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Title: Variables involved in the acquisition and maintenance of racial aggression and its victims' reactions

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## Variables involved in the acquisition and maintenance of racial aggression and its victims' reactions

**Abstract:** This study aimed to investigate how behavior analysis can contribute to the understanding of some variables and processes involved in the acquisition and maintenance of racial aggressors' behaviors, as well as the victims' reactions. We describe how the concepts of rule-governed behavior and motivating operations may be involved in institutional racism: Individuals belonging to ethnic groups who hold the social administration in a context may keep important reinforcers available for their own group, while other racial groups may have their access to those reinforcers hindered. For these privileges to be perpetuated, the ruling group can arrange contingencies that reinforce the behavior of following certain rules that contribute to the maintenance of relevant reinforcers for the ruling group and exclusion of Black individuals and other people of color. For those underrepresented groups, motivating operations can be manipulated and reinforcers can be provided only when their responses are deemed appropriate by the dominant group. Individual learning through discriminative training, equivalence class formation, transfer of functions, stimulus generalization, and function altering were also discussed. Patterns such as aggression, escape, and avoidance, were identified in the actions of racial aggressors. Finally, the victim's reactions were also identified as escape, avoidance, or aggression of racial aggressors, but also as effects of processes such as learned helplessness, extinction after elimination of benefits, countercontrol, and respondent conditioning. Despite the lack of research in the field, behavior analysis has the power to elucidate some variables related to this theme, aiding, thus, evidence-based intervention proposals.

**Keywords:** racism, racial prejudice, behavioral analysis of culture, behavior analysis, social issues.

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Guest Editor, Denisha Gingles

On August 31<sup>st</sup>, 2001, the UNESCO (United Nations Educational, Scientific and Cultural Organization) held an international conference in the city of Durban, South Africa, to combat racism. This conference resulted in several resolutions, including the recognition of the existence of "negative economic, social and cultural consequences of racism, racial discrimination, xenophobia, and related intolerance" (United Nations, 2001, p.13). A first question, however, is how can we define racism?

According to Cavalleiro (2014), racism is a set of collective practices that reproduce certain false ideas, with negative attributes directed at one or more ethnic groups<sup>1</sup>. Such negative attributions can contribute to the maintenance of the power of groups that are dominant in society. Still, according to this author, racism can be described in two basic divisions: Institutional racism involves processes at a macro level of the society, in which the access to opportunities and social participation of certain ethnic groups is systematically hindered or denied. Individual racism, by its turn, is characterized by hostile actions by one individual towards another, from a different ethnic group (Cavalleiro, 2014).

Despite the recognition of the harmful effects that racism can have, we are daily faced with cases of racial violence aimed at Black individuals and other people of color<sup>2</sup>. On May 25<sup>th</sup>, 2020, the world witnessed George Floyd's death in the city of

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<sup>1</sup> There are several conceptions for the term race. Given that, from the point of view of Biology, there are no different races, but only one race, the human race, we will use race in its sociological sense, as a "social category of domination and exclusion" (Munanga, 2004, p. 23). In this sense, the term race will be used both to refer to the physical attributes of individuals (skin color, hair texture, and other phenotypic traits) and concerning the cultural aspects and origin of individuals. This is justified by the fact that substituting ethnicity for race in Brazil "does not change the reality of racism at all, as it does not destroy the hierarchical relationship between different cultures that is one of the components of racism. That is, racism, today practiced in contemporary societies no longer needs the concept of race or the biological variant, it reformulates itself based on the concepts of ethnicity, cultural difference or cultural identity, but today's victims are the same as yesterday's, and yesterday's races are today's ethnicities. What has changed in reality are the terms or concepts, but the ideological scheme that implies domination and exclusion has remained intact" (Munanga, 2004, p. 29). Therefore, race and ethnicity, in this paper, are used interchangeably to denote individuals that suffer from racist behaviors.

<sup>2</sup> Although in the U.S. there is a difference between who is considered African-American and people of color, in Brazil the race of an individual is given primarily by skin color. Therefore, the origin of a person is not a criterion to identify an individual's race.

