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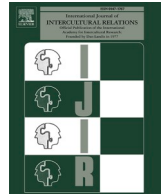
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A social virus: Intergroup dehumanization and unwillingness to aid amidst COVID-19 – Who are the main targets? ☆☆

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ABSTRACT

Previous studies have shown that external threats, such as financial crises and natural disasters, might fuel negative attitudes, emotions, and behaviors towards outgroup members. However, it is unclear what types of outgroups are likely to be targeted when an external threat is taking its toll. In this study, we examine two types of outgroups that might be at risk of becoming victims of intergroup hostility. The first is the “ultimate scapegoat” outgroup which has a long history of negative relations with the ingroup. The second is the “context-dependent” outgroup which is viewed as an outgroup only in certain contexts. We utilized the COVID-19 crisis and the highly diverse social makeup of Israeli society to explore the extent to which each type of outgroup would be targeted. Results from our study ($N = 664$), conducted during the first peak of COVID-19 in Israel, show that higher levels of exposure to COVID-19 predicted lower willingness to aid outgroups and that outgroup dehumanization mediated this association. However, this held true only when the target outgroup was a context-dependent outgroup. When the target group was the ultimate scapegoat, exposure to COVID-19 did not predict ingroup willingness to aid them. Our findings contribute to our theoretical and practical knowledge on how intergroup hostility proliferates during external threats and, as such, are valuable to scholars, practitioners, and policymakers working to reduce intergroup tensions during large-scale crises.

Since early 2020, our world has been confronting a massive global crisis that has affected most countries and resulted in more than a million casualties (Harapan et al., 2020). The rapid spread of the disease and the unique form of infection have forced governments

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worldwide to take severe measures. The most common measures have been border closures, social distancing, and home isolation to all citizens, followed by closings of schools, workplaces, and businesses. These measures have led to the largest global recession in history, with more than a third of the global population being placed on lockdown, causing unemployment rates that have not been seen in the last few decades (International Monetary Fund, 2020), and posing significant economic hardship (Becker, Wagner, & Christ, 2011; Dryhurst et al., 2020). The COVID health risks, the economic difficulties, and the effects of the lockdown and other such tensions have exposed millions around the world to prolonged global threat (Ozili & Arun, 2020). Exposure to threat can greatly affect an individual, giving rise to a variety of emotions and leading to different types of reactions (Canetti, Elad-Strenger, Lavi, Guy, & Bar-Tal, 2017). Prolonged exposure to threat can lead to even stronger and more extreme reactions (Hirsch-Hoefler, Canetti, Rapaport, & Hobfoll, 2016).

Responses to a global crisis, such as the current pandemic, may vary among individuals. While some may experience adverse reactions following exposure to the pandemic in the form of negative emotions, increased feelings of depression, anxiety, and loneliness, others may not be affected at all (Lades, Laffan, Daly, & Delaney, 2020). This variation can also be experienced on the intergroup level. On the one hand, an external crisis may unite society in order to fight against the common enemy (Myrick, 2019). This could increase the willingness of individuals to help each other overcome the pandemic together while increasing pro-social and altruistic orientations (Russell & Mentzel, 1990). On the other hand, the same events and experiences may provoke strong negative emotions, fears, and anxieties, which may elicit negative attitudes (e.g., Renström & Bäck, 2021; Riek, Mania, & Gaertner, 2006) and discrimination (Chang, Krosch, & Cikara, 2016a) towards outgroup members. As these responses can drastically impair the capabilities of societies to cope with a crisis, it is important to understand what influences the appearance of these reactions, and to whom they are primarily directed.

External threat and intergroup relations

Existing literature demonstrates that an increase in perceived threat elicits negative attitudes (e.g., Riek et al., 2006) and discrimination (Chang et al., 2016) towards outgroup members. Negative intergroup attitudes and discrimination could result from competition over resources (Sherif & Sherif, 1969) or due to conflicting values and beliefs (Kinder & Sears, 1981; McConahay, 1983). As suggested in classic integrated threat theory (Stephan, Renfro, & Davis, 2008; Stephan & Stephan, 1985), negative attitudes and discrimination can be driven by the integration of different factors at the group level, capturing various combinations of the following four types of threat: realistic threat, symbolic threat, intergroup anxiety, and negative stereotypes. While different intergroup threat theories vary in the type of threat they emphasize (e.g., realistic, symbolic), they all point to the same source, the outgroup itself, as the threat initiator. The tendency to focus on the outgroup as the source of threat is supported by a meta-analysis (Riek et al., 2006) that revealed that almost all of the studies examining relations between threat and intergroup conflict have focused exclusively on threats posed by the outgroup. Nevertheless, external threats that are not directly related to the outgroup can also result in detrimental intergroup outcomes. For example, individuals tend to respond to an external threat (e.g., a global economic crisis) with higher levels of intergroup hostility (Bukowski, de Lemus, Rodriguez-Bailón, & Willis, 2017), prejudice (Becker et al., 2011; Butz & Yogeewaran, 2011) and discrimination (Brambilla & Butz, 2013) towards the outgroup. External threats have also been linked to lower levels of empathy and willingness to aid outgroup members (Arceneaux, 2017). However, why would a threat unrelated to specific outgroups lead to increased hostility, prejudice, and discrimination towards them? One explanation relates to the sense of uncertainty, fear, and incoherence commonly experienced under external threats (Allport, Clark, & Pettigrew, 1954; Bukowski et al., 2017). To regain a sense of control, certainty, and coherence, individuals often blame and punish a person or a group for a negative outcome caused by unrelated, external factors (Glick, 2002; Rothschild, Landau, Sullivan, & Keefer, 2012). Pandemics are caused by intangible, amorphous factors that are hard to predict or understand and are thus likely to generate uncertainty and incoherence (Taha, Matheson, Cronin, & Anisman, 2014). As such, pandemics like COVID-19 may elicit the need to blame or punish outgroups as a means to regain control.

It is important to note that most of these studies have examined perceived threat (e.g., Becker et al., 2011; Butz & Yogeewaran, 2011; see Hirsch-Hoefler et al., 2016 for an exception) which is highly subjective and dependent on one's background, experience and even personality traits. These studies did not measure actual exposure to the threat in its different aspects, and the extent of harm it has caused to the individual. However, due to the paucity of literature on exposure to threat, we have included the literature on perceived threat in this paper and have used it to help us develop the rationale for the research hypotheses.

