

# RISK PERCEPTION GAPS

**Public perceptions of  
stakeholder risk response and  
responsibility in Singapore,  
South Korea and China**

# WHY FOCUS ON RISK PERCEPTION GAPS?

*Project Wavelength* is a flagship research project of the Lloyd's Register Foundation Institute for the Public Understanding of Risk (IPUR). Launched in 2022, the project aims to understand and assess *risk perception* gaps—the extent to which experts and the general public diverge in identifying and assessing risks. The research aims to inform and incentivise stakeholders to take action to close the gaps.

This report is the third in a series employing survey data from Singapore, South Korea, and China. Each report highlights different dimensions of public perceptions relating to 10 everyday risks.

This report focuses on how individuals perceive key stakeholders—**public authorities (government)**, **private companies**, the **media**, as well as the **general public**. It covers perceptions of:

- ▶ How much attention is paid to these risks by stakeholders and how much protective action is taken
- ▶ Risks which receive insufficient attention
- ▶ How much responsibility each stakeholder group should take in managing these risks
- ▶ Which stakeholder groups are most trusted to inform people about risks and to take protective action.

The insights from this research are intended to inform decision-makers about how the public perceives the everyday risk landscape, fostering two-way risk communication and building risk know-how among stakeholders.

# 10 RISKS:



**Infectious diseases**



**Chronic diseases**



**Data fraud/theft**



**Mental health problems**



**Food safety**



**Drinking water quality**



**Violent crime**



**Environmental pollution**



**Traffic/roadside accidents**



**Natural disasters**

## METHODOLOGY.

Data were collected through an online survey of 2,400 individuals conducted in Singapore, South Korea, and China in October-November 2022. Respondents shared their views on 10 everyday risks spanning from *health risks* (e.g., chronic diseases, infectious diseases) to *environmental risks* (e.g., climate change, natural hazards) to *technological risks* (e.g., data fraud/theft).

The survey featured four main sections:

- ▶ **Perceptions of risk** pertaining to severity of the risk, its likelihood, worry and experience of serious harm from the risk.
- ▶ **Perceptions of regulatory authorities, private companies, and the media** in terms of the amount of attention paid to each risk and the level of protective action taken.
- ▶ **Perceptions of other members of the public** in terms of how informed they are about each risk, the amount of attention paid to each risk and the level of protective action taken.
- ▶ **Perceptions of experts** in terms of the amount of attention paid to each risk and the level of protective action taken, and the perceived consensus among scientists on the actions required to manage the risk.

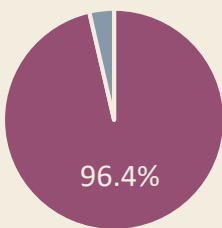
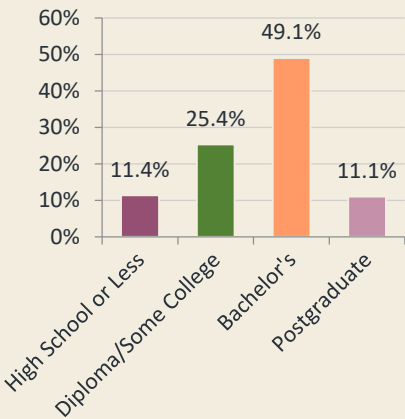
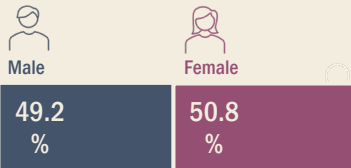
# Respondent Profile

## Singapore



**813**  
respondents

**40.9**  
mean age (years)



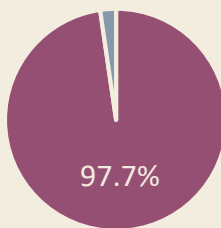
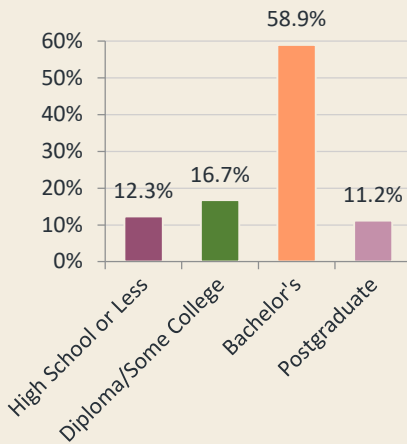
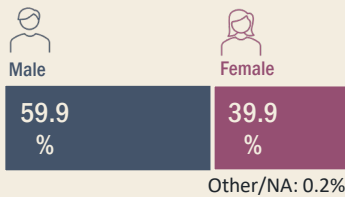
■ Asian ■ Other

## South Korea



**812** respondents

**42.4**  
mean age (years)



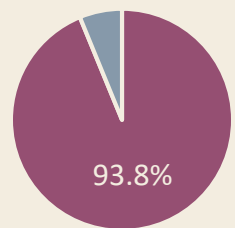
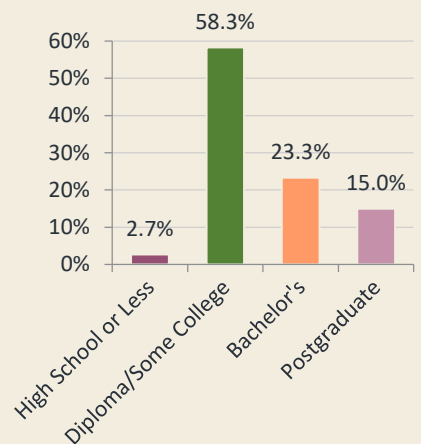
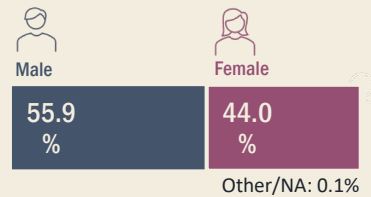
■ Asian ■ Other

