclusions. In short, new perspectives make it possible to rethink old conclusions and create new lines of thought (Bhambra, 2014).

Finally, this paper actively addresses the critique that studies on racism often claim a “neutral” position, detached from cultural, political, and power dynamics (Roberts, 2020). Instead, we started from a post-colonial context and, taking into account the current political and social context, we tried to contribute to the study of a psychological phenomenon that is itself a product of racial power dynamics.

Regarding the dynamic and constantly evolving nature of racism, we believe we have also contributed to the current need for innovation in research. For decades, the most frequent expressions of racism have been more covert in response to the robustness of the anti-racist norm. More recently, however, the rising of the right-wing political movement (e.g., Bernardino-Costa, 2023) has paved the way for more overt forms of racism to regain territory. This new scenario calls for the need for research instruments to be sensible to these open expressions of racism, and the CMS-W allows the display of racist and colonialist beliefs and attitudes more openly.

Additionally, given the rise of cultural racism observed in the generality of European countries (see Ramos et al., 2020), CMS-W can be of particular value. We refer to the fact that the cultural shame and inferiority dimension directly assesses the attitudes towards Black culture/traditions in comparison to White culture/traditions. In parallel, the physical characteristics dimension can contribute to the study of the differences regarding racial based beauty standards, and to help dismantle this racial form of oppression.

The colonial debt dimension can also be of particular interest. It has a strong link with luso-tropicalism and, in particular, with one of its dimensions, which relates to the development work done during colonization (sample item: “The creation of education and health systems in the colonies was a hallmark of Portuguese colonialism”). However, the colonial debt dimension additionally highlights the presence of beliefs about the existence of a debt felling on the part of formerly colonized people (sample item: “In my opinion, Black people should be grateful to White people for transforming the African way of life into a more White/European way of life”). Kilomba (2019) argues that, from a White privileged standpoint, acknowledging colonial oppression’s consequences requires moving beyond repression and negation through accepting guilt and shame to finally reach recognition and some sort of reparation. In a recent visit to Portugal to receive an *Honoris Causa* PhD (2023), Kilomba noted that by offering her an award for her work on colonial legacy, there seemed to be a jump from negation straight to recognition, while avoiding the stages of guilt and shame. According to the same author, in a

negation stage, an idea or thought is allowed into conscience, but in its negative form. Additionally, despite negating this idea or thought the person accuses the existence of such ideas or thoughts in *the other* (Kilomba, 2019), in a process of projection of the unbearable White guilt (see Swim & Miller, 1999) and shame for the colonial History. Zooming in the original CMS-Portugal, those exact emotions appear in the existing dimensions of colonial debt and cultural shame and inferiority: the shame associated to the racialized group and the guilt of owing gratitude. In this way, the CMS-W can assist in re-introducing these emotions in the study of racism by White people and shed light on the collectively denied colonial issued (Maeso, 2019).

### **Clinical Implications**

Focusing into the field of mental health, we analyzed the relationship between colonial mentality, the attribution of psychological symptoms and help-seeking behaviors in White people. It was possible to detect different patterns according to the group belonging of the subject being evaluated. Thus, this paper provides the first contribution to understanding the link between the colonial mentality in White people and the perception of psychological suffering, in Black and White people, as well as practical behavioral consequences resulting from this association.

Despite the fact that the participants of Study 4 were recruited from general population, we must bear in mind that 1) racism is present throughout society and largely associated with automatic processes and 2) psychotherapists are found to be generally ill-equipped to provide culturally sensitive and anti-racist services (Cénat, 2023; Mensah et al., 2021). As such, we argue that it is plausible that the observed patterns in these studies will replicate in samples made exclusively of mental health care providers. This is particularly relevant when we consider the fact that the vast majority of mental health providers in Portugal is White.

Furthermore, we consider the results from Study 4 that indicate that the patients' race elicits different perceptions in participants with higher colonial mentality, which pave way for different behavioural decisions. Given that, in Clinical Psychology, interventions are anchored in the assessment of emotional condition of patients in real time, these results might be indicating an underestimation of the perception of psychological suffering of Black patients and, in consequence, the option for a treatment that does not correspond to their true needs.

Further research is needed to investigate possible conflicts between the reality of clinical practice by White therapists with high colonial mentality and the code of ethics for Portuguese psychologists. This document states that clinical practice must always follow the principle of beneficence and non-maleficence (Ordem dos Psicólogos Portugueses, 2024). However, failure to carry out an accurate psychological assessment of Black patients, with consequent less psychological support, will result in less care being provided - thus undermining the principle of beneficence. In addition, failure to recognize the dynamics of racism within the clinical setting, but also in patients' daily lives, contributes to the reinforcement of current racial power dynamics and the IRO, which was shown to (see Gale et al., 2020) translates into mental health costs for racialized people - thus undermining the principle of non-maleficence. To reduce these risks, we must first recognize that there is a problem. In this respect, the CMS-W can be an invaluable tool as it will allow us to monitor the levels of colonial mentality among health professionals. Second, we will need to evaluate efforts to reduce racial disparities in healthcare (Bailey et al., 2017; Nolasco et al., 2020; Pattillo et al., 2023), and the development of anti-racist and culturally sensitive mental health care practices (Cénat et al., 2024; Mensah et al., 2021), in particular. CMS-W can be a valuable tool in this regard.

### **Limitations and Future Directions**

Despite the quality of the instrument, some limitations can be pointed out in its development and validation. The first one concerns the (convenience) samples used in the studies, that do not allow for the generalization of the results, and may also lead to challenges in achieving a gender balance among participants. This factor stands out as a limitation of these studies since the samples were composed predominantly of participants who identified as female. Future studies should address this aspect by seeking more balanced samples regarding participants' gender identification and providing psychometric evidence of equivalence validity between genders.

The second limitation of this study relates to the lower robustness of one of the CMS-W dimensions (the cultural shame and inferiority dimension). However, evidence was provided for a bifactor structure, allowing the instrument to be used with a single factor (a general measure of colonial mentality) or three factors (the three dimensions). This structure resembles the bifactor structure found for the CMS-Portugal (which served as the basis for developing

the CMS-W) (Miranda et al., 2024). Future studies should also seek to provide evidence of the measure's stability over time through test-retest.

Despite the evidence found regarding the relationship between colonial mentality, the perception of psychological distress, and help-seeking behaviors, it is important to note that Study 4 used a general population sample. Future studies should examine these results among healthcare professionals, particularly psychologists and psychiatrists. For example, studies have demonstrated biases in healthcare, particularly concerning the time allocated to patients (e.g., Do Bú et al., 2023). Future research could explore the relationship between colonial mentality and time in healthcare settings. Thus, this instrument could be used to deepen the body of knowledge that informs public policy, supporting the necessary transformation in terms of social justice and equity in social systems.