Minneapolis after a police officer kept his knee pressing Floyd's neck for more than eight minutes, even after George said he couldn't breathe. A few days earlier, on May 18<sup>th</sup>, a 14-year-old boy, João Pedro, was killed in the city of Rio de Janeiro after the police broke into his house during a chase. The tragic deaths of George and João, however, were not isolated cases, but episodes within a larger social and historical context in which Black people's lives were taken for no reason whatsoever.

In behavior analysis, discussions about racism are still scarce, both in experimental and theoretical research. A review by Mizael et al. (2019), who searched for terms related to the topic (e.g., racism, racial prejudice, racial discrimination) in three Brazilian and nine international journals of behavior analysis found only 10 published studies on the topic<sup>3</sup>. Half of the papers had as main objective to analyze the presence of implicit racial biases with the use of a specific measure (The Implicit Relational Assessment Procedure – IRAP, Barnes-Holmes, et al., 2006). Two studies used an experimental model in the field (the stimulus equivalence paradigm; e.g., Sidman, 1994; Sidman & Tailby, 1982) to reduce negative racial biases in children. Two theoretical studies examined practices considered racist from a functional contextual analysis or behavior-analytical perspectives on language and cognition (verbal behavior, stimulus equivalence, and Relational Frame Theory). Only one study consisted of an intervention aimed to increase the integration of White and Black children in the school context.

Guerin (2005), in one of the papers found in the review, addresses the contributions of behavior analysis to the understanding of racism from a contextual-functional perspective, showing that, when it comes to racism, many approaches are

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<sup>3</sup> But see also a study published later, by Matsuda, Garcia, Catagnus, and Brandt (2020), that also discussed a behavioral account of racism and reviewed research in the field.

based on an internal instance that would be “the cause” of racist behaviors. Guerin (2005) explains that such internal attributions help to hold the "racist" individual accountable for their actions, thus removing or omitting the role of the environment in establishing and maintaining racist behavior. Guerin argues that we should focus on the functions of the so-called “racist responses”. Hence, for example, an individual can make a “joke” or laugh at “jokes” that are considered racist to hurt or offend an individual, to obtain social status, to be included in a group, etc. Thus, a more complete understanding of racism requires considering the environment in which these behaviors are emitted, as well as the contingencies that make them possible and maintain them.

Although such studies are important for an articulation of the analysis of behavior with social issues, there is no behavior-analytic research so far addressing some of the contingencies that produce the behavior of racial aggressors in daily interactions. Given the potential to study and intervene on important social issues, as highlighted by some behavior analysts (e.g., Holland, 1978; Moore, 2003), the present study aimed to investigate some contributions of behavior analysis to the study of the variables involved in the behavior of racial aggressors, that is, individuals who verbally or physically assault individuals from stigmatized racial groups, with a focus on aggression against Black individuals. We also analyzed possible behavioral processes involved in the reactions of the victims of such aggressions. Our analysis seeks to understand aspects related to cultural practices as well as individual behavioral patterns.

### Institutional Racism and Cultural Practices

According to Skinner (1974), when people started to live in groups, this led to the emergence of the “social environment”. This, in turn, is maintained by certain practices reinforced by the consequences obtained by each individual and by the

continuity of the group. Skinner also stated that the maintenance and changes of these practices continuously over generations, as well as the adoption of other practices, configures what is called "culture" (Skinner points out, however, that other characteristics must be considered when defining culture). It is from this understanding of "culture" and "cultural practices" that we will follow our analyses throughout this text.

