



Citizen Compliance with Pandemic Rules in China: Exploring the Effects of Emotional States, Peer Influence, and Policing

Kai Lin¹ · Ivan Y. Sun² · Yuning Wu³ · Shan Shen⁴

Received: 26 October 2021 / Accepted: 25 February 2022 / Published online: 19 March 2022
© The Author(s), under exclusive licence to Springer Nature Switzerland AG 2022

Abstract

In December 2019, the SARS-CoV-2 virus was first detected in Wuhan, China. Soon after, China became the first country in the world to enforce strict restrictions in an effort to mitigate the spread of the disease. Relying on survey data from 600 Chinese citizens in urban China, this study assessed the extent of citizen compliance and factors related to public compliance to pandemic lockdown and mitigation rules during the initial peak of the pandemic in January, 2020. Using multivariate regressions, we explored the effects of three sets of factors on Chinese citizens' compliance to pandemic mitigation rules: negative emotions during the pandemic, peer modeling of compliance, and the prevalence of formal social control in the forms of police presence and performance. Our regression analyses suggest that all three mechanisms influence Chinese citizens' level of compliance with counter-pandemic rules. Nevertheless, the strengths of their effects varied, with peer influence showing the strongest effect on compliance, followed by police presence and fear of contracting COVID-19.

Keywords COVID-19 · China · Pandemic Rules · Policing · Public compliance

Introduction

Less than two years since the SARS-CoV-2 virus was first detected in Wuhan, China, millions of people worldwide have died from COVID-19 (WHO, 2021). While COVID-19 vaccination is well underway in many countries, the disparity in vaccination within and across countries, along with the emergence of more contagious variants that also weaken

the effects of the vaccines, hope is dim that the end of the pandemic is in sight. Countries around the globe continue deploying all tools available to curb the community transmission of the virus. Since the beginning of the pandemic, a range of public health mitigation policies and measures, from masking, physical distancing to strict “lockdowns” of a city or neighborhood and vaccination, have been implemented in various parts of the world at times, particularly during periods of COVID-19 outbreak. Although public health experts credit these policies with effectively reducing community transmission, many in the general public resist and even protest against them, claiming that they infringe upon citizens' civil liberties (Connaughton, 2021). The efficacy of these public health mitigation measures is directly correlated with the general public's receptiveness to the policies and the enforcement of such policies. Less is known, however, on what influences public compliance to these pandemic rules and regulations. As the pandemic is still raging globally, there is an urgent and practical need to systematically study factors related to public compliance to pandemic mitigation measures.

Compared to most countries around the world, China, the first country to confront the outbreak of COVID-19, has since implemented the most restrictive lockdown measures at the onset of the pandemic and whenever a surge of local

✉ Shan Shen
Shan.S@cqu.edu.cn

Kai Lin
kai.lin@csus.edu

Ivan Y. Sun
isun@udel.edu

Yuning Wu
yuningwu@wayne.edu

¹ Division of Criminal Justice, California State University, Sacramento, Sacramento, USA

² Department of Sociology and Criminal Justice, University of Delaware, Newark, DE 19716, USA

³ Department of Criminal Justice, Wayne State University, Detroit, USA

⁴ School of Public Administration, Chongqing University, Chongqing, China

cases has occurred. As most Western countries have gradually adapted to the pandemic, China continues firmly holding its “zero-tolerance” policy, aiming at eliminating the disease with all possible means. The aggressive containment strategy seems to have been working well for China as the country’s total recorded deaths from the pandemic registered at only 5691 on October 1, 2021, making up only about 0.13% of the total deaths worldwide (WHO, 2021). Arguably, China’s success in implementing these policies would not have been possible without Chinese citizens’ high degrees of compliance to strict pandemic mitigation measures. Many media reports, especially those coming out during the early days of the pandemic, attributed public compliance largely to the government’s unchecked authority and the police’s ubiquitous surveillance of the general populace (e.g., Qin & Wang, 2020). This observation stands in sharp contrast with recent empirical studies in Western countries, which found that formal social control, such as law enforcement interventions, had little and sometimes even counterproductive effects on citizen compliance (McCarthy et al., 2021; Murphy et al., 2020; Van Rooij et al., 2020). It is, therefore, worthwhile to empirically explore whether the presence of state authority plays a significant role in eliciting public compliance under an emergency circumstance in an authoritarian country such as China.

Furthermore, it is also meaningful to compare the effects of formal social control with psychosocial factors such as peer modeling of compliance, fear of COVID-19, and personal stress during the pandemic. Peer influence tends to be strong in a collective culture, and negative emotional states remain heightened as the government and media constantly report severe illnesses and deaths worldwide during the pandemic. These factors may be linked to citizens’ willingness to comply with COVID-19 policies. Relying on survey data from 600 Chinese citizens, we assessed the extent of citizen compliance and factors related to public compliance to pandemic lockdown and mitigation rules. We then explored the effects of three sets of factors on Chinese citizens’ compliance to pandemic mitigation rules using multivariate regressions: negative emotions during the pandemic, peer modeling of compliance, and the prevalence of formal social control in the forms of police presence and performance.

Literature Review

Policing During the Pandemic

In December 2019, the SARS-CoV-2 virus was first detected in Wuhan, China. After initial mishandlings by the government, a total lockdown of the city and strict lockdown protocols in other parts of the country were carried out in January 2020. At the peak of the pandemic in January and February

of 2020, many cities in China restricted all access in and out of the cities, and many urban residential communities also implemented strict access control, allowing only occasional trips to grocery stores and hospitals and clinics if necessary (Kupferschmidt & Cohen, 2020). In addition, recreational activities, such as exercising outdoors and visiting tourist sites, were prohibited. Although most of these protocols were later relaxed as daily infections dropped to almost zero in the coming months, they were quickly readopted and enforced whenever there was a local outbreak in China (Cortez & Thomson, 2021).

In China and later almost everywhere else globally, the police were called on to help enforce pandemic rules and protocols, ranging from mask-wearing to social distancing and mandatory quarantine. Notably, in China, where the initial lockdown measures were among the strictest in the world, the police played an auxiliary rather than central role in enforcing the pandemic lockdown (Jiang & Xie, 2020). The Neighborhood Resident Committee (NRC), a supposedly civil organization with bureaucratic hierarchy and government accountability mechanisms, along with private security personnel on residential properties and community volunteers, undertook most of the lockdown enforcement responsibilities. Local NRC staff and its grid-workers (frontline agents hired by the NRCs) made house visits while private security personnel and volunteers guarded at the residential property gates to check and record the outgoing residents’ body temperature and take the residents’ online deliveries to their doors in some cases (Jiang & Xie, 2020). The police remained the last resort in settling conflicts where citizens refused to obey various quarantine rules or accept mandatory hospitalization following a positive COVID-19 test (Jiang & Xie, 2020).