Pandemics and intergroup relations

During an epidemic, individuals' health is threatened continuously. Every time people leave their homes, they may be infected, endangering themselves and their loved ones. The sense of uncertainty and incoherence may drive individuals to blame "others" for spreading the pandemic (Cohn, 2012; Muzzatti, 2005). Since previous studies have found that individuals tend to associate disease risk more strongly with outgroup members than with ingroup members (e.g., Faulkner, Schaller, Park, & Duncan, 2004; Navarrete & Fessler, 2006), a social and psychological environment that provides fertile ground for intergroup prejudice and animosity is created (Beall, Hofer, & Schaller, 2016; Gover, Harper, & Langton, 2020; Rosenfeld & Tomiyama, 2020). In cases of epidemics, minority groups frequently suffer from racism, even though they are not directly related to this threat. That is because they are blamed for spreading the diseases, as the ingroup perceives them to be "dirty" or "sickly" (Taylor, 2019). Moreover, xenophobia is reinforced even in contexts where threats are only related to specific racial or ethnic groups (Ceobanu & Escandell, 2010).

One mechanism that may link threats to outgroup hostility is dehumanization (Kteily & Bruneau, 2017). Dehumanization is the act of denying outgroup members human-like attributes (Haslam & Stratemeyer, 2016). It has been found to mediate relations between

environmental factors and negative attitudes and behaviors towards outgroups (Haslam & Stratemeyer, 2016). For example, Andrighetto, Baldissarri, Lattanzio, Loughnan, and Volpato (2014) demonstrated that dehumanization of the outgroup explained the connection between stereotypes and unwillingness to aid the outgroup during natural disasters.

Another aspect of COVID-19 is its severe effect on the economy. Historical and contemporary examples show that economic threats often lead to increased intergroup hostility and negative intergroup attitudes (Fritsche, Jonas, & Kessler, 2011; Glick, 2002; Hovland & Sears, 1940; Krosch, Tyler, & Amodio, 2017). A clear example was the rise in intergroup hostility and xenophobia following the 2008 financial crisis. Higher levels of perceived financial threat were related to higher rates of prejudice towards Asian-Americans (Butz & Yogeewaran, 2011), immigrants, and Jews (Becker et al., 2011). Similar patterns were observed in a study about attitudes towards immigrants in times of financial depression (Harris, Findley, Nielson, & Noyes, 2018). In addition, higher levels of exposure to the crisis and harm caused by it have resulted in higher levels of hostility towards the outgroup (Becker et al., 2011). Thus, aside from the direct health threat posed by a pandemic, its economic impact can also result in higher levels of hostility and discrimination against minorities and outgroups.

Threat varies in its effect on different outgroups

Although external threat may increase hostility between groups, an unresolved question asks which groups will be affected most by that external threat? In other words, what are the characteristics of the outgroups at which hostility will be directed in times of external crises? Previous studies have found that particular types of threats affect certain outgroups. For example, in a study conducted in the United States, security threats elicited negative attitudes towards Muslim immigrants, but economic threats evoked negative attitudes towards Eastern European immigrants (Hellwig & Sinno, 2017). Similar findings demonstrating that distinct threats elicit negative attitudes towards distinct groups have been found in studies conducted in Belgium (Meuleman, Abts, Sloomaeckers, & Meeusen, 2019) and Israel (Canetti-Nisim, Ariely, & Halperin, 2008). However, in most of these studies, the threat was inherently related to a specific outgroup whereas, in a pandemic, the threat is external to particular groups. Therefore, there is a gap in our ability to predict which outgroups will be discriminated against when the threat is external and not directly caused by or related to them. Importantly, although some groups can be blamed for amplifying the pandemic threat, we consider the threat external because the mere outbreak of the pandemic is attributed to neither one of the groups studied in this paper.

Hence, the outbreak of COVID-19 and the global crises that followed provide us with a unique opportunity to identify the types of outgroups that will be most affected and the psychological mechanisms that tie external threats to discrimination hostility towards outgroups.

Two potential victims

We identify two types of groups that are likely to be discriminated against during times of external threat. The first is what we define as the “ultimate scapegoat.” Scapegoating is the act of blaming and often punishing a person or a group for a negative outcome that is due, at least in large part, to other causes (Rothschild et al., 2012). The ultimate scapegoat refers to an outgroup that has prolonged negative encounters with the ingroup and is believed to possess dangerous abilities and evil intentions. Thus, it is more likely to be blamed and discriminated against (Fiske, Cuddy, Glick, & Xu, 2002). Therefore, when an external threat appears, hostility might be directed at this group, even when the group is not related to the external threat in any way. Redirecting the blame to the ultimate scapegoat may ease the feelings of uncertainty and lack of control (Sullivan, Landau, & Rothschild, 2010). Blaming the ultimate scapegoat is also beneficial for political reasons, as the government attributes all societal troubles to the enemy while presenting itself as the savior (Pettersson, 2009). Scapegoating is more likely to occur when negative outcomes are caused by an amorphous or unknown factor (Rothschild et al., 2012). In such cases, people tend to use compensatory techniques in the search for order and causality. Blaming the ultimate scapegoat for this new situation makes the situation seem more familiar and controllable (Kay, Whitson, Gaucher, & Galinsky, 2009).

The second type of group that could suffer from hostility during times of an external threat is what we call “context-dependent” outgroups. These outgroups are temporarily perceived as threatening due to the perceived association between the external threat, on the one hand, and the group’s location and actions, on the other hand. So, the way they conduct themselves and where they are at the time of the threat leads the ingroup to perceive them as threatening. Moreover, even when these groups pose no actual hazard, they become identified with the threat due to previous stereotypes or their behavior during the crisis (Becker et al., 2011; Brambilla & Butz, 2013). Most importantly, this group is perceived as threatening only in this specific context, and thus we call it a context-dependent group. For example, white Americans responded to an economic threat with increased prejudice against Asian Americans but not against Black Americans (Butz & Yogeewaran, 2011). This pattern has also been documented during the early outbreak of COVID-19, when cases of anti-Asian racism were reported worldwide (Human Rights Watch, 2020). The perception of these groups as being related to the threat creates a psychological linkage, making them more vulnerable to blame and discrimination.

Based on the above, we raise the following question: Which type of outgroups will be targeted at times of external threat: the ultimate scapegoat groups, the context-dependent groups (or both)? More specifically, we ask towards which type of outgroups will the threat posed by the COVID-19 pandemic lead ingroups to discriminate against by denying them aid. We also seek to test whether dehumanization of the outgroup serves as the mechanism tying the external threat to outgroup discrimination.

