Public perspective on the governmental response, communication and trust in the governmental decisions in mitigating COVID-19 early in the pandemic across the G7 countries

Constantine Vardavas [a,*], Satomi Odani [b], Katerina Nikitara [b], Hania El Banhawi [b], Christina Kyriakos [b], Luke Taylor [c], Nicholas Becuwe [c,d]

[a] Department of Oral Health Policy and Epidemiology, Harvard School of Dental Medicine, Boston, United States
[b] School of Medicine, University of Crete, Heraklion, Greece
[c] Kantar, Public Division, United Kingdom
[d] Kantar, Public Division, Belgium

ABSTRACT

The COVID-19 pandemic poses a threat to global health and security inciting governments with the responsibility to respond with measures that ensure the health and safety of their communities. We assessed public attitudes towards governmental actions to combat the COVID-19 pandemic in the G7 countries. Data were collected during 19th–21st March 2020, from 7005 Kantar's online panelists aged >16 years across the G7 countries: Canada, France, Great Britain, Germany, Italy, Japan, and the United States. Data were post-stratified and weighted to match population distributions of the respective countries. Descriptive and multivariable analyses were conducted. Amongst the G7, Japan had the lowest level of approval of governmental response to the pandemic, rating governmental communication as good, and trusting governmental decisions (35.0%, 33.6%, and 38.0%, respectively), followed by the U.S. (52.9%, 64.6%, and 59.9%, respectively). Understanding of which measures one can personally take to help limit the spread of the coronavirus was significantly associated with approving governmental response (aOR = 2.88), rating government communication as good (aOR = 2.70) and trust in future governmental decisions (aOR = 2.73). Those who reported government/politicians and friends/family as their most trusted information source were more likely to report approval, higher rating, and/or trust toward governmental actions. Public attitudes towards governmental actions against COVID-19 varied substantially across the G7 countries and were associated with the understanding of measures and source of information that respondents most trusted. Timely and accurate communication is essential to enhance public engagement to control the COVID-19 pandemic.

1. Introduction

The COVID-19 pandemic poses a threat to global health and security inciting governments with the responsibility to respond with measures that ensure the health and safety of their communities. However, in formulating such a response plan, governments are also faced with the challenge of balancing public health with individual rights (Gostin et al., 2020). Given that public health is heavily dependent on the governmental response, and governments are conversely reliant on the population in implementing measures in containing the epidemic, the public's trust and attitudes towards legislative actions are critical in

flattening the pandemic curve. In this study, we assessed public evaluation of governmental responses, communication and trust towards future political decisions across the G7 countries – Canada, France, Great Britain (G.B.), Germany, Italy, Japan, and the United States (U.S.).

2. Methods

Data were collected by the Public Division of Kantar from 7005 online panelists aged 16+ between the 19th–21st March 2020, across the G7. With this type of convenience sample, the accuracy of estimates is conditional on the assumption that the combined effects of panel

---

recruitment, quota application, and weighting have successfully eradicated biasing selection effects on the data. We used a diverse set of recruitment sources that utilize a variety of recruitment methods, including opt-in email, co-registration, e-newsletter campaigns, and traditional banner placements. Collected data were post-stratified with respect to gender by age group, and gender by degree-holding status within each country and were weighted using the U.S. Census Bureau and education statistics from the Organization for Economic Co-operation and Development (OECD) to match population distributions for each of the G7 countries. Those aged 65+ were typically the most under-represented, for instance, in three countries, these individuals received a mean weight of over 2, while respondents in the U.S. sample had a mean weight of 3.

