Health, Concerns, and Finance: News Framing of Wearing Masks in China From 2001 to 2020

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Since the COVID-19 outbreaks, masks have become one of the most controversial topics throughout the world. However, the pro-mask atmosphere seems to be formed smoothly in China, at least in the beginning and peak of epidemic. To understand the social construction of masks in China, this study examines the media framing of masks from 2001 to 2020 in two important newspapers, the People's Daily and the Southern Metropolis Daily. We found that pro-mask discourse portrayed wearing masks first as an emergent and undesired health strategy; later, as an inevitable measure against constant crises; and lastly, part of the new normality. The legalization of wearing masks lies in the severity of a certain health crisis, the effectiveness that masks can protect citizens from such crisis, a comparatively low cost that to exchange for normal lives under a crisis, and the fact that it could overall benefit China's national image and interests. Moreover, masks have been constructed as a financially promising business and a trendy fashion, which further justifies their existence. The counterdiscourses against masks appeared when the conditions that justified masks were questioned.

Keywords: masks, media framing, Chinese media, COVID-19

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Since the COVID-19 outbreaks, masks have become one of the most controversial topics throughout the world. Before then, scientists examined masks and their effect in the field of medical science, analyzing to what extent masks, as a nonpharmaceutical measure, can reduce the transmission of illnesses during epidemics (Puro, Magnavita, & Ippolito, 2004; Zhang et al., 2013). Meanwhile, social scientists have focused on the social, cultural, and political meanings of masks as accessories, leaving the evaluation of medical effects to scientists (e.g., Baehr, 2019; Spooner, 2012). Such boundaries between medical science and social science have been blurred since 2019. Scientists have observed that wearing or abstaining from masks has been heavily politicized in different societies; therefore, they have to consider the social meanings of masks when examining their health effects (Haischer et al., 2020; Samannan, Holt, Calderon-Candelario, Mirsaeidi, & Campos, 2021). In other words, the scientific evidence currently cannot stop the debate on wearing masks in some societies, because such debates are also about whether people have faith in the scientific evidence.

In China, the pro-mask atmosphere seems to be formed smoothly, at least in the beginning and peak of epidemic (Tan, Wang, Luo, & Hu, 2021). The experts and the government institutes suggested that the public should wear masks from the very beginning of the COVID-19 outbreak (Wang & Mao, 2021). Surveys demonstrated the public's willingness to follow that suggestion; compliance was especially evident in those persons who were younger, educated, and living in the city areas (Zhang et al., 2021). Comparative studies also confirmed that the Chinese people's overall willingness to wear masks was higher than compliance rates in other countries (e.g., Poland; Wang & Mao, 2021).

Why did Chinese people accept masks against COVID-19? Moreover, was such acceptance without conditions? It would be convenient to regard those people as being “docile,” following the government’s policies no matter what they are. Some researchers also attributed the differences in wearing masks between China and “the West” to the culture of collectivism. The same Chinese people, however, voice complaints and disapprovals of other, nonpharmaceutical measures, which suggests another story. Indeed, the voices that challenged the health measures (e.g., quarantines and social distancing) were constantly found online, thereby demonstrating that the Chinese people could critically evaluate those measures that the authority implemented. This made their acceptance of wearing masks special and interesting.

To solve the "puzzle" of masks in China, this study examines not only the social discourse about masks during the COVID-19 outbreak but also the history of mask use. We would like to know the following: (a) How did Chinese media construct the issue of masks? (b) When did the media coverage of masks increase, and why? (c) How was wearing masks being legitimized in the media? (d) Did such legalization of masks occur before or after COVID-19? (e) Are there any counterdiscourses competing with the pro-mask argument? To get the answers, we borrow framing analysis, a theory and methodology from media studies, to examine the social discourse of wearing masks.

**Framing of Masks: Consequences, Responsibilities, Morality, and Beyond**

One question we explore is whether we can use media framing analysis to understand the social discourse of masks and whether the study of social discourses of masks, in return, enriches the traditional understanding of media frames. This section answers these two questions by building a bridge, theoretically and methodologically, between the framing analysis and the social discourse of masks.
According to Entman (1993), journalists use various frames (i.e., angles or focuses) to define problems, diagnose causes, provide remedies, and make moral judgments. In such a way, the media could construct a social problem at will and then shape the public’s opinions (Entman, 2007). Researchers have developed different methods of doing framing analysis. In this study, we apply Semetko and Valkenburg’s (2000) research framework to examine the frames that journalists used to frame masks in China. They found that the media experts used different angles (i.e., frames) to highlight some specific elements of a social issue. Those angles included economic consequences (i.e., illustrating the economic impact of certain issues), conflict (i.e., portraying the conflicts between different interest groups), attribution of responsibility (i.e., discussing who shall take responsibility for fixing a problem), human interest (i.e., personalizing a certain issue), and morality (i.e., moral judgments of institutions or individuals; Semetko & Valkenburg, 2000).