The Israeli case

Israel's first confirmed case of COVID-19 was reported on February 21, 2020. On March 9, Israel's Ministry of Health instructed all those arriving from abroad or having contact with a confirmed patient to go into quarantine. Two days later, the country began enforcing social distancing and other rules to limit the infection rate. On March 19, a national state of emergency was declared, and a day later, the first confirmed death of an Israeli citizen from COVID-19 was reported. In the following weeks, more severe measures were taken; stores, schools, public transportation, and most workplaces were closed. These measures resulted in over a million citizens losing their jobs (Flug, 2020). Following the outbreak, the growth in Israel's GDP per capita severely slowed down while its public debt spiked (Taub Center 2020). By many indicators, it seems that COVID-19 has posed a significant threat to Israeli citizens' health and financial conditions.

Israel has a highly diverse society consisting of different ethnicities and religions. The two major ethnic groups are Jews and Palestinians, with 75% of Israel's citizenry being Jewish and 20% Palestinian. Israeli society is also diverse in its religiosity levels, with 45% of Israeli Jews defining themselves as secular, 25% as traditional, 16% as religious, and 14% as ultra-orthodox. Despite the differences in religious observance, except for the ultra-orthodox, Jewish-Israeli society shares a fundamental ethos and experiences, such as obligatory service in the military or national service.

In the current study, Jewish-Israeli society, with the exception of the ultra-orthodox, will serve as the ingroup. From the ingroup perspective, three significant outgroups relevant to our study can be identified (see Table 1).

Palestinian citizens of the Palestinian Authority

Israel and the Palestinian citizens of the Palestinian Authority have been embroiled in an intractable conflict for roughly a century, causing long-lasting animosity between the groups, including blatant and military violence. Negative attitudes and emotions towards the outgroup are pivotal components of the societies' psychological repertoire in this conflict (Bar-Tal, 2007; Pliskin & Halperin, 2016). The conflict also fosters the evolution of negative stereotypes and delegitimization towards the other group (Bar-Tal, 2007; Halperin & Reifin Tagar, 2017). It is important to note that the limited contact between Palestinian citizens of the Palestinian Authority and Israelis decreased during COVID-19 even further due to the lockdown declared by both the Israeli government and the Palestinian Authority. Thus, the Palestinian citizens of the Palestinian Authority could serve as the ultimate scapegoat –there is long-lasting animosity between them and the ingroup, but they do not pose any threat in the actual context.

The ultra-orthodox community

The ultra-orthodox community, which makes up about 12.5% of Israeli society (Central Bureau of Statistics, 2020), shares Jewish ethnic and historical roots with the non-ultra-orthodox majority group while differing on religious and cultural issues. Since the ultra-orthodox and non-ultra-orthodox Jews have shared history and ethnicity, they are closer to our ingroup than the Palestinian citizens of the Palestinian Authority are. During the COVID-19 outbreak, the ultra-orthodox community had the highest infection rates and fatalities in Israel (Saban, Reznik, Shachar, Wilf-Miron, & Sivan-Hoffmann, 2021). As a result, they were publicly accused of not following the rules. The Israeli media focused on the community's uncompliant behavior, often using images of blatant violations of government guidelines. Thus, the ultra-orthodox community can serve as a context-dependent outgroup – they constitute a part of the Israeli society and are usually not considered a threat to the ingroup. However, in the COVID-19 context, they are perceived as a threat due to the higher infection rates among them.

Palestinian citizens of Israel

The Palestinian citizens of Israel, who make up about 20% of Israeli society, have a complex relationship with the Jewish majority group (Rouhana & Sabbagh-Khoury, 2015; Smooha, 1997). On the one hand, since the Palestinian citizens of Israel are Arab Palestinians, they are perceived by many of the Jewish Israeli public as part of the enemy group. They share a common ethnicity, history, and language, and have been divided only by arbitrary borders since 1948 when the State of Israel was founded. On the other hand, the Palestinian citizens of Israel are Israeli citizens and, as such, have shared interests with the ingroup (Rabinowitz, 2001). In addition, there is more daily contact between the ingroup and the Palestinians citizens of Israel, compared to the Palestinian citizens of the Palestinian Authority, and their relationship with the Israeli ingroup is characterized by less violence and animosity.

Table 1
The Study's Ingroup and Outgroups Features.

	Citizenship	Ethnicity	Language	Hypothesized Outgroup type
The Jewish-Israeli majority (Ingroup)	Israeli	Jewish	Hebrew	–
The ultra-orthodox community (UOs)	Israeli	Jewish	Hebrew	Context-dependent
Palestinian citizens of Israel (PCIs)	Israeli	Arab/ Palestinian	Arabic & Hebrew	Either Context-dependent or ultimate scapegoat
Palestinian citizens of the Palestinian Authority (PCPAs)	Palestinian	Arab/ Palestinian	Arabic	Ultimate scapegoat

Both the Palestinian citizens of Israel and ultra-orthodox community are considered part of Israeli society but are seen by the majority group as disadvantaged, distant, and separated from the main Israeli ingroup, as they frequently live in separate cities or neighborhoods. In the context of COVID-19, along with the ultra-orthodox community, the Palestinian citizens of Israel had the highest infection rates in Israel (Saban et al., 2021) and were also often blamed for spreading the disease. In summary, the Palestinian citizens of Israel can serve both as an ultimate scapegoat due to their conflictual past with the ingroup and their proximity to the Palestinian citizens of the Palestinian Authority but can also serve as a context-dependent outgroup due to the high rates of COVID-19 among them.

Current study hypotheses

We test two competing hypotheses. The first is that during external threats, the ultimate scapegoat outgroup but not the context-dependent groups will be targeted. This hypothesis is based on the deeply rooted and longstanding negative emotions and attitudes towards the ultimate scapegoat group, which may result in decreased willingness to aid them even when they pose no threat at all. This hypothesis will be supported if we find a positive association between the ingroup's exposure levels to COVID-19 and the unwillingness to aid the Palestinian citizens of the Palestinian Authority, and if no association is found between the ingroup's exposure to COVID-19 and reactions towards the ultra-orthodox group. The competing hypothesis is that context-dependent groups but not the ultimate scapegoat groups will be discriminated against during external threats. This hypothesis is based on previous work demonstrating a rise in negative attitudes towards specific groups in times of specific threats (Butz & Yogeeswaran, 2011). This hypothesis will be supported if we find a positive association between exposure levels to COVID-19 and unwillingness to aid the ultra-orthodox community, and if there is no association between ingroup's exposure to COVID-19 and reactions towards Palestinian citizens of the Palestinian Authority.