Evaluation of the governmental response to the COVID-19 outbreak was assessed as "*How much do you approve or disapprove of the way he [country] government is responding to the coronavirus epidemic?*" Responses were dichotomized as approving (strongly/somewhat approve) or not approving (strongly/somewhat/neither disapprove, neither approve or disapprove). The "neither approve or disapprove" was categorized as a negative response as our aim was to assess a proactive or positive stance/belief to measures. Governmental communication regarding the COVID-19 outbreak was evaluated as "*How would you rate the [country] government in how it is communicating information about the coronavirus outbreak?*" Responses were dichotomized as good (very/fairly good) or not good (very/fairly poor, don't know). Trust towards future governmental decisions was assessed as "*how much do you trust them (the government) to make the right decisions in the future?*" Responses were dichotomized as trusting (trust a lot/a little) or not trusting (do not trust very much/at all, don't know). Furthermore, concern about income was assessed using two questions asking about respondents' personal income and household income. Respondents were classified as concerned if they answered: 'Coronavirus has already impacted on my personal/ household income' or 'Coronavirus has not yet impacted on my personal/ household income, but I expect it to do so in the future' (vs not concerned, or 'don't know'). Concern about education was assessed with the question: '*If this is applicable to you, how concerned are you about either your education or the education of your children*?'. Respondents were classified as 'concerned (very/fairly concerned)', 'not concerned' (not very/not at all concerned or don't know), or "not applicable". Concern about health was assessed using three questions that asked how much respondents were concerned about their health, the health of family and friends, and other people living in their country. Perceived spread of COVID-19 was assessed by whether respondents themselves and/or their close family members/friends have contracted the virus. Responses were dichotomized into yes ('Yes, definitely', 'Yes, I think so', or 'Possibly') and no ('No', 'Don't know'), while understanding of the use of precautionary measures to reduce COVID was asked with the question "*How much do you feel you understand about what measures you can personally take to help limit the spread of the coronavirus?*" Responses were dichotomized (little/no understanding, don't know vs good/fair understanding).

Descriptive statistics and Chi-squared tests were used to examine within-group differences, and adjusted odds ratios (AOR) were calculated with 95% Confidence Intervals (CI), fitted to examine associations with statistical significance set at $p < 0.05$. Data analysis was conducted in late March 2020 using R version 3.6.1. The current study was exempt from an ethics review by institutional review board (IRB), as it was a secondary analysis of de-identified data.

3. Results

As noted in Table 1, Japan had the lowest level of approval of governmental response to the pandemic amongst the G7, rating governmental communication as good, and trusting governmental decisions (35.0%, 33.6%, and 38.0%, respectively), followed by the U.S. (52.9%, 64.6%, and 59.9%, respectively). In comparison to Italy, which

was leading the curve of the pandemic at the time of the survey, all other countries had lower levels of approval of governmental response, with the lowest aOR in Japan (aOR 0.20, 95% C.I: 0.16–0.26) followed by the G.B. (aOR 0.41, 0.33–0.52) and the U.S. (aOR 0.42, 0.34–0.53). Understanding of which measures one can personally take to help limit the spread of COVID-19 was significantly associated with approving governmental response (aOR 2.88, 95% C.I: 2.19–3.79), rating government communication as good (aOR 2.7, 95% C.I: 2.04–3.58) and trust in future governmental decisions (aOR 2.73, 95% C.I: 2.09–3.57). Those who reported government/politicians as the most trustable source of information were more likely to report approval, higher rating toward governmental communications, and/or trust toward governmental actions compared to those who reported doctors/health care providers as the most trusted source. Those who reported family/friends as the most trustable source of information also had a higher likelihood to report approval and trust toward governmental actions.

4. Discussion

Public attitudes towards governmental actions against COVID-19 varied substantially across the G7 countries. Besides the governmental instructions and interventions adopted in the respective countries, this variation could also be explained by cultural differences, social norms, and differences in relative positioning on the curve of the pandemic (Hilyard et al., 2010). Indeed at the time of the survey, Italy was substantially ahead of the curve of the pandemic (35,713 cases), compared to the other G7 countries (United States: 9415; France: 9134; Germany: 8198; United Kingdom: 4427 (not G.B.); Japan: 873; Canada: 690) (Roser et al., 2020). As countries move towards different stages of the pandemic, with measures being escalated and de-escalated, levels of public approval and trust are likely to change. Indeed, at the time of the survey countries differed with regards to their policies – as noted by their Government Stringency Index, a composite measure of the strictness of policy responses. At the time of the survey, France (GSI: 87.96) and Italy (GSI: 85.19) had already applied strict policy responses, while Japan (GSI: 40.74) and Great Britan (GSI: 31.48) had the least stringent policies a factor which may have been reflected in the responses as Italians provided the highest level of approval of governmental response, and high rating of governmental communication while Japanese noted the lowest support of both governmental response, communication and trust in future decision making (Roser et al., 2020).