Previous studies have frequently used these frames in debatable social topics related to uncertainties (e.g., Kuttschreuter, Gutteling, & De Hond, 2011; Shaw, Whitehead, & Giles, 2010). Therefore, we assume that there is a theoretical and methodological fit between Semetko and Valkenburg’s (2000) frames and the media coverage of wearing masks. Indeed, previous studies have indicated that the consequences of (not) wearing masks were the major concern of the public (Howard et al., 2020), and we can apply the consequences frame to examine the attitudes of Chinese media toward masks in different stages.

Meanwhile, we can analyze the pro- and anti-mask debate by focusing on those news articles that used the conflicts frame to see how this discourse and counterdiscourses competed with each other in Chinese media across time. With regard to the responsibility, morality, and human impact frames, previous studies have found that people’s senses of responsibility and morality were crucial factors in their mask-wearing behaviors (Arkoful, Lugu, & Shuliang, 2021; Si, Shen, Liu, & Wu, 2021), and human emotions also played important roles regarding wearing masks. Apart from the preceding frames, we will also examine whether there are other frames used by Chinese media when reporting on the issue of wearing masks. Based on the aforementioned assumptions, we raise the following questions:

**RQ1:** Which frames have been frequently used by the Chinese media when reporting on masks over the last 20 years?

**RQ2:** How did the Chinese media portray the consequences of wearing masks over time?

**RQ3:** How did the Chinese media attribute responsibility, make moral judgments, and portray controversies regarding wearing masks over time?

**RQ4:** Which information sources were most influential regarding the issue of wearing masks?

We are also concerned about who dominated the social discourse of masks and whether that domination changed over time. Such power dynamics behind the news framing could be examined by analyzing the sources used in the relevant news reports. We therefore add another research question:
RQ8: Who were sources for the news reports of masks? Did the dominant sources change over time?

Method

Data

This study used a data set of two popular newspapers to analyze the Chinese news coverage of wearing masks. In China, the newspapers could be categorized into party newspapers and metropolitan newspapers. The former function as the mouthpiece of the policy makers, whereas the latter are more liberal and market-oriented. Taking into consideration the possible differences between these two kinds of newspapers in framing the issue of masks, we have sampled both types for our study. For the party newspapers, we selected People’s Daily, the most dominant party newspaper in China. For the metropolitan newspaper, we selected Southern Metropolis Daily, which is well-known for its liberal content and critical investigative reporting on social issues (Wang, Sparks, & Huang, 2018).

We used “masks” or “wearing masks” as the keywords to search the relevant news articles in the People’s Daily and Southern Metropolis Daily from January 2001 to December 2020, covering 20 years of news reporting of masks. We excluded irrelevant articles, making sure that the articles that we sampled were mainly about masks or wearing masks as an important issue. This yielded 223 articles (54.8%) for People’s Daily and 184 articles (45.2%) for Southern Metropolis Daily. In total, 407 articles were examined, including 370 news (90.9%) and 37 opinions (9.1%).

Coding Procedure and Pilot Study

We trained two coders to code the sampled articles. First, we randomly selected 15% of the sampled articles for a pilot study and examined whether there were new frames used by the two newspapers. We found that all five frames existed in the sampled articles.

Apart from that, we also identified a new frame used by the newspapers, which we named the “entertainment and fashion” frame. When using this frame, the journalists portrayed masks as a kind of fashion, linking them with celebrities, youth trends, and entertainment. The articles under this frame could not be categorized under any of the five main frames in the literature, so we listed them as the sixth frame. We tested the reliability between the two trained coders using Krippendorf’s alpha, and the results were as follows: consequences frame .82, responsibility frame. 88, morality frame .83, conflict frame .84, entertainment and fashion frame 1.00, and human impact frame .82.

Findings

To answer our first research question, that is, which frames were used most frequently in the report on masks, we calculated the percentage of articles that used each frame. We found that responsibility frame (n = 174, 42.8%) was used the most often, followed by morality frame (n = 127, 31.2%), consequences frame (n = 60, 14.7%), human interest frame (n = 29, 7.1%), conflict frame (n = 12, 2.9%), and entertainment and fashion frame (n = 5, 1.2%).
Table 1. Operationalization of Frames.

<table>
<thead>
<tr>
<th>Frames</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consequences</td>
<td>Consequences frame refers to those articles that focused on the impact of wearing masks on health, economics, psychology, and international relations.</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Responsibility frame refers to those articles that focused on persuading institutions or individuals to take responsibility to wear masks.</td>
</tr>
<tr>
<td>Morality</td>
<td>Morality frame refers to those articles that made moral judgment regarding the issue of wearing masks.</td>
</tr>
<tr>
<td>Conflict</td>
<td>Conflict frame refers to those articles that portrayed the conflicts between groups or individuals regarding the issue of wearing masks.</td>
</tr>
<tr>
<td>Human Interests</td>
<td>Human interest frame refers to those articles that portrayed the issue of masks from an emotional angle.</td>
</tr>
<tr>
<td>Entertainment and Fashion</td>
<td>Entertainment and fashion frame refers to those articles that associated masks with fashion and trendiness.</td>
</tr>
</tbody>
</table>