Furthermore, we explore whether Palestinian citizens of Israel are perceived as a context-dependent group or as an ultimate scapegoat, by testing whether Jewish-Israelis' reaction to the Palestinian citizens of Israel is more similar to their reaction towards Palestinian citizens of the Palestinian Authority (ultimate scapegoat) or towards the ultra-orthodox community (context-dependent). Finally, we test whether outgroup dehumanization serves as the underlying mechanism of the effect of exposure to COVID-19 on the ingroup's behavioral inclinations, in this case - the unwillingness to assist the outgroup with aid to cope with COVID-19. This hypothesis is based on previous findings that have found dehumanization to have a mediating effect between threat, and hostile and discriminatory attitudes towards outgroup members (Haslam & Stratemeyer, 2016).

Methods and measures

Sample and procedures

Data for the study was collected between April 30 and May 5, 2020, during the peak of the first wave of the COVID-19 outbreak in Israel. While the questionnaire was being distributed, a strict quarantine was imposed in Israel, shutting down most public places, schools, and workplaces. Social gatherings were strictly forbidden. The online questionnaire was distributed to a sample pool of 912 Jewish Israeli adults who participated in a larger global study on the impact of COVID-19 (see: Van Bavel et al., 2020). From this pool, 699 completed the current questionnaire. Given that the ultra-orthodox are among the three outgroups of the study, we excluded from analysis all those identifying as ultra-orthodox ($N = 35$), resulting in a final sample of 664. In this sample ($M_{\text{age}} = 41.6$, $SD = 15.77$), 52% were males.

Participants reported their individual exposure level to the pandemic using two questions, each addressing different aspect of exposure – exposure to the COVID-19 disease itself (health aspect) and to its negative financial effects (Financial aspect)". These aspects are somewhat similar to Kujawa, Green, Compas, Dickey and Pegg (2020) Pandemic Stress Questionnaire's (PSQ) subscales of health (self and close others subscales together) and financial exposure. As the infection rates in Israel during our study were low, we used one item to assess both self and close others' infection in COVID-19. After answering these items respondents were presented with three identical blocks of questions about the three different outgroups: the ultra-orthodox community, Palestinian citizens of Israel, and Palestinian citizens of the Palestinian Authority. The questions gauged dehumanization levels toward the outgroup and participants' support for discriminatory policies aimed at the outgroup in the context of COVID-19. To minimize the potential confusion between the outgroups, the blocks were ordered such that the block about the ultra-orthodox community was always in between the blocks regarding Palestinian citizen of Israel and Palestinian citizens of the Palestinian Authority. The order of the other two blocks was counterbalanced to decrease order effects.

Measures

Independent variables

Exposure to COVID-19 was measured through one item ("Do you know someone who has been medically confirmed as having this disease?"). The three possible answers gauged levels of exposure ("Yes, I or someone from my core family was diagnosed," "Yes, people that I know have been diagnosed," "I do not know anyone who was diagnosed with COVID-19"). It should be noted that the questionnaire was distributed in the early months of COVID-19 in Israel when exposure to confirmed cases was uncommon.

Occupational and financial harm caused by COVID-19 was measured using one item assessing the extent to which participants' financial situation was negatively affected by COVID-19 ("Please rate to what extent your occupational and financial situation has been

adversely affected by COVID-19?)". The response scale ranged from 1 = "not at all" to 6 = "to a great extent".

Mediating and outcome variables

Dehumanization. Following (Kteily, Bruneau, Waytz, & Cotterill, 2015), outgroup dehumanization was measured with one item assessing the extent to which participants view the outgroup as human. Respondents were presented with the following sentence: "Psychological research shows that people tend to attribute different levels of humanity to different groups," followed by a request to rate each outgroup on a 0–100 scale using a slider indicating the extent the outgroup has the quality of being human (0 = "not at all," to 100 = "to a great extent"). The scale was then reversed to represent dehumanization.

Willingness to aid. This was measured using one item assessing the extent to which participants believe the State of Israel should provide the outgroup with resources to help it cope with COVID-19 ("Following the COVID-19 outbreak the State of Israel must allocate resources to explain, prevent, and rehabilitate in (outgroup) society?" 0 = not at all to 100 = to a great extent).

Covariates

Demographics. Demographic variables included gender, age, and levels of religiosity. A single item measured religiosity, in which the participants identified themselves as either secular, traditional, religious, or ultra-orthodox (see: Vishkin et al. 2016). Religiosity was measured due to its relations with attitudes towards the ultra-orthodox community and the other outgroups (Gindi & Ron, 2020) and to help us identify ultra-orthodox participants, who were not omitted by the survey company prior to filling out the survey questionnaire, and thus, we had to omit them ourselves.

Political orientation. Political orientation was measured through a standard self-identified item on a scale ranging from 1 = extreme right to 7 = extreme left. Following (Leshem, 2017), we categorized the scale into three categories, representing the three main political camps in Jewish-Israeli politics: right, center, and left.

Results

Out of the entire sample, only a small number of participants reported being exposed to COVID-19. Only nine participants (1.4%) reported that they or someone from the immediate family had been diagnosed with COVID-19. A larger portion of the sample (26.6%) knew someone diagnosed with COVID-19, but most (72%) were not familiar with any diagnosed patients. On the other hand, financial harm caused by COVID-19 and the quarantine was far more common, with 50.2% who reported that they were severely or very severely affected, 26.8% who were mildly affected, and only 23% who reported no financial harm. Regarding the participants' attitudes towards the outgroups, the average dehumanization score was 34.12 out of 100 for all the groups together. Willingness to aid the different outgroups had a total average of 61.27 out of 100. Comparing the attitudes towards the different outgroups, one-way repeated measures ANOVA⁴ indicated significant differences between the groups: $F(2, 1989) = 77.74, p < .001, \eta_p^2 = .07$. All post-hoc pairwise comparisons were significant, even after controlling for multiple comparisons: The ultra-orthodox community was dehumanized less than Palestinian citizens of Israel ($t(663) = -3.25, p = .004$), or Palestinian citizens of the Palestinian Authority ($t(663) = -14.47, p < .001$), and Palestinian citizens of Israel were less dehumanized than Palestinian citizens of the Palestinian Authority ($t(663) = -16.28, p < .001$) (Fig. 1a).

In order to investigate whether the attitudes of Jewish-Israelis towards the Palestinian citizens of Israel are more similar to their attitudes towards ultra-Orthodox or to their attitudes towards Palestinian citizens of the Palestinian Authority, we computed Cohen's d 's (Cohen, 2013) for each pairwise difference. Then, we compared their squared root using Fisher's Z (based on Eid, Gollwitzer, & Schmitt, 2010). Although the gap between attitudes towards Palestinian citizens of Israel and Palestinian citizens of the Palestinian Authority was larger than the gap between the attitudes towards Palestinian citizens of Israel and ultra-Orthodox, this method allows us to quantitatively compare these differences and conclude whether the attitudes towards the Palestinian citizens of Israel are significantly closer to one of the other groups or not. The effect size of the difference between the dehumanization of Palestinian citizens of Israel and Palestinians citizens of the Palestinian Authority is larger than the effect size of the difference between the dehumanization of Palestinian citizens of Israel and ultra-orthodox ($Z = 3.29, p = .001$).