Lastly, since this study was conducted in the Portuguese context, evidence is still needed regarding the measure's validity in other post-colonial contexts. We suggest that future studies investigate this concept in other countries with a colonial history. Therefore, we argue that these studies may contribute globally to the study of prejudice and discrimination phenomena and deepen awareness of the impact of colonialism.

## **Conclusion**

The development and validation of the CMS-W demonstrate that the instrument is psychometrically sound, valid, and easy to apply. Initially created for the Portuguese context, the CMS-W has the potential to be adapted for use in other languages and regions, enabling the study of colonial mentality among White populations across diverse settings. This research marks a significant step in rethinking racism through the lens of colonial mentality within dominant White societies. By foregrounding the experiences and knowledge of racialized people and acknowledging racial power dynamics, the CMS-W offers a valuable tool for contributing to a historically and culturally informed understanding of racism, helping shape future research that fully recognizes and values these perspectives.

## References

- Adams, G., Dobles, I., Gómez, L. H., Kurtiş, T., & Molina, L. E. (2015). Decolonizing psychological science: Introduction to the special thematic section. *Journal of Social and Political Psychology*, 3(1). <https://doi.org/10.23668/psycharchives.1766>
- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. Harpers.
- Ahmed, M. K., Scretching, D., & Lane, S. D. (2023). Study designs, measures and indexes used in studying the structural racism as a social determinant of health in high income countries from 2000–2022: evidence from a scoping review. *International Journal for Equity in Health*, 22(1), 4. <https://doi.org/10.1186/s12939-022-01796-0>
- Alexandre, V. (1999). O Império e a ideia de raça (séculos XIX e XX). In J. Vala (Ed.). *Novos Racismos: Perspectivas Comparativas* (pp. 133-144). Oeiras: Celta.
- Araújo, M. (2013). Challenging Narratives on Diversity and Immigration in Portugal: the (de) politicization of colonialism and racism. In P. Kretsedemas, J. Capetillo-Ponce, . Jacobs (Eds.), *Migrant Marginality* (pp. 27-46). Routledge.
- Araújo, M., & Rodríguez Maeso, S. (2010). Explorando o eurocentrismo nos manuais portugueses de História. *Estudos de Sociologia*, 15(28), 239-270. <https://hdl.handle.net/10316/42619>
- Babbie, E. (2021). *The Practice of Social Research* (15th ed.). Cengage Learning.
- Bailey, T.-K. M., Chung, Y. B., Williams, W. S., Singh, A. A., & Terrell, H. K. (2011). Development and validation of the Internalized Racial Oppression Scale for Black individuals. *Journal of Counseling Psychology*, 58(4), 481–493. <https://doi.org/10.1037/a0023585>
- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: evidence and interventions. *The lancet*, 389(10077), 1453-1463.
- Bernardino-Costa, J. (2023). Opening Pandora's Box: the extreme right and the resurgence of racism in Brazil. *Latin American Perspectives*, 50(1), 98-114. <https://doi.org/10.1177/0094582X221147596>
- Bethencourt, F. (2015). *Racismos: das cruzadas ao século XX*. Temas e Debates.

- Bhambra, G. (2014). *Connected Sociologies*. Bloomsbury Academic.
- Biko, S. (2015). *I write what I like: Selected writings*. University of Chicago Press.
- Bilwani, S. (2023). Experiences of Microaggression by Black Professionals in Social Services in Portugal. *Journal of Progressive Human Services*, 34(3), 211–233. <https://doi.org/10.1080/10428232.2023.2227537>
- Boari, L., Cavalcanti, C. M., Bannwart, S. R., Sofia, O. B., & Dolci, J. E. L. (2004). Avaliação da escala de Epworth em pacientes com a Síndrome da apnéia e hipopnéia obstrutiva do sono. *Revista Brasileira de Otorrinolaringologia*, 70, 752-756. <https://doi.org/10.1590/S0034-72992004000600007>
- Bogardus, E. S. (1933). A social distance scale. *Sociology & Social Research*.
- Brauer, M., & Er-Rafiy, A. (2011). Increasing perceived variability reduces prejudice and discrimination. *Journal of Experimental Social Psychology*, 47(5), 871-881. <https://doi.org/10.1016/j.jesp.2011.03.003>
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). The Guilford Press.
- Brown, T. H., & Homan, P. (2024). Structural Racism and Health Stratification: Connecting Theory to Measurement. *Journal of Health and Social Behavior*, 65(1), 141-160. <https://doi.org/10.1177/00221465231222924>
- Capielo Rosario, C., Schaefer, A., Ballesteros, J., Rentería, R., & David, E. J. R. (2019). A caballo regalo no se le mira el colmillo: Colonial mentality and Puerto Rican depression. *Journal of Counseling Psychology*, 66(4), 396. <https://doi.org/10.1037/cou0000347>
- Carneiro, E. (1958). *O quilombo dos Palmares*. Brasileira.
- Cénat, J. M. (2023). Complex Racial Trauma: Evidence, Theory, Assessment, and Treatment. *Perspectives on Psychological Science*, 18(3), 675-687. <https://doi.org/10.1177/17456916221120428>
- Cénat, J. M., Broussard, C., Jacob, G., Kogan, C., Corace, K., Ukwu, G., Onesi, O., Furyk, S. E., Bekarkhanechi, F. M., Williams, M., Chomienne, M.-H., Grenier, J., & Labelle, P. R. (2024). Antiracist training programs for mental health professionals: A scoping

review. *Clinical Psychology Review*, 108, 1–39.  
<https://doi.org/10.1016/j.cpr.2023.102373>

Clark, K. B., & Clark, M. K. (1939). The development of consciousness of self and the emergence of racial identification in Negro preschool children. *The Journal of Social Psychology*, 10(4), 591-599. <https://doi.org/10.1080/00224545.1939.9713394>

Costa-Lopes, R. (2024). *Preconceito e Discriminação em Portugal*. Fundação Francisco Manuel dos Santos.

Cronbach, J. L. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334. <https://doi.org/10.1007/BF02310555>

Cross, W. E., Jr. (1971). The Negro-to-Black conversion experience. *Black World*, 20, 13–27.

Cross, W. E., Jr. (1991). *Shades of black: Diversity in African-American identity*. Temple University Press.

Cross, W. E., Jr. (1995). In search of Blackness and Afrocentricity: The psychology of Black identity change. In H. W. Harris, H. C. Blue, & E. E. H. Griffith (Eds.), *Racial and ethnic identity: Psychological development and creative expression* (pp. 53–72). Taylor & Frances/Routledge.

Cullors, P. & Bandele, A. (2018). *When they call you a terrorist: A Black Lives Matter memoir*. St. Martin's Press.