Racism involves cultural practices that reproduce erroneous, incomplete, and/or distorted ideas about one or more racial groups and these ideas may be rooted in certain cultures, justified through religious, economic, and even scientific arguments. An example is a historical fact that even today has negative effects on the Black population: the African enslavement. In the 15th century, European nations, especially Portugal and Spain, started the expansion of navigations and the exploration of new territories, establishing their colonies in different places around the world. The need to obtain workers for their activities resulted in the practice of bringing the natives of regions dominated by Europeans into servitude. When the exploration of America began, the "solution" adopted to solve the "problem of colonization" of the New World was to enslave African individuals. Enslaved individuals were acquired by the so-called masters, who were thus allowed to acquire human beings as if they were products: White men had the right to own a person. Black individuals, therefore, were members of a class of stimuli equivalent to materials, products, things. In consequence, they were also in a relation of difference, or even opposition, to human-like characteristics (e.g., Haynes, 2002; Hayes et al., 2001).

The submission of millions of people to slavery was justified under the economic argument that the need for producing materials and food for the new colonies and metropolis was necessary, but only a purely economic argument would not support

such a practice. Other justifications were related to these, especially in the field of religion, since the Catholic Church exercised great control over the decisions of European nations and their subjects. These interpretations, combined with economic interests, played a role in justifying both African slavery and everyday practices of inferiorization on the part of Europeans in relation to the enslaved individuals. Additional support for these practices was based on the idea of European superiority. White lords were considered blessed, virtuous, civilized, superior by nature, with divine rights to be owners of other human beings, who were considered inferior, addicted, and savage - needing, therefore, help from the Christian civilization, to find salvation (Haynes, 2002).

As time passed, new arguments were adapted and used as justifications to maintain racist behaviors. Pseudo-scientific arguments such as Phrenology and Eugenia stated that morphological, behavioral, and even moral characteristics were related to the cranial shape or genetic expressions of individuals, thus stating that certain races were superior to others due to “natural” differences. Consequently, a civilizing process of human improvement according to the “natural capabilities” of each race was endorsed, justifying the segregation and submission of the “lower races” and the domination of the “superior” one. In this line, even intelligence tests were used to justify the “natural divergences” of the “cognitive skills”, thus decontextualizing their results in relation to the social and economic environment in which the populations lived (Andery & Sérgio, 1997; Macedo, 2016).

Conceptions like these not only led to the attribution of negative stereotypes to Black individuals but also served as a basis for the behavior of the agents involved in these relationships, who behave in accordance with these ideas. These erroneous ideas can be described as "rules": verbal stimuli that describe possible contingencies,



specifying the variables present in them (antecedent, response, and consequence) or only part of them. The presentation of a rule can increase the probability of emitting a response specified by the rule (evocative effect; Blakely & Schlinger, 1987). Emitting the responses specified by rules can allow someone to behave more effectively in the environment, obtaining positive reinforcers or avoiding negative ones, in addition to obtaining the possible approval of peers or avoiding their disapproval. Such consequences can strengthen instructional control. Laws, codes of conduct, proverbs, councils, among others, are examples of rules (Skinner, 1957).

What makes someone follow certain rules? According to Skinner (1989), we respond to verbal stimuli according to our shaping history; following instructions is developed and maintained according to the verbal and cultural contingencies to which we are continuously exposed. Therefore, racist practices can be maintained by cultures that organize verbal contingencies in which negative attributes are assigned to people of certain races; new members of this culture are trained in accordance with such verbal rules and their actions can be reinforced by other members, through approvals and benefits, for example.

At the macro level, following these rules can generate several products. Racist practices may allow, for example, access to resources for the ruling group. Additionally, the manipulation of certain contingencies gets restricted to a particular group. If a culture maintains practices of segregation, then excluded groups have their access to basic resources denied. Moreover, the social ascension of members of the segregated group is hampered. They could also be deprived of civil rights, being afraid to move freely in public places because of the probability of police aggression or social rejection, or even worse, suffer from disenfranchisement. In contrast, for the dominant group, access to products, resources, and circulation is guaranteed and even facilitated.

In a racist culture, the criterion for these differentiations are not the skills or abilities of individuals, but their race and/or origin (social, national, etc.). Thus, behaving in accordance with rules related to the attribution of negative stereotypes to Black people can also be maintained by the dominant group's privileges. Racist and segregationist practices can be reinforced as they produce benefits for a portion of the population. Such consequences tend to strengthen instructional control, which in turn, maintains the behavior of producing this type of rule and keeps the underrepresented groups in conditions of deprivation and misery.

