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Arbitrarily Applicable Relational Respondings derived from experiences with racism, their possible associations with the self in Black youth and its clinical implications

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Abstract

Given the documented psychological impacts of racism and its association with psychological suffering, this research was conducted to understand its repercussions on the lives of Black people and how behavior analysis can help comprehend and mitigate these impacts, specifically regarding the development of the self. The objective was to examine potential associations between instances of Arbitrarily Applicable Relational Responding derived from experiences of racism and the self in young Black adults in Brazil. To this end, an exploratory qualitative study involving case studies was carried out. Data was collected using a semi-structured interview script, developed for this study, containing 56 questions; For the 3 participants cited in this article, interviews were conducted in person, and the results were analyzed qualitatively through the lens of Relational Frame Theory (RFT), identifying verbal behaviors such as self-descriptions, accounts of events, and subjective experiences regarding those events. For all participants, it was possible to identify verbal behavior derived from experiences of racism that appeared to be associated with their self-evaluations. The data indicates the existence of complex relational networks in which relations derived from contact with racism culminate primarily in the equivalence of the "Self" with aversive stimuli. Thus, the findings point to an association between verbal relations derived from racism and the self in young Black adults. Consequently, it was possible to analyze how psychotherapy - specifically Acceptance and Commitment Therapy (ACT) - can be improved to better impact the lives of these individuals.

Introduction

Relational Frame Theory

Relational Frame Theory (RFT) is a behavioral account of human language in which the authors postulate that humans develop linguistic ability through the behavior of relating stimuli. They highlight that, beyond establishing relations between stimuli based on direct contingencies and the physical characteristics of stimuli, humans possess the unique capacity to establish relations based on arbitrary properties (those established by convention within a verbal community) rather than on physical properties (Barnes-Holmes et al., 2001b; Hayes et al, 2001). This behavior, termed Arbitrarily Applicable Relational Responding (AARR), also enables the emergence of new relations without direct training. This phenomenon is known as Derived Relational Responding (i.e. upon relating A and B and relating B and C, one derives a relation between A and C) (Barnes-Holmes et al., 2001b; Rose et al., 2022).

The term “relational frames” is a metaphor for specific patterns of arbitrarily applicable relational responding (AARR), that is, classes of relational responding that vary according to the contexts evoking their occurrence (Hayes et al., 2001). The various contextual cues specifying the type of relationship between stimuli allow us to conceive of several types of frames (Hayes et al., 2001; Perez et al., 2017). Equivalence or coordination frames are those that establish equality between stimuli and are fundamental to the establishment of AARR. Other notable types are frames of opposition, difference, comparison, causality/contingency, hierarchy, temporality, spatiality, and deictic frames (Hayes et al.,

2001; Rose et al., 2022). Deictic frames appear later in the human repertoire and are also known as perspective-taking frames because they involve responding relationally based on the difference in perspective between listener and speaker (Silveira et al., 2022). Consequently, they involve relational terms such as I/you, here/there, and now/before/after (e.g., “I think you shouldn't talk to her today”) (Barnes-Holmes et al., 2001b; Hayes et al., 2001; Rose et al., 2022).

Despite their variety of types, all relational frames are characterized by three properties: mutual entailment, combinatorial entailment, and transformation of stimulus function (Barnes-Holmes et al., 2001b; Hayes et al., 2001; Rose et al., 2022). Mutual entailment describes the bidirectionality of arbitrary relations between stimuli. If A relates to B, it is entailed that B relates to A. This relation may be the same in both directions (as is the case with relations of coordination and opposition) or not (as is the case with comparative and causal relations, for example) (Hayes et al., 2001; Rose et al., 2022).

Combinatorial entailment refers to the property of combining mutually entailed relations, enabling the formation of relational networks. If A is related to B and B is related to C, then A and C will also be related in some way (Hayes et al., 2001; Rose et al., 2022). Rose, Perez, and Almeida (2022) emphasize that this relationship may or may not be transitive, depending on the types of relational frames involved. While equivalence relational frames are always transitive (if A is equal to B and B is equal to C, then A and C are equal), that is not the case for frames of opposition frames. For example, if A is opposite to B and B is opposite to C, we cannot state that A and C are opposites of each other or that they are equivalent, but it is implied within this relational network that A and C share a certain similarity.

The property of transformation of function describes how stimuli can acquire functions without direct learning, through arbitrary relations. This phenomenon is characterized by the spread of a function from one stimuli to others arbitrarily related to it, depending on the nature of the arbitrary relation, that is, the contextual cue that controls that relation. For example, in equivalence relational frames the same function is shared by both stimuli; in opposition, the opposite function is transferred (Almeida & Perez, 2016; Silveira & Perez, 2022). In that sense, if chickens have acquired an aversive function throughout an individual's life and an equivalence relation is established between chickens and canaries, then canaries also gain aversive function, even without direct training.

Silveira and Perez (2022) highlight how the transformation of functions allows for an expansion of the human repertoire, enabling individuals to respond to stimuli with which they have had no direct experience. By acquiring functions through arbitrary relations with other stimuli, various stimuli become capable of exercising control over an individual's behavior. RFT refers to these stimuli as “verbal stimuli”, characterized as stimuli that acquire functions which quantitatively and qualitatively impact an individual's behavior through verbal processes and the establishment of arbitrary relations (Perez et al., 2017; Silveira & Perez, 2022). This definition encompasses words, facial expressions, and any other stimulus included in an arbitrary relation (Silveira & Perez, 2022).

