

**“The Chinese Virus”: How COVID-19’s Transmission Context and Fear Affect Negative
Attitudes Toward Chinese in France**

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Highlights

- COVID-19 transmission context impacted attitudes towards Chinese
- Perceived COVID-19 threat is linked to negative attitudes toward Chinese people when transmission is external

Abstract

This research examines the impact of COVID-19 fear on attitudes towards Chinese depending on the context of propagation of the COVID-19. We predicted that COVID-19 fear is linked to negative attitudes towards Chinese people, especially when the spread of the virus was external (in China; vs. when the spread was internal with transmission within the French ingroup). We collected data online ($N = 403$) when COVID-19 was being transmitted externally, outside of France (Phase 1) and after transmission between French people had begun (Phase 2). We measured COVID-19 fear and attitudes toward Chinese people. Our hypothesis was supported. COVID-19 fear was linked to more negative attitudes towards Chinese people only in Phase 1. This study highlights individuals' adoption of defence strategies which are dependent on the societal context surrounding the threat. We also discuss the potential to promote peace and reduce conflict by focusing on internal crises versus external threats.

Keywords: COVID-19; intergroup relations; threat; outgroup attitudes

“The Chinese Virus”: How COVID-19’s Transmission Context and Fear Affect Negative Attitudes Toward Chinese in France

In early December 2019, COVID-19 emerged in China as a menacing new health threat. Media outlets began to report on the outbreak, and political figures and journalists used the term “the Chinese virus” to talk about the COVID-19 (e.g., Hillard, 2020). Aggressions against people with Chinese heritage were reported, such as the beating of a young French man of Chinese origin in France (Zemouri et al., 2020). However soon, the virus began spreading internally in European countries, and relevant to the current study, in France. As French people became infected and began to spread the virus to their fellow citizens, Chinese people could no longer be solely blamed for transmission of the virus. Our study aims to confirm the hostility experienced by Chinese people related to COVID-19 and examine whether negative attitudes toward Chinese people are related to fear of COVID-19. We also seek to understand whether the context of the transmission of the virus (external to the country vs. internal) could moderate the relationship between fear and hostility.

Hostility as a Threat Defense

When individuals are fearful of a threat to their personal or collective identity, they develop defence mechanisms to protect themselves (Jonas et al., 2014). One frequently observed social defence in response to a threat is the emergence of hostility towards the outgroup perceived as threatening (Jonas et al., 2014). For example, in an experiment, Becker et al. (2011) show that framing an economic crisis as being due to migrants or bankers leads to more negative attitudes towards the specific group identified as the source of the threat. In the time of COVID-19, studies by researchers in the US have highlighted that fear of COVID-19 is associated with prejudice toward Chinese people (Dhanani & Franz, 2020; Reny & Barreto, 2020). Importantly, these studies were conducted when COVID-19 was not yet considered to be transmitted on American soil (i.e., before the official declaration of a national emergency) and thus when the threat of disease transmission was perceived as coming from an external source. The change from an external to internal threat may reduce the association between fear and hostility toward Chinese people.

Overview

The current study examines the impact of fear of COVID-19 on the expression of negative attitudes towards Chinese people depending on the phase of transmission of COVID-19. We hypothesize that fear of COVID-19 is linked to more negative attitudes towards Chinese people, but we predict that this link is stronger when the transmission of COVID-19 was external, mainly in China (Phase 1), but that this association should be diminished in Phase 2 when transmission is internal.

Method

Population

We recruited 403 French participants (337 women, 61 men, 5 others), aged between 18 and 81 years ($M = 31.81$, $SD = 15.22$) by posting a questionnaire to French Facebook groups. Data were collected at two time points. First, when transmission of COVID-19 was present in China and not yet present in France (Phase 1, external). Phase 1 includes participants who responded very early in the crisis, between February 3 and February 24, 2020, ($n = 110$). Second, when the virus was being transmitted by ingroup members, French citizens (Phase 2, internal). Phase 2 includes participants who responded between February 25, corresponding to the date of the first death of a COVID-19 patient infected on French soil and thus, when the population was officially notified of inter-citizen transmission, and March 9, 2020 ($n = 293$). This sample allowed us to detect a small effect size ($f^2 = .03$), with an alpha of 0.05% and a power of .80 in a multiple regression testing one predictor among five (G*Power, Faul et al., 2007).

Measures¹

Attitudes Towards Chinese People

Attitudes towards outgroups were calculated using the feeling thermometer method (see e.g., Mahfud et al., 2015, for use in a French context). Participants were asked to

¹ Other measurements were also carried out. They are not relevant to the subject of this paper and are not reported or discussed here.

assess a series of 18 social groups, including the target group "Chinese" , on a 11-point scale from 1 = *Very unfavourable* to 11 = *Very favourable*.

Fear Related to COVID-19

COVID-19 fear was measured by averaging three items ("Do you feel medically safe with respect to coronavirus in France? " [reversed]; "Are you afraid that the coronavirus will spread in France? "; "Are you afraid of being infected with the coronavirus?"), on a 7-point scale ranging from 1 = *Not at all*, to 7 = *Very much*, $\alpha = .83$.

General Perception of Insecurity

As a control variable, we measured the perception of economic, political and cultural insecurity ("As a Frenchman, how secure do you feel economically/politically/culturally?" [reversed]), on a 7-point scale ranging from 1 = *Not at all*, to 7 = *Very much*, (Montreuil & Bourhis, 2001), $\alpha = .75$.

