

Nationalism and Belief into COVID-19 Conspiracies

Marc Oliver Rieger¹

March 4, 2021

Abstract

The outbreak of the COVID-19 pandemic has also led to manifold conspiracy theories. While the origin of the pandemic in China led some, including that time US president Donald Trump, to dub the pathogen "Chinese virus" and to support anti-Chinese conspiracy narratives, it caused Chinese state officials to openly support anti-US conspiracy theories about the "true" origin of the virus. In this article, we study whether nationalism, or more precisely, its close cousin uncritical patriotism, is related to beliefs in conspiracy theories among normal people. To this aim we use survey data from Germany and China, including data from the Chinese community in Germany. We also look at relations to other factors, in particular media consumption and xenophobia.

Keywords: SARS-Cov-2, COVID-19, conspiracy theories, conspiracy myths, uncritical patriotism.

¹University of Trier, Research Cluster "Cultures in Transitions", Department IV – Business Administration, 54296 Trier, Germany, mrieger@uni-trier.de.

1 Introduction

The COVID-19 pandemic is a global problem. The virus does not discriminate and the fight against it requires international collaboration. It didn't take long, however, for the pandemic to become infected with nationalism: while the outbreak of the new disease was officially reported in Wuhan, China on 31 December 2019, already two days later the first conspiracy theories circulated in China that stipulated that the virus had been developed by the US to harm China (Molter & Webster 2020, Rieger 2020a). Later, this escalated with US president Trump naming the pathogen the "Chinese virus", and the Chinese government starting a coordinated campaign to question the origin of the virus from China (Davey 2020, Jaworsky & Qiaoan 2020, Verma 2020). As a side remark, the conflict also reached academia with a letter by three researchers from China to *Nature Human Behaviour* demanding that academic papers should not state Wuhan or China as origin of the virus (Zeng, Wang & Zhang 2020).

While from a scientific point of view, the virus' origin is of no relevance for the fight against COVID-19, the political dimension of the conflict is obvious (Jaworsky & Qiaoan 2020). Additionally, it seems natural that nationalists of all countries when faced with a disastrous situation in their own country caused by the pandemic will look for scapegoats elsewhere: uncritical patriotism, the close cousin of nationalism, denies anything bad happening in one's own country (unless, of course, it is caused by other countries or national groups). For Chinese nationalists it is therefore pivotal to deny the origin of the disease in China, while for, e.g., US nationalists it is pivotal to blame China for the hundreds of thousands of deaths in the US. Conspiracy theories play for both groups an essential role, as they conveniently focus responsibility onto an outside group.

The connection between nationalism and conspiracy theories is not something unique to COVID-19. Antisemitic conspiracy theories, e.g., are a prominent example with a long history that, in medieval times, was also at times associated with the outbreak of epidemics (Cohn 2012). The COVID-19 pandemic, however, gives a topical importance to the connection between nationalism and conspiracy theories: it has a multitude of consequences for international politics, but also for the potential life or death of millions of people as there is a strong connection between belief in conspiracy theories, protective individual behavior and policies

that helps to contain the spread of the disease (Allington, Duffy, Wessely, Dhavan & Rubin 2020, Imhoff & Lamberty 2020, Rieger 2020*a*, Rieger 2020*b*, Hornik, Kikut, Jesch, Woko, Siegel & Kim 2021).

In this article, we will investigate the connection between patriotism and belief in conspiracy theories empirically. We will distinguish between the impact of different types of patriotism, in particular uncritical patriotism¹, the variety closest to nationalism, and we will study some of the correlates, e.g., the effect of COVID-19 on xenophobia, and the potential transmission through social media consumption. This paper is structured as follows: in Section 2, we will describe our surveys, their items and subject pools. In Section 3 we analyze the relation between nationalism and beliefs in conspiracy theories. Section 4 summarizes the findings and discusses their limitations as well as future avenues of research.

