



The relative value of mental health for pandemic response: A discrete choice experiment with stakeholders and the general population in Europe

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ABSTRACT

Background: During a public health emergency, health policies often prioritised physical over mental health, prompting concerns about whether these decisions reflected societal values. This study assessed stated preferences for mental health relative to other wellbeing domains and examined how these priorities align between the general population and health policy stakeholders across eight European countries.

Method: A discrete choice experiment (DCE), grounded in random utility theory, was administered via an online survey to 1615 members of the general population (nationally representative samples) and 145 health stakeholders in Belgium, France, Germany, Italy, the Netherlands, Spain, Sweden, and the United Kingdom. Participants assessed six pairs of hypothetical countries (A and B), differing in four attributes representing pandemic policy consequences: hospital admissions, psychological distress, employment loss, and movement restrictions.

Results: Among the four attributes, psychological distress accounted for 34% of the relative importance in decision-making, compared to 30% for hospital admissions. In contrast, restrictions on mobility exerted the least influence on choice. On average, respondents expected 0.61 fewer hospitalisations (per 100,000) to accept a 1% increase in psychological distress. Compared to the general population, stakeholders placed greater emphasis on reducing psychological distress and were more willing to accept restrictions on mobility. Respondents who held more negative views towards individuals with mental health problems or those hospitalised due to COVID-19 were significantly less likely to prioritise reductions in psychological distress.

Conclusion: There is similar importance attached to psychological distress and to the risk of COVID-19-related hospitalisation by the general population and stakeholders, but they diverge regarding civil liberties restrictions, providing insights into essential considerations for shaping effective mitigation policies for public health emergencies.

1. Introduction

1.1. Background

During the COVID-19 pandemic, most countries implemented suppression policies to control the surge of cases, avoid overloading the health care system, and prevent deaths. The precise mix of such policies varied between countries and periods but generally included some restrictions on outdoor activities, movement, and social gatherings, travelling and social bubble size, as well as the closure of cultural and commercial venues, schools, borders and mandatory homeworking or learning.

The policies had wide-ranging consequences. Unemployment rates rose from 5.4% in the first quarter of 2020 to 8.6% in the second quarter

(European Commission, 2021; OECD, 2021a), with job losses more pronounced in less regulated labour markets (such as in the USA) and for socially vulnerable groups such as low-wage workers, young people, women, migrants and ethnic/racial minorities (Adams-Prassl et al., 2020; Couch et al., 2020; Tooze, 2021). The pandemic also led to increased underemployment, widespread job insecurity, and a 15% drop in number of hours worked. At the peak of the first wave, one third of workers in the EU were working from home, often for longer hours (OECD, 2021a).

Suppression policies also affected the mental health of populations; levels of psychological distress were higher in countries which implemented more stringent policies (Aknin et al., 2022). However, the magnitude of this effect remains debated. Several studies report mixed findings, and a meta-review concluded that the pandemic was associated

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<https://doi.org/10.1016/j.socscimed.2026.119067>

Received 27 May 2025; Received in revised form 1 February 2026; Accepted 2 February 2026

Available online 11 February 2026

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with a heterogeneous but statistically significant—and generally small—increase in self-reported mental health problems, with effect sizes ranging from 7% to 27% (Bonati et al., 2022; Penninx et al., 2022; Robinson et al., 2022; Santomauro et al., 2021).

Concerns were also raised about the redistributive effects of suppression policies, as the cost of the policies was not borne equally by different sociodemographic groups. For example, suppression measures helped to protect the health of the elderly and people with chronic diseases, but at a cost for the youngest age groups who were denied onsite schooling and educational activities. Concerns were also raised about the redistributive effects of suppression policies regarding women and men, because women were more heavily impacted by home-schooling and more exposed to the contagion as the health and care sector is predominantly female (Flor et al., 2022).

As the pandemic went on, the consequences of these policies ceased to be “side” effects and became integral to the policy equation. For instance, arguments for reopening schools after the first wave were heavily influenced by consideration for the mental health of the youngest, and the reopening of non-essential activities such as restaurants to avoid large numbers of job losses. Policymakers were thus confronted with hard choices between competing values within and between groups of the population. Balancing such competing values is central to the role public health policies: health insurance redistributes income from the healthiest to the sick; taxation, from the wealthy to the less affluent. Yet, during the pandemic, the extent to which the decisions made reflected the preferences of policymakers or the general population was unclear. Most decisions were made on a very short-term basis, with high priority given to the preservation of physical health (Colman et al., 2021; Esmonde et al., 2024). Furthermore, decision-making tended to be concentrated and centralised, led by national advisory groups, with limited input from mental health stakeholders (Colman et al., 2021).