A few recent studies have revealed some general information on policing during the pandemic in China. For instance, one study analyzed changes in calls for police service during the lockdown in a county-level city in Hubei province and found that traffic, disputes, and crime calls reduced, whereas domestic violence and public security calls increased (Dai et al., 2021). Other descriptive studies asserted that the police had experienced an increase in COVID-19 related crime, such as producing and selling fake medical devices, price gauging, and online and telephone fraud (Jiang & Xie, 2020). The official news agency, Xinhua, reported that the police had disposed of 22,000 pandemic-related criminal cases and detained 4260 suspects by late February 2020 (Xinhua News, February 26, 2020). However, none of these studies or reports touched on issues related to public compliance with pandemic-related restrictions.

In some countries, police played a much more active and unambiguous role in pandemic rules enforcement. In the U.K., for example, the police were charged with enforcing lockdown restrictions, face coverings, international

travel quarantine, and even self-isolation in collaboration with other agencies and organizations. The UK police were authorized to issue Fixed Penalty Notices (FPNs), use “reasonable force if necessary,” make an arrest (if necessary), and even enter people’s homes without permission in certain territories and circumstances. A total of 68,952 FPNs were issued in England and Wales under lockdown regulations between 27 March 2020 and 14 February 2021 (Brown, 2021). In Victoria, Australia, police issued 5800 tickets for curfew and other lockdown violations in August 2020 during the stage 4 lockdown, leading to a total of 2.9 million Australian dollars in fine (Handley, 2020). Other countries such as Spain, France, Italy, Argentina, and Chile have enacted similar law enforcement efforts against lockdown violations (DW, 2020; Thomson & Sanders, 2020; Vivanco, 2020).

Theoretical Perspectives and Empirical Evidence on Public Compliance

Rational Choice, General Strain, and Compliance

Regarding public compliance with laws and regulations, several theoretical perspectives in criminology may offer some insights. The rational choice theory posits that social actors are calculative of risks and rewards, and they tend to make decisions that maximize rewards and minimize risks (Becker, 1968). Therefore, a rational assessment of COVID-19 infection risks would predict more defensive and avoidance behaviors against such risks, including greater degrees of compliance to pandemic mitigation regulations. However, the rational assessment of risks does not always predict compliance, as studies have shown that higher compliance costs can result in lower degrees of compliance (Donovan & Blake, 1992; Paternoster & Simpson, 1993). In contrast to rational choice theory, general strain theory (Agnew, 1992) informs a different interpretation of the potential effects of risk perceptions. According to the general strain theory (Agnew, 1992), strains (e.g., economic deprivation and other adverse experiences) experienced by individuals can result in negative emotions such as anger, anxiety, and fears, which mediate the effects of strains and increases the odds of offending. Therefore, perceptions of great risks from COVID-19 could be a source of strain that induces negative emotions, which can, in turn, lead to deviant behaviors including rule violations.

Current studies on public compliance to COVID-19 pandemic rules from multiple countries seem to have documented a linkage between perceived threat or fear of COVID-19 and rule compliance, as opposed to rule violation. Based on surveys of 26,508 citizens from eight Western democracies and Jørgensen et al. (2021) found that perceptions of threat from COVID-19 are a culturally uniform determinant of both avoidant and preventive forms of

protective behavior. A study in the UK (Harper et al., 2020), for example, showed that fear of the virus was the only predictor of positive behavior change (e.g., social distancing, improved hand hygiene). A study in Australia found that the perceived seriousness of COVID-19 risk predicted compliance to pandemic rules (McCarthy et al., 2021). In the US, a study documented that the perceived severity of the pandemic predicted more social distancing and disinfecting among adolescents (Oosterhoff et al., 2020). A Dutch study (Kuiper et al., 2020) and a US study (Van Rooij et al., 2020) found that the perceived threat of COVID-19 predicted better compliance behavior. Another recent US study (Burruss et al., 2021) also found a link between fear of COVID-19 and compliance with pandemic rules. The study showed that rational choice considerations, including the perceived severity of the disease, certainty about dying from it, and how much perceived control that one has over getting it predicted fear of COVID-19, which, in turn, predicted compliance with COVID-19 mitigation guidelines along with rational choice considerations. Regarding stress and anxiety, a U.S. study (Van Rooij et al., 2020) found no correlation between negative emotions and compliance. In sum, there seems to be some evidence suggesting a connection between fear of infection and compliance, but little evidence suggests other negative emotions, such as stress and anxiety, affect compliance.

Formal Social Control and Deterrence

Related to rational choice theory, deterrence theory posits that punishment certainty, severity, and celerity can deter non-compliance to laws, rules, and regulations (Apel, 2013; Bar-Gill & Harel, 2001; Casey & Scholz, 1991; Nagin, 2013). Formal social control, such as effective law enforcement and severe penalties following the violation of pandemic rules, should deter noncompliance. Although deterrence theory has a long history in criminology and received substantial empirical testing, meta-analyses of these studies seem to suggest generally weak and qualitatively mixed empirical support for the thesis. For example, Pratt and Cullen (2005) found that deterrence theory received weaker empirical support than other criminological theories; empirical support is especially weak in studies that employ more rigorous research (Pratt et al., 2006). The most significant deterrent effects seem to be found in minor crimes, administrative offenses, and infringements of informal social norms (Dölling et al., 2009). In terms of rules compliance specifically, Abed and Weistroffer’s (2016) meta-analysis of studies on employees’ compliance behavior with information security policies showed that punitive deterrence did not have a remarkable impact on employees’ compliance behavior. Another meta-analysis on compliance with information security policy (Trang & Brendel, 2019) found that

deterrence theory better predicts noncompliance in malicious contexts (such as serious criminal activities), cultures with a high degree of power distance, and cultures with high uncertainty avoidance. According to Trang and Brendel (2019), “power distance refers to the degree to which members of organizations or institutions accept the legitimacy of unequally distributed power (Hofstede, 1984, p. 1269)” and “uncertainty avoidance is defined as the degree to which members of organizations or institutions feel uncomfortable with uncertainty or ambiguity (Hofstede, 1984, p. 1269).” China fits the profile of a high power-distance society and a high uncertainty-avoidance society (Hofstede, 1984). Indeed, Jiang and colleagues (2013) revealed that the perceived severity of sanctions is significantly and positively related to citizens’ felt obligation to obey the law in Guangzhou, China.