2 Methodology

2.1 Sample characteristics

We use data from an online survey that run in several waves in Germany, China and among Chinese in Germany² between March 2020 and December 2020 with in total more than 3000 participants, see Rieger & He-Ulbricht (2020) for a documentation of the first waves. The survey was advertised on several universities. In the case of the sample of Chinese in Germany, the survey has also been distributed via Email and WeChat to a broader community. In the survey, respondents have been asked about a varying number of items regarding COVID-19, in particular their belief into conspiracy theories, but also regarding the origin of COVID-19 and patriotism. The questions were not identical between the waves, thus leading to smaller sample sizes, depending on the interactions studied. Basic demographic characteristics of the sample can be found in Table 1.

In the following, we describe the items of the survey that are relevant for the following analysis. General questions, e.g., about demographics, are described in Rieger & He-Ulbricht (2020). The data analysis was conducted with SPSS version 25. The data is openly available, see Rieger & He-Ulbricht (2020).

Table 1: Demographic characteristics of the three samples.

		German	China	Chinese in Germany
Age	Average	26	22	33
Gender	Male	38%	28%	33%
	Female	62%	72%	66%
	Other	1%	0%	1%
Highest degree	High school	53%	79%	9%
	Bachelor	29%	22%	32%
	Master or similar	13%	0%	45%
	PhD	2%	0%	11%
	Other	2%	0%	3%
	Pupil	0%	0%	1%
Occupation	Students	81%	100%	39%
	Working	16%	0%	34%
	Others	2%	0%	26%
<i>N</i>		3159	135	193

2.2 Survey items: conspiracy theories

The conspiracy theory items were elicited in two parts. In the first part, some general statements were presented in random order, mixed with a couple of items on other topics and one about trust in COVID-19 reports in German media and by German institutions:

1. The media try to hide information about the Coronavirus from us.
2. The hype about the Coronavirus was caused by pharmaceutical companies and other groups that benefit from it.
3. The virus is just an excuse for our politicians to trample on our fundamental human rights.

Each item was elicited on a 4-point Likert scale: disagree / somewhat agree / mostly agree / fully agree.

In the second part, more specific conspiracy theories were presented, again in random order, mixed with statements that reflected the scientific consensus (see below):

4. The first patient was an employee of a virus laboratory in Wuhan who got infected by accident.³
5. The US Secret Service developed the virus and imported it into Wuhan to damage China.
6. The virus was developed by China at a laboratory for biological weapons and spread due to an accident.
7. The spread of COVID-19 is related to the rollout of 5G networks.
8. Pharmaceutical companies and Bill Gates spread the virus to make money from their patented vaccine.

All items were elicited on a 5-point Likert scale (very unlikely / unlikely / average probability / likely / very likely).

The statements about the scientific consensus were:

9. The virus originated in animals (bats or pangolins) and spread to humans.

10. The virus emanated in Wuhan (China).

We defined scores for conspiracy beliefs as follows, similarly to Rieger (2020a):

- “Neutral conspiracies”: sum of items 1, 2, 3 and 7 (Cronbach’s Alpha: 0.761, $N = 2240$, minimum theoretical value 4, maximum theoretical value 19).
- Anti-China conspiracies: sum of items 4 and 6 (Cronbach’s Alpha: 0.672, $N = 2310$, 2 to 10).
- Anti-US conspiracies: sum of items 5 and 8 (Cronbach’s Alpha: 0.756, $N = 2308$, 2 to 10).

A composite score (“conspiracies score”) was calculated as the sum of these three subscales (Cronbach’s Alpha: 0.814, $N = 2234$).

The sum of responses to these two questions 9 and 10 was defined as a scale “consensus” (Cronbach’s Alpha: 0.564, $N = 1005$, possible values between 2 and 10). In China, the survey was conducted in two waves. In the first wave, we could not ask directly for the conspiracy theories to avoid potential political problems. We therefore instead asked where subjects thought the virus originated from: China, USA, elsewhere. For each option we elicited the likelihood on a 4-point Likert scale (yes / rather likely / rather unlikely / no). In the second wave, we did not involve colleagues from China in the data collection and could therefore ask questions more freely. We hence additionally elicited some of the conspiracy theory items as in the other waves.