We found that the two newspapers seldom reported masks from 2001 to early 2003, and it was until the burst of SARS that the Chinese media set masks as an important social agenda. After SARS, masks were again barely mentioned until 2009, when H1N1 started to threaten Chinese society, from when masks attracted the attention of Chinese media again. Media reported the issue of masks constantly yet not so intensively during this period. After the outbreak of COVID-19, the two newspapers reported the issue of masks in a very intensive way. To understand the similarities and differences in the social discourses of masks over time, we divided the trajectory of Chinese press reports on masks into three phases: 2003–2008 (which we named SARS and post-SARS period); 2009–2019 (which we named H1N1 and post-H1N1 period); and January 1, 2020–December 31, 2020 (which we named the COVID-19 period). The three phases were distinguished because of their very different character, as outlined in the following paragraphs.

Figure 1 shows the number of articles on mask was generally constant from 2003 to 2019 but peaked suddenly in 2020.
Figure 1. Number of news reports on face masks in the two mainland Chinese newspapers, January 1, 2003–December 31, 2020.

We drew a line graph based on the percentage of each frame in each period to examine how the frames evolved in the Chinese media’s report of masks (see Figure 2). To examine whether the six frames have significantly changed across the three phases, we also ran a series of Pearson’s chi-square tests (see Table 1).

Figure 2. The percentage of each frame in three phases.
Table 2. Number and Percentage of Articles Featuring Specific Frames in Three Phases.

<table>
<thead>
<tr>
<th>Frame</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Pearson’s χ²</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 73)</td>
<td>(n = 90)</td>
<td>(n = 244)</td>
<td></td>
<td>(n = 407)</td>
</tr>
<tr>
<td>Responsibility</td>
<td>33 (45.2)</td>
<td>51 (56.7)</td>
<td>90 (36.9)</td>
<td>10.73**</td>
<td>174 (42.8)</td>
</tr>
<tr>
<td>Consequences</td>
<td>4 (5.5)</td>
<td>26 (28.9)</td>
<td>30 (12.3)</td>
<td>20.48***</td>
<td>60 (14.7)</td>
</tr>
<tr>
<td>Conflict</td>
<td>1 (1.4)</td>
<td>4 (4.4)</td>
<td>7 (2.9)</td>
<td>1.35</td>
<td>12 (2.9)</td>
</tr>
<tr>
<td>Morality</td>
<td>34 (46.6)</td>
<td>2 (2.2)</td>
<td>91 (37.3)</td>
<td>47.47***</td>
<td>127 (31.2)</td>
</tr>
<tr>
<td>Entertainment and fashion</td>
<td>1 (1.4)</td>
<td>4 (4.4)</td>
<td>0 (0)</td>
<td>10.72**</td>
<td>5 (1.2)</td>
</tr>
<tr>
<td>Human interest</td>
<td>0 (0)</td>
<td>3 (3.3)</td>
<td>26 (10.7)</td>
<td>12.15**</td>
<td>29 (7.1)</td>
</tr>
</tbody>
</table>

Note. Values in parentheses represent percentage of articles in that time period with the frame. Pearson’s χ² across phases. *p < .05. **p < .01. ***p < .001.

Of the six frames identified in the study, five frames showed significant differences across the three phases. Among them, three frames were used most in phase 2. Specifically, responsibility frame peaked in phase 2 (56.7%), whereas it was used in 45.2% of the articles in phase 1 and 51.7% of the articles in phase 3, Pearson’s χ² = 10.73, p < .01; consequences frame was used most in phase 2 (28.9%), whereas it was used by 12.3% of the articles in phase 3 and only 5.5% of the articles used it in phase 1, Pearson’s χ² = 20.48, p < .001; entertainment and fashion frame was least used, with 4.4% in phase 2, 1.4% in phase 1, and 0% in phase 3, Pearson’s χ² = 8.32, p < .05. Human interest frame increased from 0% in phase 1 to 3.3% in phase 2, and 89.7% in phase 3, Pearson’s χ² = 12.15, p < .01. Morality frame fluctuated during the three phases, with 46.6% in phase 1, 2.2% in phase 2 and 37.3% in phase 3, Pearson’s χ² = 47.47, p < .001.

Conflict frame was seldom used in all three phases and did not differ significantly across three phases, Pearson’s χ² = 1.35, p > .05.

The Themes Within the Consequences Frame

The data show that the Chinese media was concerned not only about the consequences of wearing masks from the health aspect but also about how wearing masks will affect the economy, psychology, and international relations. We then named and coded four subframes under the consequences frame, which included “health impact,” “economic impact,” “psychology impact,” and “international relations impact.” Table 2 showed that articles mostly mentioned positive impact in all four aspects, and negative impact and neutral impact were seldom mentioned. Of the four positive impacts, positive health impact was mentioned most often (37.1%), followed by positive impact on international relations (25.8%), positive economic impact (7.1%), and positive psychology impact (5.7%). The number of articles mentioned the positive impact in the four aspects fluctuated in the three phases, with peak in phase 2 for positive health impact, positive economic impact, and positive psychology impact, and peak in phase 3 for positive impact on international relations.
Table 3. The Frequency of Consequences Themes.

