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COVID-19 Prejudice Towards Afro-Brazilians

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ABSTRACT

As of May 2021, more than 14.7 million people have been infected and nearly 409,000 people have died from COVID-19 in Brazil. During the pandemic, there were countless cases of discrimination, racism, prejudice, and violence towards Brazil's Afro-Brazilian population. Using integrated threat theory (ITT), this study investigates prejudice towards Afro-Brazilians. Specifically, this study (n= 410) examines the extent to which COVID-19 related prejudice towards Afro-Brazilians, who were partially blamed for the spread of the virus, is related to prejudice and fear of COVID-19. Results reveal the following: ethnocentrism is positively related to symbolic and realistic threat and fear of COVID-19 is positively related to symbolic and realistic threat.

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integrated threat theory; prejudice; intergroup communication; ethnocentrism; COVID-19

Faced with rising fatalities (the highest number of daily fatalities in the world in April 2021), a government response to the pandemic considered one of the worst in the world, and a collapsing health system, the nation is on the brink of economic, political and health collapse (CBS News, 2021; Filho & Feil, 2021). As of July 2021, there are more than 19.1 million confirmed cases and nearly 540,000 COVID-19 related deaths in Brazil (Johns Hopkins University Coronavirus Resource Center updated daily). Throughout 2020 and early 2021 cases increased steadily, with the crisis deteriorating rapidly in early 2021 as the nation faced a new and more contagious variant of COVID-19, P1 (Phillips & Collyns, 2021). The COVID-19 pandemic response has brought to the forefront racial inequalities in Brazilian society, and how these inequalities foster not only political, economic, and social inequalities, but health inequalities and vulnerabilities (Martins-Filho et al., 2021; Oria, 2020).

In Brazil, like in the United States, minorities have been targets of verbal abuse since the outbreak of the COVID-19 pandemic. Brazilian government officials came under scrutiny for discriminating against Asians and for racist anti-Asian tweets (AFP, 2020; Folha de S. P, 2020). President Bolsonaro has even criticized the Chinese government for

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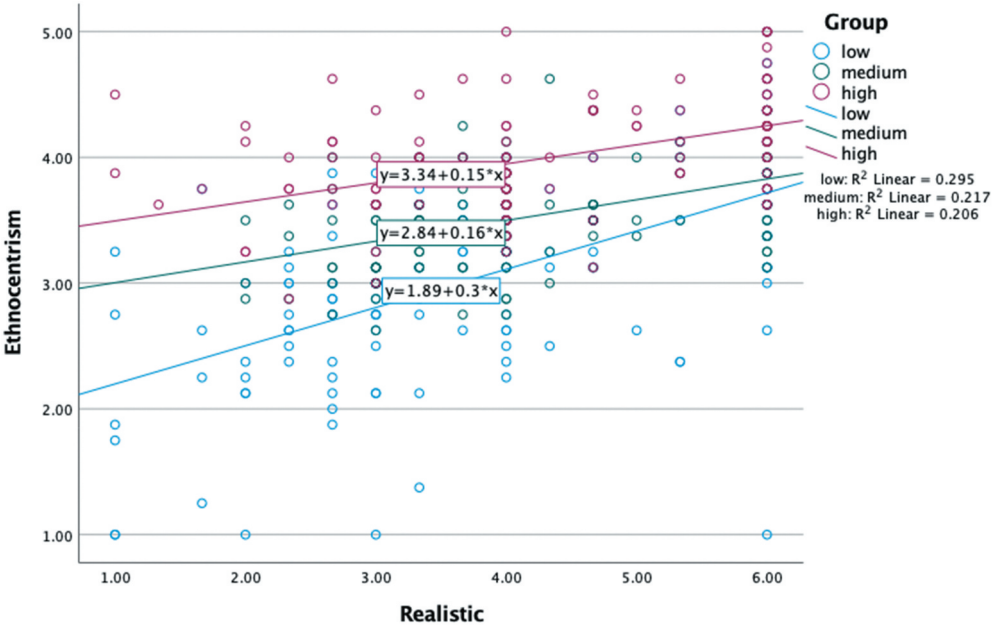

Figure 1. Interaction between Fear of COVID-19 and Ethnocentrism on Realistic Threat.