David, E. J. R., & Okazaki, S. (2006). The Colonial Mentality Scale (CMS) for Filipino Americans: Scale construction and psychological implications. *Journal of Counseling Psychology*, 53(2), 241. <https://doi.org/10.1037/0022-0167.53.2.241>

David, E. J. R., & Nadal, K. L. (2013). The colonial context of Filipino American immigrants' psychological experiences. *Cultural Diversity & Ethnic Minority Psychology*, 19(3), 298–309. <https://doi.org/10.1037/a0032903>

David, E.J.R., Petalio, J., & Crouch, M. (2018). Microaggressions and internalized oppression. In C. M. Capodilupo, K. L. Nadal, D. P. Rivera, D. W. Sue, & G. C. Torino (Eds.), *Microaggressions theory: Influence and implications*. John Wiley & Sons.

David, E., Schroeder, T., & Fernandez, J. (2019). Internalized Racism: A Systematic Review of the Psychological Literature on Racism's Most Insidious Consequence. *Journal Of Social Issues*, 75(4), 1057-1086. <https://doi.org/10.1111/josi.12350>

- Davis, A. (1981). *Women, Race & Class*. Random House.
- DeVellis, R. F. (2016). *Scale development: Theory and applications*. (4a Ed.) Sage Publications.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56(1), 5–18. <https://doi.org/10.1037/0022-3514.56.1.5>
- Dimitrov, D. M. (2012). *Statistical methods for validation of assessment scale data in counseling and related fields*. American Counseling Association.
- DiStefano, C., & Morgan, G. B. (2014). A comparison of diagonal weighted least squares robust estimation techniques for ordinal data. *Structural Equation Modeling*, 21(3), 425–438. <https://doi.org/10.1080/10705511.2014.915373>
- Do Bú, E. A., Madeira, F., Pereira, C. R., Hagiwara, N., & Vala, J. (2024). Intergroup time bias and aversive racism in the medical context. *Journal of Personality and Social Psychology*, 127(1), 104–131. <https://doi.org/10.1037/pspi0000446>
- Dollard, J., Miller, N. E., Doob, L. W., Mowrer, O. H., & Sears, R. R. (1939). *Frustration and aggression*. Yale University Press. <https://doi.org/10.1037/10022-000>
- Damáσιο, B. F. & Borsa, J. C. (2017). *Manual de desenvolvimento de instrumentos psicológicos*. Vetor.
- Dovidio, J. F., & Gaertner, S. L. (1986). *Prejudice, discrimination, and racism*. Academic Press.
- Dovidio, J. F., & Gaertner, S. L. (2004). Aversive racism. *Advances in experimental social psychology*, 36, 4-56. [https://doi.org/10.1016/S0065-2601\(04\)36001-6](https://doi.org/10.1016/S0065-2601(04)36001-6)
- Dovidio, J. F., & Gaertner, S. L. (2008). New directions in aversive racism research: Persistence and pervasiveness. In C. Willis-Esqueda (Ed.), *Motivational aspects of prejudice and racism* (Vol. 53, pp. 43-67). Springer New York.
- Dovidio, J. F., Gaertner, S. L., & Abad-Merino, S. (2017). Helping behaviour and subtle discrimination. In E. van Leeuwen & H. Zagefka (Eds.), *Intergroup helping* (pp. 3–22). Springer International Publishing/Springer Nature. [https://doi.org/10.1007/978-3-319-53026-0\\_1](https://doi.org/10.1007/978-3-319-53026-0_1)

- Du Bois, W. E. B. (1989). *The souls of Black folks*. New York: Bantam.
- Fanon, F. (2022). *Pele Negra, Máscaras Brancas*. Letra Livre. (Original work published 1952)
- Fanon, F. (2023). *Os Condenados da Terra* (2nd ed.). Letra Livre. (Original work published 1961)
- de França, D. X., & Monteiro, M. B. (2013). Social norms and the expression of prejudice: The development of aversive racism in childhood. *European Journal of Social Psychology*, 43(4), 263–271. <https://doi.org/10.1002/ejsp.1965>
- Fredrickson, G. M. (2015). *Racism: A Short History*. Princeton University Press.
- Gale, M. M., Pieterse, A. L., Lee, D. L., Huynh, K., Powell, S., & Kirkinis, K. (2020). A Meta-Analysis of the Relationship Between Internalized Racial Oppression and Health-Related Outcomes. *The Counseling Psychologist*, 48(4), 498-525. <https://doi.org/10.1177/0011000020904454>
- Garrow, D. J. (2015). *Bearing the cross: Martin Luther King, Jr., and the southern Christian leadership conference*. Open Road Media.
- Geiss, I. (1974). *The pan-african movement: a history of pan-africanism in America, Europe, and Africa*. Holmes & Meier Pub.
- Gorjão Henriques, J. (2016). *Racismo em português. O lado esquecido do colonialismo*. Tinta da China.
- Groos, M., Wallace, M., Hardeman, R., & Theall, K. P. (2018). Measuring inequity: a systematic review of methods used to quantify structural racism. *Journal of health disparities research and practice*, 11(2), 13. <https://digitalscholarship.unlv.edu/jhdrp/vol11/iss2/13>
- Guttman, L. (1954). Some necessary conditions for common factor analysis. *Psychometrika*, 19(2), 149–162. <https://doi.org/10.1007/BF02289162>
- Hailu, E. M., Maddali, S. R., Snowden, J. M., Carmichael, S. L., & Mujahid, M. S. (2022). Structural racism and adverse maternal health outcomes: A systematic review. *Health & place*, 78, 102923. <https://doi.org/10.1016/j.healthplace.2022.102923>

- Hamed, S., Bradby, H., Ahlberg, B. M., & Thapar-Björkert, S. (2022). Racism in healthcare: a scoping review. *BMC Public Health*, 22(1), 988. <https://doi.org/10.1186/s12889-022-13122-y>
- Hardeman, R. R., Homan, P. A., Chantarat, T., Davis, B. A., & Brown, T. H. (2022). Improving the measurement of structural racism to achieve antiracist health policy: Study examines measurement of structural racism to achieve antiracist health policy. *Health Affairs*, 41(2), 179-186. <https://doi.org/10.1377/hlthaff.2021.01489>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Henry, P. J., & Sears, D. O. (2002). The symbolic racism 2000 scale. *Political psychology*, 23(2), 253-283. <https://doi.org/10.1111/0162-895X.00281>
- Hing, A. K., Chantarat, T., Fashaw-Walters, S., Hunt, S. L., & Hardeman, R. R. (2024). Instruments for racial health equity: a scoping review of structural racism measurement, 2019-2021. *Epidemiologic Reviews*, mxae002. <https://doi.org/10.1093/epirev/mxae002>
- Hipolito-Delgado, C. P., Payan, S. G., & Baca, T. I. (2014). Self-hatred, self-doubt, and assimilation in Latina/o communities: Las consecuencias de colonización y opresión. In E. J. R. David (Ed.), *Internalized oppression: The psychology of marginalized groups* (pp. 109–136). Springer.
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., ... & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO<sub>7</sub> scale. *Journal of personality and social psychology*, 109(6), 1003. <https://doi.org/10.1037/pspi0000033>
- Hoffman, K. M., Trawalter, S., Axt, J. R., & Oliver, M. N. (2016). Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proceedings of the National Academy of Sciences of the United States of America*, 113(16), 4296–4301. <https://doi.org/10.1073/pnas.1516047113>
- Ivarsflaten, E., Blinder, S., & Ford, R. (2010). The Anti-Racism Norm in Western European Immigration Politics: Why we Need to Consider it and How to Measure it. *Journal of*