<table>
<thead>
<tr>
<th>Themes of consequences frame</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive health impact</td>
<td>14 (19.2)</td>
<td>51 (56.7)</td>
<td>86 (35.2)</td>
<td>151 (37.1)</td>
</tr>
<tr>
<td>Negative health impact</td>
<td>2 (2.7)</td>
<td>2 (2.2)</td>
<td>3 (1.2)</td>
<td>7 (1.7)</td>
</tr>
<tr>
<td>Neutral health impact</td>
<td>0 (0)</td>
<td>1 (1.1)</td>
<td>0 (0)</td>
<td>1 (0.2)</td>
</tr>
<tr>
<td>Positive economic impact</td>
<td>1 (1.4)</td>
<td>19 (21.1)</td>
<td>9 (3.7)</td>
<td>29 (7.1)</td>
</tr>
<tr>
<td>Negative economic impact</td>
<td>2 (2.7)</td>
<td>0 (0)</td>
<td>9 (3.7)</td>
<td>11 (2.7)</td>
</tr>
<tr>
<td>Neutral economic impact</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (1.4)</td>
<td>1 (0.2)</td>
</tr>
<tr>
<td>Positive psychology impact</td>
<td>1 (1.4)</td>
<td>5 (5.6)</td>
<td>17 (7)</td>
<td>23 (5.7)</td>
</tr>
<tr>
<td>Negative psychology impact</td>
<td>0 (0)</td>
<td>6 (6.7)</td>
<td>5 (2)</td>
<td>11 (2.7)</td>
</tr>
<tr>
<td>Neutral psychology impact</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Positive impact on international relations</td>
<td>7 (9.6)</td>
<td>1 (1.1)</td>
<td>97 (39.8)</td>
<td>105 (25.8)</td>
</tr>
<tr>
<td>Negative impact on international relations</td>
<td>1 (1.4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (0.2)</td>
</tr>
<tr>
<td>Neutral impact on international relations</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (0.8)</td>
<td>2 (0.5)</td>
</tr>
</tbody>
</table>

Note. Values inside the parenthesis represent percentage of n.

Tone

As can be seen in Table 3, in terms of tones, 91.9% of the two newspapers’ articles used a positive tone, 5.4% of the articles used a neutral tone, and only 2.7% of the articles used a negative tone. *People’s Daily* used a significantly more positive tone (56.7%) than *Southern Metropolis Daily* (43.3%), \( \chi^2 = 6.68, p < .01 \). *Southern Metropolis Daily* used significantly more neutral tone (81.8%) than *People’s Daily* (18.2%), \( \chi^2 = 12.58, p < .001 \). There were no statistically differences between the two newspapers in the use of negative tone.

Table 3. Number and Percentage of Articles Featuring Specific Tones in the Two Newspapers.

<table>
<thead>
<tr>
<th>Tone</th>
<th><em>People’s Daily</em></th>
<th><em>Southern Metropolis Daily</em></th>
<th>Chi-square</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>212 (56.7)</td>
<td>162 (43.3)</td>
<td>6.68**</td>
<td>374 (91.9)</td>
</tr>
<tr>
<td>Negative</td>
<td>7 (63.6)</td>
<td>4 (36.4)</td>
<td>0.36</td>
<td>11 (2.7)</td>
</tr>
<tr>
<td>Neutral</td>
<td>4 (18.2)</td>
<td>18 (81.8)</td>
<td>12.58***</td>
<td>22 (5.4)</td>
</tr>
</tbody>
</table>

Note. Values inside the parenthesis represent percentage of n. **p < .01. ***p < .001.

Table 4 shows that the percentage of articles using a positive tone for the two newspapers increased significantly from phase 1 (16.3%) to phase 3 (63.9%), Pearson’s \( \chi^2 = 30.12, p < .001 \), whereas the percentage of articles using a neutral tone decreased significantly from phase 1 (40.9%) to phase 3 (18.2%), Pearson’s \( \chi^2 = 17.33, p < .001 \). The percentage of articles using a negative tone fluctuated in the three phases, with its peak in phase 2 (63.6%) and the lowest percentage in phase 3 (9.1%), Pearson’s \( \chi^2 = 14.24, p < .001 \).
Table 4. Number and Percentage of Articles Featuring Specific Tones in Three Phases.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Pearson’s $\chi^2$</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>16.30%</td>
<td>19.80%</td>
<td>63.90%</td>
<td>30.12***</td>
<td>374 (91.9)</td>
</tr>
<tr>
<td>Negative</td>
<td>27.30%</td>
<td>63.60%</td>
<td>9.10%</td>
<td>14.24***</td>
<td>11 (2.7)</td>
</tr>
<tr>
<td>Neutral</td>
<td>40.9%</td>
<td>40.9%</td>
<td>18.2%</td>
<td>17.33***</td>
<td>22 (5.4)</td>
</tr>
</tbody>
</table>

*Note.* Values inside the parenthesis represent percentage of $n$. **$p < .01$. ***$p < .001$. 