## China



**819** respondents

**31.5**  
mean age (years)



■ Asian ■ Other

# Findings at-a-glance

- The majority of respondents perceive that the **public authorities** in their country give the **right amount of attention** to most risks. Agreement on this was strongest for **drinking water** risk in Singapore where 71.6% of people surveyed are satisfied with the amount of attention paid by the government and in China and South Korea for **natural disaster** risk, with 72.4% and 65.6% of respondents respectively satisfied with their own government's level of attention to this risk.
- Overall, **public authorities** are seen as more likely to pay too little attention to risks than to pay too much attention to them. This pattern is consistent across the three countries.
- There is more variation across risks among respondents in China compared to Singapore and South Korea. Over half of the people surveyed in China thought the government was not paying the right amount of attention to **mental health problems, data fraud/theft, food safety, and infectious diseases**.
- In all three countries, **mental health problems** ranked as the top risk receiving “**too little attention**” from public authorities, private companies, the media, and the general public, highlighting a significant multi-stakeholder gap.
- In all three countries, trust in a stakeholder to **provide necessary risk information** is strongly correlated with their trust in the stakeholder to **take protective actions**.
- People in the three countries **trust public authorities the most** of all stakeholder groups to inform and take action on risks. In China and Singapore, there are higher levels of trust in public authorities to provide risk information and take protective action compared to South Korea.
- **Social media influencers** and **private companies** are **trusted the least** among stakeholders both to provide risk information and to take appropriate protective actions.

**Based on public perceptions in Singapore,  
South Korea, and China...**

**Are key stakeholder groups  
giving enough attention to  
risks? Are they taking enough  
protective action?**

Survey questions analysed:

“In general, how much **attention** do you think the public authorities / private companies / the media / the general public in this country give to each of the following risks?”

“In general, how much **protective action** do you think the public authorities / private companies / the media / the general public in this country are taking for each of the following risks?”

## Are public authorities paying enough attention to risks?

In general, most respondents perceived their public authorities to be giving the right amount of attention to most risks (see Figure 1). This view was most widely held in relation to **drinking water quality** in Singapore, with 71.6% of respondents indicating that the government paid the right amount of attention, and for **natural disasters** in China and South Korea, with 72.4% and 65.6% respectively expressing this view.

In Singapore, over 60% of respondents felt their government was giving the right amount of attention to 9 out of the 10 surveyed risks. In South Korea the proportion was slightly lower compared to Singapore: 50% or more felt that their government was adequately addressing all 10 risks. However, China showed more variation in public perceptions of government attention across different risks. While over 50% of respondents believed their government was giving the right amount of attention to 6 out of the 10 risks, less than half of the Chinese respondents felt public authorities were giving the right amount of attention to **mental health problems**, **data fraud/theft**, **food safety** (too little attention) and **infectious diseases** (too much attention).