The limited existing evidence from Western countries suggests a weak and sometimes counterproductive deterrence effect from formal social control on pandemic rules compliance. A study in the U.S. (Van Rooij et al., 2020) and a study in the Netherlands (Kuiper et al., 2020) revealed that perceptual deterrence (i.e., certainty and severity of punishment) was not associated with compliance. A third study in Australia (McCarthy et al., 2021) found that recent police-initiated contact *reduced* compliance to pandemic rules unless such contacts featured high procedural justice from the police. Another Australian study (Murphy et al., 2020) found that normative factors such as an internal sense of duty to obey general rules had a significantly greater influence on compliance than the perceived risks of sanction.

Social Learning and Peer Influence

Beyond rational choice and institutional deterrence, another important factor to consider in public compliance is peer influence. As a key component of social learning theory in criminology, differential association with delinquent peers is consistently a significant predictor of involvement in various types of crime and delinquency (Akers & Jensen, 2006; Kubrin, 2009; Pratt et al., 2010). This body of evidence is especially strong regarding substance misuse and minor forms of deviance (Warr, 2002). For instance, Gunter’s (2008) study found that peer involvement in Internet piracy predicts college students’ online pirating behaviors.

In the context of China, an authoritarian society with a collectivist culture, peer influence may play an even stronger role in pandemic rules compliance. Empirical studies in China have demonstrated that peer influence affects crime and delinquency (Bao et al., 2014; Pyrooz & Decker, 2013; Wang et al., 2020). Studies have documented a significant reduction effect of pro-social peer attachment on adolescent delinquent peer association (e.g., Bao et al., 2017). In addition, a recent Chinese study found that perceived neighbors’

willingness to cooperate with the police by reporting crime is positively associated with people’s own willingness to report the crime to the police (Wu et al., 2021). Given existing empirical support, it stands to reason that peer behaviors concerning pandemic rules compliance may shape an individual’s compliance behavior. However, no existing study has examined the role of peer influence in pandemic rules compliance.

The Current Study

Although there has been some preliminary literature on public compliance with pandemic rules in many Western countries, studies on such compliance in China remain scarce. Furthermore, the existing literature stays inconclusive regarding the role of formal social control in shaping citizen compliance. The very presence of the police in the community signals and represents formal social control. Although the Chinese police may not have played an ostensibly major role in the enforcement of pandemic rules (Jiang & Xie, 2020), their presence and involvement in the enforcement effort may significantly affect compliance, given China’s authoritarian style of domestic governance. The current study seeks to assess whether formal social control in police presence and performance influences public compliance with pandemic rules in China. Finally, the effects of peer behavior and negative emotions on public compliance are under-examined and may manifest themselves differently in the context of China. The current study aims at addressing these knowledge gaps in the literature by analyzing a sample of 600 Chinese citizens to explore whether negative emotions, peer compliance, and formal social control impact Chinese rule compliance during the peak month of the pandemic in China. Our findings reveal whether these effects manifest themselves any differently than in the Western context, given China’s authoritarian political configuration and its particular social and cultural characteristics.

Methodology

Research Project and Site

This study used survey data from China as part of a large international research project titled “Police Organizational Changes During the Global COVID-19 Pandemic.” A group of US- and UK-based scholars (Dr. Sanja Kutnjak Ivković from Michigan State University, Dr. Jon Maskály from the University of North Dakota, and Dr. Peter Neyroud from the University of Cambridge) initiated the project in the fall of 2020. Data collection is an ongoing effort in about a dozen countries worldwide. The project focuses on the nature and

extent of police organizational changes in response to the pandemic and the potential consequences of such agency changes, including citizen compliance. Several studies from this project have already been published (). The research team developed two English survey instruments, one for police officers and one for the public. The project was then approved by the lead researcher's institutional review board. The China project was carried out by a group of U.S. and Chinese scholars. A project researcher translated the English surveys into simplified Chinese, and a second team of researchers then translated the Chinese instrument back into English to ensure comparability of the two surveys. This study analyzed data collected by the research team utilizing the public survey instrument. The survey contains roughly 75 questions that tap into people's views of the police and police performance and their own experiences during the peak month of the pandemic.

The research site was a large city in western China. With a population of over 30 million, the city is administratively divided into 38 districts. On January 24, 2020, the city government activated its level-1 (the highest level) emergency response to the coronavirus, implementing lockdown measures. The city recorded roughly 500–600 confirmed COVID-19 cases in the middle weeks of February 2020. During the pandemic's peak months (i.e., January and February 2020), counter-virus measures were widely enforced, including ceasing any forms of assembly, mandating 14-day quarantine for people returning to the city, and setting up health checking points at transportation hubs (e.g., train and bus station, harbors, and airports). During the peak weeks of the pandemic, highly strict measures also were applied across all residential neighborhoods in the city. For example, only one person in each household was permitted to leave home for shopping basic essentials once every 3 days. Furthermore, entrance control posts, handled chiefly by private security personnel and members of NRCs, were established to check and block people and vehicles for unauthorized access to and departure from residential developments. Like in many Western countries, the city government also required people to work from home and shut down restaurants, theaters, libraries, museums, gyms, and other crowded places during the peak times of COVID-19.

Data Collection and Sample

Data collection was completed between March and July 2021 through the traditional paper-and-pencil surveys. Due to the pandemic, one-on-one, face-to-face survey interviews with the respondents was not feasible. Rather, data collection was carried out in classroom settings through two arrangements. First, we obtained permission from two non-degree-granting adult training centers located in two different municipal districts of the city. The trainees came

from various occupations, including government officials, administrators from both public and private sectors, and individuals from other backgrounds and industries. Center administrators informed the team members about their upcoming training classes, and the researcher visited the centers at scheduled times to explain the project and distribute the survey to those willing to participate in the study. A total of 457 surveys were distributed during roughly 15 visits to the centers, and 403 surveys were returned, resulting in an 88.2% response rate.