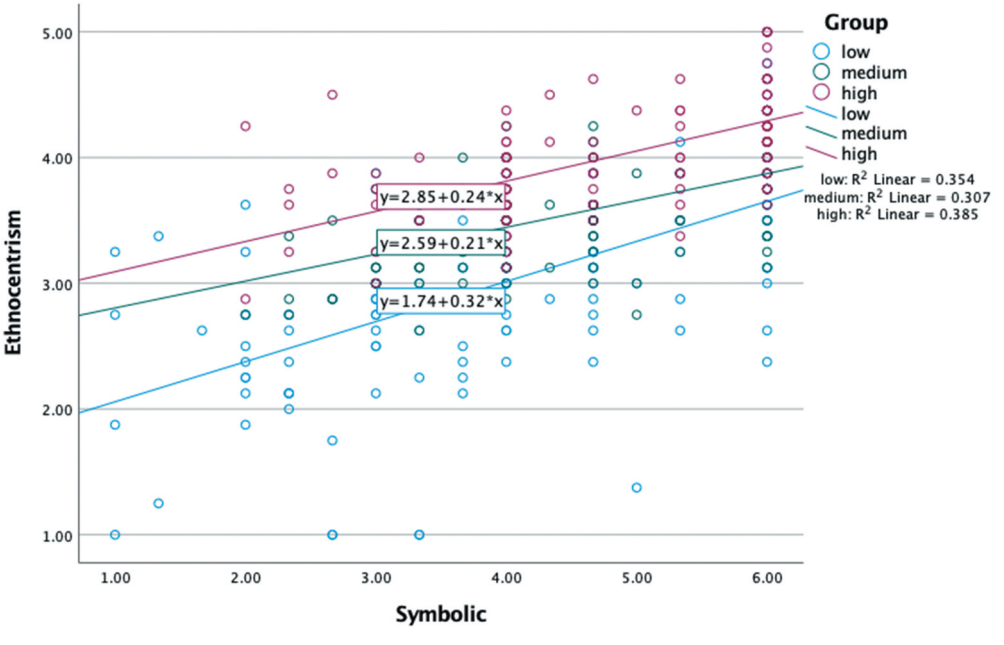

Figure 2. Interaction between Fear of COVID-19 and Ethnocentrism on Symbolic Threat.

its handling of the pandemic. Bolsonaro has publicly called the virus the "Chinese virus" (AFP, 2020). While Brazil's Asian populations have faced ethnocentrism, discrimination, and racism during the pandemic, Brazil's Afro Brazilian population has experienced

intense racism, discrimination, and violence during the COVID-19 pandemic and been disproportionately affected by the virus (Caldwell & de Araújo, 2020). The Afro-Brazilian population has increasingly been blamed for the spread of the virus, while also being denied public health coverage (Phillips, 2020). This study examines the extent to which COVID-19 related prejudice towards Afro-Brazilians is related to ethnocentrism. This study uses Stephan and Stephan (1993, 1996) integrated threat theory (ITT) in conceptualizing prejudice. Examining ethnocentrism and prejudice in the midst of the COVID-19 pandemic expands our understanding of intergroup and intercultural dynamics in a pandemic situation.

COVID-19 Prejudice towards Afro-Brazilians

As of the 2010 Census, Brazil's Afro-Brazilian population made up nearly 8% of Brazil's population, almost 14.5 million (Censo Demográfi, 2010); however, due to problems with how the census is collected in Brazil the true population is likely higher (Berryman, 2016). This group is defined as primarily descendants of former African slaves and/or immigrants. Brazil abolished slavery in 1888. However, in the decades following, Brazil did not make concerted efforts to integrate and include the millions of Afro-Brazilians into Brazilian society (Mitchell, 2010). Instead of integrating Afro-Brazilians into dominant Euro-Brazilian society, the government (and the majority of Brazilians) largely denied the existence and presence of racism, prejudice, and inequality (Bailey, 2009). Brazil's government declared Brazil a "racial democracy," where all Brazilians live in racial harmony (Ames, 2002), and do not view one another through a racial lens. Researchers have challenged this notion, asserting the promotion of a "racial democracy" by the government was to hide racism and oppression and protect the white elite (Hanchard, 1994; Skidmore, 1974; Twine, 1997). Instead of promoting a "racial democracy", do Nascimento (1978) asserted the government has followed a policy of "whitewashing". Whitewashing is a systematic campaign of institutional racism (Barreto, 2019).