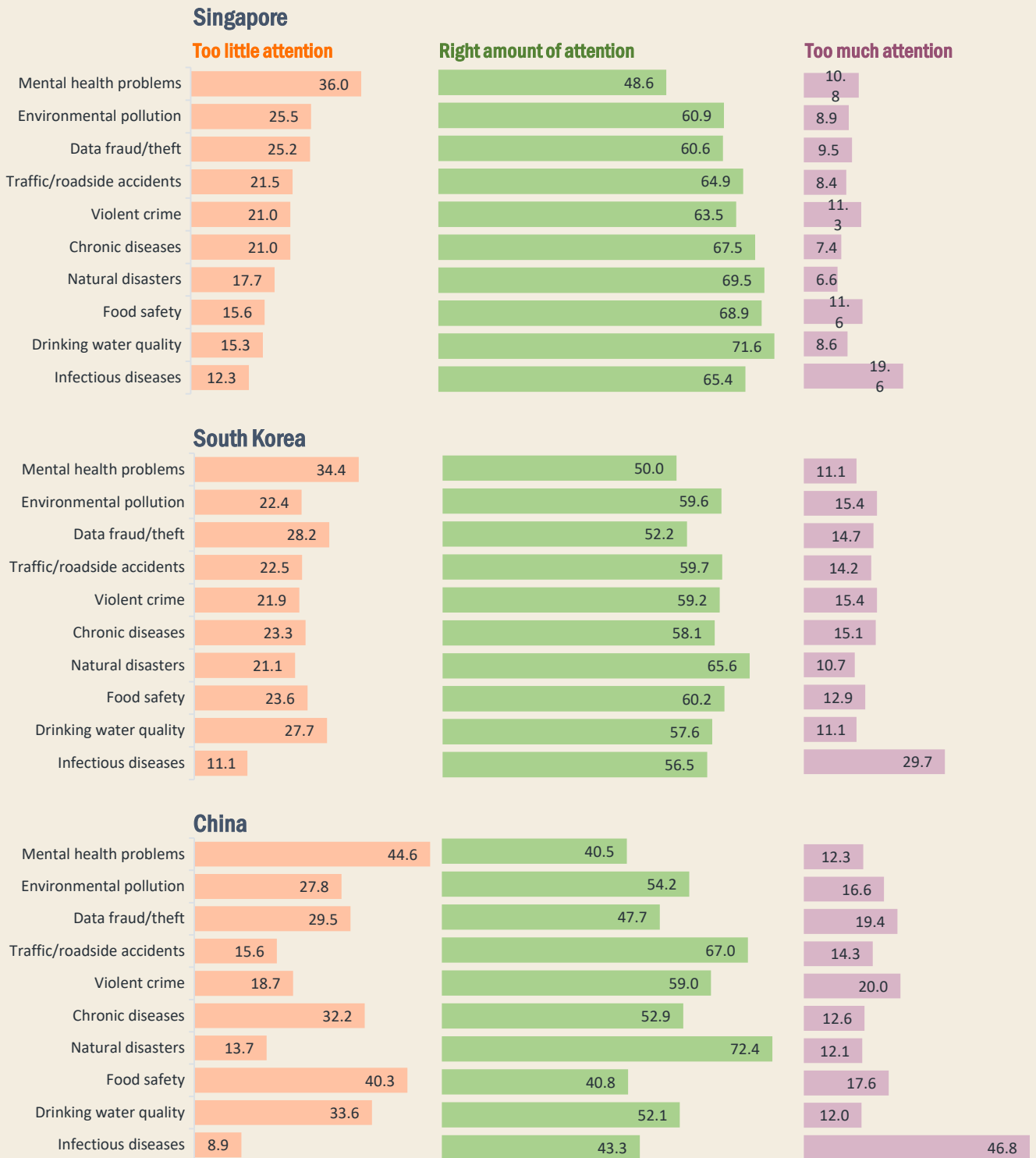
Relatedly, compared to those from Singapore and South Korea, a higher percentage of respondents in China felt that “too little attention” was given to certain risks. This was especially evident for **mental health problems** (44.6%), **food safety** (40.3%), **drinking water quality** (33.6%) and **chronic diseases** (32.2%).

Notably, **mental health problems** were also perceived to be getting insufficient attention in Singapore (36.0%) and South Korea (34.4%). These observations reveal a shared concern over mental health challenges across different national landscapes and a need for greater governmental prioritization.

Respondents in Singapore (19.6%), South Korea (29.7%), and China (46.8%) identified **infectious diseases** as the top risk receiving “too much attention” from their respective public authorities. This could be attributed to the considerable resources directed towards managing Covid-19. The heightened public awareness and government actions, such as extensive vaccination campaigns and stringent control measures, might have led more people to perceive a disproportionate emphasis on infectious diseases compared to other risks.

# More risks perceived to be getting “too little attention” rather than “too much attention” from their government.

**FIGURE 1 |** Proportion of respondents’ perceptions of their government attention to risks



*Survey question:* In general, how much attention do you think the public authorities in this country give to each of the following risks?

Note: Rows may not sum up to 100% as “don’t know” responses were excluded



## What are the top risks that key stakeholders are paying insufficient attention to?

The survey considered the amount of attention and action relating to the 10 risks among four stakeholder groups—public authorities, private companies, the media and the general public. These constitute the key actors in the risk management ecosystem. While their roles vary depending on the specific risk and risk context, together they lead risk management efforts, from the individual up to the national level.

The findings show consistent patterns in the risks that respondents see as neglected – those receiving “too little attention” and “too little protective action”. In all three countries, **mental health** risk was identified as the most neglected risk issue (see Figure 2). This indicates a critical multi-stakeholder gap warranting urgent, concerted efforts.