Self

Acceptance and Commitment Therapy (ACT), based on Relational Frame Theory, postulates the “Self” as a complex, socially learned verbal behavior (Hayes et al., 2021). Through Arbitrarily Applicable Relational Responding (AARR), the individual begins to respond verbally to their own behavior, turning it into a verbal stimulus that can integrate arbitrary relations (Barnes-Holmes et al., 2001b). Moreira et al. (2017) describe that the Self emerges from the abstraction of multiple experiences involving a difference between the speaker's and the listener's perspectives (i.e., what you are doing differs from what I am doing). This Self, now a verbal stimulus, can be a stimulus in arbitrary relations (e.g., a coordination relation between "Self" and "shyness" becomes "I am shy") (Barnes-Holmes et al., 2001a).

Accordingly, the proponents of ACT present three forms of self (Hayes et al., 2021). The self-as-process concerns private events occurring in the present. It is the behavior of observing and differentiating the various private events as they occur, moment by moment. Through coordination relational frames between bodily sensations and the names assigned to them (emotions and feelings), we experience bodily states as distinct from one another, thereby discriminating among our own behaviors (Barnes-Holmes et al., 2001b; Hayes et al., 2021).

Based on the accumulation of these discriminations, the individual places the Self into relational frames with other stimuli. This leads to the self-as-content or conceptualized self, wherein the individual creates stable narratives about themselves (e.g., “I am feeling sad” becomes “I am sad") (Barnes-Holmes et al., 2001b; Hayes et al., 2001). According to Hayes et al. (2021), while useful, this can lead to suffering due to the aversiveness of the stimuli to which the Self may be related. Furthermore, because incoherence is socially constructed as an aversive, incoherence among the various relations established with the Self can lead the individual to avoid experiences that contradict the constructed narrative. Moreover, it fosters cognitive fusion: a process in which thoughts are taken as corresponding to reality, thereby diminishing the control that direct contact with contingencies exerts over the subject's behavior (Hayes et al., 2021)

As a more flexible alternative, the proponents of ACT introduce the concept of "self-as-context." Barnes-Holmes and colleagues (2001b) note that once deictic frames become part of an individual's repertoire, deictic relations are present whenever that individual speaks or thinks; we always speak from the perspective of a Self located in the "Here and Now." It is this behavior of discriminating events that remains constant even when the various contents (or verbal stimuli) we relate to the Self change moment-to-moment. Thus, the idea of self-as-context involves an intentional act of experiencing the Self as the space where psychological experiences occur. That is, placing it in hierarchical relational frames with our experiences, rather than ones of coordination, opposition, or distinction (Barnes-Holmes et al., 2001b; Hayes et al., 2021).

Internalized Racism

Research in RFT and stimulus equivalence have expanded our understanding of racial relations by demonstrating that, within a given culture, we are exposed to relational networks that cause countless

stimuli to acquire arbitrary functions that appear intrinsic to the stimuli (Mizael et al., 2016; Mizael et al., 2022). In this way, several stimuli acquire aversive or reinforcing function through verbal behavior (Silveira & Perez, 2022). This often occurs even before we have direct contact with the stimuli in question (Mizael et al., 2022; Silveira & Perez, 2022). Thus, whether directly or through derived relations, we learn to relate Blackness and those belonging to this category to various stimuli that have aversive functions (Passarelli et al., 2023).

Building on this, Araújo and his colleagues (2022) present a behavioral interpretation of internalized racism. While this phenomenon has historically been investigated and understood as a process wherein a racialized individual internalizes oppression, from a behavioral-analytic perspective, it is defined as a process of learning pejorative relations regarding oneself and/or one's own racial group. It is, therefore, a form of social behavior shaped and maintained through the interaction between the individual and the social environment (Araújo et al., 2022).

In their behaviorist framework, the authors identify three elements common to various existing explanations of internalized racism: the contextual element, involving exposure to racist contingencies; the cognitive element, concerning negative beliefs and attitudes toward oneself and one's racial group; and the affective element, involving feelings of inferiority and suffering (Araújo et al., 2022). The first element refers to the racist context that facilitates the learning of these arbitrary, pejorative relations. As previously explained, arbitrary relations between stimuli allow for the transformation of their functions. Coupled with the derivation of untrained relations (or Derived Relational Responding), the effects of this transformation is extended to other stimuli within a relational network via various contextual cues (Barnes-Holmes et al., 2001b; Silveira & Perez, 2022). This is how we learn various racist associations, either directly or through derivation. For instance, if we learn that “light skin” is equivalent to "beautiful" and that "Black" is the opposite of or different from “light skin”, just as "beautiful" differs from "ugly", we derive the relational frame “Black is ugly”.

The same learning process that leads a White person to relate Black features to aversive stimuli carries different implications for Black people. By learning these associations, a Black person assigns negative value, or rather, an aversive function to an aspect of themselves. This process pertains to the second element of internalized racism: beliefs and attitudes regarding the self and the group (Araújo et al., 2022).

Racist equivalence relational frames involving one's own physical traits can transform the function of previously neutral stimuli (e.g., tightly coiled hair, dark skin) into conditioned aversive stimuli (Araújo et al., 2022). Furthermore, based on the principle of derivation, even stimuli that were not part of the direct learning experience can acquire functions through their relationship with other stimuli (Mizael et al., 2016; Mizael et al., 2022).

Additionally, if individuals are aware that their own traits are aversive to them — that is, if they identify these traits as the cause of their suffering — they may engage in escape and avoidance behaviors aiming to eliminate the aversive stimulation (e.g. straightening their hair, thinking or saying they wish to be

White). The issue is that even with avoidance, the individual cannot rid themselves of the aversive stimulation, as these are permanent physical traits. Consequently, they remain constantly exposed to aversiveness. This points to the third element of internalized racism: psychological suffering and feelings of inferiority. Thus, the third element concerns emotional responses to specific relational frames learned within the racist social contingencies to which the individual has been exposed (e.g., physical traits as aversive stimuli) (Araújo et al., 2022).