Second, permission was also secured from the 2020 MPA (Master of Public Administration) class instructors with a local university whose students all have full-time jobs and take courses during weekends. During three weekends, the researcher visited the class introducing the project and handing out the surveys to students willing to partake in the study. Like those respondents in the training centers, MPA students were told about their participation's voluntary and anonymous nature. A total of 216 surveys were distributed, and 197 were returned, representing a 91.2% response rate. The two data collection approaches yielded a total of 600 valid respondents. It is noteworthy that the profiles of the two student groups were very similar. They all had full-time jobs and the main difference was simply that one group received non-degree-granting training, and the other received degree-granting training (but only studying during weekends). We are thus confident that the sample allows us to generalize to the urban young professionals/public servants, arguably the critical citizens in China worthy of investigation. As shown in Table 1, the majority of the respondents were female (57%) between 30 and 49 years of age (56%) and had at least a bachelor's degree (63%). Thus, our respondents reflect the middle-class population in the city, which tends to be young and better-educated professionals.

Variables

The dependent variable, *Public Compliance*, in an additive scale of four survey items. Respondents were asked to indicate their level of agreement to engage in the following activities at the peak month of the pandemic: (1) face-to-face social activities with friends and family outside of the same household, (2) walking, jogging, biking, or other relaxing activities, (3) driving out for recreational activities such as exercise, and (4) wearing a face mask whenever entering a public indoors space. All these activities were prohibited (1–3) or mandated (4) in the research site during the peak month of COVID-19. The response categories ranged from 1, "strongly disagree," to 5, "strongly agree." Items 1–3 were reverse coded, so a higher value on the index represents a higher level of compliance with local pandemic mitigation rules and regulations. Exploratory factor analysis indicated that the items loaded on the

Table 1 Descriptive statistics of all variables ($N=600$)

Scales and items	Mean	SD	Range	α
Dependent variable				
Public compliance (1 = strongly agree; 5 = strongly disagree)	15.2	3.6	7–20	0.78
(1) Socialized with friends or relatives with whom I did not live	3.60	1.27	1–5	
(2) Went out for a walk, run, or cycle, or otherwise spent more than a few minutes somewhere to relax	3.49	1.28	1–5	
(3) Traveled for leisure (i.e., drove somewhere to exercise)	3.70	1.22	1–5	
(4) Regularly wore a mask when I entered an indoor public space (reverse coded)	4.41	0.77	1–5	
Independent variables				
Fear of COVID-19	2.67	0.83	1–4	–
Pandemic stress (1 = much less frequent; 5 = much more frequent)	15.17	2.80	4–20	0.82
(1) Worrying about one's health	3.85	0.90	1–5	
(2) Worrying about health of loved ones	4.00	0.89	1–5	
(3) Feeling stressed	3.73	0.82	1–5	
(4) Feeling anxious	3.60	0.84	1–5	
Peer influence (1 = strongly disagree; 5 = strongly agree)	0	1	1.14	0.90
(1) Most people in my community obey COVID-19 regulations	4.33	0.61	3–5	
(2) Most of my friends obey COVID-19 regulations	4.36	.61	2–5	
Police presence	2.47	1.06	1–5	–
Police competence	15.56	2.91	8–20	0.88
Control variables				
Male	0.43	0.50	0–1	–
Age	3.31	1.08	1–7	–
Ethnic minority	0.10	0.30	0–1	–
Married or cohabitating	0.71	0.45	0–1	–
Education	3.82	0.85	1–5	–
Urban resident	.43	0.50	0–1	–

same dimension, with an eigenvalue of 2.48 and 62% of variance explained. Cronbach's alpha registered 0.78, indicating good inter-item reliability among these items.

Five independent variables were constructed and included in the analysis. The variable *Fear of COVID-19* was measured by a single survey item: "how afraid are you of being infected and developing COVID-19?" The response categories ranged from 1 (not afraid at all) to 4 (very afraid). The variable *Pandemic Stress* was derived from four survey items: "compared to before the pandemic, how would you describe your concern for (1) your health (2) your loved ones' health (3) your level of stress, and (4) your level of anxiety?" The response categories ranged from 1, "significantly less than before the pandemic," to 5, "significantly more than before the pandemic." The variable *Peer Influence* was constructed based on two survey items: "regarding local regulations against the pandemic, (1) most in my community can abide by them, and (2) most of my friends can abide by them." The response categories varied from 1 (strongly disagree) to 5 (strongly agree). The two items were strongly correlated (correlation coefficient = 0.82).

Two formal social control variables relating to policing were also included. The variable *Police Presence* was measured by a single survey item: "during the pandemic, the police patrol our neighborhood as frequently as they did before the pandemic," with response categories reversed coded to range from 1 (strongly agree) to 5 (strongly disagree). The variable *Police Competence* was measured by a series of survey items asking the respondent their assessment (1 = strongly disagree and 5 = strongly agree) of police competence: (1) "police are successful in fighting community crimes," (2) "police respond quickly to crime reporting or calls for help," (3) "police are successful in crime prevention," and (4) "police are successful in rescuing/assisting victims." Exploratory factor analyses were performed on all the multi-item variables, and the results indicated that they all loaded onto one common factor. Additive scales were then created for each multi-item variable. Table 2 provides descriptive statistics of each item in these constructs and reliability test indicators (i.e., Cronbach's alpha) of additive scales used in the analysis.

As for control variables, we included several demographic and socioeconomic characteristics. Sex (0 = female;

Table 2 Percentage distributions of items of public compliance

During the peak month of the pandemic...	Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
I socialized with friends or relatives with whom I did not live	7.67%	18.00%	8.33%	38.67%	27.33%
I went out for a walk, run, or cycle, or otherwise spent more than a few minutes somewhere to relax	7.83%	20.17%	13.00%	33.00%	26.00%
I traveled for leisure (i.e., drove somewhere to exercise)	6.33%	15.33%	10.67%	37.67%	30.00%
I regularly wore a mask when I entered an indoor public space	54.67%	35.33%	7.33%	1.83%	0.83%

1 = male), age (ranging from 1 = 18–21 to 7 = 70 and above), ethnic minority status (0 = no; 1 = yes), relationship status (0 = single; 1 = married or cohabitating), location of residence (0 = small town and rural area; 1 = city), and level of education (1 = less than high school diploma; 2 = graduated high school; 3 = completed associated degree; 4 = completed bachelor’s degree; 5 = completed postgraduate degree) were included in the analysis. Table 1 provides the descriptive statistics of these variables.