2.3 Survey items: patriotism

In some of the waves, we also elicited patriotism and uncritical patriotism (as proxy for nationalism). To this end we used standard items that have been used frequently in the literature and previous surveys, e.g., the World Value Survey:

- *Patriotism*: I am proud to be German/Chinese.
- *Uncritical patriotism*: We should all fight for our country, whether it is right or wrong.

In both cases, we used (as is standard in the literature) a 4-point Likert scale: disagree completely / mostly disagree / mostly agree / fully agree.

From previous studies it is known that both variants of patriotism are higher in China than in Germany which is reflected in our data (see Tab. 7–8).

2.4 Survey items: media sources and other items

We asked Chinese participants living in Germany about the media sources from which they obtain news. They could select between WeChat, Facebook, Chinese press, German press, German TV, Chinese TV, English language press, and English language TV. Multiple selections were possible.

In fact, WeChat was the most frequently chosen media channel (77%, followed by Chinese press (67%), German press (60%), and German TV (50%). All other channels were chosen 35% or less.

We elicited among Chinese in Germany also how they think that Germans perceive Chinese with the following two items:

1. The Western society is happy to see China decaying.
2. Most Westerners understand the feeling of Chinese people.

These items were elicited on a 4-point Likert scale (Totally disagree / Somewhat disagree / Somewhat agree / Totally agree).

We computed a score “Perceived anti-Chinese sentiment” as the difference between both items (Cronbach’s Alpha: 0.613, $N = 162$).

We also elicited how they think about openly discussing negative issues on the same 4-point Likert scale:

1. I am not in favor of discussing the dark side of society in the public sphere.
2. Without openly discussing negative issues, there is no way to improve the situation.

We defined a score “Hiding dark side” as the difference of both items (Cronbach’s Alpha: 0.727, $N = 143$).

Among the German participants, we elicited two items about their attitudes towards Chinese (same 4-point Likert scale):

1. Ultimately, the Chinese are responsible for the Corona pandemic.
2. It would be better if there were fewer Chinese in Germany.

For descriptive statistics on the main variables see Tab. 7–8 in the Appendix.

3 The nationalistic side of COVID-19

While relations between nationalism/patriotism and beliefs about COVID-19 are to be expected among Chinese (for the reasons described in the introduction), there are a priori no strong reasons to expect such effects among Germans.

While there is indeed no relation between (critical) patriotism and conspiracy beliefs. However, there is a strong positive correlation between uncritical patriotism and all types of conspiracy beliefs (Table 2). These results may suggest that persons who are inclined to uncritical patriotism and persons who believe in conspiracy theories share some common psychological characteristics. The relation confirms previous findings that proponents of far-right political ideologies are more inclined to believe in conspiracy theories than the proponents of centrist political ideologies (van Prooijen, Krouwel & Pollet 2015).⁴ The main point is here that the relation between uncritical patriotism and conspiracy beliefs does not distinguish much between conspiracy theories with different contents.

Let us next take a look at the Chinese living in Germany (Table 3). Here, for the anti-US conspiracy theories and also for the neutral conspiracies, the picture is similar (although not statistically significant for the latter ones), but we find a striking difference regarding the anti-China conspiracies: a *negative* correlation between uncritical patriotism and belief in the conspiracy theories. It does not seem surprising that anti-Chinese conspiracies are considered to be anti-patriotic by Chinese and, thus, are considered to be less plausible, but we have to keep in mind that even beliefs in contradicting conspiracy theories are usually positively correlated. This demonstrates that the influence of uncritical patriotism on these beliefs is, indeed, very strong. We observe this effect even more distinctly in the sample of Chinese students: here we find a strong and significant *negative* correlation between patriotism and the belief in the theory that the virus originated in China (Table 4).