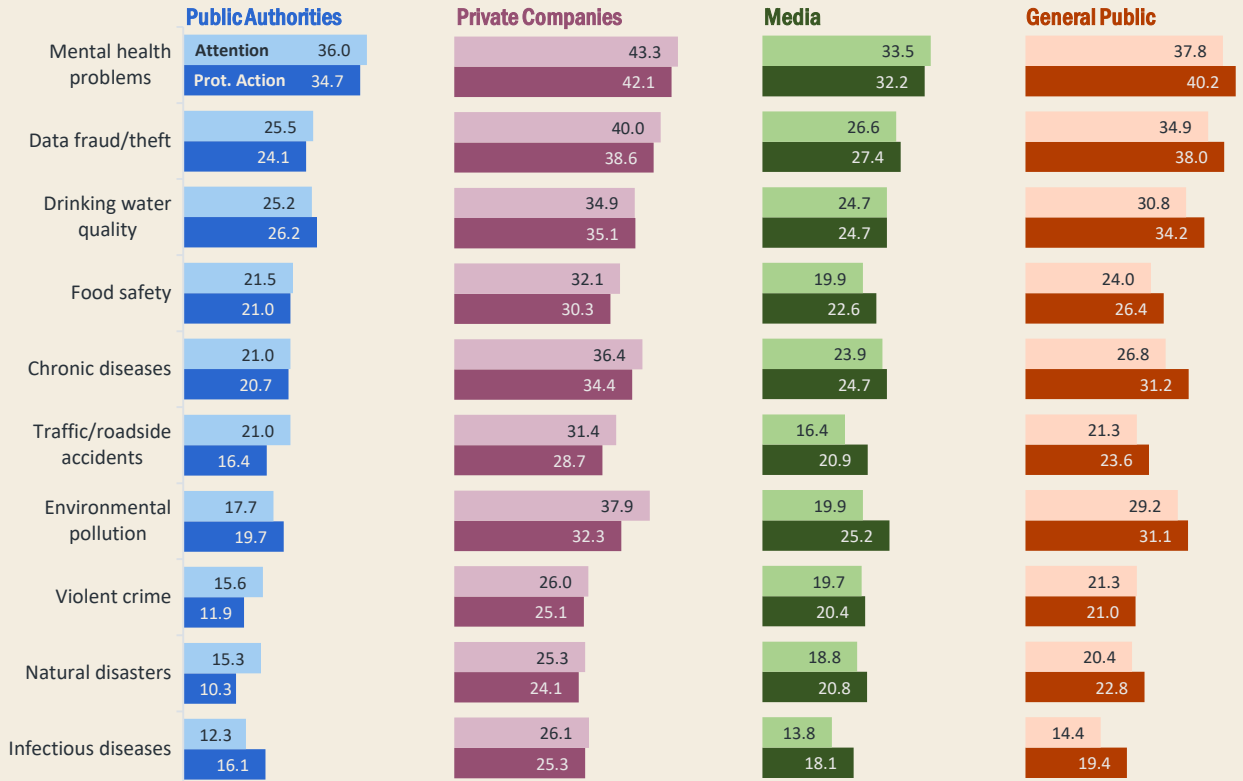
Data-related risk (**data fraud and theft**), **food safety**, **drinking water quality** and **chronic diseases** appeared in the top five neglected risks in all countries, after **mental health problems**. However, there were some differences in the rankings between countries. In Singapore and South Korea, respondents perceived data fraud and theft to be more neglected compared to those in China, while in China, food safety was emphasized as a bigger issue.

Overall, respondents perceived inadequate action to be more severe than inadequate attention. This was most clear in South Korea, where the proportion of respondents who consider action insufficient is higher than the proportion who consider attention to be insufficient for all stakeholders and all risks, with just one exception. In Singapore, attention from public authorities was, perhaps surprisingly, perceived as more inadequate than action for a few risks including **traffic/ roadside accidents**, **violent crime** and **natural disasters**.

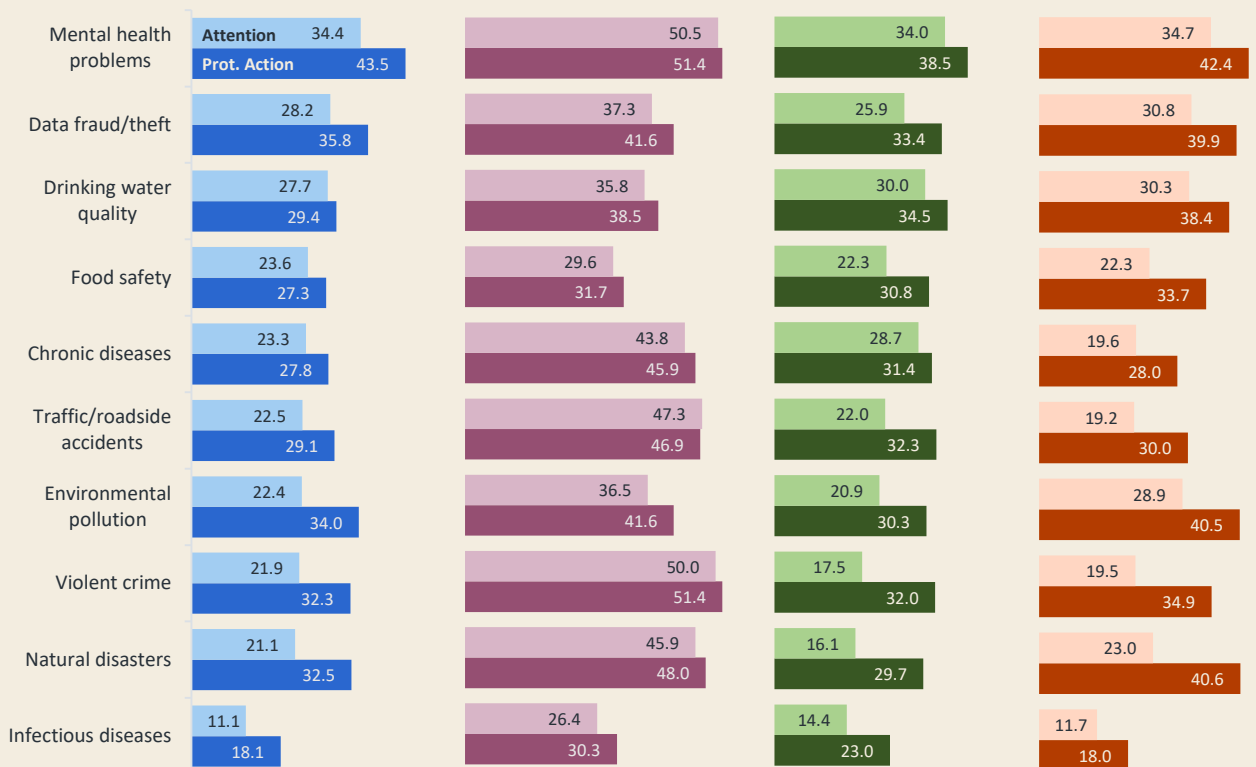
Comparing across stakeholders, attention and action by companies and the general public were generally considered to be more inadequate than attention and action by public authorities and the media. Inadequate attention and action ratings were highest for private companies in relation to **mental health** (all countries), **violent crime** (South Korea) and **food safety** (China). For the general public, risk neglect was most severe for **mental health** followed by **data fraud/theft** and **drinking water quality** (Singapore), **natural hazards** and **environmental pollution** (South Korea) and **food safety** and **environmental pollution** (China). The presence of such disparities suggests potential weaknesses in resourcing, executing, and incentivising protective measures and support systems across stakeholder groups.