*Elections, Public Opinion and Parties*, 20(4), 421–445.  
<https://doi.org/10.1080/17457289.2010.511805>

- Jak, S., Jorgensen, T. D., Verdam, M. G. E., Oort, F. J., & Elffers, L. (2021). Analytical power calculations for structural equation modeling: A tutorial and Shiny app. *Behavior Research Methods*, 53, 1385–1406. <https://doi.org/10.3758/s13428-020-01479-0>
- Jones, C. P. (2000). Levels of racism: a theoretic framework and a gardener's tale. *American journal of public health*, 90(8), 1212. <https://doi.org/10.2105/ajph.90.8.1212>
- Judd, C. M., Ryan, C. S., & Park, B. (1991). Accuracy in the judgment of in-group and out-group variability. *Journal of Personality and Social Psychology*, 61(3), 366–379. <https://doi.org/10.1037/0022-3514.61.3.366>
- Katz, I. (1981). *Stigma: A social psychological analysis*. Hillsdale, NJ: Lawrence Erlbaum.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20(1), 141–151. <https://doi.org/10.1177/001316446002000116>
- Kilomba, G. (2019). *Memórias da Plantação. Episódios de racismo quotidiano*. Orfeu Negro. (Original work published 2008)
- Kilomba, G. (2023, Apr 14). *Acceptance speech*. [Acceptance speech]. Cerimónia de Atribuição de Título Honoris Causa a Grada Kilomba. ISPA - Instituto Universitário, Lisbon, Portugal.
- Kite, M.E., Whitley, B.E., & Wagner, L.S. (2023). *Psychology of Prejudice and Discrimination* (4th ed.). Routledge. <https://doi.org/10.4324/9780367809218>
- Leth-Sorensen, D. (2023). *The Role of Acculturation Strategies in the Internalisation of Racial Oppression within Black Families in Portugal* [Master's thesis, Ispa - Instituto Universitário]. Ispa Repository. <http://hdl.handle.net/10400.12/9514>
- Li, C. H. (2016). Confirmatory factor analysis with ordinal data: Comparing robust maximum likelihood and diagonally weighted least squares. *Behavioral Research Methods*, 48(3), 936–949. <https://doi.org/10.3758/s13428-015-0619-7>
- Lin, J., Drain, A., Goharзад, A., & Mende-Siedlecki, P. (2024). What factors predict anti-Black bias in pain perception? An internal meta-analysis across 40 experimental studies.

*Social and Personality Psychology Compass*, 18(2), e12901.  
<https://doi.org/10.1111/spc3.12901>

- Loomba, A. (2015). *Colonialism/postcolonialism (3rd ed.)*. Routledge.
- Madeira, F., Pereira, C. R., Ciambellini, M., & Do Bú, E. (2023, February). *The past in the present: The Role of Postcolonial Ideologies in Opposition to Social Inclusion Policies (Migration and Anti-Discrimination Policies)* [Presentation]. Society for Personality and Social Psychology 2023 Annual Convention Political Psychology Preconference, Atlanta, United States.
- Maeso, S. R. (2019). O Estado de negação e o presente-futuro do antirracismo: Discursos oficiais sobre racismo, ‘multirracialidade’ e pobreza em Portugal (1985-2016). *Revista Direito e Práxis*, 10, 2033-2067. <https://doi.org/10.1590/2179-8966/2019/43883>
- Mandela, N. (2008). *Long walk to freedom: The autobiography of Nelson Mandela*. Hachette
- McConahay, J. B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91–125). Academic Press.
- McDonald, R. P. (1999). *Test theory: A unified treatment*. Lawrence Erlbaum.
- McGee, E. O. (2020). Interrogating structural racism in STEM higher education. *Educational Researcher*, 49(9), 633-644. <https://doi.org/10.3102/0013189X20972718>
- Mensah, M., Ogbu-Nwobodo, L., & Shim, R. S. (2021). Racism and mental health equity: History repeating itself. *Psychiatric Services*, 72(9), 1091–1094. <https://doi.org/10.1176/appi.ps.202000755>
- Miller, P. (2021). “System Conditions”, System Failure, Structural Racism and Anti-Racism in the United Kingdom: Evidence from Education and Beyond. *Societies*, 11(2), 42. <https://doi.org/10.3390/soc11020042>
- Miranda, M. P., & Ribas, A., (2024). Para além do indivíduo: Avaliação Psicológica de Membros de Grupos Minorizados. In E. Do Bú, K. Lima & T. Brito (Eds.), *Avaliação Psicológica Direcionada para Pessoas em Situação de Vulnerabilidade e Grupos Minorizados* (pp. 21 - 34). Editora CRV. <https://doi.org/10.24824/978652516303.1.19-32>

- Miranda, M. P., Ribas, A., Do Bú, E., Vieira, F., & Leth-Sørensen, D. (2024, June). *Blocking the transgenerational transmission of colonial mentality in Black families: the social cure effect in depression* [Presentation]. Meeting on Social Identity, health and Leadership, Brussels, Belgium.
- Neblett, E. W., Jr. (2023). Racism measurement and influences, variations on scientific racism, and a vision. *Social Science & Medicine*, 316, 1–4. <https://doi.org/10.1016/j.socscimed.2022.115247>
- Nery, N. N. de F., Brito, T. R. de S., Mariano, T. E., Do Bú, E. A., & Pereira, C. R. (2023). Scale of Sexual Prejudice Against Bisexuals: Evidence of Validity. *Psico-USF*, 28(2), 333–345. <https://doi.org/10.1590/1413-82712023280210>
- Nolasco, I., Cunha, M., & Santos, E. (2020). Desigualdades raciais e étnicas no tratamento da depressão: uma revisão scoping. *Millennium-Journal of Education, Technologies, and Health*, (7e), 109-115. <https://doi.org/10.29352/mill0207e.12.00362>
- Nunnally, J. C. (1978). *Psychometric theory*. McGraw-Hill.
- Olmos-Alcaraz, A. (2022). Populism and racism on social networks: An analysis of the Vox discourse on Twitter during the Ceuta ‘migrant crisis’. *Catalan journal of communication & cultural studies*, 14(2), 207-223. [https://doi.org/10.1386/cjcs\\_00069\\_1](https://doi.org/10.1386/cjcs_00069_1)
- Ordem dos Psicólogos Portugueses (2024). *Código Deontológico da Ordem dos Psicólogos Portugueses*. [https://www.ordemdospsicologos.pt/ficheiros/documentos/web\\_cod\\_deontologico\\_pt\\_revisao\\_2016\\_1.pdf](https://www.ordemdospsicologos.pt/ficheiros/documentos/web_cod_deontologico_pt_revisao_2016_1.pdf)
- Palma, T., & Marôco, J. (2009). Escalas de motivação interna e motivação externa para responder sem preconceito: Estudo de validação cruzada da versão portuguesa. *Psicologia, Saúde e Doenças*, 10(2), 267-275. <http://hdl.handle.net/10400.12/1093>
- Parham, T. A., & Helms, J. E. (1981). The influence of Black students' racial identity attitudes on preferences for counselor's race. *Journal of Counseling Psychology*, 28(3), 250–257. <https://doi.org/10.1037/0022-0167.28.3.250>