Therefore, Black features and Blackness itself are stimuli subject to becoming part of arbitrary relations. For Black people, this necessarily entails these stimuli being in equivalence and/or hierarchical relational frames with the Self. In this light, the perspective on internalized racism presented by Araújo et al. (2022) points to the possibility that learning racist arbitrary relations can also generate suffering by contributing to the construction of a highly aversive and inflexible self. This study was developed based on this hypothesis.

Therefore, the general objective of the research was to examine possible associations between instances of AARR derived from experiences of racism and the self in young Black adults. Consequently, specific objectives included: characterizing and comparing participants' experiences of racism (aspects of life where it happened, frequency, intensity, and forms of manifestation); observing and describing self-related behaviors of the participants during the interviews; determining whether participants linked their self-descriptions to their experiences of racism; and discussing clinical implications for ACT-based psychotherapy.

Method

To achieve the objectives cited above, the study employed a qualitative exploratory design with a case study approach that had participants selected via convenience sampling. Inclusion criteria were: being Brazilian; self-identifying as Black (preto or pardo, in Brazilian culture); residing in the city of Curitiba or its metropolitan area; and being an adult between 18 and 29 years of age — coherent with the Brazilian Law No. 12.852 of August 5, 2013, which establishes the Youth Statute and defines a young person as anyone between the ages of 15 and 29.

The following exclusion criteria were also applied: individuals outside the specified age range, those who did not self-identify as Black, non-Brazilians, and those unable to attend interviews or unwilling to consent to audio recording. Participation in the research was voluntary and confidential; therefore, participants' names were replaced with fictional names used to refer to them throughout the study.

Participants

Jacob: Cisgender man, 26 years old, self-identified as a dark-skinned Black man (Preto retinto), bisexual. He had attended both private and public schools and, at the time of the interview, was an undergraduate student at a public university. He had no professional experience. His nuclear family consisted of his

mother, stepfather, and two younger siblings (all White). He had little contact with his father's family (his father was a Black man), being integrated primarily into his stepfather's family. He underwent psychotherapy during childhood and adolescence, and at the time of the interview had been in therapy for about two and a half years. His emotional support network was predominantly family-based and White.

Carmen: Cisgender woman, 24 years old, self-identified as Black woman (Preta), bisexual. She had always attended public schools and at the time of the interview was an undergraduate at a public university. She worked with her father and had previous professional experience as an intern. Her nuclear family consisted of her father, mother, older brother and younger sister (all Black, with the exception of her father, a White man of indigenous descent). She began psychotherapy during adolescence and resumed it during the pandemic. Her emotional support network consisted mainly of her White friends.

Noah: Non-binary person, 19 years old, self identified as a light-skinned Black person (Preto de pele clara); They attended public schools and, at the time of the interview, they were studying at a private university on a full scholarship and working at a call center, with prior experience in the IT field. Their nuclear family is predominantly black (father, mother, and brother), with some White members (sister) and members of Asian descent (nieces/nephews). They underwent psychotherapy during adolescence for a short period of time. Their emotional support network consists mainly of White friends.

Instruments and Procedures

Participants were recruited via a promotion of the research posted on the social media channels of the researchers and the research group to which they are affiliated. Interested individuals could access an online form containing a consent form previously approved by the research ethics committee. Upon consenting, they answered questions to assess inclusion/exclusion criteria and provided personal details for future contact.

The selection process resulted in a final sample of four participants, chosen based on the order in which they completed the form (3 of which will be presented in the article). The research team contacted them to schedule individual in-person interviews, during which each participant signed the printed consent form they previously read before the interview session began. The interviews, lasting an average of one and a half hours, took place over one or two sessions (depending on participant availability) and were audio-recorded and subsequently transcribed for analysis.

The data collection instrument was a semi-structured interview guide developed specifically for this study, comprising 54 questions divided into four sections: the first section aimed to gather data essential for characterizing the participant (20 questions); the self-assessment section had 2 questions in which participants were asked to select seven adjectives they thought described themselves and seven adjectives they wished described them, and to elaborate on these choices; the third section, named conscient relations regarding the self (2 questions), asked whether they perceived a connection between

their self-descriptions and their life experiences (racial or otherwise); the fourth section was an exploration of experiences with racism (31 questions), and aimed at gathering information on the racist experiences the participants had faced in educational contexts, family setting, romantic/sexual relationships, workplace settings, personal relationships (i.e friendships), service interactions, and other daily life occurrences.

Data Analysis

Following the interviews, the audio recordings were transcribed and the obtained data was organized for analysis. Given the qualitative nature of the research, data analysis involved identifying the verbal behaviors exhibited by participants during the interviews - specifically, their accounts of life events and their subjective experiences regarding them. From this, case-by-case analyses were developed through the lens of Behavior Analysis and Relational Frame Theory. Based on the verbal accounts of the participants, analyses and hypotheses were developed regarding the function of relevant behaviors and how the transformation of function (especially of the self) might have occurred through verbal processes.

Results and Discussion

Given the amount and diversity of information gathered in each interview, the results and discussions will be presented on a case-by-case basis, followed by a general discussion that compares and addresses the cases collectively. In each case, several analyses were made where a link could be established between the participants' experiences of racism and their self-descriptions or self-evaluations. However, only the ones deemed more relevant to the general discussion were picked to be a part of this article and are presented in the following text. The data includes excerpts from the interviews that were translated to english from Brazilian Portuguese, and are presented primarily in table format.

Participant: Jacob

Jacob, chose the following adjectives to describe himself: extroverted, cool, sociable, handsome, self-critical, smart, and affectionate. As for the adjectives he wished described him, he chose: kind, capable, useful, lovable, important, attractive, and valuable. Among the adjectives analyzed, "extroverted" and "lovable" were selected as particularly relevant to this article.