Within whitewashing, residential segregation and employment discrimination abound, which correlate highly with lower life expectancy, and less access to quality health care for Afro-Brazilians (Braveman & Gottlieb, 2014; Caldwell & de Araújo, 2020). With the outbreak of COVID-19 in Brazil, the impacts of institutional racism (Hogan et al., 2018) on the Afro-Brazilian community have been amplified. The pandemic has further revealed the harsh working conditions, unequal access to health care, lack of funding for public hospitals in Afro-Brazilian neighbourhoods, higher rates of chronic illness, and poor housing conditions many Afro-Brazilians face (Caldwell & de Araújo, 2020; Canzian & Mena, 2019). Researchers have asserted for decades that this institutional racism leads to more health problems for Afro-Brazilians (Hogan et al., 2018) and apathy towards health issues among Afro-Brazilians.

As COVID-19 has ravaged Brazil, President Jair Bolsonaro's response to the virus has not only been criticized for lacking structure and initiative (Anderson, 2021) but for also lacking attention to the most adversely affected group in Brazil, Afro-Brazilians (Leão, 2021). Bolsonaro's government has also been called inconsistent in its response. While at first supporting the World Health Organization (WHO), its response and measures, the President quickly changed his tone and framed the pandemic as a media exaggeration. He argued against social distancing, mask wearing, and other steps that might hurt the

economy (Pronunciamento do predisente da República, 2020). In addition, Bolsonaro diverted funding from Afro-Brazilian regions hit hard by the pandemic while simultaneously blaming Afro-Brazilians for the spread of the virus (Caldwell & de Araújo, 2020; Leão, 2021; Phillips, 2020).

Integrated Threat and Ethnocentrism

Prejudice is defined as "thinking ill of others without sufficient warrant" (Allport, 1954, p. 6). Research on prejudice (Atwell Seate & Mastro, 2016; Croucher et al., 2014, 2013; Maoz & Ellis, 2008; Saleem et al., 2016) has demonstrated that prejudicial attitudes and behaviours against outgroups/minorities expose the fears the in-group /dominant cultural group has towards an out-group, in this case Afro-Brazilians. A reason for these attitudes and behaviours is perception of threat. In their integrated threat theory (ITT), Stephan and Stephan (1996) argued perceptions of threat are explain and predict prejudice towards minority groups (Croucher, 2013). Stephan et al. (1999) also stressed that the perception of threat is important, as it leads an in-group to have prejudice and negative attitudes against an out-group whether a threat is real or not. Stephan and Stephan (1993; 1996, 2000) originally proposed four kinds of threats (realistic and symbolic threats, negative stereotypes, and intergroup anxiety. Stephan et al. (2015) condensed the four kinds of threat into two: realistic and symbolic threats, to form the revised intergroup threat theory (ITT). The revised ITT explains and predicts prejudice and negative attitudes towards out-group members (Croucher et al., 2013; Stephan et al., 2015).

Symbolic threats are related to differences in the "way of life" including *morals, values, standards, beliefs, culture, and attitudes* between an in-group and an out-group (Stephan et al., 2015). This threat occurs when an in-group individual perceives that their "way of life" is threatened by an out-group. Researchers have shown that the perception of a symbolic threat is positively correlated with prejudicial attitudes and behaviours (Croucher, 2013; Ramsay & Pang, 2017; Spencer-Rodgers & McGovern, 2002). When the ingroup perceives the out-group as threatening their existence (such as warfare), political and economic power, physical and material well-being (for example, health concerns), these threats are realistic threats (Stephan et al., 2015). Studies have shown that the more realistic threats an in-group member perceives, the more negative attitudes and behaviours they have towards an out-group (Croucher, 2013; Ramsay & Pang, 2017). Often when threatened, the ingroup will, if possible, in addition to expressing prejudice enact steps to protect their position of power. In Brazil, the government, largely made up of the Euro-Brazilian population, has been accused of structural racism, discrimination and violence against people of African descent. Critics of Bolsonaro's government accuse the government of excluding Afro-Brazilians from decision-making, institutions, structures, and protecting the rights and privileges of whites by taking away the rights of black Brazilians.