The Themes Within the Responsibility Frame

To explore whom the Chinese newspapers attributed responsibilities to when talking about the issue of wearing masks and whether this changed over time, we compared the themes within the responsibility frame. Table 5 shows that multiple parties’ responsibility was mentioned most ($n = 101$, 24.8%), followed by individual responsibility ($n = 97$, 23.8%), and government’s responsibility ($n = 40$, 9.8%). Government’s responsibility decreased significant from phase 1 (17.8%) to phase 3 (5.3%), Pearson’s $\chi^2 = 14.15$, $p < .001$. Individual responsibility fluctuated with a peak in phase 2 (41.1%), Pearson’s $\chi^2 = 25.57$, $p < .001$. Similarly, multiple parties’ responsibility fluctuated as well with a peak in phase 3 (29.9%), Pearson’s $\chi^2 = 9.31$, $p < .01$. 

Table 5. The Frequency of Responsibility Themes.

<table>
<thead>
<tr>
<th>Themes of causal responsibility frame</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Pearson’s $\chi^2$</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Government’s responsibility</td>
<td>13 (17.8)</td>
<td>14 (15.6)</td>
<td>13 (5.3)</td>
<td>14.15***</td>
<td>40 (9.8)</td>
</tr>
<tr>
<td>5.2 Individual’s responsibility</td>
<td>22 (30.1)</td>
<td>37 (41.1)</td>
<td>38 (15.6)</td>
<td>25.57***</td>
<td>97 (23.8)</td>
</tr>
<tr>
<td>5.3 Multiple parties’ responsibility</td>
<td>15 (20.5)</td>
<td>13 (14.4)</td>
<td>73 (29.9)</td>
<td>9.31**</td>
<td>101 (24.8)</td>
</tr>
</tbody>
</table>

*Note.* Values inside the parenthesis represent percentage of $n$. **$p < .01$. ***$p < .001$. 

The Themes Within the Conflict Frame

Table 6 showed that the most frequently mentioned conflict was conflicts between individuals (3.4%), followed by conflict between government and individuals (3.2%), and conflicts between government and experts (0.5%). The themes in the conflict frame generally increased from phase 1 to phase 3; however, the differences were not statistically significant.

Table 6. The Frequency of Conflict Themes.

<table>
<thead>
<tr>
<th>Themes of conflict frame</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Chi-square</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1. Conflicts between individuals</td>
<td>1 (1.4)</td>
<td>4 (4.4)</td>
<td>9 (3.7)</td>
<td>1.26</td>
<td>14 (3.4)</td>
</tr>
<tr>
<td>6.2. Conflicts between government and individuals</td>
<td>3 (4.1)</td>
<td>5 (5.6)</td>
<td>5 (2)</td>
<td>2.86</td>
<td>13 (3.2)</td>
</tr>
<tr>
<td>6.3. Conflicts between government and experts</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (0.8)</td>
<td>1.34</td>
<td>2 (0.5)</td>
</tr>
</tbody>
</table>

*Note.* Values inside the parenthesis represent percentage of $n$. 

The Themes Within the Morality Frame

Table 7 shows that of the themes in the morality frame, the moral evaluation of the donation of masks was mentioned most (28.3%), followed by moral evaluation of those who (do not) wear a mask (1.0%).

<table>
<thead>
<tr>
<th>Themes of morality frame</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Chi-square</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1. Moral evaluation of those who (do not) wear a mask</td>
<td>1 (1.4)</td>
<td>0 (0)</td>
<td>3 (1.2)</td>
<td>1.16</td>
<td>4 (1.0)</td>
</tr>
<tr>
<td>7.2. Moral evaluation of the donation of masks</td>
<td>19 (26)</td>
<td>1 (1.1)</td>
<td>95 (38.9)</td>
<td>26.62***</td>
<td>115 (28.3)</td>
</tr>
</tbody>
</table>

Note. Values inside the parenthesis represent percentage of n.

Sources and Tone

Table 8 shows 91.9% of the articles' overall tone on masks were positive, only 2.7% of the articles were negative, and 5.4% of the articles were neutral. The Chinese government/government officials were cited most often (28.7%), followed by Chinese citizens (27%), Chinese experts/professional organizations (17.9%), foreign citizens (5.9%), foreign government/government officials (5.7%), Chinese corporations (5.2%), foreign experts (3.7%), and foreign corporations (2.1%). Most sources were positive on masks.