Regarding the choice of the word "extroverted", Jacob describes himself as someone who finds it easy to converse and meet many people, though he notes that this is a recent development in his life: "I used to be very shy, I was very withdrawn." He also stated that he viewed his shyness as a consequence of the multiple acts of racial violence he endured. Those experiences, according to him, consciously led him to limit his contact with others. He stated: "I didn't talk to people [...] I deprived myself of a lot of things. I became shy because I was excluded," and "To become the person I am today [extroverted], I had to work really hard. It didn't happen overnight."

As for the adjective "lovable," he said he does not see himself as a lovable person because he struggles to let people get close to him. Linking this to his childhood, he said: “I 'shielded' myself so I wouldn't be disappointed again, you know? But to this day, I’m still kind of 'shielded' because of that. [...] Like, I’m kind of hard-hearted."

The participant shared various experiences with racism across all life domains and contexts explored in the interview (with the exception of the workplace, as he has never had a job). He states that he never touched on the subject of racism in his personal psychotherapy out of fear the therapist “wouldn’t know how to handle it”.

The experiences of racism at school were particularly notable for its constancy and impact on his life and were perpetrated by both peers and teachers in his predominantly White schools. The racism he faced within his stepfather's White family was also relevant, especially due to its intensity and constancy. From these experiences, those that appear to have been central to the construction of the Self in relation to the highlighted adjectives were selected and presented in the following table.

Table 1

Excerpts from the interview with Jacob categorized by the experiences of racism they express

Chosen adjectives: Extroverted and Lovable	
Experiences with racism relevant to the chosen adjectives	Emblematic excerpts from the interview
Black features and Blackness talked about in a negative way	“[Family members] used to say my hair was too coarse, too curly. And regarding lightening my skin - people even asked why I didn’t lighten it.”
Racist nicknames and slurs	“There was a time a kid at school said something like, ‘I don’t know why the *crioulo* is still talking.”
Being addressed by labels based on his blackness	“It was rare for me to be called by my name. It was *neguinho**, or *nego**, you know?” “[With his family members] It was always "call the *nego*," not "call Jacob".
Being singled out based on his blackness	“They [kids at school] would say things like “Jacob is different. Jacob has different hair and a different nose”, you know?” “I was always the last one to get picked at school because I was the ‘weirdo.’ [...] Man, I was just a normal kid. But they would make comments like, ‘Oh, you say this, you talk that way, you speak strangely, you’re Black, you’re this...’”
Impunity for his aggressors	“My grandfather was openly racist. I’d tell him not to be like that, but my family would say there was no point trying to change his mind because that’s just how he was.” “People would say, "Jacob is different!" They said it in front of teachers, coordinators, and principals. And absolutely nothing ever happened. I thought, "Well, if nothing happens, there's no point in complaining."

* The words “Nego” and “Neguinho” — derived from the word Negro, similar to the word Black in english — are specific to Brazilian culture. They are used to refer to Black people and are considered complex words that sparks significant debate for their dual connotation: it can be understood as an affectionate term or as a racist way of describing Black people, depending on the context, the intention, and the person using it.

Throughout his life, Jacob encountered various equivalence relational frames equating Blackness and Black features to aversive verbal stimuli such as "ugly" and "undesirable". Regardless of whether it was directly taught by comments easily found in a racist society (e.g. black skin is ugly) or derived from more subtle racist comments (e.g., family members telling him he should lighten his skin), these encounters led to learning a relational frame of equivalence between Blackness and these aversive stimuli. Coupled with this, Jacob reports being constantly addressed by terms related to his Blackness or called "different" and "weird", rather than by his own name. We can hypothesize that such experiences facilitated the establishment of relational frames of difference — such as "I am not called by my name, but others are” — which, combined to pre-existing frames like "I am Black and they are not," allowed for the emergence of causal and difference frames such as "I am called this way because I am Black" and "I am different from them because I am Black."

Kilomba (2019) notes that being marked as "different" highlights that the "different" person is the one who deviates from those with the power to define themselves as normal, in Jacob’s case, his White peers and family members. Thus, based on his account, we can infer that the contingencies mentioned so far facilitated the establishment of an equivalence frame relating "Black" to aversive verbal stimuli like "weird" and "different." Since Jacob’s self is in an equivalence relation with Blackness, it also acquires an aversive function through its coordination with these stimuli.

These and other acts of racial violence resulted in profound suffering but the expression of this distress was not validated and often punished. For example, his family reprimanded only him when he hit his cousin who had racially insulted him. This, combined with the persistent impunity of his aggressors, may have led Jacob to establishing a network of arbitrary relations that resulted in a sense of helplessness in the face of racism. Deictic frames (perceiving another person's perspective as racist and distinct from one's own), causality frames (e.g., “when I interact with people, I experience racism”), and opposition frames (e.g., “the opposite of social interaction is withdrawal/shyness”) may be involved. When combined, this network may have led to causality frames such as, in his own words, “if I don’t interact with people, I won’t have to hear myself referred to in that way or be subjected to such abuse.” This resulted in an avoidant behavioral pattern, in which Jacob avoided interacting with family and colleagues due to the aversiveness of potentially experiencing racism. Here, we observe the cognitive fusion and subsequent experiential avoidance described by ACT, wherein the individual behaves primarily to avoid aversive experiences, resulting in a restricted behavioral repertoire.