Willingness to aid policy also differs between the different outgroups $F(2, 1989) = 100.10, p < .001, \eta_p^2 = .09$. All pairwise comparisons were also significant, even after adjusting for multiple comparisons (Fig. 1b). Levels of willingness to aid different outgroups exhibit a mirror image of the dehumanization pattern, as the willingness to aid the ultra-orthodox community was higher than willingness to aid Palestinian citizens of Israel ($t(663) = 6.16, p < .001$) and Palestinian citizens of the Palestinian Authority ($t(663) = 17.04, p < .001$), and the willingness to aid Palestinian citizens of Israel was higher than willingness to provide aid to Palestinian citizens of the Palestinian Authority ($t(663) = 13.88, p < .001$). As in the dehumanization measure, the mean differences between support for aiding Palestinian citizens of Israel and Palestinian citizens of the Palestinian Authority were significantly larger than the effect size of the mean differences between aiding support levels for Palestinian citizens of Israel and the ultra-orthodox community ($Z = 2.40, p = .02$).

⁴ Using heteroscedastic ANOVA for trimmed means due to normality and sphericity assumption violation showed similar results.

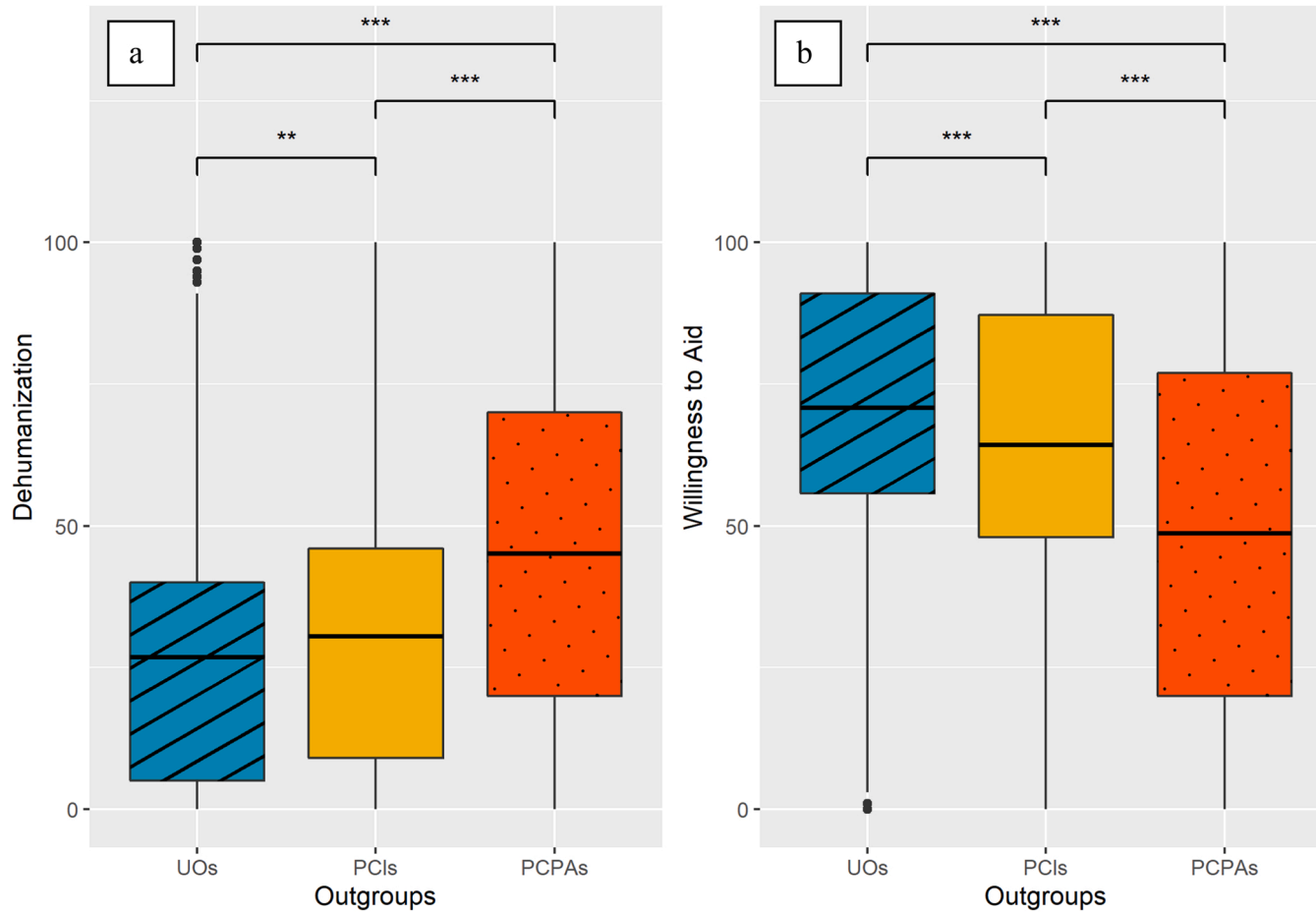


Fig. 1. Describes levels of a) dehumanization and b) willingness to aid regarding the three outgroups: ultra-orthodox (UOs), Palestinian citizens of Israel (PCIs), and Palestinian citizens of the Palestinian Authority (PCPAs). * * $p < .01$, * * * $p < .001$.

Correlations between sociopolitical features and intergroup attitudes

Knowing people diagnosed with COVID-19 was negatively associated with dehumanization of the ultra-orthodox community ($r = -0.08, p = .03$), but not with the willingness to aid them ($r = -0.01, p = .87$). It was not related to dehumanization of Palestinian citizens of the Palestinian Authority ($r = 0.06, p = .14$) or to willingness to aid them ($r = -0.06, p = .11$). Finally, it was positively associated with higher levels of dehumanization of Palestinian citizens of Israel ($r = 0.11, p = .006$) and negatively with willingness to aid them ($r = -0.09, p = .02$).