- Pattillo, M., Stieglitz, S., Angoumis, K., & Gottlieb, N. (2023). Racism against racialized migrants in healthcare in Europe: a scoping review. *International journal for equity in health*, 22(1), 201. <https://doi.org/10.1186/s12939-023-02014-1>
- Pereira, C., Vala, J., & Costa-Lopes, R. (2010). From prejudice to discrimination: The legitimizing role of perceived threat in discrimination against immigrants. *European Journal of Social Psychology*, 40(7), 1231-1250. <https://doi.org/10.1002/ejsp.718>
- Perry, M. J., Arrington, S., Freisthler, M. S., Ibe, I. N., McCray, N. L., Neumann, L. M., Tajanlangit, P., & Trejo Rosas, B. M. (2021). Pervasive structural racism in environmental epidemiology. *Environmental health: a global access science source*, 20(1), 119. <https://doi.org/10.1186/s12940-021-00801-3>
- Pestana, M., & Gageiro, J. (2014). *SPSS—Análise de Dados para Ciências Sociais-A complementaridade do SPSS (6th ed.)*. Edições Sílabo.
- Pettigrew, T., & Meertens, R. (1995). Subtle and blatant prejudice in western Europe. *European Journal of Social Psychology*, 25(1), 57-75. <https://doi.org/10.1002/ejsp.2420250106>
- Phillips, N. L., Adams, G., & Salter, P. S. (2015). Beyond adaptation: Decolonizing approaches to coping with oppression. *Journal of Social and Political Psychology*, 3, 365-387. <https://doi.org/10.23668/psycharchives.1786>
- Ponterotto, J. G., & Wise, S. L. (1987). Construct validity study of the Racial Identity Attitude Scale. *Journal of Counseling Psychology*, 34(2), 218-223. <https://doi.org/10.1037/0022-0167.34.2.218>
- Primi, R. (2004). Avanços na interpretação de escalas com a aplicação da Teoria de Resposta ao Item. *Avaliação Psicológica*, 3(1), 53-58. [https://pepsic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1677-04712004000100006](https://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1677-04712004000100006)
- Pyke, K. D. (2010). What is internalized racial oppression and why don't we study it? Acknowledging racism's hidden injuries. *Sociological perspectives*, 53(4), 551-572. <https://doi.org/10.1525/sop.2010.53.4.551>
- Quattrone, G. A., & Jones, E. E. (1980). The perception of variability within in-groups and out-groups: Implications for the law of small numbers. *Journal of Personality and Social Psychology*, 38(1), 141-152. <https://doi.org/10.1037/0022-3514.38.1.141>

- Ramos, A., Pereira, C. R., & Vala, J. (2020). The impact of biological and cultural racisms on attitudes towards immigrants and immigration public policies. *Journal of Ethnic and Migration Studies*, 46(3), 574–592. <https://doi.org/10.1080/1369183X.2018.1550153>
- The Readsura Decolonial Editorial Collective. (2022). Psychology as a site for decolonial analysis. *Journal of Social Issues*, 78(2), 255–277. <https://doi.org/10.1111/josi.12524>
- Ribas, A., Miranda, M. & do Bú, E. (2024). *Internalized racial oppression: the roles of family resilience and activism in depression* [Manuscript submitted for publication].
- Roberts, S. O., Bareket-Shavit, C., Dollins, F. A., Goldie, P. D., & Mortenson, E. (2020). Racial Inequality in Psychological Research: Trends of the Past and Recommendations for the Future. *Perspectives on Psychological Science*, 15(6), 1295-1309. <https://doi.org/10.1177/1745691620927709>
- Robinson, C. J. (2000). *Black Marxism: The Making of the Black Radical Tradition*. The University of North Carolina Press.
- Rodrigues, B. D. O., Rezende, T. F., & Nunes, T. D. G. (2019). Movimento Negro e a pauta quilombola no Constituinte: ação, estratégia e repertório. *Revista Direito e Práxis*, 10, 198-221. <https://doi.org/10.1590/2179-8966/2018/31335>
- Roldão, C., Pereira, J. A., & Varela, P. (2023). *Tribuna Negra. Origens do Movimento Negro em Portugal (1911-1933)*. Tinta da China.
- Rucker, J. M., & Richeson, J. A. (2021). Toward an understanding of structural racism: Implications for criminal justice. *Science*, 374(6565), 286-290. <https://doi.org/10.1126/science.abj7779>
- Sahota, G. (2024). *A Critical Race Theory Approach to Multiperspectivity as Counterhegemonic History. Putting knowledge (s) into perspective?: Wissen, Reflexivität und (Multi-)Perspektivität in Bildungsmedien*. V&R unipress
- Salter, P., & Adams, G. (2013). Toward a critical race psychology. *Social and Personality Psychology Compass*, 7(11), 781-793. <https://doi.org/10.1111/spc3.12068>
- Samejima, F. (1968). Estimation of latent ability using a response pattern of graded scores. *ETS Research Bulletin Series*, 1968(1), i-169. <https://doi.org/10.1002/j.2333-8504.1968.tb00153.x>