**FIGURE 2 | % of respondents reporting risks receiving “too little attention” (lighter bars) and “too little protective action” (darker bars) by stakeholder group, ranked by attention given by public authorities in each respective country**

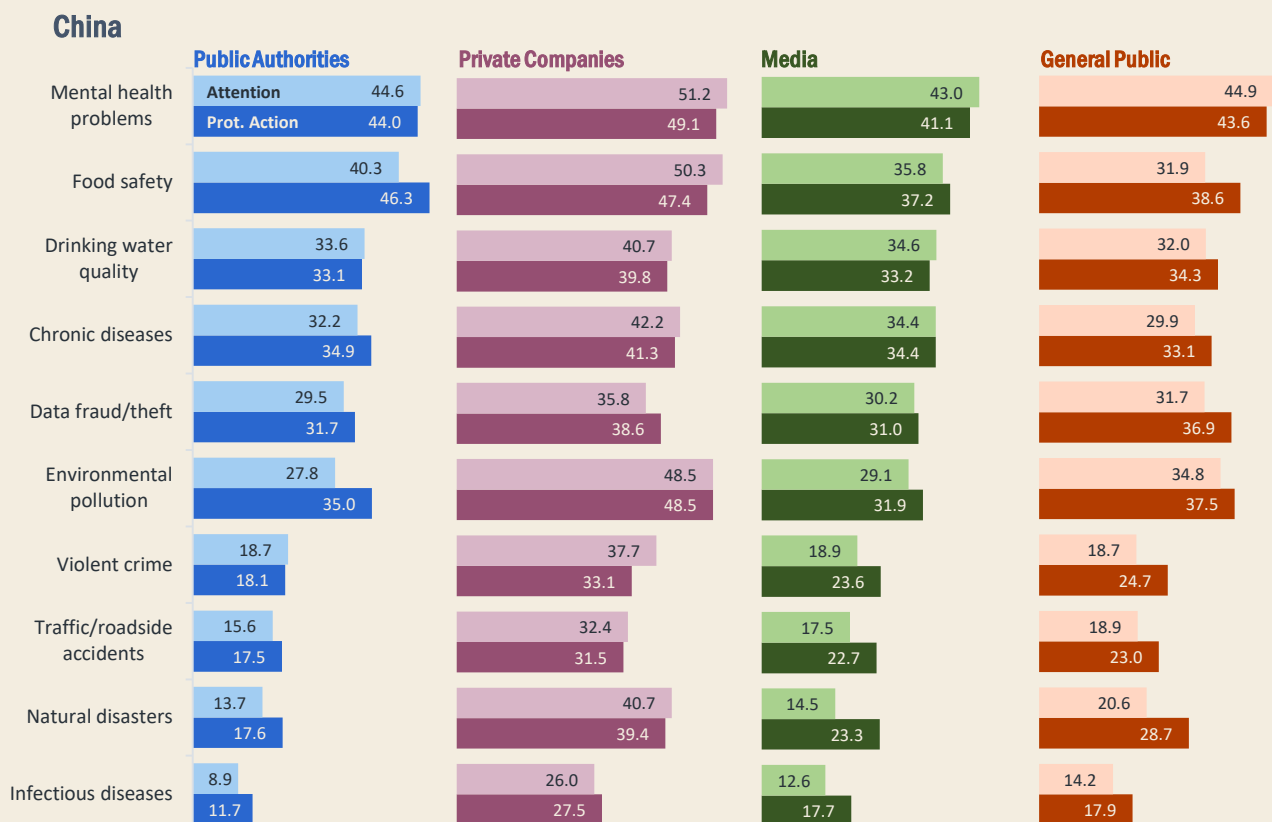
### Singapore



### South Korea



**FIGURE 2 (continued) | % of respondents reporting risks receiving “too little action” (lighter columns) and “too little protective actions” (darker columns) by stakeholder group, ranked by attention given by public authorities in each respective country**



*Survey questions:*

“In general, how much **protective action** do you think the [public authorities / private companies / the media / the general public] in this country are taking for each of the following risks?”

In general, how much **attention** do you think [the public authorities / private companies / the media / the general public] in this country give to each of the following risks?”