Results

Data from the study are available at:

https://osf.io/dkhy6/?view_only=698479b6146b487185645ad5309ad233

Preliminary Analysis

Means, standard deviations and correlations are reported in Table 1.

[INSERT TABLE 1]

Effect of Specific Threat of COVID-19 and Phases on Attitudes Towards Chinese People

For the analyses that follow, the perceived threat of COVID-19 has been standardized. Phases were coded as -1 = Phase 1, +1 = Phase 2. We conducted a hierarchical multiple regression where the perceived threat of COVID-19, the phases, and their interaction were predictors of the evaluation of Chinese people in step 1 and we controlled for general insecurity in step 2, see Table 2.

[INSERT TABLE 2]

These analyses showed that the threat related to COVID-19 was associated with more negative attitudes toward Chinese people. However, as expected, the interaction between perception of COVID-19 threat and phases was significant, supporting H1. The decomposition of this interaction controlling for general insecurity² (cf. Table 3, Figure 1) confirmed that the effect of COVID-19 threat was linked to more negative evaluations of Chinese people in Phase 1, but not in Phase 2.

[INSERT TABLE 3]

[INSERT FIGURE 1]

Discussion

Our study supports the hypothesis that fear of COVID-19 was predictive of more negative attitudes towards Chinese people when transmission of the virus was from an external source. This finding is consistent with media reports of discrimination against Chinese people and with previous research showing hostility toward Chinese people as a function of fear among Americans early on in the pandemic (Dhanani & Franz, 2020; Reny & Barreto, 2020). However, this devaluation of Chinese people disappeared in Phase 2, i.e., when the spread of COVID-19 was internal.

This novel finding in an ecologically valid context shows that individuals adapt their defence strategies according to the perceived source of a threat. Indeed, when the threat of transmission was coming from external sources individuals exhibited increased negative

² Results remained the same when general insecurity was not controlled for.

attitudes towards the group perceived as the threat's source (i.e., Chinese individuals). However, once the spread of the virus was internal, the association between the fear of COVID-19 and hostility toward Chinese people disappeared. Indeed, although participants in Phase 2 reported greater fear of COVID-19, this fear was not associated with more negative attitudes toward Chinese people. This could be because hostility toward Chinese people was no longer an appropriate response to the threat of transmission, as the threat was now coming from their fellow French citizens. For the first time to our knowledge, we were able to test in real-world conditions the moderating effect of the changing source of a threat on attitudes towards the outgroup originally designated as the source of the threat. Focusing on the source of a threat as internal (as in Phase 2) could mitigate intergroup identity defence reactions, as shown in the current study. For example, framing the outbreak of COVID-19 as an internal problem being faced by people in each country could help reduce devaluation of outgroups resulting from feelings of fear associated with the virus.

Limitations and Perspectives

One limitation of our study is that we have designated Phases 1 and 2 in our study based on real-life elements related to the spread of COVID-19 and governmental announcements in France related to the crisis. This reliance on a real-world context contributes to the greater ecological validity of our study, but does not allow us to strictly control participants' perceptions of these conditions. Although we did not measure participants' perception of the source of transmission as internal or external we did observe higher levels of fear of COVID-19 in Phase 2 which could suggest that participants perceived the threat as closer in proximity resulting from their understanding that transmission was now occurring inside their own country.

In conclusion, our study confirms the findings commonly reported in the media that the threat of COVID-19 has contributed to an increase in hostility towards Chinese people. However, we show in greater detail that this effect is diminished once COVID-19 has become an internal threat, and hostility toward an external group is no longer an appropriate response. Thus, those who want to decrease conflict in times of threat may want to focus on

the challenges internal to the nation rather than focusing on the external threats facing the nation.

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Tables

Table 1

Means and Standard Deviations

Variable	<i>M (SD)</i>		
	Total	Phase 1	Phase 2
1. COVID-19 Threat	3.25 (1.58)	2.88 (1.60)	3.39 (1.56)
2. General Insecurity	4.12 (1.35)	4.08 (1.45)	4.14 (1.31)
3. Evaluation of the Chinese group	0.21 (1.53)	0.25 (1.52)	0.19 (1.53)
4. Evaluation of the North African group	-0.27 (1.72)	-0.25 (1.87)	-0.27 (1.67)

Table 2*Multiple Regression on the Evaluation of the Chinese Group*

Predictor	Evaluation of the Chinese Group			
	β	t	p	η^2_p
COVID-19 Threat	-.16	-2.89	.004	.02
Phases	.02	0.29	.772	< .001
COVID-19 Threat x Phases	.12	2.14	.033	.01

Table 3

Decomposition of COVID-19 threat x Phases Interaction on the Evaluation of the Chinese Group

Predictor	Level of Moderator	Evaluation of the Chinese Group			
		β	t	p	η^2_p
COVID-19 Threat	Phase 1	-.28	-2.96	.003	.02
	Phase 2	-.04	-0.70	.482	.001
Phases	-1 <i>SD</i> COVID-19 threat	-.09	-1.40	.164	.01
	+1 <i>SD</i> COVID-19 threat	.12	1.60	.111	.01

Figures

Figure 1

Interaction between COVID-19 Threat and Phases on Evaluation of the Chinese Group