Results

Table 2 summarizes the percentage distributions of the survey items used to construct the dependent variable, *Public Compliance*. The vast majority of Chinese citizens surveyed abided by public health mitigation rules during the peak month of the pandemic, although there was a small but robust proportion of the respondents who did not. For example, a quarter of the respondents (25.67%)

“strongly agreed” and “agreed” with socializing with friends and relatives with whom they did not live. Even more respondents (28%) expressed that they went out for a walk, run, or cycle, or otherwise spent more than a few minutes somewhere to relax. Slightly over 20% of the respondents (21.66%) stated that they traveled for leisure. Together, roughly a quarter of the respondents were non-compliance with lockdown policies during the peak month of the pandemic. When asking about the mask mandate, the respondents’ compliance rate is extremely high, with less than 3% of them “disagreeing” or “strongly disagreeing” with wearing a mask while in an indoor public place.

Table 3 reports the results from the multivariate regression analysis. As the distribution of the dependent variable approximates normal distribution, four Ordinary Least Square (OLS) hierarchical regression models were constructed and estimated to predict the level of public compliance. *F* tests indicated that all the models significantly predict the dependent variable, with Model 4 (the full model) explaining 14% of the variability in the level

Table 3 OLS regression models on citizen compliance with covid enforcement (*N* = 600)

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	Beta	SE	<i>B</i>	Beta	SE	<i>B</i>	Beta	SE	<i>B</i>	Beta	SE
Male	− 1.01**	− 0.14	.30	− 0.93**	− 0.13	.30	− 0.83**	− 0.11	.30	− 0.76**	− 0.11	0.29
Age	− 0.31*	− 0.0	.16	− 0.28	− 0.08	.16	− 0.30	− 0.09	.15	− 0.19	− 0.06	0.15
Ethnic minority	− 1.38**	− 0.12	.49	− 1.55**	− 0.13	.49	− 1.61**	− 0.14	.48	− 1.5**	− 0.13	0.47
Married or cohabitating	0.41	0.05	0.36	0.37	0.05	0.35	0.28	0.04	0.35	0.21	0.03	0.34
Education	0.29	0.07	0.19	0.34	0.09	0.19	0.42*	0.11	0.19	0.30	0.08	0.18
Urban resident	0.21	0.02	0.31	0.14	0.01	0.31	0.13	0.00	0.31	0.12	0.00	0.30
Fear of COVID				0.41*	0.10	0.18	0.07*	0.10	0.18	0.08**	0.11	0.17
Pandemic stress				0.09	0.07	0.05	0.42	0.05	0.05	0.49	0.06	0.05
Peer influence							0.56**	0.18	0.14	0.79**	0.25	0.14
Police presence										0.74**	0.22	0.13
Police competence										− 0.11*	− 0.09	0.05
Adjusted <i>R</i> ²	0.04			0.06			0.09			0.14		
<i>F</i> test	5.53**			5.49**			7.3**			10.14**		

p* < .05; *p* < .01 two-tailed tests

B unstandardized coefficient; *beta* standardized coefficient

of compliance, compared to only 4% in the baseline model (Model 1).

The results displayed in Model 1 (baseline model) suggest that male, older, and ethnic minority respondents were more likely than their counterparts to report a lower level of compliance. The adjusted R^2 of 0.04 indicates that 4% of the variability in the dependent variable was explained in Model 1. In Model 2, being male and an ethnic minority continued to be significant predictors of lower compliance, while the significant impact of age disappeared when the two emotional states variables were added into the analysis. Having a stronger fear of COVID-19 was shown to predict a higher level of compliance. Pandemic stress, however, did not predict public compliance. The adjusted R^2 of 0.06 indicates that 6% of the variability in the dependent variable was explained in Model 2, a modest improvement from Model 1.

Switching to Model 3, the three significant variables in Model 2 remained predictive of compliance. In addition, educational attainment, which is not a significant predictor in the previous models, became predictive of compliance when peer influence was included in Model 3. Better-educated people were more likely to comply with lockdown policies. Peer compliance is the strongest predictor among all significant predictors, with greater peer influence leading to higher compliance. The adjusted R^2 of 0.09 indicates that 9% of the variability in the dependent variable was explained in Model 3, a further improvement from Model 2.

Finally, in the full model (Model 4), the significant effect of gender and race persisted, but the impact of educational attainment reduced and became an insignificant predictor of compliance. When the two policing variables were added into the analysis, fear of COVID-19 and peer influence also remained significant predictors of compliance with pandemic rules. Police presence in the community is significantly positively related to public compliance, whereas police competence is negatively connected to compliance. Considering the effect size, peer influence was the strongest among all the significant predictors ($\text{Beta} = 0.25$), followed by police presence in the community (0.22) and racial minority (0.13). The adjusted R^2 of 0.14 indicates that the predictors together explain 14% of the variation in compliance, substantially improving the previous models. Variance Inflation Ratio (VIF) was well below the commonly accepted threshold of 4 (with a mean VIF of 1.19 in the full model), indicating no problem with multicollinearity.

Discussion

This study offered one of the first looks at Chinese citizens' willingness to comply with policies and measures fighting against the COVID-19 pandemic. Percentage distributions of compliance items indicate that Chinese people were highly

compliant with the government's various counter-virus measures, registering an agreement rate of roughly 60% for policies restricting socialization and traveling during the peak of the pandemic. Furthermore, although wearing a mask has encountered resistance in some U.S. jurisdictions, less than 3% of the Chinese citizens in our sample opposed mask-wearing policies. A recent study of 45 U.S. states conceptualized mask wearing as a cultural behavior linked to individual political orientations and collective interdependence (Kimmelmeier & Jami, 2021). Chinese citizens' high acceptance of facial coverings and COVID-restrictions is likely shaped by political and cultural contexts, which should be further investigated in future research.

In addition, this study explored the effects of three groups of potential explanations, namely, negative emotional states, peer influence, and policing, on public compliance with pandemic rules in China. Our regression analyses suggest that all three mechanisms influence Chinese citizens' level of compliance with counter-pandemic rules. Nevertheless, the strengths of their effects varied, with peer influence showing the strongest effect on compliance, followed by police presence and fear of contracting COVID-19.