A more coherent pattern is presented in the effect of financial harm caused by COVID-19. Significant correlations were found between financial harm and dehumanization of the ultra-orthodox community ($r = 0.10, p = .01$) and negatively between financial harm and willingness to aid them ($r = -0.10, p = .01$). The same pattern was seen towards the Palestinian citizens of Israel, with a significant correlation between financial harm and dehumanization ($r = 0.08, p = .03$) and a negative correlation between financial harm and willingness to aid them ($r = -0.11, p = .004$). On the other hand, the correlation between financial harm and dehumanization of Palestinian citizens of the Palestinian Authority ($r = 0.04, p = .26$) was not significant, as was the correlation between financial harm and willingness to help Palestinian citizens of the Palestinian Authority ($r = -0.07, p = .08$). A full correlations table, including sociodemographic variables, can be found in Appendix 1.

COVID-19 and intergroup attitudes

To test our main research question - does external threat lead to dehumanization and decreased support towards the ultimate scapegoats or the context-dependent outgroup, we estimated two regression models for each group, one predicting outgroup dehumanization (Model 1) and one predicting willingness to aid the outgroup (Model 2). Exposure to COVID-19 diagnosed people and financial harm were entered as the independent variables while controlling for collected sociopolitical and demographic measures.

Attitudes towards a context-dependent outgroup. Financial harm predicted the dehumanization levels of the ultra-orthodox ($\beta = 0.10, p = .008$) and willingness to aid them ($\beta = -0.08, p = .03$), such that ingroup members who suffered more from the financial crisis exhibited higher levels of dehumanization of the ultra-orthodox community and lowered willingness to aid them. Knowing diagnosed people was not significantly related to dehumanization ($\beta = -0.02, p = .56$) or to the willingness to aid the ultra-orthodox community ($\beta = -0.002, p = .96$).

Attitudes towards the ultimate scapegoat. Regarding the Palestinian citizens of the Palestinian Authority, financial harm did not predict dehumanization towards them ($\beta = 0.03, p = .33$) or the willingness to aid them ($\beta = -0.03, p = .30$). Knowing diagnosed people was unrelated to dehumanization of Palestinian citizens of the Palestinian Authority ($\beta = -0.01, p = .68$) or ingroup's willingness to aid them ($\beta = 0.02, p = .53$). Although the ingroup's attitudes towards them were the most negative, with the highest dehumanization levels and the lowest willingness to aid, compared to the other groups, there was no association between the exposure to COVID-19 and the attitudes towards them.

Attitudes towards the Palestinians citizens of Israel. Financial harm predicted the dehumanization of Palestinian citizens of Israel ($\beta = 0.07, p = .03$) and the unwillingness to help them ($\beta = -0.07, p = .04$). It appears that participants who were more severely harmed by the economic crisis tended to dehumanize Palestinian citizens of Israel and opposed policies to help them, compared to participants who were not severely harmed. As was found for all three groups, exposure to COVID-19 diagnosed people was not related to dehumanization of Palestinian citizens of Israel ($\beta = 0.03, p = .41$) or to the willingness to aid them ($\beta = -0.002, p = .94$). Overall, results show that financial harm, but not familiarity with people who have been diagnosed, predicted the dehumanizing and unwillingness to aid the ultra-orthodox community and Palestinian citizens of Israel. Moreover, although Palestinian citizens of the Palestinian Authority were dehumanized and discriminated against more than the other two groups, exposure to the external threat of the COVID-19 was not correlated with attitudes toward them.

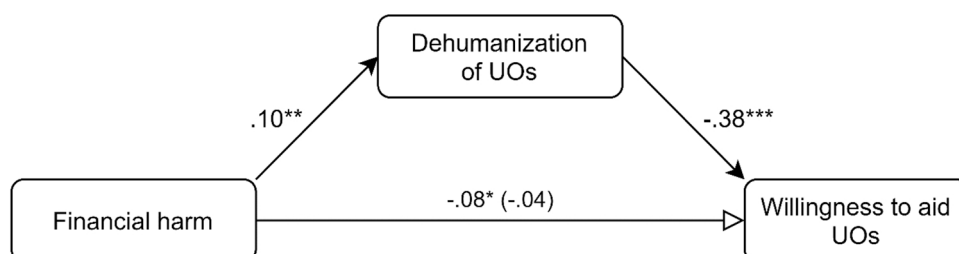


Fig. 2. Mediation analysis illustrating the direct and indirect effects of COVID-19 financial harm on the dehumanization of the ultra-orthodox community and the willingness to aid them. The figure displays standardized regression coefficients. The numbers in the brackets represent the standardized regression coefficient for the relation between COVID-19 financial harm and willingness to aid the ultra-orthodox after adjusting for dehumanization levels. * $p < .05$, ** $p < .01$, *** $p < .001$. UOs = ultra-orthodox.

The mediating role of dehumanization

To better understand the mechanism behind the observed link between external threat and unwillingness to aid outgroup, we estimated a mediation model to test our hypothesis that the relationship between financial harm and willingness to aid is mediated by the degree of dehumanization towards the outgroup. In the model, financial harm was entered as the independent variable, willingness to aid as the dependent variable, and dehumanization as the mediator. We also controlled for age, gender, political affiliation, religiosity, and the participants' exposure to COVID-19. The model was estimated for the two populations where effects were observed, the ultra-orthodox community and Palestinian citizens of Israel.

As Fig. 2 illustrates, the standardized coefficient between financial harm and willingness to aid the ultra-orthodox community was significant ($\beta = -0.08, p = .03$), as well as its relations with dehumanization ($\beta = 0.10, p = .008$). The coefficient between dehumanization and willingness to aid was significant ($\beta = -0.38, p < .001$). Bootstrap analysis with 10,000 iterations demonstrated that the indirect effect was significant, $b = -0.55, SD = 0.24, 95\% CI = [-1.05, -0.11]$. When including dehumanization in the regression formula, the relation between financial harm and willingness to aid became nonsignificant ($\beta = -0.04, p = .22$).

As Fig. 3 illustrates, the same pattern emerges when participants were asked about Palestinian citizens of Israel. The standardized coefficient between financial harm and willingness to aid was significant ($\beta = -0.07, p = .04$), as was the coefficient between financial harm and dehumanization ($\beta = 0.07, p = .036$). Dehumanization and willingness to help were also significantly related ($\beta = -0.44, p < .001$). The indirect effect of financial harm on willingness to aid Palestinian citizens of Israel was tested by bootstrap estimation with 10,000 iterations. The indirect effect was indeed significant, $b = -0.052, SD = 0.26, 95\% CI = [-1.05, -0.03]$. When including dehumanization in the regression formula, the relation between financial harm and willingness to aid became nonsignificant, $\beta = -0.04, p = .24$. It thus seems that the dehumanization of Palestinian citizens of Israel fully mediated the relationship between financial harm and willingness to aid them.