## Infectious diseases is the main risk perceived to receive “too much attention” from stakeholders.

Across all three countries, **infectious diseases** stood out as the top risk that a notable percentage of respondents indicated was getting “too much attention”— and to a lesser degree, “too much protective action”—from public authorities, private companies, the media, and the general public.

The perceived over-attention is likely driven by the Covid-19 pandemic where extensive news coverage, strict lockdowns and enforced restrictions fueled widespread public frustration in many countries. In particular, outbursts of public anger reported in China signaled deep-seated angst and skepticism over endless lockdowns, mass testing and quarantines due to the country’s “zero-Covid” policy. People were also fatigued from the incessant attention that the media and general public were giving to the pandemic at the expense of other important issues.

These sentiments were reflected in country-level findings, where a higher proportion of respondents in China expressed concerns over excessive attention and protective action from all four stakeholder groups—notably, over-attention from the public authorities (46.8% of participants), the media (43.8%) and even the general public (40.4%). Although similar concerns were expressed in Singapore and South Korea, the proportion of respondents who perceived such over-attention was less pronounced than that in China (see Figure 3).

**FIGURE 3 |** % of people who indicated that infectious diseases risk was receiving “too much attention” (lighter text) and “too much protective action” (darker text) from key stakeholder groups

	Public Authorities	Private Companies	Media	General Public
<b>Singapore</b>				
Too much attention	19.6%	14.5%	23.6%	22.5%
Too much protective action	14.5%	11.1%	16.9%	14.3%
<b>South Korea</b>				
Too much attention	29.7%	15.4%	28.4%	30.5%
Too much protective action	19.1%	12.1%	20.8%	18.7%
<b>China</b>				
Too much attention	46.8%	25.6%	43.8%	40.4%
Too much protective action	39.8%	23.9%	33.8%	33.7%

# How much responsibility do different stakeholders have to manage risk? Which stakeholder group(s) are perceived as trustworthy?

Survey questions analysed:

“How much **responsibility** do you think each of these groups have for managing this risk?”

“How much do you trust each of the following groups in your country to provide you with the necessary **information** about various risks?”

“How much do you trust each of the following groups in your country that they will take the necessary **actions** to protect the public against various risks?”

## Which stakeholders should have the most responsibility for managing risks?

Respondents indicated the relative responsibility they think different stakeholders have to manage each risk by allocating scores totalling 100. The survey covered seven stakeholders: public authorities, scientists/researchers, news media, social media, private companies, community leaders and family/friends. Across all three countries, **public authorities** were seen as having the most responsibility for managing risks (see Figure 4).

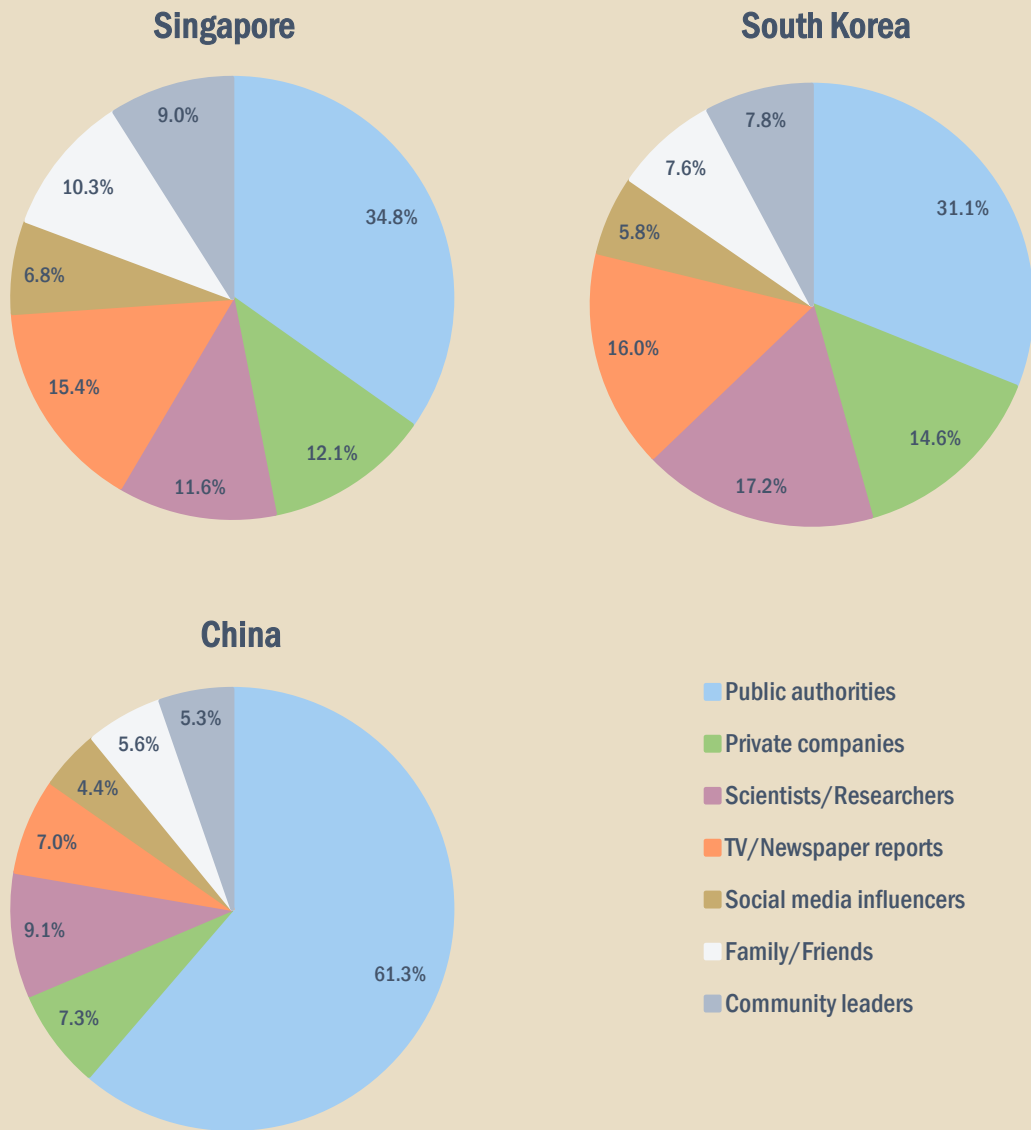
In Singapore and South Korea, respondents expected public authorities to have, on average, just over 30% of risk management responsibility. However, in China, public authorities were expected to have a much greater share of responsibility, averaging 61.3%. This significantly higher percentage of perceived responsibility in China suggests a greater expectation, and perhaps even reliance, on government intervention for risk management compared to efforts from other stakeholders.