Our analysis also revealed that understanding of precautionary measures and trusted sources of information strongly predicted public attitudes towards governmental actions, highlighting the importance of health communications that educate the public on the purposes and expected effects of precautionary measures and how to practice these measures through various communication channels. As seen in historical pandemics, timely and accurate governmental communication is essential as it determines whether the public will trust government authorities more than rumours and misinformation (Vinck et al., 2019). During the H1N1 pandemic, people actively evaluated government advice and communication, in terms of feasibility, credibility and costs associated with the recommended pandemic control measures (Teasdale and Yardley, 2011). Subsequently, health communication strategies that utilize data and the available scientific evidence should be used in COVID-19 messaging, given that public perceptions and level of trust in the government could indirectly impact population compliance with response measures (Khosravi, 2020) – which may have significant public health implications in the case of COVID-19.

Although our study was subject to a limitations including convenience sampling that may have resulted in bias, and the cross-sectional nature of the survey, its timely data collection from multiple countries enabled us to assess public attitudes during the early stages of the COVID-19 pandemic. Repeated assessment during the progression of the pandemic is warranted.

Table 1

Approval of governmental response, evaluation of governmental communication, and trust towards governmental decisions regarding the COVID-19 outbreak in G7 countries, March 19–21, 2020 (n = 7005).