Ethnocentrism is intrinsically linked with how ingroups communicate with outgroups. An extensive body of literature has explored and documented the negative effects of ethnocentrism (see Clark et al., 2015; Neuliep, 2017; Neuliep & McCroskey, 1997; Wrench et al., 2006). With ethnocentrism, people "put their own group in a position of centrality and worthwhile creating and reinforcing negative attitudes

and behaviors toward outgroups" (Neuliep & McCroskey, 1997, p. 386). There are numerous negative effects of ethnocentrism. Dreu et al. (2011) explained how ethnocentrism creates and perpetuates group bias, which leads to prejudice. Behaviours linked to ethnocentrism include a lack of cooperative relations with out-group individuals (Neuliep, 2017). Researchers have shown that while related constructs, ethnocentrism and prejudice, are distinctly different and are positively correlated with one another (Agroskin & Jonas, 2010; Figueredo et al., 2011; Croucher et al., 2021 ; Stephan et al., 1994). There is a long history of ethnocentrism towards Black Brazilians from many White Brazilians (Da Costa, 2014; Dzidzienyo, 1993; Guimaraes, 2015).

Research Question and Hypotheses

During the COVID-19 pandemic, Afro-Brazilians have experienced increased discrimination, ethnocentrism, racism, prejudice, and violence, and increasingly been blamed for the spread of the virus (Caldwell & de Araújo, 2020; Leão, 2021; Phillips, 2020). While the bulk of research on prejudice (using ITT) and ethnocentrism has emphasized minority/dominant group interactions, research has examined prejudice towards those with health conditions or those blamed for spreading illness. Research demonstrates fear, prejudice, discrimination, hate crimes, and ethnocentrism towards those living health issues such as cancer, HIV/AIDS, obesity, etc. (Berrenberg, 1989; Berrenberg et al., 2007). Research for example, has shown higher levels of prejudice towards those with HIV/AIDS than those with cancer (Berrenberg et al., 2007). Results were attributed to participants believing they were more likely to get cancer, and thus were less likely to prejudice that group.

During health crises, such as a pandemic, ingroups will often dehumanize outgroups, as such dehumanization helps ingroups rationalize illness and disease (Suefeld & Schaller, 2002). Dehumanization as a communication strategy is positively correlated with ethnocentrism and prejudice (Faulkner et al., 2004; Navarrete & Fessler, 2006). In addition, the perception that one is vulnerable to a disease/illness is positively related to disgust towards those blamed for or deemed to have said disease/illness (Schaller & Neuberg, 2012). Therefore, with the chances of catching COVID-19 heightened in Brazil, at the time of data collection, it is logical that prejudice would increase towards the outgroup historically prejudiced against and blamed for the spread of the virus. Thus, to explore the extent to which ethnocentrism predicts prejudice towards Afro-Brazilians, the following hypotheses and research question are proposed:

H1: Ethnocentrism is positively related to realistic threat.

H2: Ethnocentrism is positively related to symbolic threat.

RQ1: To what extent will fear of COVID-19 influence the relationship between ethnocentrism and threat (realistic and symbolic)?

Table 1. Means, standard deviations, and correlations.