Finally, we combine the data for Germans and Chinese living in Germany and test the effects of uncritical patriotism and its interaction with nationality on beliefs in the three dimensions of conspiracy theories (Table 5). At first, for the combined dataset we find that uncritical patriotism is positively related to all types of conspiracy beliefs. Chinese, however, are less likely to believe in anti-China theories and more likely to believe in anti-US theories. As expected, we do not find any nationality effect on the “neutral” conspiracies. Next, we take interaction effects into account (where we consider only the two dimensions with national differences). Due to the small number of Chinese students in our sample, we have to enlarge the sample here by adding non-students. We compute for each population the individual difference to the average level of uncritical patriotism and denote this difference by “deviation uncritical patriotism”. Then we test the model with the interaction term “Chinese \times deviation uncritical patriotism”. It turns out that this factor is strongly significantly negative for anti-China theories, i.e. uncritical patriotism plays a significantly larger role on this for Chinese than for Germans. However, we do not find any significant difference for anti-US theories. It seems that uncritical patriotism does, indeed, lead to a more strongly pronounced rejection of anti-China conspiracy theories, but, at the same time, it does not automatically lead to a higher degree of acceptance of anti-US theories – at least not more so than it does for Germans.

Which other factors can explain the fact that the Chinese living in Germany perceive conspiracy theories about COVID-19 differently than Germans? We tested correlations with the following factors: use of social media (WeChat and Facebook), the idea that one should hide bad things and a perceived anti-Chinese sentiment (all as specified in Section 2). The results are summarized in Table 3: social media consumption increased the belief in anti-US conspiracies, regardless of the fact whether Chinese (WeChat) or American (Facebook) apps were used. More importantly, the idea that one should hide bad things increased the belief in neutral conspiracies and reduced the belief in consensus, but decreased the belief in anti-China conspiracies. The latter effect could probably mean that anti-China conspiracies are considered to be something bad to talk about China which these persons would agree one should not do. A perceived anti-Chinese sentiment increased anti-US conspiracy beliefs and strongly decreased the belief in the scientific consensus, so this perception seems to support all beliefs that are directed against foreigners

(as they are seen as opponents).⁵

In conclusion, we find strong evidence for the hypothesis that conspiracy theory beliefs are, on average, more widespread in China, as we expected given the cultural and political differences. Chinese living in Germany are placed between both groups. There are different possible interpretations for these findings: it might be that the difference in media freedom enables the Chinese living in Germany to improve their critical thinking, or it could be that cultural adaptation or self-selection mechanisms blur the cultural differences in holistic/analytic thinking style. – Most likely, it will be a mix of these factors.

The differences between Germans and the Chinese living in Germany, however, become larger when we compare the belief in different types of conspiracy theories: Chinese are generally less likely to believe in anti-China conspiracies and are more likely to believe in anti-US conspiracies than Germans. This difference can be partly explained by (uncritical) patriotism, where for belief in anti-Chinese conspiracies, uncritical patriotism indeed acts differently for Chinese and Germans: it affects only the Chinese. For anti-US conspiracies, we do not find different effects of uncritical patriotism. It just correlates positively with belief in *any* kind of conspiracies (except for anti-China conspiracy theories).

There is further evidence in favor of the hypothesis that the differences regarding the beliefs are self-motivated: agreement to the necessity of “hiding dark sides” decreases anti-China conspiracies, but not anti-US conspiracies, while a perceived anti-China sentiment in Germany (“Westerners are happy to see China decaying”) strongly correlates with anti-US conspiracies and a decreased belief in consensus (but not with other types of conspiracies).

However, we do not find evidence that Chinese media would impact conspiracy beliefs differently than Western media: while the use of WeChat of Chinese in Germany did increase the likelihood of believing in anti-US conspiracies, the use of Facebook did so even more.

We also did not find evidence supporting the idea that the status of Chinese in Germany as minority increased their overall beliefs in conspiracy theories, but a larger sample would be needed to answer this question.

All in all, the fact that the virus most probably originated in China is a kind of an “inconvenient truth” for many Chinese, even more so if they are very patriotic. This makes it easy for them to believe in conspiracy theories that offer alternative

“theories” about the origin of the virus. On the other hand, similar reasons make it more difficult for them to believe in anti-China conspiracy theories.