However, for people whose access to reinforcers has been hampered, other behavioral effects may occur. The deprivation of resources such as food, for example, increases the effectiveness of food as a reinforcer and evokes the emission of any behavior that at any time has been reinforced with food: either through work, begging, submission, or theft. Resource deprivation functions as a motivating operation and the emission of responses due to the manipulation of this deprivation highlights the evocative effect that motivating operations also have (Laraway et al., 2003). If a dominant group has access to resources, then it can distribute them contingently to behaviors that the excluded group emits, as long as this maintains the power of the dominant group.

As this cycle continues, the verbal rules that shape the new members of the two groups will be maintained, since those involved end up behaving in the way that the rules describe, generating the creation of realities: once the individuals of both groups only get reinforcement if they act according to the description of the rules, those rules “become naturalized”. That is, they turn into principles and values that individuals follow and believe are real – as if they were true and indisputable descriptions of how things are and how the world works (Barnes-Holmes et al. 2001; Hayes & Gifford,

1997; Torneke, 2010). Thus, statements like “it's a Black people's thing”<sup>4</sup> become common and more and more Black individuals may believe that the color of their skin or their origin is the real reason for their misfortunes, rather than historical or social reasons.

As a result, Black individuals and other people of color end up suffering economical losses, such as unemployment and being assigned to jobs with lower salaries or with less access to administrative positions. According to data from the Brazilian Institute of Geography and Statistics (IBGE), for the third quarter of 2017 (Marli, 2017), 14.6% of the Black population in Brazil was unemployed, while the percentage of the unemployed White population was 9.9%. Additionally, of almost 13 million unemployed individuals in the country, 8.3 million were Black (63.7% of unemployed in Brazil). The data collected also show the prevalence of the two groups in different professional sectors. Black individuals are the majority in sectors such as “agriculture, livestock, forest production, fishing and aquaculture” (10.8 million Black people vs. 7.9 million White people); “construction” (9 million against 5.9 million), “accommodation and food” (6.2 million against 5.2 million) and “domestic services” (8.5 million against 5 million). In contrast, White individuals are the majority in the sectors “general industry” (14.1 million White people vs. 12 million Black people); “information, communication, and financial, real estate, professional and administrative activities” (13.6 million vs. 8.7 million), and “administration politics, defense, social security, education, human health, and social services” (19.2 million vs. 15.6 million). Thus, there is a greater presence of Whites individuals in administrative, political, and

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<sup>4</sup> Statement emitted by a Brazilian reporter in news coverage in the city of Washington in 2016 when he felt uncomfortable with the sound of a car horn driven by an African American.

educational sectors, while Black individuals are the majority in sectors of manual labor (Marli, 2017).

#### Different stimulus functions attributed to victims

There are also other ways of attributing negative characteristics to Black people. In a parental learning situation, a child's caregiver may give their child affection and phrases of approval such as "your friends are cool, son!" and "look how many friends you have!" when the child plays with White peers. When the child plays with a Black child, however, the parents may provide different consequences, saying, for example, "son, come home now" or "you cannot play with this kid." This differential reinforcement, in which the response of playing with White children is reinforced while playing with Black children is punished may be sufficient for the child to attribute positive characteristics to his White peers and negative characteristics to Black children.

Researchers have discussed the involvement of respondent conditioning in the formation of preferences and tastes, in what has been called "evaluative conditioning". De Houwer et al. (2001) define evaluative conditioning as changes in the "liking" of a stimulus resulting from the pairing of this stimulus with other positive or negative stimuli (cf., Levey & Martin, 1975). Evaluative conditioning has been used in several studies, changing the valence of food, alcohol, brands, and even the body satisfaction of participants (e.g., Martijn et al., 2013). In the study by Wang et al. (2017), for example, the simultaneous presentation of images of chocolates with images considered negative led to a reduction in the valence of chocolates by the participants, compared to a control group exposed to images of chocolates with positive and negative images. In this sense, the frequent pairing of Black individuals with negative stimuli (initially as soulless beings or barbarians, later as enslaved and, then, like burglars, drug dealers, and criminals in general), helps in the establishment of a negative valence to Black

individuals. Once this conditioning is established, whatever is paired with Black people can also acquire negative valence. Thus, Black music (music composed and or performed by Black individuals), may be considered of inferior quality or “not really music” by several audiences (e.g., Brazilian rap).