<table>
<thead>
<tr>
<th>Types of sources</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese experts/professional organizations</td>
<td>68 (16.7)</td>
<td>5 (1.2)</td>
<td>0 (0)</td>
<td>73 (17.9)</td>
</tr>
<tr>
<td>Foreign experts</td>
<td>14 (3.4)</td>
<td>1 (0.2)</td>
<td>0 (0)</td>
<td>15 (3.7)</td>
</tr>
<tr>
<td>Chinese government/government officials</td>
<td>113 (27.8)</td>
<td>2 (0.5)</td>
<td>2 (0.5)</td>
<td>117 (28.7)</td>
</tr>
<tr>
<td>Foreign government/government officials</td>
<td>20 (4.9)</td>
<td>3 (0.7)</td>
<td>0 (0)</td>
<td>23 (5.7)</td>
</tr>
<tr>
<td>Chinese citizens</td>
<td>101 (24.8)</td>
<td>5 (1.2)</td>
<td>4 (1.0)</td>
<td>110 (27)</td>
</tr>
<tr>
<td>Foreign citizens</td>
<td>21 (5.2)</td>
<td>2 (0.5)</td>
<td>1 (0.2)</td>
<td>24 (5.9)</td>
</tr>
<tr>
<td>Chinese corporations</td>
<td>21 (5.2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>21 (5.2)</td>
</tr>
<tr>
<td>Foreign corporations</td>
<td>5 (1.2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>5 (2.1)</td>
</tr>
<tr>
<td>Articles’ overall tone on masks</td>
<td>374 (91.9)</td>
<td>11 (2.7)</td>
<td>22 (5.4)</td>
<td>407 (100)</td>
</tr>
</tbody>
</table>

Note. Values inside the parenthesis represent percentage of n.

Discussion

In China, the news reporting of masks was triggered by different public health crises: the SARS crisis in 2003, air pollution issues worsened since 2007 and 2008, the H1N1 crisis in 2009, and the most recent COVID-19 pandemic beginning at the end of 2019. In the past two decades, pro-mask discourse first framed wearing masks as an emergent and undesired health strategy from 2003 to 2008, then as an inevitable measure against the constant health crises from 2009 to 2019, and finally as part of a new normality since the outbreak of the COVID-19 pandemic. The use of frames differed during these three stages.
Three Stages of Media Framing of Masks

Masks as an Undesired Measure During a State of Emergency (2003–2008)

In the SARS and post-SARS periods from 2003 to 2008, wearing masks was framed as a specific and temporary strategy during a state of emergency. An analysis of the consequences frame revealed that news articles admitted that the health consequences of masks remained positive; however, during the same time period, masks were highly associated with an unusual, abnormal life and with disasters that people did not want. In an article published on People’s Daily titled “A Spring With Masks,” the author wrote:

In spring, we should not wear the masks, we should’ve breathed in the nice wind and tasted the sweet rains … In order to not to wear the masks anymore in the future springs, we need to learn this lesson (of SARS), we need to be more experienced. (Liu, 2003, p. 7)

The “nice wind” and “sweet rains” (Liu, 2003, p. 7) of the springs could be regarded as a take-it-for-granted normality that Chinese people desired, while wearing masks was associated with an undesired measure only for a period of undesired abnormality. The author’s attitude toward masks explained why the media interest in masks rose with the outbreak of SARS and faded soon after the outbreak ended the same year.

From these news articles, using the consequences frame, we can see that the newspapers also worried that wearing masks and the corresponding state of emergency would cause negative economic consequences by scaring tourists away. In 2008, the Southern Metropolis Daily published a news article about masks in which the Chinese government officer declared that Beijing’s air pollution had been well controlled, and “there is no need” for the foreign athletes attending the Beijing Olympic Games to bring masks with them. “It’s unnecessary to consider bringing masks,” said Shaozhong Du, the officer of the Beijing Environment Bureau. “If you insisted to do so, it’s just an extra burden in your luggage. I don’t think you will use them at all” (Li, Zhang, & Lai, 2008, p. 6). Indeed, among all the sampled news articles, this article was the only one in which the Chinese government held a negative tone toward masks. The reason was embedded in the special social atmosphere in 2007 and 2008. During that period, the air pollution issue started to rapidly worsen in China, and multiple provinces suffered from the impact of smog and fog, which represented the dark side of modernization (Chan & Yao, 2008). Wearing masks seemed to be a reasonable measure for citizens to protect their health from pollution, yet such measures also demonstrated worsening air quality. Worrying that the air pollution issue would result in China’s humiliation at the Beijing Olympics and scare foreign tourists away, the Chinese government made great efforts to increase air quality in Beijing, including temporarily shutting down factories and launching driving restrictions, and it declared that the Green Olympics would be fulfilled (Min & Zhen, 2010; Wang et al., 2009). Under these circumstances, wearing masks was portrayed as an insult to the authority, yet it was the evidence that the state emergency—which the officials declared was over—was still going on.

Masks as a Routinized Measure: Constant Crises, Counterdiscourse, and the Rise of the “Masks Industry” (2009 to 2019)

From 2009 to 2019, the media’s framing of wearing masks entered its second stage when the media portrayed masks as an inevitable measure against various health crises (e.g., H1N1 influenza and air pollution). Because such crises were constantly attacking Chinese society, mask-wearing began to enter the
daily lives of local residents. After the 2009 outbreak of H1N1 influenza in China, the media coverage of
masks increased again, but during this period, unlike SARS, such coverage did not drop dramatically.
Instead, the two newspapers periodically reported on masks. Both newspapers used the consequences frame
to remind people to wear masks to avoid the negative health impact of H1N1 influenza.