We repeated the analysis of Table 4 also in Taiwan ($N = 112$ subjects) using the same recruiting method as in China. There, we did – as expected – not find a significant relation between uncritical patriotism and the belief in an origin of the virus from the US ($\rho = 0.14, p = 0.14$) nor the CIA conspiracy theory ($\rho = -0.91, p = 0.34$). The CIA theory was also not widespread: 84.1% found it at least unlikely, only 4.4% found it likely.

Table 2: Correlation between patriotism, uncritical patriotism and various COVID-19 related beliefs among German students.

Correlation with	patriotism	uncritical patriotism
Consensus	.127* 0.049	0 0.997
Conspiracies score	-0.016 0.799	0.228*** <0.001
“Neutral” conspiracies	-0.037 0.571	.193*** <0.001
Anti-China conspiracies	0.038 0.561	.173** 0.001
Anti-US conspiracies	-0.013 0.84	.213*** <0.001
	N=241	N=369

4 Conclusions

Exceptional events require exceptional explanations: this is a well-known phenomenon that helps to create conspiracy theories whenever world-changing events take place (Leman & Cinnirella 2007, LeBoeuf & Norton 2011). COVID-19 for sure was such a world-changing event, and it is therefore not a surprise that conspiracy theories flourished.

Table 3: Relationship between uncritical patriotism and belief in various conspiracy theories among Chinese living in Germany.

	Uncritical patriotism
Consensus	-.336**
	0.007
Conspiracies score	0.177
	0.161
“Neutral” conspiracies	0.149
	0.239
Anti-China conspiracies	-.271*
	0.03
Anti-US conspiracies	.313*
	0.012
	<i>N</i> =64

Table 4: Relationship between patriotism and beliefs in potential origins of COVID-19 among subjects in China.

	Patriotism
China	-0.273**
	0.002
USA	0.014
	0.877
Elsewhere	0.044
	0.632
	<i>N</i> =122

Table 5: Effect of uncritical patriotism on beliefs in conspiracy theories among Germans and Chinese living in Germany.

	“Neutral” conspiracies	Anti-China conspiracies	Anti-US con- spiracies	Anti-China conspiracies	Anti-Us con- spiracies
age	0.194*** (3.523)	0.059 (1.067)	0.051 (0.929)	0.087 (1.579)	0.053 (0.979)
female	-0.022 (-0.495)	0.051 (1.12)	0.087 (1.922)	0.043 (1.010)	0.092* (2.19)
student				0.009 (0.104)	0.018 (0.214)
university degree	-0.07 (-1.475)	0.038 (0.782)	0.053 (1.122)	0.030 (0.597)	0.008 (0.159)
working	-0.039 (-0.711)	-0.122* (-2.219)	-0.096 (-1.755)	-0.121 (-1,558)	-0.066 (-0.853)
uncritical patriotism	0.20*** (4.458)	0.187*** (4.122)	0.237*** (5.288)		
deviation uncritical patriotism				-0,188*** (-4,153)	-0.238*** (-5.287)
Chinese				-0,201*** (-4,283)	0.138** (2.967)
Chinese × deviation uncrit. patriotism				0.14** (2.995)	-0.25 (-0.533)
sample	students	students	students	all	all
<i>N</i>	478	480	480	541	541
adjusted <i>R</i> ²	5.7%	4%	5.8%	7.4%	8.7%

Table 6: Correlations of the two variants of patriotism with Chinese responsibility and the agreement to the statement that “there are too many Chinese in Germany”. Pearson correlation, values in parentheses are p-values.

	Patriotism	Uncritical patriotism
Chinese responsible for COVID-19	0.175** (0.003)	0.220** (<0.001)
It would be better if there were fewer Chinese in Germany	0.098 (0.96)	0.179*** (<0.001)
<i>N</i>	289	483

An interesting aspect about COVID-19 is that the pandemic led immediately to nationalist sentiments that were decisive in writing some of the most important conspiracy narratives. In this article, we have studied the interaction between nationalism, or more precisely the closely related uncritical patriotism on the one hand, and belief in certain types of conspiracy theories on the other hand.