Research on stimulus equivalence has shown that individuals can respond to a stimulus based on the experience with another. As pointed out in some studies (Mizael, de Almeida, et al., 2020; Mizael, de Almeida, et al., 2016; Mizael & de Rose, 2017; Mizael, dos Santos, et al., 2016), the attribution of negative characteristics to Black people can also be the result of equivalence relations between Black individuals and negative attributes. When a feature is assigned to one or more members of an equivalence class, that characteristic can be evoked in the presence of other members of the same class, even without direct training; this phenomenon is called “transfer of function” (de Rose et al., 1988; Perez et al., 2018). Different functions can be transferred, including, for example, conditioned emotional responses. Studies in the field have shown that after the establishment of a class of equivalent stimuli if one of the stimuli in the class has its function altered, other members may have their functions altered in a similar way (Dougher et al., 1994).

In all the processes discussed above, the characteristics attributed directly or indirectly to a Black individual may generalize to other Black people, based on their physical features (e.g., Mizael & de Rose, 2017). Given that a Black individual may belong to a class of stimuli comprised of different physical elements and negative verbal attributions, members of this class may acquire a conditioned aversive function for some individuals.

One example of racist behavior can be the removal of the “racist” individual to situations where the target group of discrimination is present. This distancing can occur through detours in paths, avoidance of places where the presence of Black people is frequent, the construction of physical structures (barriers) that prevent the circulation of certain groups, and also through the creation of laws or verbal rules that maintain institutional segregation. Practices that involve such behaviors are negatively reinforced as long as they are effective in keeping the target individuals away (e.g., avoiding physical contact or approach, and even preventing their social ascension). This distancing evidence that the targeted individuals or groups have an aversive function to the ones avoiding them (Sidman, 1989).

Research shows that aversive stimuli can generate different response patterns, such as escape and avoidance or even physical aggression (Azrin et al., 1966; Sidman, 1989). In this sense, we understand that racially aggressive behaviors may often be considered negatively reinforced patterns, which can be maintained if it keeps the victim (as well as symbols and other elements of their culture) away from the aggressor. We are not disregarding here the entire historical and social contexts in which people acquire and maintain racist practices for generations; some considerations of them were made in the previous topic; here we propose to understand some behavioral contingencies present in the relationship between two or more individuals.

It is important to note that these racist behaviors can also be emitted in relation to other stimuli that belong to the same class to which the victim belongs; the destruction of Jewish symbols, attacks on mosques, and the disdain for elements of Black culture are some examples. Thus, in a racist culture, cultural symbols of underrepresented groups also end up being the target of violence, destruction, and rejection. Also, once these stimuli have become aversive, they have also become

conditioned stimuli that elicit respondent reactions; these may be described by the aggressor as feelings, such as "contempt", "anger", "aversion" and even "repulsion" (Skinner, 1953).

As discussed earlier, stereotypes and negative descriptions are often attributed to excluded groups. Black people are often related to negative attributes and these attributes lead to the adoption of practices aimed at the excluded group, which are not common to members of a dominant group. For example, in a society that claims that Black people are potential criminals, the police may use excessive force against members of those communities because "the individual seemed potentially dangerous", "did not appear to be a local resident", "his tone of voice and/or look was challenging and directed at me", etc. Similar actions by White individuals living in upper-class neighborhoods are much less likely to have the same consequences (Sampaio, 2019).