- Schulz, R., Monin, J. K., Czaja, S. J., Lingler, J. H., Beach, S. R., Martire, L. M., Dodds, A., Hebert, R. S., Zdaniuk, B., & Cook, T. B. (2010). Measuring the experience and perception of suffering. *The Gerontologist*, 50(6), 774–784. <https://doi.org/10.1093/geront/gnq033>
- Sears, D. O., & Henry, P. J. (2005). Over thirty years later: A contemporary look at symbolic racism. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 95–150). Elsevier Academic Press. [https://doi.org/10.1016/S0065-2601\(05\)37002-X](https://doi.org/10.1016/S0065-2601(05)37002-X)
- Sherif, M. (1961). Intergroup conflict and cooperation: The robbers cave experiment. *University Book Exchange*.
- Son Hing, L. S., Chung-Yan, G. A., Hamilton, L. K., & Zanna, M. P. (2008). A two-dimensional model that employs explicit and implicit attitudes to characterize prejudice. *Journal of Personality and Social Psychology*, 94(6), 971. <https://doi.org/10.1037/0022-3514.94.6.971>
- Stepanikova, I. (2012). Racial-ethnic biases, time pressure, and medical decisions. *Journal of health and social behavior*, 53(3), 329-343. <https://doi.org/10.1177/00221465124458>
- Streiner, D. L., & Kottner, J. (2014). Recommendations for reporting the results of studies of instrument and scale development and testing. *Journal of Advanced Nursing*, 70(9), 1970–1979. <https://doi.org/10.1111/jan.12402>
- Streiner, D. L., Norman, G. R., & Cairney, J. (2015). *Health measurement scales: A practical guide to their development and use* (5th ed.). Oxford University Press. <https://doi.org/10.1093/med/9780199685219.001.0001>
- Swim, J. K., & Miller, D. L. (1999). White guilt: Its antecedents and consequences for attitudes toward affirmative action. *Personality and Social Psychology Bulletin*, 25(4), 500-514. <https://doi.org/10.1177/0146167299025004008>
- Turner, J. C., Brown, R. J., & Tajfel, H. (1979). Social comparison and group interest in ingroup favouritism. *European journal of social psychology*, 9(2), 187-204. <https://doi.org/10.1002/ejsp.2420090207>
- Taylor, P. C. (2016). *Black is beautiful: A philosophy of black aesthetics*. John Wiley & Sons.

- Taylor, J., & Grundy, C. (1996). Measuring Black internalization of White stereotypes about African Americans: The Natanolitization Scale. In R. L. Jones (Vol. Ed.), *Handbook of tests and measurements for Black populations: Vol. 2* (pp. 217–226). Cobb & Henry.
- Theoharis, J. (2015). *The Rebellious Life of Mrs. Rosa Parks*. Beacon Press.
- Trawalter, S., & Hoffman, K. M. (2015). Got pain? Racial bias in perceptions of pain. *Social and Personality Psychology Compass*, 9(3), 146-157. <https://doi.org/10.1111/spc3.12161>
- Ture, K., & Hamilton, C. V. (1967). *Black power: The politics of liberation in America*. Vintage Books.
- United Nations (2011). *State of the World's Indigenous People*. United Nations. [https://www.un.org/esa/socdev/unpfii/documents/SOWIP/en/SOWIP\\_web.pdf](https://www.un.org/esa/socdev/unpfii/documents/SOWIP/en/SOWIP_web.pdf)
- Utsey, S. O., Abrams, J. A., Opare-Henaku, A., Bolden, M. A., & Williams, O. (2015). Assessing the Psychological Consequences of Internalized Colonialism on the Psychological Well-Being of Young Adults in Ghana. *Journal of Black Psychology*, 41(3), 195-220. <https://doi.org/10.1177/0095798414537935>
- Vala, J. (2021). *Racismo, Hoje. Portugal em Contexto Europeu*. Fundação Francisco Manuel dos Santos.
- Vala, J., Lopes, D., & Lima, M. (2008). Black immigrants in Portugal: Luso-tropicalism and prejudice. *Journal of social issues*, 64(2), 287-302. <https://doi.org/10.1111/j.1540-4560.2008.00562.x>
- Vala, J., & Pereira, C. (2012). Racism: An Evolving Virus. In F. Bethencourt & A. J. Pearce (Eds.), *Racism and Ethnic Relations in The Portuguese-speaking World*. Oxford University Press
- Vala, J., & Pereira, C. R. (2018). Racisms and normative pressures: A new outbreak of biological racism?. *Changing societies: legacies and challenges. Vol. 2. Citizenship in crisis*, 217-248. <https://doi.org/10.31447/ics9789726715047.09>
- Vala, J., Pereira, C. R., Lima, M. E. O., & Leyens, J. P. (2012). Intergroup time bias and racialized social relations. *Personality and Social Psychology Bulletin*, 38(4), 491-504. <https://doi.org/10.1177/014616721142974>

- Vandiver, B. J., Cross, W. E., Jr., Fhagen-Smith, P. E., Worrell, F. C., Swim, J., & Caldwell, L. (2000). *Cross Racial Identity Scale (CRIS)*. APA PsycTests. <https://doi.org/10.1037/t01825-000>
- X, M. & Haley, A. (1965). *The Autobiography of Malcolm X: As Told to Alex Haley*. Ballantine Books.
- Wilkerson, I. (2020). *Caste: The origins of our discontents*. Random House. <https://doi.org/10.1111/padr.12394>
- Williams, D., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity & health*, 5(3-4), 243-268. <https://doi.org/10.1080/713667453>
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*, 76(6), 913–934. <https://doi.org/10.1177/0013164413495237>
- Yi, J., Neville, H. A., Todd, N. R., & Mekawi, Y. (2023). Ignoring race and denying racism: A meta-analysis of the associations between colorblind racial ideology, anti-Blackness, and other variables antithetical to racial justice. *Journal of Counseling Psychology*, 70(3), 258. <https://doi.org/10.1037/cou0000618>
- Young, R. J. C. (2016). *Postcolonialism: An Historical Introduction*. Wiley-Blackwell
- Zeilig, L. (2015). *Lumumba: Africa's lost leader*. Haus Publishing.

## Appendices

### Appendix 1. Supplementary information regarding literature review.

#### *Assumptions regarding the new forms of racism*

In relation to the “new forms of racism”, we can highlight some common assumptions: 1) in Western societies, there has been a shift from a racist norm to an anti-racist norm; 2) not everyone has adopted this norm in the same way; 3) even people who have not accepted this norm are motivated to act in a non-racist way (for a review see Kite et al., 2023).

#### *New forms of racism measure*

Measure (Author)	Country	Participants
Symbolic racism (Sears & Henry, 2005)	USA	White (about Black)
Modern racism (McConahay, 1986)	USA	White (about Black)
The Ambivalent racism scale (Blair, 1999)	USA	White (about Black)
Subtle and flagrant prejudice (Pettigrew & Meertens, 1995)	France, Netherlands, Great Britain and “West” Germany	White (French respondents about North Africans and Asians; Dutch respondents about Surinamers and Turks; British respondents about West Indians and Asians; West German respondents about Turks)
Aversive racism (Dovidio & Gaertner, 1986)	USA	White (about Black)

#### *Critical Race Theory and Scientific Knowledge*

Scientific production in psychology has mostly been carried out by the dominant White society. In addition to the practical consequences of the majority of studies being conducted, edited and based on White people - making the knowledge generated essentially based on a White perspective - there is also an associated dimension of power. Western society, as the primary source of knowledge creation and publication, is based on a system where racial

oppression prevails, favoring White voices and silencing racialized ones (Hooks, 1984; Kilomba; 2019).