We have seen that in China conspiracy theories that see the “culprit” outside the national borders, and in particular in the US, are very popular – even among our highly educated sample. Germans, on the other hand, tend to believe less in conspiracy theories, but if so, they are more likely to believe in anti-Chinese theories. In all samples, we have found a general positive relation between belief in such theories and uncritical patriotism, but basically no relation to (critical) patriotism. However, we have also found that among Chinese the relation reverts for anti-China conspiracy theories and is strongest for anti-US conspiracies. We see again that nationalism influences in a selective way the belief in conspiracy theories.

Finally, we have also presented some results demonstrating that in the COVID-19 crisis sinophobia among Germans correlated significantly with uncritical patriotism, but not with normal (critical) patriotism.

We conclude that conspiracy theories surrounding the origin of COVID-19, fueled by nationalism, seem to have a stable effect on beliefs of a large proportion of Chinese. They shape national differences regarding a historic event that are likely to lead to a permanent difference of its perception between China and Germany. The

results for Germany will likely carry over to other Western countries as well, but there is definitely a limitation to our study, as it would have been very interesting to investigate these effects also in the US for two reasons: First, anti-China conspiracies have been propagated even by the US president, so their impact as well as their relation to nationalism should be larger. Second, the Chinese population in the US must have been in an even more difficult position in this conflict between anti-US and anti-China conspiracy theories, and it would therefore be very interesting to study their beliefs in more details.

Acknowledgement

This work was supported by the research cluster “Cultures in Transitions in East Asia and Germany” of the University of Trier, funded by the research initiative of the state of Rhineland-Palatinate. The author thanks Mei Wang and Xenia Matschke for discussions about this topic, and Yanping He-Ulbricht, Karine Nanyan, Pascal Langer, Marco Korngiebel, and Sinean Callery for their help with preparation of the data and the manuscript.

Notes

¹For definitions of different concepts of patriotism and its relations to nationalism see, e.g., Nincic & Ramos (2012) and Kwak & Matsuda (2014).

²More precisely, the sample consisted of people in Germany with Chinese origin, regardless of their nationality. The wave was conducted in Chinese language. For simplicity we refer to them as “Chinese in Germany”. The general sample taken from Germany, however, may also include some respondents of other nationalities, but for simplicity we refer to respondents from this sample simply as “Germans”, similarly for the China sample.

³This item is not scientifically disproven, but there is also no supporting evidence for it. Omitting it, does not lead to significantly different results.

⁴For the sake of completeness, van Prooijen et al. (2015) also find that this increased tendency to believe in conspiracy theories also exists among the proponents of far-left political ideologies.

⁵We also tested for effects of Chinese versus German or English-language traditional media consumption (TV, newspapers), but did not find any significant effects.

References

- Allington, D., Duffy, B., Wessely, S., Dhavan, N. & Rubin, J. (2020), 'Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency', *Psychological medicine* pp. 1–7.
- Cohn, S. K. (2012), 'Pandemics: waves of disease, waves of hate from the plague of Athens to AIDS', *Historical Research* **85**(230), 535–555.
- Davey, G. (2020), 'The China–US blame game: claims-making about the origin of a new virus', *Social Anthropology* .
- Hornik, R., Kikut, A., Jesch, E., Woko, C., Siegel, L. & Kim, K. (2021), 'Association of COVID-19 misinformation with face mask wearing and social distancing in a nationally representative US sample', *Health communication* **36**(1), 6–14.
- Imhoff, R. & Lamberty, P. (2020), 'A bioweapon or a hoax? the link between distinct conspiracy beliefs about the coronavirus disease (covid-19) outbreak and pandemic behavior'.
- Jaworsky, B. N. & Qiaoan, R. (2020), 'The politics of blaming: the narrative battle between China and the us over COVID-19', *Journal of Chinese political science* pp. 1–21.
- Kwak, J.-H. & Matsuda, K. (2014), *Patriotism in East Asia*, Routledge.
- LeBoeuf, R. A. & Norton, M. I. (2011), 'Consequence-Cause Matching: Looking to the Consequences of Events to Infer Their Causes', *Journal of Consumer Research* **39**(1), 128–141.
URL: <https://doi.org/10.1086/662372>
- Leman, P. J. & Cinnirella, M. (2007), 'A major event has a major cause: Evidence for the role of heuristics in reasoning about conspiracy theories', *Social Psychological Review* **9**(2), 18–28.
- Molter, V. & Webster, G. (2020), 'Virality project (china): Coronavirus conspiracy claims', *Stanford FSI News* **March 31**.