Aggressions against Black individuals and other people of color have unfortunately been reported frequently in newspapers and the media. As experimental research has already shown us, aversive stimulation can lead to aggressive behaviors (Azrin et al., 1966; Sidman, 1989). Moreover, in such situations, seeing the other person injured can be reinforcing for the aggressor (Azrin et al., 1965). Aggressive behaviors against Black people, therefore, can be evoked by aversive functions that this group can have for other groups. Furthermore, when the aggressor commits violence, the victim may withdraw from the situation, negatively reinforcing the aggressor's behavior. Finally, it may be possible that the damage to an individual can also be positively reinforced by the group to which the aggressor belongs: the aggressor may be praised by other members of the group and may gain acceptance and prestige (Ventura et al., 2013).

Physical aggression can often result in punishment of the aggressors. Punitive contingencies for aggression may involve restraint (imprisonment), disapproval from peers, and counterattacks. To avoid these punishments, the individual may emit responses incompatible with the aggression, such as withdrawing from a place with Black individuals or using certain verbal strategies. If those strategies are effective in avoiding punishment, such responses will be negatively reinforced, characterizing avoidance patterns (Sidman, 1989). Thus, an episode of interaction between a person with racist attitudes and someone of another race, in which the first demonstrates appropriate treatment behaviors, is a situation in which this attitude can have an elusive function. Looking only at the behavior's topography, rather than its function, can mislead the observer towards perceiving the individual's racial attitudes (Guerin, 2005).

However, if there is a situation in which punishments are not likely to occur for aggressive behavior, the responses emitted may be different. Cognitive researchers such as Rogers and Prentice-Dunn (1981), call this process "Deindividualization": antecedent conditions that signal a reduction in punishments for violent behavior, leading to aggressions motivated by racial motives, which would normally be punished. According to the same authors, many contextual conditions can favor deindividualization, especially the formation of groups: if a group is formed by individuals with racist attitudes, its members will not be punished by their peers for attacking others for racial reasons; the absence of punishment for racist behavior, as well the validation of this behavior through other people, favors "deindividualization". It is important to remember that the struggles and civil rights movements have played an important role in changing contingencies that maintain practices of racial discrimination. Yet, racist attitudes still exist, that is, specific social and cultural conditions still create and maintain these practices in more refined ways. Thus, loosening legislation regarding punishment



against racial crimes or against speeches by authorities validating such violence against underrepresented groups may increase the incidence of these practices, leading to the phenomenon named "deindividualization".

Here we can also think about the actions of institutional authorities that result in violence against underrepresented groups. Based on what has been discussed so far, we must always take into account that the police is not an institution apart from others that make up society and that its members also have their personal histories. When we note that complaints about police stops and violence have been similar for decades and that these police practices have been directed at the same groups, we can say that this institution (like many others in our societies) may maintain certain practices, often informally or, even unconsciously, in the same way, that is characteristic of institutional racism<sup>5</sup>. This is related to what Skinner (1953, 1974) refers, and is also aligned with the formation of conditioned aversive stimuli through the attribution of negative stereotypes to a portion of the population and through the validation of violent acts (e.g., when illegal behaviors of police officers go unpunished).

In Brazil, we know that the reality of the vast majority of public security agents is far from ideal, both in financial terms and in terms of equipment and exposure to danger, which leads these agents to many difficulties, fears, anguish, and resentment (Spode & Merlo, 2006; Souza et al., 2007; Minayo et al., 2008). Nonetheless, cultural practices in the training of police officers can contribute to racial violence. This is why it is important to rethink police behaviors in some communities, rather than promote the idea that police officers, or other agents, are inherently racist.

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<sup>5</sup> This may be defined as the failure of institutions to provide adequate treatment and/or services for some groups in society because of their skin color, racial or ethnic origin, or culture (Brazil, 2006).

### Victim's reactions and feelings

Racist behavior may assume the form of avoidance, defamation, destruction of property, attacks, and murders. Victims of racial aggressions, by their turn, can develop feelings of inferiority about themselves, may feel excluded from decisions and participation, and feel resentment against the aggressors or members of the aggressor group, which can generate counterattacks (Kleg, 1993). We cannot ignore the effect that violence, segregation, and racial discrimination can have on victims. We have seen, for example, that in a culture that maintains racist practices, Black people may have restricted access to important reinforcers, but they can also be exposed to aversive stimuli in a higher frequency than other populations.