In 2008, in her doctoral thesis, Grada Kilomba (2019) asked some important questions about knowledge creation: Who can create knowledge? Who defines the questions worth asking? Who asks these questions? Who explains them? And for whom is knowledge being created? And because racism is pervasive and systemic, it is also inevitably present in academia. So Kilomba's last question that I would like to mention is: how can a Black person create knowledge in a world that systematically points to Black academic discourses as less valid?

Additionally, presenting itself as universal and a symbol of social progress, this Western standard compels even researchers from the Majority World<sup>5</sup> to conform (Adams et al., 2015). This colonization of minds feeds on itself, resulting in scientific production strongly marked by a Westernized vision, in which racial oppression and colonial violence are often absent from the discourse (The Readsura Decolonial Editorial Collective, 2022).

### ***Relation between IRO and negative health outcomes***

In general, internalized racial oppression has been associated with physical, mental and experiential consequences. For instance, Riviera and Paredez (2014) linked internalized racism with an increased risk of obesity. Also, in terms of mental health outcomes, internalized racism has been associated with reduced psychological well-being (Ferrera, 2016) and self-esteem (Cross & Frost, 2016). Additionally, people who internalize racism seem to be more susceptible to depressive (James, 2016; Mouzon & McLean, 2017), anxiety (Graham et al., 2016), and stress related symptoms (Cort et al., 2009), as well, as higher levels of hopelessness (Grace, 2013). In a more experiential level, internalized racial oppression has been linked to negative religious coping and more harmful coping styles (Szymanski & Obiri, 2010), with a greater tendency to consider oneself deserving of the adverse experiences to which one is subjected (Szymanski & Obiri, 2010). It was also found that higher levels of internalized racism

---

<sup>5</sup> The term "Majority World" replaces "third world" or "developing countries" to address their discriminatory connotations and better reflect their true population size (Balaram, 2001). It highlights that these nations make up the majority of the world's population, contrasting with the Western-centric view of "majority" based on power rather than numbers.

are associated with more negative attitudes towards seeking mental health care (Kim & Lee, 2014; Tuazon et al., (2019). Specifically concerning colonial mentality, studies have demonstrated a link to depressive symptoms (David et al., 2019; David & Nadal, 2013; Ribas et al., 2024; Utsey et al., 2015;), higher anxiety levels (Utsey et al., 2015), and lower self-esteem, both individual and collective (David & Okazaki, 2006; Utsey et al., 2015).

## References

- Adams, G., Dobles, I., Gómez, L. H., Kurtiş, T., & Molina, L. E. (2015). Decolonizing psychological science: Introduction to the special thematic section. *Journal of Social and Political Psychology, 3*(1). <https://doi.org/10.23668/psycharchives.1766>
- Balaram, S. (2001). *Universal design and the majority world*. Universal Design Handbook, McGraw-Hill.
- Blair, J. (1999). *Ambivalent racism scale*. Institute of Clinical Training and Research.
- Cort, M. A., Tull, E. S., Gwebu, K., Dlamini, P., Pinkney, E., Gramby, E., Cuthbertson, S., Daniels, A., Luu, S., & Gwebu, E. T. (2009). Education and internalized racism in socio-political context: Zimbabwe and Swaziland. *The Social Science Journal, 46*(4), 644–655. <https://doi.org/10.1016/j.sosci.2009.08.001>
- Cross Jr, W. E., & Frost, D. M. (2016). Black identities, internalized racism, and self-esteem. In M. Sullivan & W. E. Cross Jr (Eds.), *Meaning-Making, Internalized Racism, and African American Identity* (pp.229-243). Suny Press.
- David, E. J. R., & Nadal, K. L. (2013). The colonial context of Filipino American immigrants' psychological experiences. *Cultural Diversity & Ethnic Minority Psychology, 19*(3), 298–309. <https://doi.org/10.1037/a0032903>
- David, E. J. R., & Okazaki, S. (2006). The Colonial Mentality Scale (CMS) for Filipino Americans: Scale construction and psychological implications. *Journal of Counseling Psychology, 53*(2), 241. <https://doi.org/10.1037/0022-0167.53.2.241>
- David, E., Schroeder, T., & Fernandez, J. (2019). Internalized Racism: A Systematic Review of the Psychological Literature on Racism's Most Insidious Consequence. *Journal Of Social Issues, 75*(4), 1057-1086. <https://doi.org/10.1111/josi.12350>

- Dovidio, J. F., & Gaertner, S. L. (1986). *Prejudice, discrimination, and racism*. Academic Press.
- Ferrera, M. J. (2016). The burden of colonial debt and indebtedness in second generation Filipino American families. *Journal of Sociology and Social Welfare*, 43(3), 155–178. <https://psycnet.apa.org/record/2016-47265-009>
- Grace, K. (2013). The Black misconception of self: An examination of internalized racism, adult attachment style, and perceived stress. [Doctoral dissertation, Alliant International University]. ProQuest Dissertations Publishing.
- Graham, J. R., West, L. M., Martinez, J., & Roemer, L. (2016). The mediating role of internalized racism in the relationship between racist experiences and anxiety symptoms in a Black American sample. *Cultural Diversity and Ethnic Minority Psychology*, 22(3), 369-376. <https://doi.org/10.1037/cdp0000073>
- Hooks, B. (1984). *Feminist Theory: From Margin to Center*. South End Press.
- James, D. (2020). Health and Health-Related Correlates of Internalized Racism Among Racial/Ethnic Minorities: a Review of the Literature. *Journal Of Racial and Ethnic Health Disparities*, 7(4), 785-806. <https://doi.org/10.1007/s40615-020-00726-6>
- Kilomba, G. (2019). *Memórias da Plantação. Episódios de racismo cotidiano*. Orfeu Negro. (Original work published 2008)
- Kim, P., & Lee, D. (2014). Internalized model minority myth, Asian values, and help-seeking attitudes among Asian American students. *Cultural Diversity and Ethnic Minority Psychology*, 20(1), 98-106. <https://doi.org/10.1037/a0033351>
- Kite, M.E., Whitley, B.E., & Wagner, L.S. (2023). *Psychology of Prejudice and Discrimination* (4th ed.). Routledge. <https://doi.org/10.4324/9780367809218>
- McConahay, J. B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91–125). Academic Press.