Overall, the results of the mediation analysis across two populations show that the association between financial harm caused by COVID-19 and willingness to aid the outgroups is mediated by dehumanization levels towards them.

Discussion

External threats have a far-reaching effect on our lives, including in the realm of intergroup relations, whereby external crises might trigger conflict and hostility. Through the years, researchers have emphasized the impact of threat on intergroup relations. However, most have focused on the threat posed by other groups, and not on the threat posed by an external factor. Moreover, existing literature has neglected the question of the nature of the outgroups that are likely to be targeted. This knowledge could help predict future trends and help take precautions to reduce the specific group's harm. In the present study, conducted during the peak of the COVID-19 outbreak in Israel, we explored how external threats impact outgroup dehumanization and willingness to aid outgroups in times of crisis. We also investigated what types of outgroups were likely to be discriminated against.

In line with the literature on intergroup threat, we tested two competing hypotheses regarding outgroup types susceptible to discrimination: the ultimate-scapegoat and context-dependent outgroup. The Palestinian citizens of the Palestinian Authority served as the ultimate scapegoat, while the ultra-orthodox community and Palestinian citizens of Israel served as the context-dependent outgroup. Previous studies have found that an outgroup that has prolonged negative encounters with the ingroup and is believed to possess dangerous abilities and evil intentions is more likely to be blamed, discriminated and treated with hostility (Fiske et al., 2002). As noted earlier, in times of threat, people tend to look for someone to blame or direct their hostility to in order to gain a sense of control and reduce anxiety (Glick, 2002; Rothschild et al., 2012). Thus, we suspected that, due to the prolonged and violent conflict between the Palestinian Authority and Israel, Jewish Israelis might direct their hostility towards Palestinian citizens of the Palestinian Authority to regain a sense of control, even though they are not related to the external threat in any way (Sullivan et al., 2010). Therefore, although Palestinian citizens of the Palestinian Authority had nothing to do with the COVID-19 outbreak in general, and in Israel in particular, hostility could still be directed at them. In addition, we were also exposed to examples that occurred in real life in which both sides of the conflict blamed each other for spreading the disease (i24NEWS, 2020).

In contrast, the second type of group in our study was what we called "context-dependent" outgroups. This outgroup is temporarily perceived as threatening due to the nature of the external threat. Even when this groups poses no actual danger, they become identified

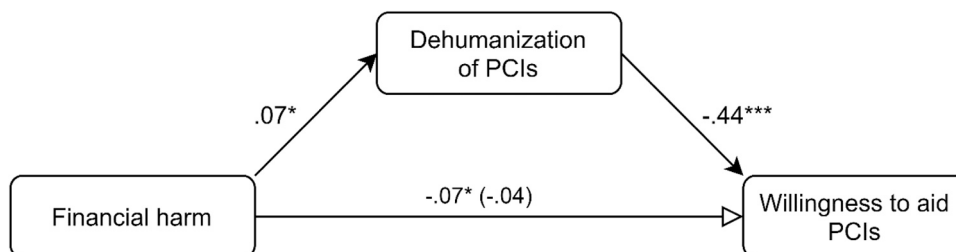


Fig. 3. Mediation analysis illustrating the direct and indirect effects of financial harm resulting from COVID-19 on the dehumanization of Palestinian citizens of Israel and the willingness to aid them. The figure displays standardized regression coefficients. The numbers in brackets represent the standardized regression coefficient for the relation between COVID-19 financial harm and willingness to aid the Palestinian citizens of Israel after controlling for the Palestinian citizens of Israel dehumanization levels. * $p < .05$, *** $p < .001$. PCIs = Palestinian citizens of Israel.

with the threat due to previous stereotypes or their behavior during the crisis (Becker et al., 2011; Brambilla & Butz, 2013).

In the current study, we found that higher levels of financial harm predicted higher dehumanization levels and less willingness to aid context-dependent outgroups, but that the external threat did not predict attitudes towards the ultimate scapegoat. In other words, when an external threat harms people, they turn their anger towards groups that seem related to the threat. Furthermore, although the ingroup members dehumanized the ultimate scapegoat outgroup the most and were willing to aid them the least, both dehumanization and willingness to aid were not predicted by exposure to people with COVID-19 or by financial harm as a result of COVID-19. This finding seems to contradict the assumption that the act of scapegoating the usual scapegoat, or the enemy, helps people deal with stressful, threatening situations. However, it might be explained by the availability of other, context-related outgroups to blame. This finding is innovative as there is almost no scientific knowledge on this issue and could have timely implications for societies worldwide dealing with the COVID-19 pandemic and future external threats.

We also found that the relationship between financial harm and unwillingness to aid the outgroup was mediated by the level of dehumanization towards the outgroup, confirming that negative outgroup perceptions, specifically dehumanization, serve as the underlying psychological mechanism that may link external threat and the ingroup's behavioral inclinations towards outgroups. Surprisingly, we found no effect of exposure to the health threat of COVID-19 on intergroup relations, unlike previous studies that have found a link between the threat of being infected and a rise in intergroup hostility (Cohn, 2012; Muzzatti, 2005). On the other hand, these findings are resonating Dhanani and Franz's (2021) study's results, that exposure to messages about the health risks of the COVID-19 did not elicit xenophobia and prejudice, while messages about the financial risks did. This pattern might suggest anxiety from competition for resources but can also be related to the relatively low exposure to the disease, as well as its relatively low mortality rates, at least at the timepoint both studies were conducted (spring 2020).

Contribution to literature and implications

This study contributes to the extensive body of research on the effect of threat on intergroup relations (Riek et al., 2006) by investigating a neglected niche - a threat posed by an external factor. Whereas most of the literature on threat and intergroup relations focuses on a threat posed by the outgroup itself (e.g., Kinder & Sears, 1981; McConahay, 1983; Sherif & Sherif, 1969; Stephan et al., 2008; Stephan & Stephan, 1985), our study focused on a global, external threat that is not posed directly by any group. Moreover, most studies conducted to date have measured individual sense of threat (e.g., Becker et al., 2011; Butz & Yogeeswaran, 2011), rather than levels of exposure to the threat (see Canetti, Hall, Rapaport, & Wayne, 2013; Hirsch-Hoefler et al., 2016 for exception). In this study we investigate the effects of individual-level, prolonged exposure to external threat. These features of the independent variable have scarcely been researched.