This exposure has implications for the victim's behavior. For example, Underrepresented groups can become submissive, that is, they may refrain from punishing the behavior of the aggressor and tend to comply to their demands, as long as remaining submissive avoid punishments and restrictions. In this sense, submission, defined here as the absence of punishment of the aggressors' behavior and compliance with their demands, can be seen as escape/avoidance and, therefore, negatively reinforced behaviors (Skinner, 1953). Some of these behaviors can be effective, but failure to remove aversive stimuli can lead to the development of a phenomenon known as "learned helplessness" (Seligman, 1972). Among other things, learned helplessness can cause difficulties in learning new repertoires due to a history of uncontrollability with negative reinforcers, as well as "passive acceptance", that is, emission of few or no responses when the person is facing aversive events. In situations like these, people commonly report that they feel "discouraged", "frustrated", "resigned", "sad" and "depressed", as well as "afraid" and "scared".

Besides, the systematic presentation of verbal and physical racial aggressions can turn the person's body features, such as the color of their skin or hair texture, an aversive stimulus by pairing (Sidman, 1989). The victim can learn to reject themselves. Derogatory comments directed at themselves or other people belonging to their group can become frequent. It is common for Black people to learn to describe themselves in negative ways, including rejecting other Black people; Black children learn from an early age that people who look like them should be avoided, generating patterns usually described as "denial", "self-rejection" and "self-loathing" (e.g., Queiroz, 2019; Williams & Mohammed, 2008).

Sidman (1989) describes that the application of punishment can lead to the development of avoidance, as well as turning the environment in which aversive stimuli are presented as well as the punishing agent into aversive stimuli. By stimulus generalization, other people similar to the punishing agent may also become aversive. Thus, even if racist acts may be practiced by a specific group of people, depending on the conditions (frequency, intensity, etc.) other individuals in the same racial group as the aggressors can become aversive stimuli and the victim might start to avoid them. They could also start to avoid places similar to those where the aggression occurred or where people of the same race as the aggressors commonly attend or are the majority. Black people could also start to avoid certain places where other Black individuals are not usually present. The aggressor, individuals similar to them and environments where these people commonly go can, as aversive stimulations, evoke escape and avoidance responses on the part of the victims, and also elicit responses described as feelings of "shame", "fear" and a lack of sense of belonging to a particular place/setting. It would not be surprising that given all these aversive contingencies to which Black people are

subjected, the risk of developing psychopathologies is high (Fanon, 2008/1952; Tavares & Kuratani, 2019).

Difficult access to or restriction of important reinforcers can provoke reactions in those who have been excluded. These reactions can, for example, be experienced as "anger" or "enrage" - emotional responses commonly present in situations where positive reinforcers are suspended (Skinner, 1953). In addition to "anger", such restrictions, when systematic and frequent, can induce aggression and counterattack (Azrin et al, 1966), also induced by situations of physical and verbal violence (Sidman, 1989). These effects can be related to the occurrence of riots, rebellions, and revolts that explode when a group of people is subjected to deprivation of resources or daily violence.

### Countercontrol

Aversive contingencies can lead to patterns of countercontrol, which involves the emission of responses that can decrease or inhibit the presentation of aversive stimuli (Sidman, 1989). Additionally, these responses (which may include punishment of the controller's behavior) result in the attainment of reinforcers, by changing the source of control from the controller to the controllee (Delprato, 2002; Skinner, 1953). Forms of countercontrol can involve behaviors that can guarantee access to reinforcers whose availability is scarce, for example. If access to important reinforcers is made difficult for underrepresented groups, some behaviors may be emitted so that such reinforcers are obtained by the excluded. Strategies like these were used by members of the Black Panther Party in the United States during the late 1960s until the early 1980s. The party promoted social actions and programs aimed at Black people, which included medical assistance, dental assistance, trade, access to products and food, jobs, and even

breakfast, maintaining access to important services within the Black community that would otherwise be difficult for them (Johnson, 2006). In Brazil, the “Frente Negra Brasileira” (“Brazilian Black Front”) is also an example of the practice of countercontrol, since this institution, formed in 1931 and with delegations (branches) in different parts of the country, promoted recreational activities, but it also had a school, legal department, medical and dental services, among other services directed at Black individuals (Domingues, 2007).