Our findings are consistent with the results from previous studies, which demonstrated a positive association between fear of COVID-19 or perceived threat of COVID-19 and people's compliance and protective behaviors (Burruss et al., 2021; Harper et al., 2020; Kuiper et al., 2020; McCarthy et al., 2021; Oosterhoff et al., 2020; Van Rooij et al., 2020). Thus, even though fear represents a form of negative emotion that tends to pose risks to people's long-term wellbeing, our findings suggest that it has an effect of quickly and sufficiently motivating individuals to adopt protective behaviors and comply with public rules to minimize the risks of infection. For the time being, authorities worldwide should undoubtedly publicize the potential harms of COVID-19 as accurately, explicitly, and widely as possible since the battle against the pandemic is still ongoing. In the long run, however, building self-efficacy among the population may be a superior approach with fewer long-term psychological side effects, as researchers have found that self-efficacy exerts a similar positive effect on protective behavior, and the effects of fear are small among those who feel efficacious, suggesting a path to compliance without fear (Jørgensen et al., 2021).

Furthermore, our study found evidence of a significant and strong peer influence on citizen compliance with pandemic rules and a slightly less strong effect of law enforcement presence on compliance. With regard to peer influence, our finding does not come as a surprise as China is a society featuring a high degree of collectivism and government-steered uniformity. Past studies in China have documented a strong peer impact on producing (as in delinquent peer association) and reducing adolescent delinquency (as in bonding

with prosocial peers) (Bao et al., 2014, 2017; Pyrooz & Decker, 2013; Wang et al., 2020). To further investigate our findings, a comparison with the results from other countries is warranted. Future research into peer influence on pandemic rules compliance in countries with diverse cultural, legal, and political traditions is strongly encouraged.

The strong and significant effect of police presence in China stands in contrast with findings from other parts of the world, where potential sanctions from formal social control seem to have a weak or even nonexistent effect on compliance (Murphy et al., 2020; Van Rooij et al., 2020). To further unpack this finding, we should consider it with both the political configuration and the cultural characteristics of contemporary China. Chinese police had a troubling history with Chinese citizens and continue assuming the responsibility of mass surveillance even after its reform started in the 1980s (Wang & Minzner, 2015). Although some scholars have argued that the police only played an auxiliary role in pandemic rules enforcement (Jiang & Xie, 2020), their mere presence through the regular foot and motorized patrol may have a strong deterring effect on public rules violations, considering the gravity of the circumstance and people's concerns for a worst-case-scenario confrontation with law enforcement of the authoritarian state. These societal contexts set China apart from other democratic nations. Besides being the most important enforcers and protectors of the authoritarian state, Chinese police are deployed closer to local residents via its neighborhood-based field stations and have been essential service providers to the community ever under its mass line policing and more recent community policing strategies (Sun & Wu, 2010). Such organizational arrangements and policing strategies make the Chinese police one of the most influential forces in various aspects of community affairs, consequently supporting the linkage between police patrol and rule compliance.

A less expected finding of our study is the negative effect of perceived police competence on compliance. One may speculate that when people see police can effectively perform their key functions, including pandemic rules enforcement, they feel comfortable with, for example, going out to meet with friends or exercise even during the pandemic, resulting in higher levels of non-compliance. In this sense, police efficacy can mitigate people's willingness to take precautions for COVID-19, a phenomenon that governments may not want to see. Maintaining a delicate balance between police competence and public compliance during health emergencies deserves much more public debate on policy considerations and formulations.

Finally, we also found that such background characteristics as gender, education, and ethnicity matter shape people's willingness to comply. The significant effect of sex on public compliance is not surprising, as the criminological literature has consistently documented a much higher propensity for

males to engage in deviant, delinquent, and criminal behaviors than females (Cooper & Smith, 2011). Pandemic rule violation is not qualitatively different from other rule-breaking or even law-breaking behaviors. The significant effects of educational attainment and racial minority status reflect the continuing diversification of the Chinese population and divergences in public opinions, despite governmental efforts to depict otherwise. Just as in the U.S., where having a college degree constitutes one of the strongest predictors of opposing public opinions on various social policies and issues, China is also experiencing an increasingly pronounced schism in public opinions and behaviors along the education line. Studies in China have found that those with college degrees are more likely to support political liberalization (Chen & Lu, 2011; Pan & Xu, 2018) and exhibit more tolerance for same-sex behaviors (Lin & Wang, 2021). These differences are exacerbated by ever-intensifying nationalism and the mass labeling of much moderate, well-reasoned speech as "unpatriotic" on social media (Yang, 2021).

Against the backdrop of boiling nationalism, ethnic tensions are also on the rise in China. China is an ethnically diverse country, with 55 ethnic minorities residing within China alongside the majority Han Chinese. In particular, the Uighurs and Tibetans share very different cultural traditions than those of the Hans', and their populations are concentrated in the Western part of the country. Although past studies on trust in Chinese police (e.g., Wu et al., 2016) found ethnic minorities, including Uighurs and Tibetans, to be at least as trusting of the police as their Han counterparts, distrust and tensions between ethnic minorities and the Chinese state representing the Han majority are at its highest. International criticisms of the Chinese government's treatment of ethnic Uighurs in the Xinjiang region have sparked a nationalistic backlash by pro-government Han supporters, prompting them to take actions such as boycotting Western brands that suspended the use of Xinjiang cotton (Taplin, 2021). Given these developments, lower conformity from ethnic minorities concerning pandemic rule enforcement does not, therefore, go beyond expectation.

Concededly, there are several limitations to this study. First, this study is exploratory. It is not meant to fully operationalize all conceptual components of the three theoretical perspectives invoked, and thus should not be viewed as an attempt at formally testing these theories. Second, the data in this study only come from one city in China, and therefore, the generalizability of our findings is limited. Third, while the survey questions on police presence and peer influence referenced "the pandemic" period, it did not specifically reference the peak month of the pandemic. Although most Chinese citizens typically refer to early 2020 when they discuss the domestic outbreak of the pandemic in China, this is an inherent limitation of the current study and as such, findings from these variables should be interpreted with caution.

Finally, this study faces a common issue that many survey studies in China are confronted with—respondents may not be entirely forthcoming with their responses due to political authoritarianism. However, we believe that creating factored indices that reflect even minor differences in attitudes has enabled us to partially circumvent this problem and still provide meaningful analyses.

To sum, this study explored the effects of three sets of factors on Chinese citizens' compliance to pandemic mitigation rules: negative emotions during the pandemic, peer modeling of compliance, and the prevalence of formal social control in the forms of police presence and performance. Our regression analyses of 600 Chinese citizens suggest that all three mechanisms influence Chinese citizens' level of compliance with counter-pandemic rules, with peer influence showing the strongest effect on compliance, followed by police presence and fear of contracting COVID-19.

This research project was partially supported by an internal grant from the School of Public Administration at Chongqing University (Grant Number 2019GGXY04); no competing or conflicting interest to declare.