- Mouzon, D. M., & McLean, J. S. (2017). Internalized racism and mental health among African Americans, US-born Caribbean Blacks, and foreign-born Caribbean Blacks. *Ethnicity & Health, 22*(1), 36-48. <https://doi.org/10.1080/13557858.2016.1196652>
- Pettigrew, T., & Meertens, R. (1995). Subtle and blatant prejudice in western Europe. *European Journal Of Social Psychology, 25*(1), 57-75. <https://doi.org/10.1002/ejsp.2420250106>
- The Readsura Decolonial Editorial Collective. (2022). Psychology as a site for decolonial analysis. *Journal of Social Issues, 78*(2), 255–277. <https://doi.org/10.1111/josi.12524>
- Rivera, L., & Paredez, S. (2014). Stereotypes Can “Get Under the Skin”: Testing a SelfStereotyping and Psychological Resource Model of Overweight and Obesity. *Journal Of Social Issues, 70*(2), 226-240. <https://doi.org/10.1111/josi.12057>
- Sears, D. O., & Henry, P. J. (2005). Over thirty years later: A contemporary look at symbolic racism. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 95–150). Elsevier Academic Press. [https://doi.org/10.1016/S0065-2601\(05\)37002-X](https://doi.org/10.1016/S0065-2601(05)37002-X)
- Szymanski, D., & Obiri, O. (2010). Do Religious Coping Styles Moderate or Mediate the External and Internalized Racism-Distress Links?. *The Counseling Psychologist, 39*(3), 438-462. <https://doi.org/10.1177/0011000010378895>
- Tuazon, V., Gonzalez, E., Gutierrez, D., & Nelson, L. (2019). Colonial Mentality and Mental Health Help-Seeking of Filipino Americans. *Journal Of Counseling & Development, 97*(4), 352-363. <https://doi.org/10.1002/jcad.12284>
- Utsey, S. O., Abrams, J. A., Opare-Henaku, A., Bolden, M. A., & Williams, O. (2015). Assessing the Psychological Consequences of Internalized Colonialism on the Psychological Well-Being of Young Adults in Ghana. *Journal of Black Psychology, 41*(3), 195-220. <https://doi.org/10.1177/0095798414537935>

**Appendix 2. Inter-raters’ agreement coefficient (CVC) for the items’ accuracy, pertinence and comprehensibility (Study 1 A).**

Item	CVC Comprehensibility	CVC Pertinence	CVC Relevance
Para mim, as pessoas com nariz fino (como o das pessoas Brancas) são mais atraentes do que as pessoas com narizes largos, tipicamente negros.	.97	.70	.63
Prefiro pessoas com cor de pele clara comparativamente a pessoas com pele negra.	.97	.80	.77
Prefiro penteados tipicamente negros à forma como as pessoas Brancas tipicamente usam o cabelo.	.90	.67	.60
Em geral, considero as pessoas que têm um dos pais Brancos mais atraentes do que as que são Negras de pai e mãe.	.93	.70	.63
Não considero que as pessoas Negras devam sentir-se gratas pelo facto de África ter sido colonizada por pessoas Brancas	.50	.90	.97
Na minha opinião as pessoas Negras deveriam sentir-se privilegiadas e honradas pelas pessoas Brancas terem tido contacto com elas.	.93	.97	.97
Considero que as pessoas Brancas da Europa são responsáveis por civilizar as pessoas negras em África e melhorar o seu modo de vida.	.90	.97	.97
Para mim, as pessoas Negras deveriam ser gratas às pessoas Brancas por transformar o modo de vida Africano num modo de vida mais Branco/Europeu.	.87	.97	.97
Considero a cultura e as tradições negras motivo de vergonha para quem as pratica.	.97	.93	.77
As pessoas Negras deviam sentir que, em geral, a sua herança étnica/cultural é tão boa como a herança étnica/cultural Branca.	.90	.97	.87
As pessoas negras deviam preferir ser membros de um grupo étnico/cultural diferente daquele a que pertencem.	.90	.90	.87
Em geral, considero que ser uma pessoa Negra não é tão bom como ser uma pessoa Branca.	.93	.80	.67

### Appendix 3. Moderation analyses (Study 4).

*Effect of experimental conditions in the relation between colonial mentality and attribution of psychological symptoms.*

**Path coefficients**

						<b>95% Confidence Interval</b>	
		<b>Estimate</b>	<b>Std. Error</b>	<b>z-value</b>	<b>p</b>	<b>Lower</b>	<b>Upper</b>
MC_Total	→ P S	-0.116	0.107	-1.085	0.278	-0.325	0.093
VinhetaLuanda	→ P S	0.372	0.309	1.202	0.229	-0.234	0.978
MC_Total:VinhetaLuanda	→ P S	-0.236	0.164	-1.436	0.151	-0.558	0.086

**Mediation effects**

						<b>95% Confidence Interval</b>		
		<b>VinhetaLuanda</b>	<b>Estimate</b>	<b>Std. Error</b>	<b>z-value</b>	<b>p</b>	<b>Lower</b>	<b>Upper</b>
MC_Total	→ P S	0	-0.116	0.107	-1.085	0.278	-0.325	0.093
MC_Total	→ P S	1	-0.352	0.125	-2.811	0.005	-0.597	-0.106

**Total effects**

						<b>95% Confidence Interval</b>		
		<b>VinhetaLuanda</b>	<b>Estimate</b>	<b>Std. Error</b>	<b>z-value</b>	<b>p</b>	<b>Lower</b>	<b>Upper</b>
Total MC_Total	→ P S	0	-0.116	0.107	-1.085	0.278	-0.325	0.093
Total MC_Total	→ P S	1	-0.352	0.125	-2.811	0.005	-0.597	-0.106

*Effect of experimental conditions in the relation between colonial mentality and recommendation for medical leave*

**Path coefficients**

						95% Confidence Interval	
						Lower	Upper
			Estimate	Std. Error	z-value	p	
MC_Total	→	Q_BaixaMedica_1	-0.266	0.191	-1.395	0.163	-0.640 0.108
VinhetaLuanda	→	Q_BaixaMedica_1	0.570	0.553	1.031	0.303	-0.514 1.654
MC_Total:VinhetaLuanda	→	Q_BaixaMedica_1	-0.341	0.294	-1.159	0.246	-0.917 0.235

**Mediation effects**

						95% Confidence Interval	
						Lower	Upper
		VinhetaLuanda	Estimate	Std. Error	z-value	p	
MC_Total	→	Q_BaixaMedica_1	-0.266	0.191	-1.395	0.163	-0.640 0.108
MC_Total	→	Q_BaixaMedica_1	-0.607	0.224	-2.712	0.007	-1.045 -0.168

**Total effects**

						95% Confidence Interval			
						Lower	Upper		
		VinhetaLuanda	Estimate	Std. Error	z-value	p			
Tota	MC_Total	→	Q_BaixaMedica_1	0	-0.266	0.191	-1.395	0.163	-0.640 0.108
	MC_Total	→	Q_BaixaMedica_1	1	-0.607	0.224	-2.712	0.007	-1.045 -0.168