At some point in the past, by observing his own avoidant behavioral pattern, Jacob related his "Self" in equivalence to the verbal stimulus "shy." Since "shy" is a stimulus related in causality frames to feelings

of isolation, loneliness, and other aversive states (e.g. "I feel lonely because I am shy"), shyness itself acquires an aversive function. Consequently, the "Self" equivalent to this stimulus also acquires an aversive function. Thus, stimuli in frames of opposition to shyness (such as extroversion and sociability) obtain a reinforcing function. Therefore, one possible explanation for Jacob's change from shy to extroverted resulted from a derived causality frame, leading to a self-rule: "I need to be extroverted and sociable to suffer less." Based on this, Jacob engaged in sociable behaviors as a way to escape the aversiveness associated with shyness. This is a possible explanation for how Jacob talked in his interview about extroversion being a decision he made after suffering from being shy. This explains why, at the time of the interview, his "Self" stood in a relation frame of opposition to "shy" and equivalence with "extroverted."

According to Relational Frame Theory, verbally capable humans generate a vast number of self-rules that control their behavior (Barnes-Holmes et al., 2001b). In Jacob’s case, this is evident in the control that causality relational frames exert over his behavior. Even though he chose adjectives he values positively to describe himself (e.g., "extroverted"), the strong fusion of the “Self” with these adjectives (e.g. thoughts such as "I need to be sociable and extroverted") poses a risk of a rigid behavioral pattern.

Furthermore, self-rules such as "if I don't talk to people, I won't face racial discrimination" still appear to exert control over his self-related behavior. An example of this is the oppositional relation he established between the "Self" and the verbal stimulus "lovable." The participant related the "Self" in equivalence to "being closed off," opposing this "Self" with "being able to trust" and "letting people into his life." In RFT terms, he exhibits cognitive fusion with the thought "I cannot trust people" — that is, a self-as-content with an aversive function due to its opposition to the verbal stimulus “Trust”.

The difficulty in letting people get close to him may stem from still having his behavior controlled (albeit unconsciously) by causality frames such as "if I don't get close, they won't be racist toward me" or even "if I talk to people about my pain, they won't know how to handle it." In other words, emotional contact is still equivalent to the potential for encountering the aversive nature of racial discrimination. Psychotherapy serves as an example of this verbally constructed control over his behavior: despite years of therapy, Jacob admitted he consciously avoided discussing experiences of racism because he believed psychologists would be unable to handle it properly (the potential inappropriate reaction from the therapist was an aversive stimulus).

Participant: Carmen

The participant chose the following adjectives to describe herself: sociable, insecure, nice, self-critical, kind, beautiful, and fun. As for the adjectives she wished described her, she chose: intelligent, irreplaceable, strong, confident, affectionate, loving, and courageous. Among these, the specific focus of this article is the adjective "irreplaceable." For C., although no one is truly irreplaceable, she feels she would be "easily replaced" in most areas of her life, particularly in the realm of her romantic and sexual relationships.

The young woman recounted various experiences of racism across different areas of her life. Acts of violence experienced in the school environment and within romantic-sexual relationships were particularly significant. She, like Jacob, admitted to being reluctant to talk about racist experiences in therapy.

The following table presents selected experiences and verbal accounts that appear to have been central to the construction of her self-as-concept in relation to the adjective being analyzed.

Table 2

Excerpts from the interview with Carmen categorized by the experiences of racism they express

Chosen adjective: Irreplaceable	
Experiences with racism relevant to the chosen adjective	Emblematic excerpts from the interview
Romantic exclusion	“At times I was interested in someone romantically, but I just wasn’t interesting enough for them. Basically because I wasn’t White.” “Sometimes I’d stare at myself in the mirror and think, ‘I’ll imagine what it would be like to have White skin,’ and ‘I think if I were like that, people would treat me differently.’ That really affected me. Then, in my early teens, all my friends at school were having their first romantic experiences. I’d look at them and think, ‘Maybe it’s because they’re White. that’s why they attract people who want to get close to them, unlike me.’”
Sexual Objectification	“I always really noticed that thing where they’d want to be with me once and that was it. [...] I think it’s closely linked to skin color.” “On those dating apps, I notice that people sometimes approach me saying things like, "You're Black, so you must be good in bed." [...] So, I think that’s a big thing: people believe Black people are good in bed and that that’s all they’re good for.”
Partners who have never dated another Black woman	“If I’m seeing someone, I want to see everyone they’ve been with before, to see if they were White. And if they were White, I get kind of paranoid. Like, ‘Why are you with me now? You’ve always liked White women.’ In my head, people are always like... ‘Oh, I’ll just spend some time with you for now, until I find a White woman.’”
Boyfriends who seemed ashamed of her because she was Black.	“With the first guy I was involved with, I noticed that he was terrified of going out in public with me; and if we did go out, he didn’t want to get too close to me, so as not to show that he was actually with me. [...] He wouldn’t even show photos of me to his friends, just to avoid awkward situations.”

The desire to be irreplaceable expressed by her indicates a strong equivalence frame between the "Self" and "replaceable" (a verbally constructed aversive stimulus); this appears to be a relational frame derived, at least in part, from complex relational networks encompassing Blackness. Based on her accounts throughout the interview, experiences in the sexual-affective realm appear central to this equivalence.

Carmen spoke in her interview of a lack of romantic relationships compared to her White peers, as well as various moments in her life when she was not viewed as a potential sexual-affective partner because she is Black. This may have enabled the emergence of coordination frames equating White people with people who are desirable for relationships. Since the "Self" stands in opposition to "Whiteness," the "Self" becomes opposed to being desirable for relationships. When combined with culturally taught comparison frames — such as the notion that desirable partners are less replaceable in the romantic sphere — an equivalence between the "Self" and "replaceable" is made.

By dating people who primarily had relationships with White individuals, Carmen may have derived a series of arbitrary relations. Observations regarding her boyfriends' ex-partners could have led to equivalence frames such as "all their ex-partners are White" and "all their ex-partners are people they find attractive," deriving then the conclusion that "they are attracted to White people." Given that the "Self" integrates an opposition relational frame with Whiteness, we can hypothesize the derivation of frames of opposition ("I am not attractive to them") and/or comparison ("White girls are more attractive than I am") that ultimately result in causality frames ("if a White girl — and thus someone more attractive — appears, I will be replaced"). Relational networks like this may underlie statements made by Carmen such as: "In my head, people are always like... 'Oh, I'll spend some time with you then, until I find a White girl.'"