References

- Abed, J., & Weistroffer, H. R. (2016). Understanding deterrence theory in security compliance behavior: A quantitative meta-analysis approach. SAIS 2016 Proceedings. 28. Retrieved from <http://aisel.aisnet.org/sais2016/28>
- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30(1), 47–88.
- Akers, R. L., & Jensen, G. F. (2006). The empirical status of social learning theory of crime and deviance: The past, present, and future. In F. T. Cullen, J. P. Wright, & K. R. Blevins (Eds.), *Taking stock: The status of criminological theory* (pp. 37–76). New Brunswick, NJ: Transaction.
- Apel, R. (2013). Sanctions, perceptions, and crime: Implications for criminal deterrence. *Journal of Quantitative Criminology*, 29(1), 67–101.
- Bao, W. N., Haas, A., Chen, X., & Pi, Y. (2014). Repeated strains, social control, social learning, and delinquency: Testing an integrated model of general strain theory in China. *Youth & Society*, 46(3), 402–424.
- Bao, W. N., Hass, A., & Tao, L. (2017). Impact of Chinese parenting on adolescents' social bonding, affiliation with delinquent peers, and delinquent behavior. *Asian Journal of Criminology*, 12, 81–105.
- Bar-Gill, O., & Harel, A. (2001). Crime rates and expected sanctions: The economics of deterrence revisited. *The Journal of Legal Studies*, 30(2), 485–501.
- Becker, G. S. (1968). Crime and punishment, an economic approach. *Journal of Political Economy*, 76, 169–217.
- Brown, J. (2021). *Coronavirus: Enforcing restrictions*. House of Commons Library. Retrieved on April 10, 2021, from <https://commo.library.parliament.uk/research-briefings/cbp-9024/>.
- Burruss, G. W., Jaynes, C. M., Moule, R. K., Jr., & Fairchild, R. E. (2021). Modeling individual defiance of COVID-19 pandemic mitigation strategies: insights from the expanded Model of deterrence and protection motivation theory. *Criminal Justice and Behavior*. <https://doi.org/10.1177/00938548211010315>
- Casey, J. T., & Scholz, J. T. (1991). Beyond deterrence: behavioral decision theory and tax compliance. *Law and Society Review*, 25(4), 821–843.
- Chen, J., & Lu, C. (2011). Democratization and the middle class in China: The middle class's attitudes toward democracy. *Political Research Quarterly*, 64(3), 705–719.
- Connaughton, A. (2021). *Those on ideological right favor fewer COVID-19 restrictions in most advanced economies*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2021/07/30/those-on-ideological-right-favor-fewer-covid-19-restrictions-in-most-advanced-economies/>
- Cooper, A., & Smith, E. (2011). *Homicide trends in the United States, 1980–2008*. Bureau of Justice Statistics. Retrieved from <https://bjs.ojp.gov/content/pub/pdf/htus8008.pdf>
- Cortez, F., & Thomson, A. (2021). China, isolated from the world, is now the last major country still pursuing a 'Zero COVID' strategy. *Time Magazine*. Retrieved from <https://time.com/6104303/china-zero-covid/>
- Dai, M., Xia, Y., Han, R. (2021). The impact of lockdown on police service calls during the COVID-19 pandemic in China. *Policing: A Journal of Policy and Practice*, 15(3), 1867–1881. <https://doi.org/10.1093/policing/paab007>
- Dölling, D., Entorf, H., Hermann, D., & Rupp, T. (2009). Is deterrence effective? Results of a meta-analysis of punishment. *European Journal on Criminal Policy and Research*, 15(1), 201–224.
- Donovan, J. L., & Blake, D. R. (1992). Patient non-compliance: Deviance or reasoned decision-making? *Social Science & Medicine*, 34(5), 507–513.
- DW. (2020) Coronavirus: What are the lockdown measures across Europe? *DW News*. Retrieved on April 10, 2021, from <https://www.dw.com/en/coronavirus-what-are-the-lockdown-measures-across-europe/a-52905137>
- Gunter, W. D. (2008). Piracy on the high speeds: A test of social learning theory on digital piracy among college students. *International Journal of Criminal Justice Sciences*, 3(1), 54.
- Handley, E. (2020). Melbourne coronavirus stage 4 lockdown sees Victoria Police issue \$2.9 million in curfew fines. ABC News. Retrieved on April 10, 2021, from <https://www.abc.net.au/news/2020-09-03/melbourne-coronavirus-lockdown-curfew-fines-top-2.9-million/12618528>
- Harper, C. A., Satchell, L. P., Fido, D., & Latzman, R. D. (2020). Functional fear predicts public health compliance in the COVID-19 pandemic. *International Journal of Mental Health and Addiction*, 19(5), 1875–1888.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). Sage.
- Jiang, F., & Xie, C. (2020). Roles of Chinese police amidst the COVID-19 pandemic. *Policing A Journal of Policy and Practice*, 14, 1127–1137.
- Jiang, S., Wu, Y., & Wang, J. (2013). Citizens' obligation to obey the law: An empirical study of Guangzhou, China. *International Journal of Offender Therapy and Comparative Criminology*, 57(4), 495–518.
- Jørgensen, F., Bor, A., & Petersen, M. B. (2021). Compliance without fear: Individual-level protective behavior during the first wave of the COVID-19 pandemic. *British Journal of Health Psychology*, 26(2), 679–696.
- Kemmelmeier, M., & Jami, W. (2021). Mask wearing as cultural behavior: An investigation across 45 U.S. states during the COVID-19 pandemic. *Frontier in Psychology*. <https://doi.org/10.3389/fpsyg.2021.648692>