Variable	*M*	*SD*	α	(1)	(2)	(3)	(4)
(1) Ethnocentrism	3.51	.69	.78	-			
(2) Fear of COVID-19	2.79	.43	.72	.24*	-		
(3) Symbolic Threat	4.36	1.25	.89	.61*	.31*	-	
(4) Realistic Threat	4.03	1.30	.89	.51*	.25*	.75*	-

* $p \leq .01$

Method

Data were collected in Brazil via an online survey with the assistance of Qualtrics. Online participant panels, such as Qualtrics are comparable to other populations in published research (Croucher et al., 2020; Troia & Graham, 2017). Qualtrics provided a small financial compensation to each participant. Before data collection, ethical approval was received. The study included 410 participants. Of the participants, 51.95% (n= 213) were male and 48.05% (n= 197) were female. Participants ranged from 18 to 76 (M= 28.97, SD = 8.37) years of age.

Measures

Surveys were distributed in Portuguese. The translation involved a three-step process. First, the surveys were translated from English into Portuguese by native bilingual speakers. Second, the translations were then checked by a professional translator for connotational and denotational issues. Third, the professional translator discussed all connotational and/or denotational issues with the lead researcher and an independent bilingual speaker to reach a consensus on potential changes. The final reliability of the translation was .89. The surveys included demographic questions and the following measures: Measure of Symbolic threat (Stephan et al., 1999), Measure of Realistic Threat (Stephan et al., 1999), Generalized Ethnocentrism Scale (Neuliep & McCroskey, 1997), and a Fear of COVID-19 Scale modified from a Fear of AIDS Scale (Bouton et al., 1987). Confirmatory factor analyses (CFAs) were conducted on each measure following criteria set by Hu and Bentler (1999). See Table 1 for the means, standard deviations, correlations, and alphas associated with the study variables.

Integrated Threat

Integrated threat was assessed using a Measure of Realistic and Symbolic Threat (Stephan et al., 1999). The outgroup was identified in the surveys as "Pretos", which is the more colloquial term in Brazilian Portuguese for "Blacks."

Measure of Symbolic Threat

Three items from Stephan et al. (1999) measured symbolic threat. Sample items in English included: "Brazilian identity is threatened because there are too many Blacks today," "Brazilian norms and values are threatened because of the presence of Blacks today," and "Blacks are a threat to Brazilian culture." Responses ranged

from (1) *strongly disagree* to (5) *strongly agree*. A higher score indicated a stronger feeling of threat.

Measure of Realistic Threat

The measure of realistic threat included three statements assessing the effects of the outgroup on the economic situation. Sample statements were: "Because of the presence of Blacks, Brazilians have more difficulties finding a job," "Because of the presence of Blacks, Brazilians have more difficulties finding a house," and "Because of the presence of Blacks, unemployment will increase." Responses ranged from (1) *strongly disagree* to (5) *strongly agree*. Higher scores indicate more threat. CFA was conducted on the realistic and symbolic threat measure; no items were dropped.[1]

Generalized Ethnocentrism Scale

Ethnocentrism was measured using a shortened version of Neuliep and McCroskey (1997) Generalized Ethnocentrism Scale (GENE); a 14-item version was used. Items ranged from 1 *strongly agree* to 5 *strongly disagree*. Sample items include, "Most other cultures are backward compared to my culture," and "Other cultures should try to be more like my culture." Items 2, 4, 5, 8, 9, and 13 were dropped for fit.[2]

Fear of Covid-19

To measure the extent to which individuals perceived COVID-19 as a threat, three items from Bouton et al. (1987) were employed. Originally developed to measure fear of HIV/AIDS, the items were modified to focus on COVID-19. As COVID-19 is a new issue, there is no scale with an established validity profile to measure fear of the virus. Sample items included: "I am afraid I will get COVID-19," "I am worried about catching COVID-19 in a public restroom," and "If I found out my lover had COVID-19, I would still have sex with him/her." No items were dropped for fit purposes.[3]

Analysis and Results

Statistical Analysis

To examine the hypotheses and research question, two multiple regressions were constructed using symbolic and realistic threat as the criterion variables, and the following predictors: ethnocentrism, and fear of COVID-19. Hierarchical regression analysis was used to test for interaction effects. In model 1, ethnocentrism was entered, as research consistently shows a relationship between ethnocentrism and prejudice. In model 2, fear of COVID-19 was entered. The relationship between prejudice and fear of an illness is less explored, and thus was entered following ethnocentrism. In model 3, the interaction between ethnocentrism and personal fear of COVID-19 was entered.