Respondents in China placed less onus of responsibility on other stakeholder groups, with the remaining six groups each perceived to take between 5.3% and 9.1% of the responsibility.

In contrast, respondents in Singapore and South Korea felt that the **media** (TV/news), **scientists/researchers** and **private companies** also had a considerable role in managing risks (ranging from 11.6–15.4% for each in Singapore and 14.6-17.2% in South Korea), though notably less than public authorities. This suggests a more distributed perception of risk management responsibility between societal actors.

Least responsibility in all three countries was placed on **social media influencers**, **community leaders** and **family**, ranging from 4.4-5.6% in China, 5.8–7.8% in South Korea and 6.8–10.3% in Singapore. This suggests an overall population preference for institutional and more formal channels of risk management over personal or community-based approaches.

**FIGURE 4 |** Perceptions of responsibility allocation across various stakeholder groups, with public authorities perceived as having the most responsibility for managing risks



Each proportion represents the average score allocated to each group of stakeholder.

*Survey question:* How much responsibility do you think each of these groups has for managing this risk? Please allocate scores for each group, totalling 100.

## Public authorities are the most trusted stakeholder to provide information and take action

Respondents indicated how much trust they had in each stakeholder group to: (1) provide necessary **risk information** and (2) take necessary **protective actions**. The same set of stakeholders was considered as for the questions on risk management responsibility, namely: public authorities, private companies, scientists/researchers, news media (TV, newspapers), social media influencers, family and friends, and community leaders.

Across all stakeholder groups, trust in a stakeholder to provide necessary risk information was closely mirrored by trust in that stakeholder to take protective actions (see Figure 5). These correlations were statistically significant, suggesting that the provision of risk information and the execution of protective action are seen as going hand in hand.

Overall, trust in stakeholders was lowest in South Korea and highest in China. To illustrate, the most trusted stakeholder to provide risk information in China (central government) was trusted “very much” by almost two-thirds of respondents (65.6%). In comparison, the most trusted stakeholder for risk information in South Korea (scientists/researchers) was only trusted “very much” by 35.6% of respondents. Active distrust was also higher in South Korea. The proportion of respondents reporting that they had “no trust at all” in a stakeholder was higher in South Korea than in Singapore and China for all stakeholder groups.

**Public authorities** were the most trusted stakeholders in all geographies. In Singapore, over 40% of respondents expressed high trust in public authorities to provide both risk information and protective actions. This trust was even more pronounced in China, where 68.1% indicated high trust in their **central government** to take necessary protective actions. Trust in **local public authorities** to take action in China was lower, but still robust, with 48.4% indicating that they trusted this stakeholder “very much.”