- Kubrin, C. E. (2009). Social disorganization theory: Then, now, and in the future. In *Handbook on crime and deviance* (pp. 225–236). Springer.
- Kuiper, M. E., de Bruijn, A. L., Reinders Folmer, C., Olthuis, E., Brownlee, M., Kooistra, E. B., Fine, A., & Van Rooij, B. (2020). The intelligent lockdown: Compliance with COVID-19 mitigation measures in the Netherlands. Amsterdam Law School Research Paper No. 2020-20, General Subserie Research Paper No. 202.
- Kupferschmidt, K., & Cohen, J. (2020). China's aggressive measures have slowed the coronavirus. They may not work in other countries. *Science.org*. Retrieved from <https://www.sciencemag.org/news/2020/03/china-s-aggressive-measures-have-slowed-coronavirus-they-may-not-work-other-countries>
- Lin, K., Wang, W. (2021). Changing public tolerance for same-sex sexual behaviors in China 2010–2017: A decomposition analysis. *Archives of Sexual Behavior*, 50(8), 3433–3445. <https://doi.org/10.1007/s10508-021-02080-y>
- Maskály, J., Ivković, S. K., & Neyroud, P. (2021a). A comparative study of police organizational changes during the COVID-19 pandemic: responding to public health crisis or something else? *Policing: A Journal of Policy and Practice*, 15(4), 2372–2388.
- Maskály, J., Ivkovich, S. K., & Neyroud, P. (2021b). A comparative study of the police officer views on policing during the COVID-19 pandemic in the United States. *Policing: an International Journal*, 45(1), 75–90.
- Maskály, J., Ivković, S. K., & Neyroud, P. (2021c). Policing the COVID-19 pandemic: Exploratory study of the types of organizational changes and police activities across the globe. *International Criminal Justice Review*, 31(3), 266–285.
- McCarthy, M., Murphy, K., Sargeant, E., & Williamson, H. (2021). Policing COVID-19 physical distancing measures: managing defiance and fostering compliance among individuals least likely to comply. *Policing and Society*, 31(5), 601–620.
- Murphy, K., Williamson, H., Sargeant, E., & McCarthy, M. (2020). Why people comply with COVID-19 social distancing restrictions: Self-interest or duty? *Australian & New Zealand Journal of Criminology*, 53, 477–496.
- Nagin, D. S. (2013). Deterrence in the twenty-first century. *Crime and Justice*, 42(1), 199–263.
- Oosterhoff, B., Palmer, C. A., Wilson, J., & Shook, N. (2020). Adolescents' motivations to engage in social distancing during the COVID-19 pandemic: Associations with mental and social health. *Journal of Adolescent Health*, 67(2), 179–185.
- Pan, J., & Xu, Y. (2018). China's ideological spectrum. *The Journal of Politics*, 80(1), 254–273.
- Paternoster, R., & Simpson, S. (1993). A rational choice theory of corporate crime. In *Routine activity and rational choice* (pp. 37–58). Routledge.
- Pratt, T. C., & Cullen, F. T. (2005). Assessing macro-level predictors and theories of crime: A meta-analysis. *Crime and Justice*, 32, 373–450.
- Pratt, T. C., Cullen, F. T., Blevins, K. R., Daigle, L. E., & Madensen, T. D. (2006). The empirical status of deterrence theory: A meta-analysis. In F. T. Cullen, J. P. Wright, & K. R. Blevins (Eds.), *Taking stock: The status of criminological theory* (pp. 367–395). Transaction Publishers.
- Pratt, T. C., Cullen, F. T., Sellers, C. S., Thomas Winfree Jr., L., Madensen, T. D., Daigle, L. E., Fearn, N. E., & Gau, J. M. (2010). The empirical status of social learning theory: A meta-analysis. *Justice Quarterly*, 27(6), 765–802.
- Pyrooz, D. C., & Decker, S. H. (2013). Delinquent behavior, violence, and gang involvement in China. *Journal of Quantitative Criminology*, 29(2), 251–272.
- Qin, A., & Wang, V. (2020). Wuhan, center of coronavirus outbreak, is being cut off by Chinese authorities. *The New York Times*. January 22, 2020. Retrieved on April 10, 2021, from https://www.nytimes.com/2020/01/22/world/asia/china-coronavirus-travel.html?_ga=2.10029877.1483797834.1617038836-1193200897.1617038836
- Sun, I. Y., & Wu, Y. (2010). Chinese policing in a time of transition, 1978–2008. *Journal of Contemporary Criminal Justice*, 26(1), 20–35.
- Taplin, N. (2021). Hyper-nationalism on Xinjiang poses risks for Chinese brands, too. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/hyper-nationalism-on-xinjiang-poses-risks-for-chinese-brands-too-11617890997>
- Thomson, E., & Sanders, P. (2020). Chile charts new path with rolling lockdowns, immunity cards. *Bloomberg News*. Retrieved on April 10, 2021, from <https://www.bloomberg.com/news/articles/2020-04-22/with-immunity-cards-and-rolling-lockdowns-chile-forges-own-path>
- Trang, S., & Brendel, B. (2019). A meta-analysis of deterrence theory in information security policy compliance research. *Information Systems Frontiers*, 21(6), 1265–1284.
- Van Rooij, B., de Bruijn, A. L., Reinders Folmer, C., Kooistra, E. B., Kuiper, M. E., Brownlee, M., Olthuis, E., & Fine, A. (2020). Compliance with COVID-19 mitigation measures in the United States. Amsterdam Law School Research Paper No. 2020-21.
- Vivanco, J. M. (2020). Argentina's violent enforcement of COVID-19 rules. *Human Rights Watch*. Retrieved on April 10, 2021, from <https://www.hrw.org/news/2020/11/20/argentinias-violent-enforcement-COVID-19-rules#>
- Wang, X., Zhang, J., Wang, X., & Liu, J. (2020). Intervening paths from strain to delinquency among high school and vocational school students in China. *International Journal of Offender Therapy and Comparative Criminology*, 64(1), 22–37.
- Wang, Y., & Minzner, C. (2015). The rise of the Chinese security state. *The China Quarterly*, 222, 339–359.
- Warr, M. (2002). *Companions in crime: The social aspects of criminal conduct*. Cambridge University Press.
- World Health Organization (WHO). (2021). WHO coronavirus (COVID-19) dashboard. <https://covid19.who.int/>
- Wu, Y., Su, I. Y., & Hu, R. (2021). Chinese reluctance to report crime: Political efficacy, group care and hukou. *Criminology & Criminal Justice*. <https://doi.org/10.1177/17488958211017370>
- Wu, Y., Sun, I. Y., Hu, R. (2016). Public trust in the Chinese police: The impact of ethnicity, class, and Hukou. *Australian & New Zealand Journal of Criminology*, 49(2), 179–197. <https://doi.org/10.1177/0004865814554309>
- Xinhua News (2020, February 26). Chinese police handle 22,000 epidemic-related criminals cases. Retrieved on May 30, 2021, from http://www.xinhuanet.com/english/2020-02/26/c_138820185.htm
- Yang, Y. (2021). What's fueling China's new online nationalists? *Financial Times*. Retrieved from <https://www.ft.com/content/f5ad70a8-3a77-41a9-b470-e50a7abc6119>