The paper adds to the literature on the impact of external threat on intergroup relations (Becker et al., 2011; Brambilla & Butz, 2013; Bukowski et al., 2017; Butz & Yogeeswaran, 2011) by providing a better understating of how people react, on the intergroup level, when they are exposed to an external threat, and the type of outgroup that would be most affected by it. Our findings show an association between levels of individual exposure level to COVID-19 and dehumanization, as well as lack of willingness to provide aid. These relationships, which are shown only towards the context-dependent outgroups, seems to indicate a rise in dehumanization and discriminatory attitudes towards these group, that is caused by the exposure to and harm from COVID-19. Although our results are derived from a very specific context, they may suggest a more general pattern in which outgroups that are perceived as related to the specific context of the threat are the ones that will be dehumanized and discriminated against (in the form of denial of aid).

Our study has implications for policymakers and practitioners working to increase intergroup cooperation in the battle against global crises such as natural disasters and pandemics. For example, it might be useful in developing interventions to decrease discrimination and increase willingness to aid outgroups in their joint struggle during large-scale crises. Following our results, these interventions should either focus on breaking the link between the threat and specific outgroups related to or providing an alternative explanation that would shift the blame away from the group level to an abstract- or systematic-level. Another option is to shift the focus from the financial aspect to the health one. Although the possibility to reduce financial harm is very limited and can be done in a scale only by governments, it is possible to use the media and intervention to shift the public focus from the financial risks and harm to those related to its health impact. As found in this and in Dhanani and Franz's (2021) study, it seems that these messages are less harmful in an intergroup context.

Although this paper is focused on the effect of COVID-19, we cannot ignore the strong effects of dehumanization on willingness to aid the different groups that were found in the study. This linkage between rather amorphous attitudes and actual support in discriminatory policies and lower willingness to aid outgroups that are part of the civil society is highly alarming. The danger in antisocial outgroup attitudes, that seems to be prevalent in our study, is frequently overlooked and the close association between attitudes and behavior should serve as a warning sign to how attitudes that sometimes dismissed as "just words" can translate to harmful behavior easily. It is especially important during crises when social cohesion is important and groups that live together are dependent in each other cooperation in order to effectively cope with the threat. In addition to the potential advantages of cooperation during pandemic and crises, these situations tend to lead to intergroup tension and violence based on previous attitudes and stereotypes as mentioned before, thus the importance of addressing these attitudes in advance.

More broadly, it seems that we will live alongside the virus for a long time, and it is thus crucial and timely to understand its ramifications on the social level. Moreover, in the coming years, we may face many external threats, such as global warming and technological changes. Our research allows a glimpse into one of the implications by shedding light on the psychological mechanism in which external threat affects intergroup relations.

Limitations and future directions

One limitation of the study is that the survey was administered in one region, which might have unique features. This fact might limit the ability to draw broader conclusions. For example, the stability of negative attitudes towards Palestinian citizens of the Palestinian Authority might be caused by the deep and longstanding animosity between the two groups. It is thus possible that the effects of threat caused by COVID-19 were not strong enough to further exacerbate the already negative attitudes of Jewish Israelis against Palestinian citizens of the Palestinian. Replicating the study in a different context, where the animosity between groups is not as intense, is one way to address this limitation.

Another limitation of our study is that most people were not exposed to COVID-19 patients when the study was conducted. Therefore, there might be a more significant effect on the exposure to confirmed patients that we could not find in our study due to lower participants' exposure levels.

In order to deal with some of the main limitations, and to attend to further issues like longitudinal changes in attitudes and changes in public opinion, and to address the critical issue of the increased dominance of the health crisis in the months following this study, future studies are called for. We advise that these studies be conducted at different time points during the outbreak and after, as in research carried out by Conway, Skitka, Hemmerich, and Kershaw (2009) after 9/11. We also suggest that these studies be implemented both in the context of the current study and in different countries with different outgroup features, which will allow us to understand better what makes specific outgroups more prone to be targeted and used as scapegoats than other outgroups. As this study has used an ecologically valid structure, and pandemics are, by nature, rapidly changing and chaotic, the ability to compare between times and across different groups and countries is an inherent challenge, which can be handled only by a massive collaboration of researchers all across the globe, or by the aggregation and meta-analyses of more evidence and more findings from different studies.

Conclusion

This study took place during a historic moment of a global pandemic that affects billions of lives, causing life-threatening illness and financial recession, resulting in millions of deaths. As researchers and social psychologists, we know that disasters and difficulties on such a scale might result in destructive intergroup conflicts that can erase years of progress and political calm and may even deteriorate into violence within and between countries. These circumstances morally obligate us to study and gather more knowledge and insights for current and future situations. The best way to use this knowledge is by prevention and intervention, and for these to be effective, we must recognize the hazards and the potential victims to be protected. Our findings could help predict which outgroups might be targeted at times of an external threat. Insights from this and other projects conducted during COVID-19 can be harnessed to help develop effective interventions used in global crises.

Appendix

See Appendix Table A1.

Table A1
Means, Standard Deviations, and Correlations Between the Variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. COVID-19 financial harm	3.43	1.84											
2. Knowing Diagnosed people	1.31	0.56	0.10										
3. UOs Dehumanization	26.79	26.48	0.10 *	-0.08 *									
4. PCIs Dehumanization	30.45	26.57	0.08 *	0.11 **	0.40 **								
5. PCPAs Dehumanization	45.11	31.66	0.04	0.06	0.38 **	0.70 **							
6. Willingness to aid UOs	70.88	26.64	-0.10 **	-0.01	-0.39 **	-0.25 **	-0.21 **						
7. Willingness to aid PCIs	64.25	28.61	-0.11 **	-0.09 *	-0.21 **	-0.54 **	-0.44 **	0.50 **					
8. Willingness to aid PCPAs	48.69	32.44	-0.07	-0.06	-0.13 **	-0.44 **	-0.48 **	0.37 **	0.56 **				
9. Sex (1 =Male)	1.48	0.50	0.04	-0.11 **	-0.02	-0.17 **	-0.12 **	0.04	0.06	0.09 *			
10. Age	42.07	15.79	-0.15 **	-0.11 **	-0.02	-0.14 **	-0.16 **	0.18 **	0.34 **	0.29 **	0.01		
11. Religiosity (1 =Secular)	1.48	0.74	0.01	0.29 **	-0.23 **	0.25 **	0.24 **	0.03	-0.24 **	-0.24 **	-0.14 **	-0.13 **	
12. Political Orientation (1 = Extremely right)	3.43	1.36	-0.04	-0.12 **	-0.09 *	-0.43 **	-0.52 **	0.14 **	0.41 **	0.46 **	0.19 **	0.24 **	-0.48 **

*p < 0.05, **p < 0.01.

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