Furthermore, considering culturally propagated relational frames and networks equating Black people with sexual objects — as opposed to stable romantic partners — sexual objectification and hypersexualization may have enabled the derivation of relational frames equating the "Self" with being merely a sexual object. This, in turn, facilitates coordination relational frames between the "Self" and the concept of being "replaceable," especially in the romantic realm. Concurrently, experiences with partners who felt ashamed to be seen with her because of her appearance foster equivalences between the "Self" and "something shameful." Culturally established relations place the "shameful" stimulus within comparison frames such as "something shameful is less desirable than something that does not cause shame." Being less desirable, the "Self"— equated with "shameful"— becomes equated with "replaceable."

Various authors point out that Black women, who are subject to multiple forms of oppression, have distinct life experiences from those of their peers who are “only” Black or “only” women. This means that Black women’s experiences must be understood holistically, at the intersection of these oppressions, which create a new and unique “monster”: gendered racism (Kilomba, 2019). In this regard, the experiences reported by Carmen differ from those of other participants but resemble those of other Black women, who commonly describe a life marked by feelings of exclusion, loneliness, being passed over in romantic contexts, and beliefs regarding their own replaceability. This set of experiences is frequently discussed under the term “Black woman’s loneliness”, a concept denoting this pattern of being passed over, particularly in romantic relationships, and its impact on mental health (Pacheco, 2013).

Participant: Noah

To describe themselves, Noah chose the terms: companionable, observant, reserved, competitive, polite, critical or self-critical, and shy. As for the adjectives they would like to describe them, they cited: careful, agile, important, extroverted, strong, pleasant, and competent. The adjectives "reserved" and "strong" were selected for this discussion.

Regarding the adjective "reserved," Noah said they don't talk about their feelings and the things that happen in their life, unless asked directly about it. As for the adjective "strong," they state that they see themselves as resilient and persistent even in the face of adversity but expressed a desire to be even stronger.

When asked about life experiences that might be linked to these choices, the participant pointed to instances of being "replaced" by close friends in favor of White people, as well as their family's invalidating reactions to any emotional expression on Noah's part, specifically those related to racism. They said: "When I mentioned it to my family, for some reason they found it very funny that I'd been nicknamed 'coffee.' [...] And so, after a while, I stopped sharing everything. So, whatever happened at school, or things like that, I preferred not to tell anyone. Because I thought, I don't know, that it would either be seen as funny, or they wouldn't care. It didn't matter. Like, 'nothing's going to happen anyway, so I won't say anything.'" Related to this, they claim to be a strong person for having gone through such experiences alone, without giving up.

Noah recounted various episodes of racism across all different areas of life explored in the interview guide, highlighting the school and family environments as settings where this violence occurred most often. Even though the experiences were constant and he suffered a lot from them, he never said anything to his therapist at the time. Considering all of this, the table below presents the selected experiences and verbal accounts that appear to have been central to the construction of his self-as-content.

Table 3

Excerpts from the interview with Noah categorized by the experiences of racism they express

Chosen adjectives: Reserved and Strong	
Experiences with racism relevant to the chosen adjectives	Emblematic excerpts from the interview
Invalidation of their suffering/the suffering of other Black people	“My sister asked why my aunt was crying [after experiencing racism] and sort of said, ‘She experienced it just once and is already crying?’” “Every day, they deny that I’m Black at home.” “My mother said that because I have a dark complexion, I’ll experience it [racism] too. And that’s it. We have to accept it.”
Impunity for aggressors and institutional racism	“But in the end, nothing came of it [reporting the racism], because the school said it was just a child and that the girl was ‘playing around’.” “There [at school], all my friends were White, and I kept wondering why I was the only one who had to go through the ordeal of constantly having to explain myself.”

Amidst the acts of racial violence reported by Noah during the interviews, a profound sense of abandonment stood out. They were excluded and experienced constant invalidation of their suffering as well as the suffering of other Black people (e.g. having their Black identity denied by family members). Furthermore, when they were subjected to racism, others failed to intervene to defend them or acknowledge their pain. From all of this, and the lack of consequences for the perpetrators, Noah appears to have derived causality relational frames such as "if I experience racism, I have to deal with it alone" and "if I report experiences of racism, nothing will be done." These frames seem to function as self-rules for emotional distancing, controlling a pattern of avoidance of the potential aversive stimuli that are racial invalidation and racial violence. This may be what controls, at least in part, the behavior they describe as fear or shame of reporting racism.

This avoidant pattern is not limited merely to reporting racism, as Noah explicitly stated being “reserved" about everything in life. The generalization of this pattern may be a result of deriving relational frames about the general context of his life from the multiple instances of racial invalidation and the causal frames involved already cited above (e.g. "speaking about my suffering leads to invalidation"). Such relations can exert verbal control over the participant's behavior, transforming any form of emotional expression into an aversive stimulus because it is equivalent to the certainty of punishment. This results in a behavioral pattern of escaping emotional contact. Thus, when Noah places the "Self" in an equivalence relationship with the verbal stimulus "reserved," they are, in reality, relating the "Self" and this avoidant pattern as equivalents. In other words, they are exhibiting a fusion of the "Self" with the pattern of emotional distancing.

Also linked to this behavioral pattern is the choice of the verbal stimulus "strong" as one of the adjectives they would like to describe them. One of Noah's accounts regarding strength was: "if I managed to get through that [suffering from racist experiences] back then, I can get through this today, too". This constitutes a causality relational frame which, in turn, also implies a possibly derived equivalence frame between "Strong" and "enduring abuse without giving up or asking for help." Together, these frames become self-rules, potentially leading to verbal behavior such as "I need to be able to handle this on my own."