Three models were generated for two regressions.[4] The regression results are in Tables 2 and 3. The first regression predicted realistic threat. In model 1, ethnocentrism was entered as a predictor ($R^2_{adj} = .25$). In model 2, personal fear of COVID-19 was entered. The nested F statistic for the comparison of models 1 and 2 was significant ($\Delta F = 10.16$, $p < .01$, $R^2_{adj} = .27$). In model 3, a cross-product term testing

Table 2. Regression model for Realistic Threat.

Regressor	MODEL 1	MODEL 2	MODEL 1
Intercept	.68	2.09	.83
Ethnocentrism	.51**	.47**	.67*
Fear of COVID-19		.14*	.01
Fear of COVID-19 *Ethnocentrism			.21
F	140.24**	76.77**	51.27**
Δ*F*		10.16*	.47
R^2	.26	.27	.28
R^2_{adj}	.25	.27	.27

* $p \leq .01$, ** $p \leq .001$.

Table 3. Regression model for Symbolic Threat.

Regressor	Model 1	Model 2	Model 4
Intercept	.49	2.15	2.42
Ethnocentrism	.61**	.57**	.53*
Fear of COVID-19		.17*	.20
Fear of COVID-19 *Ethnocentrism			.05
F	239.80**	134.34**	89.36**
Δ*F*		18.56*	.03
R^2	.37	.40	.40
R^2_{adj}	.37	.40	.40

* $p \leq .01$, ** $p \leq .001$.

the interaction between personal fear of COVID-19 and ethnocentrism was entered; this model was not a significant improvement over model 2 ($\Delta F = .47$, $p = .49$; $R^2_{adj} = .27$). Therefore, model 2 was retained for analysis. Based on model 2 in Table 2, ethnocentrism ($b = .47$, $p < .001$) has a positive effect on realistic threat (*H1*), and personal fear of COVID-19 ($b = .14$, $p < .01$) also has a positive effect on realistic threat. The effect of personal fear of COVID-19 on the relationship between ethnocentrism and realistic threat was analysed, and this effect did not have a significant interaction effect on realistic threat and ethnocentrism (*RQ1*). Thus, the relationship between realistic threat and ethnocentrism did not change based on whether individuals scored from "low fear" to "high fear" of COVID-19: see Figures 1.

The second regression predicted symbolic threat. In model 1, ethnocentrism was entered as a predictor ($R^2_{adj} = .37$). In model 2, personal fear of COVID-19 was entered. The nested *F* statistic for the comparison of models 1 and 2 was significant ($\Delta F = 18.56$, $p < .01$, $R^2_{adj} = .40$). In model 3, a cross-product term testing the interaction between personal fear of COVID-19 and ethnocentrism was entered; this model was not a significant improvement over model 2 ($\Delta F = .03$, $p = .87$; $R^2_{adj} = .40$). Therefore, model 2 was retained for analysis. Based on model 2 in Table 3, ethnocentrism ($b = .57$, $p < .001$) has a positive effect on symbolic threat (*H2*), and personal fear of COVID-19 ($b = .17$, $p < .01$) also has a positive effect on symbolic threat. In interpreting the interaction, the effect of personal fear of COVID-19 on the relationship between ethnocentrism and symbolic threat was analysed. Personal fear of COVID-19 did not have a significant interaction effect on symbolic threat and ethnocentrism (*RQ1*). The relationship between symbolic threat and ethnocentrism did not change based on whether individuals scored from "low fear" to "high fear" of COVID-19: see Figures 2.