Affirmative action can also be seen as a form of countercontrol. Racial quotas, for instance, exist because laws aim to guarantee access of Black individuals, people of color, indigenous, people with disabilities, among others, to reinforcement contingencies important for the development of academic and professional repertoires, as well as the presence of such groups in work environments. These laws aim to allow access to reinforcers to historically excluded populations, especially for ethnic reasons, despite the contingencies of aversive control that are still maintained by institutional racism and racial discrimination practices. Another form of countercontrol happens when individuals fail to comply with laws that harm people of a certain race, opposing these rules through “passive resistances” (Skinner, 1953).

When possible, underrepresented groups can organize themselves to change political structures through government representations at different levels of power, electing candidates who fight for their demands, among other actions. This can be considered a form of countercontrol within legislative and democratic possibilities. However, many times when this route is impossible and aversive stimulation is of great magnitude, protests and revolts can occur. Popular revolts involve a set of individual and social behaviors that can result in changing aversive practices and ensuring access

to some reinforcers, configuring another possible form of countercontrol (Skinner, 1953; Sidman, 1989).

### Concluding Remarks

This paper aimed to investigate how behavior analysis can contribute to the understanding of some variables involved in the acquisition and maintenance of racial aggressors' behavior. Another goal was to show which behavioral processes can be involved in the victims' reactions and feelings. Based on the above, it is possible to see that, despite the scarcity of behavior-analytic studies in the field that explicitly focus on racial issues, the broad theoretical and experimental body within behavior analysis has the potential to elucidate many of these variables, thus helping in proposals for changes in contingencies.

We conclude that racial violence may be related to culturally endorsed practices that maintain the attribution of aversive attributes to Black people and their cultural elements, as well as to other underrepresented groups. We learn early on to be suspicious of people who have certain characteristics, such as certain skin color. This distrust, which involves both elicited responses (such as fear) as well as operant responses (escape and avoidance) can be maintained as we avoid the presence of the individual we have learned to distrust, but also by the approval of our peers who have taught us to distrust. For these behaviors to be maintained, negative attributions to underrepresented groups and their symbols are made (formation of classes of equivalent stimuli and conditioned aversive stimuli by verbal rules, among other procedures). Finally, all these patterns lead to an increase in the exclusion of one or more groups and the dominance by another group over resources and the power to manipulate important contingencies, in addition to prejudicial effects on the victims.

Changes in cultural practices are necessary to effectively decrease and eliminate aversive contingencies imposed on the Black population. The teaching of cooperative practices can be encouraged from the early years of schooling, scheduling contingencies of positive reinforcement for behaviors like interactions with children with different races, shared playing and problem-solving in groups, contributing thus to healthy coexistence among children from different origins (Hart et al., 1968; Serbin et al., 1977). Also, the functions of the stimuli that make up equivalence classes that relate to Black individuals must be changed, so that these stimuli become discriminative for respectful responses. The adoption of strategies that attribute positive characteristics to both Black culture and Black individuals can contribute to this end (Mizael, de Almeida, et al, 2016, 2020; Mizael & de Rose, 2017; Mizael et al., 2019).

It is worth mentioning that these proposals are not new. However, such ideas and discussions are still scarce in the behavior-analytic community. Perhaps the present special issue may be a turning point in the position of behavior analysts against the current practices that guarantee the dominance of reinforcers for one group and exclusion and submission of other groups. As exemplified in the present article (and others in this special issue), behavior analysis can contribute to the *description* of the behavioral processes and the contingencies involved in racist practices. Confronting racist practices and the contingencies that maintain them is a significant behavioral challenge and behavior analysis may have an important role in contributing to effective action.

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