This relational network appears to have stemmed from various invalidating experiences that led Noah to conclude that suffering is inescapable for a Black person (e.g., their mother's rhetoric about there being nothing one can do about racism). Thus, "Black" becomes equated with suffering and with the need to be okay despite it. Since the "Self" is equated with "Black," this highly aversive quality is directed towards Noah and constantly experienced.

As presented by Araújo et al. (2022), in a racist verbal community, we learn equivalence relational frames between Blackness (and its associated features) and aversive stimuli. As a consequence, one of the characteristics of internalized racism is the derived equivalence between being Black and emotional hardship. In Noah's case, this reaches a level of intense suffering during adolescence that results in not wanting to be Black, as being Black is equated with having to endure abuse. In Noah's words: "[...] And so I kept thinking, 'If I were White, I'd be much happier.' Because then I wouldn't have to go through the whole process of accepting myself as a Black person; I could simply live without thinking about my skin color. And then I had an internal debate and concluded that I no longer liked my skin color—I took no pride in it, and I didn't want to be Black."

General Discussion

Regarding the self-as-content, we observed that all participants established equivalences between the "Self" and verbally constructed aversive and reinforcing stimuli. At least one of these equivalences could be linked to experiences of racism. That is, in every case analyzed, it was possible to hypothesize derived relations stemming from experiences of racism that integrate the relational networks containing the verbal stimulus "Self."

Among the types of relational frames established, equivalence and causality frames were particularly significant, playing a central role in how participants constructed self-rules. In all of the cases, relations derived from racism were primarily associated with aversive stimuli; consequently, they became part of complex networks where the "Self" was equivalent to aversive stimuli and/or in opposition to reinforcing ones. We conclude, then, that for Black individuals, contact with racist contingencies appears to result in a "Self" that inherits many aversive functions due to its equivalence with Blackness, thereby corroborating the theorization proposed by Araújo and his colleagues concerning internalized racism (2022).

In the same vein, it is noteworthy that all participants, to some extent, reported having desired to be White or not to be Black. These accounts point primarily to equivalence frames linking Blackness to suffering. Causality frames also appear to have played a key role in this process, as all participants demonstrated having established frames in which being Black was the cause of an aversive event. Once again, this data supports the observation by Araújo et al. (2022) regarding how the perception of one's Black traits as a source of aversive stimulation leads to "inferiorization". That is, a desire to escape the continuous aversive stimulation that is conditioned to one's own Black body. Furthermore, these findings align with the proposition of Ribeiro, Santos, and Borba (2023). In their article on the impact of racist jokes on the construction of the self among Black individuals, the authors explain how consistent associations between Black characteristics and devalued symbols result in aversive constructions of self for Black people.

On the other hand, for some participants in the present study, relational frames derived from racism also appear to be part of relational networks where the "Self" is equivalent to reinforcing stimuli. However, these verbal constructions seem to emerge after the "Self" has been put in equivalence frames with aversive stimuli (e.g. Jacob only recently began describing himself as extroverted after years of dealing with the aftermath of a racist school). Alternatively, they may also be "compensatory" behavior, typically self-rules that can generate some degree of suffering by fostering psychological inflexibility (e.g. Noah's self-description regarding being strong).

The complexity of the relational networks the verbal stimulus "Self" integrates allows us to conclude just how pervasive racism and its impacts are. Although all participants reported the formation of the "Self-Black-Ugly" equivalence triad at some point in their lives (and similar ones of equivalence between aversive stimuli and their physical traits) these were neither the only nor the most persistent relational frames in their accounts. The verbal relations derived from the participants' experiences with racism were not limited to their Black physical traits or the "obvious" equivalences learned in a racist society (e.g., Black-dirty). The impact of racism permeated the construction of these individuals' selves in a far more complex and wide-ranging manner, influencing everything from the aversive associations formed around coily hair to self-imposed rules about the need to be extroverted.

Such results indicate that the impact of racism does not always follow obvious patterns and that the derived relational responding stemming from racist experiences can lead to verbal relations vastly different from those directly taught. Therefore, given that experiences of racism in a racist culture are constant and permeate every day of racialized individuals, failing to investigate and analyze how these experiences might relate to all the complaints a client presents — even those that do not appear to have a racial component — would mean, at the very least, neglecting a significant part of the client's life experience and how integral they seem to be to self behavior.

Another interesting data to consider when developing a racially sensitive clinical practice is that all 3 participants reported a reluctance to speak about racism, or a conviction that doing so would "come to nothing." The various experiences of racial violence, coupled with the punishment received when

reporting such incidents, may have enabled verbal constructions relating social and emotional contact with others in equivalence to being subjected to invalidation and violence. In this sense, highly aversive experiences with racism appear to result in a generalized pattern of escape and avoidance — manifesting as the avoidance of either social or emotional contact.

Acceptance and Commitment Therapy (ACT), based on Relational Frame Theory (RFT), posits that through combinatorial entailment human beings create predictions about events that have not yet occurred based on the combined interpretation of past events, establishing similarities between them (Hayes, Strosahl, & Wilson, 2021). These verbal constructions can exert more control over an individual's behavior than direct contact with contingencies — a phenomenon known as cognitive fusion. But what happens when a verbally constructed narrative aligns closely, if not completely, with the aversive contingencies someone is directly exposed to?