One reason for this change was the less intensive yet constant continuation of the H1N1 outbreak
in China for several years. Apart from H1N1, air pollution issues (e.g., smog) impacted Chinese society
frequently during this period. After the Beijing Olympics, the political tension over this environmental
problem decreased, while citizens’ concerns about air pollution remained intense (Hu et al., 2010). Judging
from the sampled news articles, the critical news reporting of air pollution problems has increased since
2008. Among those news articles reporting on air pollution, many have persuaded people to protect their
respiratory tracts by wearing masks. Terms associated with people’s daily lives (e.g., “frequent,” “routine,”
daily”), which never appeared in the news in the first period, appeared in several post-2008 news articles
framing masks. For instance, the People’s Daily published an article titled “Smog Frequently Attacked Many
Areas of Our Country,” admitting the severity of environmental pollution in China while persuading people
to “wear masks when go outside” (Liu, 2012, p. 20). During this second stage, wearing masks was no longer
portrayed as a negative signal that the public desired to eliminate. Instead, the media no longer denied the
constant existence of environmental risks like smog and their impact on health, and wearing masks was
thus portrayed as an inevitable, necessary health strategy for Chinese people’s daily lives.

Because the acceptance of masks seemed to be inevitable, the media started to take the bad with
the good by focusing on the increasing demand for masks and the positive economic impact of such a
market. This rising business, according to the Chinese media, was beneficial for corporations in particular,
and the employment rate of the whole nation in general. The media was also aware that as a global health
Crisis, H1N1 also increased the overseas demand for masks from China. They were keen on reporting how
local factories earned a fortune from exporting to foreign markets and how China’s donation of masks to
foreign countries, which the two newspapers called “mask diplomacy,” benefited China’s international
relations. The Southern Metropolis Daily even categorized the companies that produced masks as mask
industry stocks, and the paper excitedly talked about the performance of the promising industry, thereby
associating masks with the social meaning of wealth.

However, in the same period, there was an increase in negative and neutral tones in reports about
masks, including statements about their negative physical and psychological health effects. The Southern
Metropolis Daily appeared more open to counterdiscourses against masks. For instance, it published an article
named “Don’t Let Masks Block Our Smile,” which criticized wearing masks to prevent H1N1 as unnecessary
“over protection,” causing people to be psychologically isolated from each other (Gao, 2009, p. 2). “When there
is no one wearing masks in public, and one person just wears a mask walking on the street and taking the bus,”
the author wrote, “would he/she be regarded as a virus carrier and isolated from the public, and causing
awkwardness?” (Gao, 2009, p. 2). Besides reports on the negative psychological impact of masks on people,
the Southern Metropolis Daily also published several news articles citing experts’ opinions that raised concerns
about “overly” wearing masks and their impact on human health. The battle between the pro-mask discourse
and its counterdiscourse indicated that Chinese society had not reached a consensus with regard to masks (i.e.,
whether people should accept wearing masks as part of their daily lives).
Masks as Part of New Normality, and the Death of Two Kids (2020)

In the third phase, the COVID-19 stage, the media coverage of masks increased dramatically and peaked for a long time. In the first news articles about COVID-19, when the severity of the epidemic remained unknown, the experts warned the public that they should wear masks (Wang & Mao, 2021). After the national outbreak of COVID-19, masks were often linked with the political strategies of new regular epidemic prevention or new normality of epidemic prevention, and masks were portrayed as part of people’s daily lives. In an article published by Southern Metropolis Daily, titled “Despite of the Hot Weather, We Still Need to Put On Masks Properly Out of the Door,” the journalist pointed out that wearing masks in public was a good, rational habit by people, similar to washing their hands and keeping safe distances from others, and the measure of which was an important part of the new normality of epidemic prevention (Fu, 2020). The article was published in June 2020, when the epidemic was completely under control in China. This perspective indicated that the social meaning of normality had been reformed and reshaped because of COVID-19 (Tesar, 2020) and that the Chinese media had persuaded Chinese citizens to accept mask-wearing as part of their daily routines.

To be more specific, when COVID-19 was under control in China in 2022, the media justified wearing masks as a necessary measure in exchange for people’s normal lives (e.g., going to work, playing in parks, wandering in shopping malls, taking public transportation, and taking offline classes). In an article titled “Ninety Percent of Parents Have Prepared Masks (for Their Children Who Will Attend Offline Classes),” the author described the parents as “concerned yet relieved” that their kids could finally go to school in late April 2002 (Xie & Zhang, 2020, p. 5). Wearing masks was portrayed as a low price that the parents were willing to pay. However, only days after the offline classes were resumed, the media reported two tragedies: On April 24 and April 30, two children in two different cities who were wearing masks during their sports classes died. At first, Southern Metropolis Daily published an article on May 5, 2020, that seemed to defend the mask policy by saying that “We couldn’t simply blame masks for the sudden cardiac death of the students” (Zhang, 2020, p. 6). Yet they were worried parents didn’t buy the story and fiercely expressed their rage and concerns on the social network. Responding to parents, the local education bureaus advised that students shall not wear masks when doing sports and the Southern Metropolis Daily also switched its position when it published an article on May 8, 2020, titled “When Taking Outdoor Exercise, Please Keep Safe Distance and Do Not Wear Masks” (Ye & Wang, 2020, p. 6).