Discussion

This study explored the extent to which ethnocentrism predicted prejudice towards Afro-Brazilians during the COVID-19 pandemic. Results revealed ethnocentrism had a positive effect on realistic and symbolic threat. Fear of COVID-19 also had a positive effect on realistic and symbolic threat. The results support previous research showing a positive relationship between ethnocentrism and prejudice (e.g. Agroskin & Jonas, 2010; Figueredo et al., 2011; Croucher et al., 2021 ; Stephan et al., 1994). These results expand our understanding of this relationship by exploring it not only in the time of a raging pandemic, but also in the midst of a pandemic when an outgroup is being blamed for that very pandemic. Results are also consistent with previous literature showing those who feel vulnerable to an illness are more likely to display prejudice and ethnocentrism towards outgroups (Faulkner et al., 2004; Schaller & Neuberg, 2012). Therefore, it is crucial to understand that such prejudice amid a global health pandemic reveals a negative influence on community as well as government's responses to crises (Navarrete & Fessler, 2006).

Theoretical Implications

The results of the current study reveal the interconnectedness of intergroup communication. Gallois et al. (2018) asserted it is essential in intergroup communication to attend to "the special features of each context" (p. 313). These particular results demonstrate the connections between intergroup relations, health, and nationalism. Researchers have demonstrated links between ethnocentrism, ethnic identity and nationalism surrounding debates around the COVID-19 pandemic. In numerous studies, whether in the U.S. (Croucher et al., 2020; Lu, 2020; Zhou, 2020), Italy (Girardelli et al., 2021), China (Xi & Jia, 2020), Turkey (Gülseven, 2021), or South Korea (Chung et al., 2021) to name a few, researchers have shown how dominant groups often frame ethnocentrism, racism, intolerance, discrimination and violence towards minority groups during Covid-19 as protection of the homeland from a health threat. For Croucher et al. (2020), Croucher et al. (2021)) found that in the U.S., Spain, Italy, and New Zealand, dominant group members tended to prejudice minority groups such as Asians to varying degrees. Verhaeghe and Ghekiere (2021) similarly showed discrimination and prejudice towards housing candidates of Maghrebian and Congolese origin in Belgium increased during the COVID-19 pandemic. In each nation, government responses, political rhetoric, historical issues, and media framing were all linked with prejudice towards the targeted groups.

Thus, while the target of negativity is a member of or a minority group itself (Afro-Brazilian), the presence of a health threat (COVID-19) influences the intergroup relationship. Studies linking disease and prejudice have supported the assertion that when faced with a life threatening health crisis, individuals will fear the health issue more than political, economic, and cultural issues, and attach that issue to those who might be blamed for its spread (Faulkner et al., 2004; Schaller & Neuberg, 2012).

The influence and depiction of inequality must also be considered when exploring integrated threat. As the perception of threat is critical to prejudice (Stephan & Stephan,

2020), it is important to consider the power dynamic between the dominant and minority groups and how these dynamics manifest. Intergroup dynamics are complicated in Brazil due to its history of inequality and poverty. De Sousa et al. (2020) stated Brazil has a highly elitist cultural system, "the rigid social hierarchy and the monopoly of information, in the hands of a few, explains the arrogance and authoritarianism of the ruling class" (p. 23). For example, the income of the richest 1% of Brazilians in 2019 was 33 times that of the poorest half (IBGE, 2019). Brazil, while average in overall crime for the region has a high homicide rate which is depicted as exceptionally high by the media (Cerqueira & Bueno,2020). In particular, the media often frame Afro-Brazilians as violent. Thus, it is not surprising to see prejudice towards this group. Research should continue to explore the relationship between historical inequalities, ethnocentrism, media depictions, and threat.

Research into ethnocentrism has shown a variety of negative consequences. For example, ethnocentrism is linked with avoiding contact with outgroups, the creation of communication barriers between groups (Neuliep & McCroskey, 1997), lower levels of intercultural willingness to communicate, and higher levels of anxiety and uncertainty (Clark et al., 2015; Neuliep, 2012). Neuliep (2012) stated that ethnocentrism is a barrier to effective intercultural communication. When members of a dominant group perceive a minority group as a threat there is a clear tendency to also have high levels of ethnocentrism. Research should thus explore the extent to which threat, like fear of COVID-19 and other health issues, impedes effective intercultural/intergroup communication.