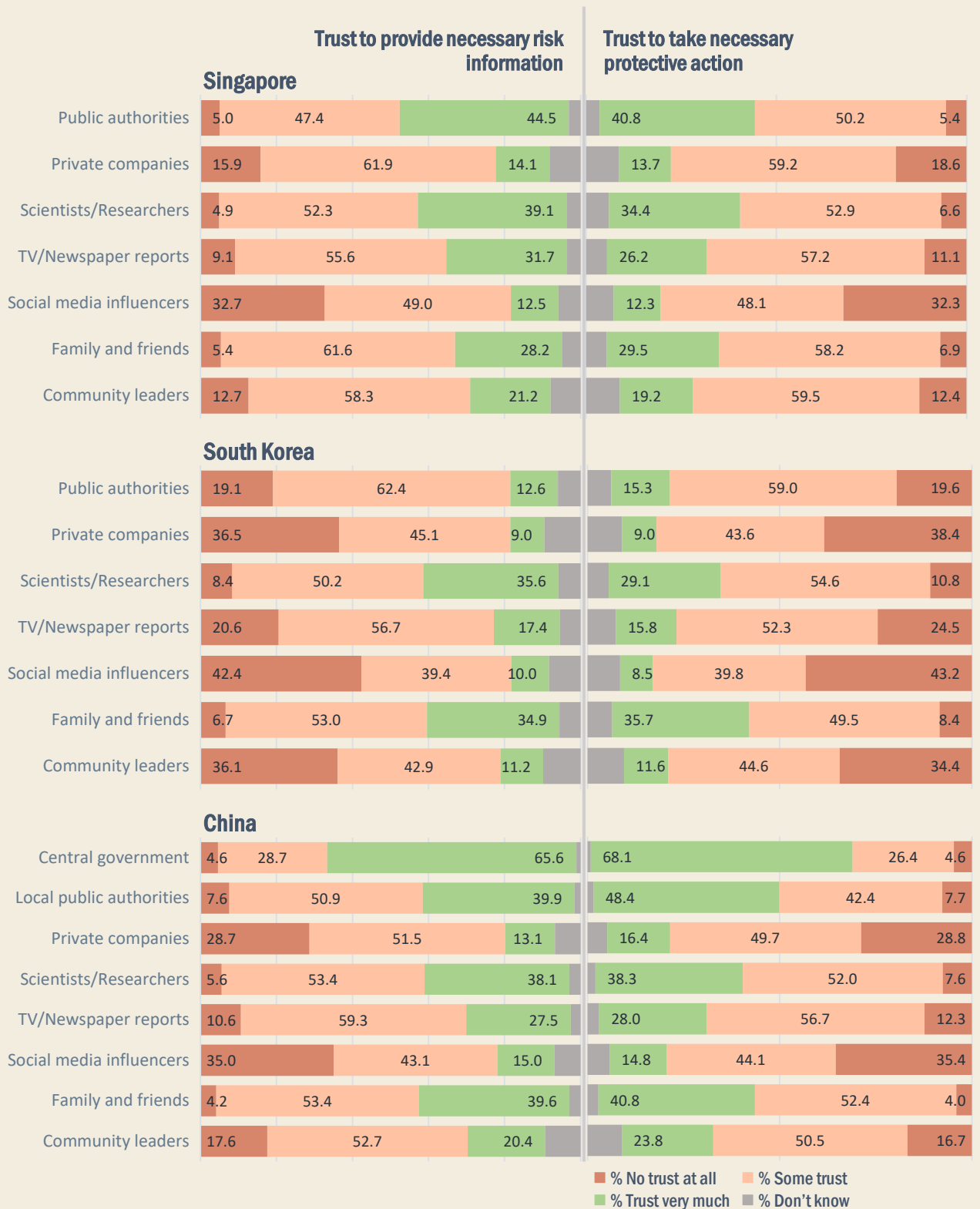
**Scientists and researchers** and **family and friends** were the next most trusted stakeholder groups. In Singapore scientists/researchers were more trusted than personal connections for information as well as action, whereas in China family and friends rated above the scientific community on both questions.

**Social media influencers** were the least trusted of the stakeholder groups overall. In Singapore, 32.7% and 32.3% of respondents indicated having “no trust at all” in social media influencers to provide risk-related information or to take protective action, respectively. This distrust was higher in China (to provide risk information: 35.0% and to take protective action: 35.4%) and most pronounced in South Korea (42.4% and 43.2% respectively). This suggests that although social media are widely used by the general public, this may have less impact on public risk perceptions and intentions than often assumed.

**Private companies** also rated low in terms of public trust. Most notably, 38.4% of respondents in South Korea said they had “no trust at all” in trust in private companies to take appropriate action on risks, compared to 28.8% in China and 18.6% in Singapore.



**FIGURE 5 | Respondents' perceptions of trust in various stakeholders to provide necessary information and take protective action**



*Survey question:* How much do you trust each of the following groups in your country to provide you with the necessary information about various risks?

*Survey question:* How much do you trust each of the following groups in your country that they will take the necessary actions to protect the public against various risks?

# ACKNOWLEDGEMENTS.

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# RESOURCES.

**Check out these free resources for more information about risk perceptions and risk communications:**

- ▶ [IPUR Resources and Tools](#)
- ▶ [IPUR Risk Communication Masterclasses](#)
- ▶ [LRF World Risk Poll](#)
- ▶ [Risk Know-How: Resources for Communities](#)

# WHO WE ARE.

The LRF Institute for the Public Understanding of Risk (IPUR) is the premier institute focusing on public risk perception and communication in Asia, a region which faces acute and growing risks relating to public health, the environment, climate change and emerging technologies. We investigate what people are worried about, where the gaps are between the public's understanding of these issues and the experts' risk assessment, and what interventions can help to bridge these gaps.


Launched in 2017, IPUR was established through funding from the Lloyd's Register Foundation and the National University of Singapore. IPUR strives to shed light on some of the most pressing societal matters which are subject to uncertainty. By dedicating ourselves to transform the risk communication landscape and enhance the public understanding of risk, we seek to improve lives with maximum impact.

Our research is multi-disciplinary and brings together social sciences – psychology, economics, public policy, communications, sociology – with marketing, science and engineering. Our research spans three main risk domains: Data and Technology, Environment and Climate, and Health and Lifestyle. We partner with government, industry and academia to design and evaluate intervention measures, train professionals and students, develop resources, and organise outreach events, stakeholder workshops and conferences.

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