Frames and the Media Discourse of Masks in China

Overall, the responsibility frame was the most frequently used frame during the three periods; the two newspapers were eager to persuade the public to take responsibility for wearing masks, and the government took responsibility for the promotion of wearing masks. In the first and third periods, morality was frequently linked with wearing masks by urging citizens to protect not only themselves but also the people around them, because SARS and COVID-19 were portrayed as being fatal more often than H1N1. The dominant source of mask information was from the Chinese government and officials, whereas the impact of foreign officials’ and experts’ opinions on masks remained limited. Chinese citizens’ opinions and actions were frequently mentioned, especially in the latter two periods, which is evident from the increasing usage of the human interest frame throughout the three stages.
The use of the consequences frame played a crucial role in normalizing wearing masks in China. The media focused on the impact of health, economy, psychology, and international relations. Among these four kinds of impacts, the health and psychology impacts are on a personal level, economic impact is on a corporate and national level, and international relations impact is on a national level.

First of all, the positive health impact of wearing masks (and the negative impact of not wearing them) stands to be the most important factor that the two Chinese newspapers used to legitimize wearing masks. Regarding the psychological impact, the neutral and negative tones toward masks increased, and the *Southern Metropolis Daily* appeared to be more open to counterdiscourses against masks. In general, the media convinced the public that wearing masks was beneficial at a personal level by highlighting the positive health impact (e.g., cutting down the transmission of epidemics or protecting the lungs from haze and smog) and justifying the possible psychological harms as inevitable side effects. The newspapers also used the conflict frame to portray the protests against masks in foreign countries and the negative consequences of such opposition. This also contributed to the discursive legitimization of masks.

Another interesting frame is the new frame that we identified in the data, the entertainment and fashion frame. The overall number of articles remained few, but they illustrated the possibility that masks were normalized not only in serious ways. In those articles, journalists examined how masks become fashionable accessories of celebrities, which influenced their young fans. It is possible that a Chinese youngster's positive attitude toward masks has originated not from the government's promotion but from the child’s desire to be trendy. For health departments around the world, how to promote their health policies among the younger generations is a difficult issue, and the case of framing masks as a fashion trend in China sheds light on an interesting angle for those policy makers.

**Conclusion**

We found that pro-mask discourse in China first framed wearing masks as an emergent and undesired health strategy, then as an inevitable measure against the constant health crises, and finally as part of a new normality since the outbreak of the COVID-19 pandemic. The legalization of wearing masks lies in the severity of a certain health crisis, the effectiveness that masks can protect citizens from such a crisis, wearing masks as a comparatively low cost (the lack of serious side effects) in exchange for normal lives during a crisis, and the overall benefit to China’s national image and interests overall.

Among all the conditions, in fact, only the effectiveness of masks in protecting citizens from certain health crises has never been questioned. This justification of masks’ positive health consequences happened long before, not after, the COVID-19 pandemic. The traumatic memories of previous crises (e.g., SARS, H1N1, and air pollution) and the faith of Chinese citizens in scientific measures to deal with those crises legitimated the use of masks to protect against COVID-19, which might explain the quick social consensus that China formed regarding masks at the beginning and peak of the epidemic.

The counterdiscourses against masks appeared during the three periods when the other conditions that legitimized masks were questioned. In the first period, wearing masks was discouraged because it was a humiliation of China during the Beijing Olympics, which was detrimental to China’s national image and
interests. Next, in the second period, journalists and citizens questioned the severity of the influenza of H1N1, and thus, they questioned the necessity of wearing masks. Finally, in the third period, people were concerned about the inappropriate use of masks and their negative health impacts on people, especially children. When wearing masks was no longer a “low-cost” exchange for normal lives, the legitimization of masks was also questioned.

Besides the focus of health, masks have been constructed as a financially promising business and a trendy fashion by Chinese media, which further justifies their existence. Such findings could contribute to the field of health communication, demonstrating that a health issue like masks could be entangled not only with health and politics but also with other social dimensions like finance and trendies.

The limitation of this study is our examination of only the mainstream media discourse of wearing masks, which is important—but only part of the social discourse in China. How do Chinese citizens view masks? How did their attitudes change over 20 years? Will conspiracy theories be circulated among those citizens? Answering these questions might help us to discover the discursive power of ordinary Chinese people in wearing masks. The media framing of the tragic deaths of two children in 2020 sheds some light on such power, with the fact that the newspaper first supported the mask policy and, after several days, suddenly jumped to the opposite position, admitting that overuse of masks can cause negative consequences for people. If we systematically examine the online framing of masks during the same period, we could portray a full map of the extent to which the citizens influenced the Chinese government’s policy on masks and the media framing of masks. Thus, we call for studies to examine online discourses about masks and to compare the differences between discourses occurring online and in the mass media.

References


Fu, J. (2020, June 22). Despite of the hot weather, we still need to put on masks properly out of the door. *Southern Metropolis Daily*, p. 8.