		N[1]	Approval of government response (Strongly/somewhat approve)		Evaluation of government communication (Very/fairly good)		Trust towards government decision in the future (Trust a lot/trust a little)	
			% (95% CI)	AOR[2] (95% CI)	% (95% CI)	AOR[2] (95% CI)	% (95% CI)	AOR[2] (95% CI)
Overall		7005	53.9 (52.3–55.5)	–	62.3 (60.8–63.9)	–	59.2 (57.7–60.8)	–
Country	Canada	1000	**65.6 (62.4–68.7)**	**0.63 (0.50–0.80)**	**81.3 (78.7–83.9)**	**1.43 (1.11–1.86)**	**77.2 (74.4–80.1)**	**1.93 (1.51–2.47)**
	France	1000	**61.2 (57.7–64.7)**	**0.51 (0.40–0.65)**	**66.0 (62.6–69.3)**	**0.62 (0.49–0.80)**	**62.7 (59.3–66.1)**	0.88 (0.70–1.11)
	Great Britan	1001	**56.3 (53.2–59.5)**	**0.41 (0.33–0.52)**	**72.7 (69.9–75.6)**	0.90 (0.71–1.15)	**67.6 (64.7–70.6)**	1.08 (0.86–1.35)
	Germany	1004	**58.0 (54.8–61.3)**	**0.46 (0.37–0.58)**	**68.1 (65.1–71.1)**	**0.72 (0.57–0.91)**	**66.9 (63.9–70.0)**	1.11 (0.88–1.39)
	Italy	1000	**75.5 (72.5–78.5)**	Ref.	**76.5 (73.5–79.5)**	Ref.	**66.7 (63.5–70.0)**	Ref.
	Japan	1000	**35.0 (31.5–38.6)**	**0.20 (0.16–0.26)**	**33.6 (30.1–37.2)**	**0.18 (0.14–0.23)**	**38.0 (34.4–41.6)**	**0.37 (0.29–0.47)**
	US	1000	**52.9 (49.7–56.1)**	**0.42 (0.34–0.53)**	**64.6 (61.6–67.7)**	**0.67 (0.53–0.85)**	**59.9 (56.8–63.0)**	0.90 (0.72–1.13)
Gender	Female	3415	**54.2 (51.9–56.5)**	Ref.	**64.5 (62.3–66.7)**	Ref.	**58.7 (56.4–60.9)**	Ref.
	Male	3514	**54.2 (51.9–56.5)**	1.05 (0.91–1.22)	**60.8 (58.6–63.1)**	0.88 (0.76–1.03)	**61.0 (58.7–63.2)**	1.16 (1.00–1.35)
	Other/prefer not to say	76	**31.2 (17.6–44.7)**	0.89 (0.38–2.09)	**34.6 (21.0–48.1)**	0.57 (0.28–1.16)	**20.8 (11.4–30.2)**	**0.27 (0.12–0.57)**
Age	16–24	810	45.8 (41.1–50.5)	Ref.	57.1 (52.3–61.8)	Ref.	58.0 (53.2–62.7)	Ref.
	25–44	2592	54.2 (51.6–56.8)	**1.54 (1.16–2.03)**	63.4 (60.9–65.8)	**1.37 (1.02–1.84)**	59.1 (56.6–61.7)	1.08 (0.81–1.43)
	45–64	2584	54.1 (51.4–56.8)	**1.67 (1.25–2.24)**	62.6 (60.0–65.2)	1.28 (0.94–1.75)	58.5 (55.8–61.2)	1.08 (0.80–1.44)
	65+	1019	57.5 (53.8–61.2)	**2.01 (1.45–2.77)**	63.4 (59.7–67.0)	1.40 (1.00–1.97)	61.0 (57.3–64.7)	1.29 (0.94–1.78)
Education	No full-time education	571	51.6 (46.2–57.0)	1.11 (0.85–1.46)	62.0 (56.8–67.1)	**1.42 (1.07–1.88)**	57.3 (52.0–62.6)	1.16 (0.88–1.52)
	Still studying	814	51.0 (46.2–55.8)	1.07 (0.79–1.44)	60.6 (55.8–65.3)	1.05 (0.77–1.44)	61.0 (56.2–65.8)	1.07 (0.79–1.44)
	<College/University	3242	56.2 (53.8–58.5)	1.13 (0.95–1.35)	64.8 (62.6–67.1)	**1.26 (1.05–1.52)**	60.4 (58.1–62.7)	1.10 (0.92–1.32)
	≥College/University	1896	53.0 (49.7–56.2)	Ref.	60.3 (57.1–63.5)	Ref.	58.8 (55.6–62.0)	Ref.
Understanding of precautionary measures to reduce COVID	A little/no understanding, don't know	679	**27.3 (22.8–31.7)**	Ref.	**35.4 (30.6–40.1)**	Ref.	**32.0 (27.4–36.5)**	Ref.
	Good/fair understanding	6326	**56.9 (55.2–58.6)**	**2.77 (2.11–3.62)**	**65.3 (63.7–67.0)**	**2.71 (2.05–3.57)**	**62.3 (60.6–63.9)**	**2.68 (2.06–3.50)**
Concern – Impact on health of yourself, family/friends, people	No at all/not very concerned, don't know	582	**35.4 (30.2–40.6)**	Ref.	**43.0 (37.6–48.3)**	Ref.	**41.7 (36.4–47.1)**	Ref.
	Fairly/very concerned	6423	**55.8 (54.1–57.5)**	1.09 (0.82–1.46)	**64.3 (62.6–65.9)**	1.26 (0.95–1.67)	**61.0 (59.3–62.7)**	1.19 (0.89–1.58)
Concern – impact on income	Will have no impact	1612	52.2 (48.9–55.4)	Ref.	61.2 (58.0–64.4)	Ref.	58.1 (54.9–61.4)	Ref.
	Already impacted/expect to impact in the future	5393	54.5 (52.6–56.4)	0.88 (0.73–1.06)	62.7 (60.9–64.5)	0.83 (0.68–1.00)	59.6 (57.8–61.4)	0.88 (0.73–1.07)
Concern – impact on education	No at all/not very concerned, Don't know	1610	**49.8 (46.5–53.0)**	Ref.	**55.2 (52.0–58.5)**	Ref.	**56.3 (53.1–59.6)**	Ref.
	Fairly/very concerned	2985	**58.4 (55.9–60.9)**	**1.23 (1.01–1.49)**	**66.2 (63.8–68.5)**	**1.30 (1.06–1.59)**	**63.1 (60.7–65.5)**	1.09 (0.89–1.33)
	Not applicable	2410	**51.3 (48.6–54.1)**	**0.80 (0.66–0.99)**	**62.4 (59.7–65.1)**	0.88 (0.71–1.09)	**56.5 (53.8–59.3)**	**0.73 (0.59–0.89)**
Perceived spread – self/family/ friends	No/Don't know	5608	**53.0 (51.2–54.8)**	Ref.	**61.8 (60.1–63.6)**	Ref.	**58.4 (56.6–60.1)**	Ref.
	Yes	1397	**58.4 (54.8–62.0)**	**1.22 (1.00–1.48)**	**64.9 (61.4–68.3)**	1.03 (0.84–1.28)	**63.7 (60.2–67.2)**	1.12 (0.91–1.38)
Most trusted information source	Doctors/health care providers	1403	**51.7 (48.1–55.4)**	Ref.	**63.8 (60.3–67.4)**	Ref.	**60.0 (56.4–63.6)**	Ref.
	Friends/family	353						