- Nincic, M. & Ramos, J. M. (2012), 'The sources of patriotism: Survey and experimental evidence', *Foreign Policy Analysis* **8**, 1–16.
- Rieger, M. O. (2020a), 'COVID-19 conspiracy beliefs among students in China and Germany – causes and effects', *Working Paper* .
- Rieger, M. O. (2020b), 'What makes young people think positively about social distancing during the corona crisis in Germany?', *Frontiers in Sociology* **5**, 61.
- Rieger, M. O. & He-Ulbricht, Y. (2020), 'German and Chinese dataset on attitudes regarding COVID-19 policies, perception of the crisis, and belief in conspiracy theories', *Data in Brief* **33**, 106384.
- van Prooijen, J.-W., Krouwel, A. P. M. & Pollet, T. V. (2015), 'Political extremism predicts belief in conspiracy theories', *Social Psychological and Personality Science* **6**(5), 570–578.
URL: <https://doi.org/10.1177/1948550614567356>
- Verma, R. (2020), 'China's diplomacy and changing the COVID-19 narrative', *International Journal* **75**(2), 248–258.
- Zeng, G., Wang, L. & Zhang, Z. (2020), 'Prejudice and xenophobia in COVID-19 research manuscripts', *Nature Human Behaviour* **4**(9), 879–879.

A Descriptive statistics

Table 7: Descriptive results for the German sample. Higher agreement to the theories/statements is indicated by a higher number. See the main text for details on the survey items.

	1	2	3	4		<i>N</i>
Uncritical patriotism	4.3%	16.1%	29.8%	49.7%		483
Chinese responsible for COVID-19	57%	26.6%	11.3%	5.1%		1671
Better if there were fewer Chinese in Germany	95.5%	2.8%	0.6%	1.1%		844
	1	2	3	4	5	<i>N</i>
Wuhan lab accident narrative	25.7%	27.2%	30.1%	12.9%	4.1%	2169
China bioweapon narrative	49.4%	28.2%	14.9%	5.8%	1.7%	2167
CIA conspiracy narrative	74%	18.4%	4.6%	2.1%	0.8%	2168
Bill Gates narrative	85.8%	8%	3.5%	1.7%	0.9%	2166
	2	3	4	5	≥ 6	<i>N</i>
Neutral conspiracies	–	71.2%	12.8%	5.7%	3.7%	2164
Anti-China conspiracies	22.2%	16.5%	20.7%	15.6%	13.3%	2165
Anti-US conspiracies	70.9%	14.9%	6.6%	2.8%	2.3%	2167

Table 8: Descriptive results in China. Higher agreement to the theories/statements is indicated by a higher number. See the main text for details on the survey items.

Origin of virus	1	2	3	4	<i>N</i>	
China	13.9%	43.3%	40.6%	2.1%	187	
USA	1.1%	24.2%	70.4%	4.3%	186	
Elsewhere	3.3%	50.0%	43.5%	3.3%	184	
Uncritical Patriotism	15.1%	52.8%	24.5%	7.5%	53	
Proud on Chinese Handling	3.8%	5.7%	34.0%	56.6%	53	
Dark side to be hidden	13.2%	64.2%	18.9%	3.8%	53	
Improvement society	3.8%	24.5%	56.6%	15.1%	53	
	1	2	3	4	5	<i>N</i>
Wuhan origin	11.3%	32.1%	34.0%	22.6%	0%	53
CIA conspiracy narrative	16.5%	46.8%	24.8%	11.0%	0%	52
Frozen food origin	4%	19.2%	34.0%	29.8%	12.8%	47