The results of this study further our understanding of the links between fear and threat. Fear is activated by threats. While both realistic and symbolic threats signify higher amounts of stress (Kachanoff et al., 2020), people react differently to various types of stress. Not all threats are the same. Even within the domain of health threats there exists a greater concern or fear regarding an infectious disease over other types of medical conditions (Troisi, 2020). These threats can elicit both positive and negative responses, depending on how we react to threats. The reaction could be a positive one like empathy (Schimmenti et al., 2020). However, the response is often negative. Minority ethnic and often marginalized groups most often suffer negative societal reactions (Elias et al., 2020) more than majority group members. In the specific context of Brazil, Giordani et al. (2020) found that women perceived a higher level of threat from Covid 19 than men. They also noted personal connections are also connectors to fear in Brazil. Threats impact feelings towards others during a pandemic. There is clearly a need for further research into the relationships between fear and threat during a pandemic.

Limitations and Future Research

As with all studies, there are limitations that need consideration. While sampling from online firms, such as Qualtrics, are comparable in comparison to other populations in research, such sampling is convenience sampling. Thus, the findings need to be interpreted with this knowledge. A second potential limitation is the use of "Pretos" instead of "Afro-Brasileiros" as the reference group. "Preto" is a more colloquial term. It is possible that using a more formal term, such as "Afro-Brasileiros" could have produced different

results. A second potential limitation is that this study modified the Fear of HIV/AIDS measure to assess Fear of COVID-19. Data for this study were collected in early 2021. However, preparation for data collection began months earlier. At the time, a scale to measure fear of COVID-19 did not exist. While measures have subsequently been published (Ahorsu et al., 2020; Lee, 2020) and validated (Bitan et al., 2020; Reznik et al., 2020), at the time of translation and preparation of this study, such measures were not available. Thus, a modified version of the Fear of HIV/AIDS measure was adopted. It is possible that a different operationalization of "Fear of COVID-19" will garner different findings.

While the results of the current study offer theoretical contributions to the field of ITT and prejudice, there are directions for future research. First, only individuals born in Brazil were surveyed. Future studies could include individuals born outside of Brazil, particularly since Brazil has an increasing number of immigrants from within and outside of South America. Second, future research should consider the extent to which media and political discourse has framed messaging on COVID-19. The initial political messaging over COVID-19 was unified around WHO messaging; however, political messaging rapidly changed to anti-WHO messaging. Similarly, media messaging has been split between media supporting WHO directives and media opposing WHO directives and supporting Bolsonaro. The influence of such discourse on COVID-19 responses, the spread of the virus, ethnocentrism, and prejudice cannot be under-estimated.

This research advanced our understanding of prejudice by exploring ethnocentrism and prejudice towards Afro-Brazilians during the COVID-19 pandemic. The study also examined the extent to which fear of COVID-19 influences this relationship. Results showed ethnocentrism positively predicted threat. In addition fear of COVID-19 also positively predicted threat. Fear of COVID-19 did not significantly influence the relationship between ethnocentrism and threat. Research should continue to investigate these relationships to enhance our knowledge of the intersections between prejudice, threat, and ethnocentrism.

Notes

1. $\chi 2(24) = 35.74$, $p = .06$, CFI = .98, SRMR = .04, RMSEA = .04: India, $\chi 2(24) = 59.23$, $p < .0001$, CFI = .98, SRMR = .05, RMSEA = .06.
2. $\chi 2(20) = 52.89$, $p < .0001$, CFI = .95, SRMS = .05, RMSEA = .06.
3. $\chi 2(1) = 2.32$, $p = .13$, CFI = .98, SRMR = .05, RMSEA = .06.
4. One of the reviewers during the review process recommended that the regressions include control variables. We re-ran the regressions with the following controls: sex, highest educational level, marital status, political affiliation, age, and intergroup contact. With adding these control variables in a first model (thus leading to a multiple regression of 4 models), we found that the overall R^2 did not change for either symbolic or realistic. More specifically, the model that included personal fear of COVID-19 was the final model retained for analysis. In this model, the coefficients did not change more than .01 for ethnocentrism or personal fear of COVID-19 in terms of their impact on threat. Thus, while we appreciate the recommendation to add the control variables, believe the addition of the control variables is unnecessary and does not add value.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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