Table 1 (*continued*)

	N[1]	Approval of government response (Strongly/somewhat approve)		Evaluation of government communication (Very/fairly good)		Trust towards government decision in the future (Trust a lot/trust a little)	
		% (95% CI)	AOR[2] (95% CI)	% (95% CI)	AOR[2] (95% CI)	% (95% CI)	AOR[2] (95% CI)
		59.3	**1.89**	**63.8**	1.30	**66.6**	**1.70**
		(52.5–66.0)	**(1.35–2.66)**	**(57.1–70.4)**	(0.91–1.84)	**(60.2–73.1)**	**(1.18–2.44)**
Government/politicians	1183	**77.7**	**3.40**	**86.2**	**3.49**	**86.5**	**4.29**
		(74.6–80.8)	**(2.65–4.35)**	**(83.6–88.9)**	**(2.64–4.63)**	**(84.1–89.0)**	**(3.27–5.64)**
Mass media (newspapers/ news websites/TV)	2843	**52.9**	1.20	**60.9**	1.15	**57.6**	1.12
		(50.4–55.4)	(0.99–1.46)	**(58.4–63.4)**	(0.93–1.41)	**(55.1–60.1)**	(0.92–1.37)
Social media (Facebook, Twitter etc.)	358	**59.4**	**1.56**	57.4	0.93	50.6	0.78
		(52.5–66.2)	**(1.10–2.21)**	(50.4–64.3)	(0.65–1.34)	(43.5–57.6)	(0.56–1.10)
Other	543	**36.6**	**0.69**	44.6	**0.64**	**39.5**	**0.54**
		(31.1–42.2)	**(0.50–0.94)**	(38.8–50.3)	**(0.47–0.87)**	**(33.9–45.2)**	**(0.40–0.73)**
Don't know	322	**28.2**	**0.57**	**38.1**	**0.59**	**32.0**	**0.55**
		(21.5–34.9)	**(0.38–0.88)**	**(31.0–45.2)**	**(0.40–0.86)**	**(25.1–38.8)**	**(0.37–0.81)**

[1] Responses do not always add up to 7005 due to missing responses to certain questions (skipped by respondents).

[2] Adjusted Odds Ratios were calculated adjusting for all covariates in the table, fitted to examine associations with statistical significance set at $p < 0.05$ (**bold**).

Authors' contributions

All authors contributed significantly to this work.

Funding

CRediT authorship contribution statement

Authors CV, KN, CK and HEB had the main role in manuscript preparation and data interpretation, authors SO and LT had the main role in data analysis. Authors LT and NB were responsible for survey implementation. All authors contributed to data interpretation and manuscript preparation. All authors have read and agreed on the final text of the manuscript.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Gostin, L.O., Hodge, J.G., Wiley, L.F., 2020. Presidential powers and response to COVID-19. JAMA.

Hilyard, K.M., Freimuth, V.S., Musa, D., Kumar, S., Quinn, S.C., 2010. The vagaries of public support for government actions in case of a pandemic. Health Aff. 29 (12), 2294–2301.

Khosravi, M., 2020. Perceived risk of COVID-19 pandemic: the role of public worry and trust. Electron. J. Gen. Med. 17 (4), em203.

Roser, Max, Ritchie, Hannah, Ortiz-Ospina, Esteban, Hasell, Joe, 2020. Coronavirus Pandemic (COVID-19). Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/coronavirus' [Online Resource].

Teasdale, E., Yardley, L., 2011. Understanding responses to government health recommendations: public perceptions of government advice for managing the H1N1 (swine flu) influenza pandemic. Patient Educ. Couns. 85 (3), 413–418.

Vinck, P., Pham, P.N., Bindu, K.K., Bedford, J., Nilles, E.J., 2019. Institutional trust and misinformation in the response to the 2018–19 Ebola outbreak in North Kivu, DR Congo: a population-based survey. Lancet Infect. Dis. 19 (5), 529–536.