Strictly speaking, the relational frames exhibited by the participants equating social contact with aversiveness do not align with their life, since not every instance of social or emotional contact necessarily results or resulted in punishment. However, such contact is frequently punished, given that racism structures Brazilian culture and systematically subjects Black people to a greater number of aversive situations. The concrete nature of these aversive contingencies cannot be ignored. We are dealing, then, with an overlap of control mechanisms. The avoidance behavior pattern exhibited by the majority of participants is verbally controlled but also a result of direct contact with racist contingencies. As these two forms of control overlap, the avoidant behavioral pattern is reinforced.

Furthermore, when verbal constructions are frequently reinforced by direct contact with contingencies, the control these verbal patterns exert over the individual's behavior intensifies (Hayes, Strosahl & Wilson, 2021). This results in reduced sensitivity to the consequences of direct contact with contingencies, making it difficult for the individual to identify potentially non-aversive contexts. This is particularly true for behaviors maintained by negative reinforcement — like the behaviors reported by the participants —, where behavior is reinforced by the non-occurrence of an aversive stimulus; this makes it impossible to distinguish whether the aversive event failed to occur because the organism behaved a certain way or because the environment itself was not punitive.

This interpretation suggests that the clinical psychologist's work should not be limited to merely identifying aversive relational frames and presenting cognitive defusion as an alternative. Despite the utility of creating distance between Black individuals and learned racist verbal relations, as indicated by Nascimento (2025), caution is required. If done without acknowledging the racist structures that create aversive environments and teach (directly or indirectly) these relational networks, the therapist risks invalidating the experiences of direct contact with racist contingencies that the individual has faced — and will likely face again. That is, if the cognitive defusion work led by the therapist treats the relational frames/networks derived from experiences with racism as “just thoughts”, it can suggest to the client that their recognition of racism is not valid. By acting this way, the therapist once again punishes the person's behavior of expressing distress and engaging in emotional contact.

Therefore, it is important that cognitive defusion work focuses on the impact that fusion with these thoughts has on the individual's behavioral repertoire, without calling their veracity into question. Validating these interpretations appears central to the therapeutic process with Black individuals. This comes before adopting the pragmatic stance of questioning their utility and the limitations they impose on that person's life, as proposed by the creators of ACT (Hayes, Strosahl, & Wilson, 2021).

Similarly, presenting and practicing self-as-context with Black individuals may require greater sensitivity from the therapist. As noted by Nascimento (2025), self-as-context can aid in perspective-taking regarding verbal behaviors associated with internalized racism. That is, it can facilitate the realization that one holds pejorative thoughts about oneself and one's group due to a prior historical context, rather than a personal failing. However, considering the data presented here — such as the persistent nature of life experiences shaped by being Black — introducing the idea of a "Self" that is merely a perspective, free of any content, may invalidate the lived experience of racialized individuals. For Black people, "Black" is a verbal stimulus continuously equated to the Self, without the possibility of moment-to-moment change. It is an attribute permanently tied to the body, thereby altering the individual's relationship with their own body. Racialized individuals are racialized constantly, throughout the entirety of their experiences. Attempts to detach the Self from this relationship with Blackness can constitute yet another form of racial violence. Consequently, in ACT-based psychotherapy with Black clients, it appears more beneficial to focus on constructing new and anti-racist equivalence relational frames with Blackness than trying to engage them in distancing the “Self” from the verbal stimulus “Black”.

This does not negate the impact that relational frames learned within racist contingencies have on the construction of the self. As Hayes, Strosahl, and Wilson (2021) emphasize, relational networks operate through addition rather than subtraction. In other words, we do not "unlearn" relations; rather, we can learn new ones that diminish the control existing ones exert over our behavior. Engaging with non-racist equivalences can reduce the aversiveness associated with Black physical traits — and the Self equated with them — as well as the suffering related to that aversiveness (Araújo et al., 2022).

Furthermore, given the aversive nature of spontaneously disclosing violence (e.g. accounts from all participants regarding psychotherapy), it is essential that the psychologist be sensitive to the subject, capable of identifying and raising these issues in session even if the client does not initially present a race-related concern. In this regard, as Mizael et al. (2024) point out, clinical practice with Black clients must necessarily be anti-racist and guided by the psychologist's racial literacy. Only when equipped with knowledge regarding racial power dynamics, including how the psychologist participates in them and how they manifest in the lives of Black people, does it become possible to identify and address the repercussions of racism.

Conclusion

Given its qualitative and exploratory nature, this study does not aim to generalize the data obtained; however, the findings point to ways in which racism can impact the development of self behavior.

Therefore, the discussions presented here offer hypotheses regarding some of the many contingencies that may determine the participants' behaviors.

The results indicate associations between experiences of racism, AARRs, and the participants' development of self through complex relational networks; in these networks, relational frames derived from contact with racism culminate primarily in the equivalence of the "Self" with aversive stimuli and in patterns of escape and avoidance.

Consequently, the study's conclusions indicate that effective clinical work with Black individuals necessarily involves acknowledging and addressing experiences of racism within psychotherapy. Common client complaints — such as issues regarding the self — appear to involve racial experiences, even if this is not immediately apparent. Thus, race is a variable that should not be ignored in a clinical context.

Finally, there is a need for future studies on this topic to deepen our understanding of how racism perpetuates itself, how it impacts Black individuals, and what actions can be taken in response. Suggested topics for exploration include: racism in schools and its potential impact on academic self-esteem; the impact of racism within the family on the formation of the self; and perfectionistic behavioral patterns among Black youth and their potential associations with the internalization of racist stereotypes.

Declarations

Author Contribution

Beatriz S. de Souza developed the idea for this research and was the main researcher and writer of the manuscript. Ana P. V. Salvador contributed with orientation, written content in each section and revision of the entire manuscript.

Data Availability

The data that support the findings of this study, as well as full analyses are yet to be published by the repository of the Department of Psychology of the Federal University of Paraná. The data is, however, available from the authors upon reasonable request.

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