Several studies have examined public preferences for COVID-19-related policies, often involving trade-offs between physical health and other outcomes. A number of these used experimental methods, including discrete choice experiments (DCEs) in Europe (Belle and Cantarelli, 2022; Lancsar et al., 2023; Loria-Rebolledo et al., 2022; Manipis et al., 2021; Mühlbacher et al., 2022; Sicsic et al., 2022), the United States (Lancsar et al., 2023; Reed et al., 2020), Australia (Manipis et al., 2021), and in India (Ahmad et al., 2021). Most found that respondents were willing to accept poorer physical health outcomes in exchange for fewer restrictions or reduced economic impacts. Although some studies identified heterogeneity in preferences, few consistent socio-demographic patterns emerged. Some studies focused on preferences between specific suppression measures (Ahmad et al., 2021; Lancsar et al., 2023; Manipis et al., 2021; Sicsic et al., 2022) while others examined trade-offs between health and economic outcomes (Belle and Cantarelli, 2022; Chorus et al., 2020; Lancsar et al., 2023; Loria-Rebolledo et al., 2022; Mühlbacher et al., 2022; Reed et al., 2020). Only one study explored the trade-off between physical and mental health (Chorus et al., 2020).

1.2. Theoretical expectations

Although the existing studies offer valuable insights into the trade-offs involved in pandemic management, they conflate health outcomes with the restrictive measures used to achieve them. This makes it difficult to interpret the results, as it is unclear whether participants are reacting to the outcomes themselves or to the means by which they were achieved. Furthermore, with one exception (Chorus et al., 2020), they do not include the mental health of the population as a choice attribute, although policy analysis has shown that it was influential in decision-making and may have contributed, for instance, to the decision to reopen schools (Toffolutti et al., 2022; Viner et al., 2020). Importantly, all prior studies have focused solely on the general population; none have examined the preferences of those involved in policymaking or compared them directly with public preferences. Policymakers,

however, must make rapid decisions on behalf of the population, so understanding how their preferences align with—or diverge from—those of the public is essential.

This study addresses a critical gap in the literature by comparing the preferences of the general population with those of health policy stakeholders regarding multiple dimensions of well-being during a public health emergency. It aims to assess how different groups prioritise physical health, mental health, employment, and civil liberties when faced with complex policy trade-offs. Below, we outline the rationale underlying our three research questions.

Before the pandemic, mental health was widely recognised as a neglected and underfunded domain relative to somatic health. Mental health care accounts for less than 6% of total health expenditure across OECD countries, despite mental disorders representing a substantial share of the global disease burden and high levels of unmet need (Fan et al., 2025; OECD, 2021b). It is unclear, however, whether that imbalance reflects genuine societal preferences or arises from a misalignment between societal preferences and resource-allocation mechanisms. The COVID-19 pandemic offered a unique setting in which to examine this question: before vaccines were available, suppression measures could worsen psychological distress, forcing both policymakers and the public to weigh the value of protecting physical health against the risk of deteriorating mental health. Our analysis therefore offers an opportunity to estimate the relative priority accorded to those two domains under conditions of acute constraint. Our first research question is: *What are the stated preferences for mental health relative to other aspects of health and to non-health issues in the context of a pandemic (Research Question #1)?* If the longstanding disparity between mental and physical health reflects true underlying preferences, we would expect physical health to be prioritised over mental health (Hypothesis 1).

Differences between stakeholders and the general population may also reveal how individual preferences diverge from the social optimum. In many areas of health policy, individuals make choices that maximise personal welfare but not necessarily collective well-being, particularly when externalities are significant as with vaccination (Bauch and Earn, 2004; Mouter et al., 2022). During the pandemic, stakeholders were responsible for preventing system failures (e.g., hospital overload), managing behavioural risks such as viral transmission, and protecting vulnerable groups. By contrast, the general population may have prioritised personal well-being, such as income, daily functioning, and freedom of movement (Belle and Cantarelli, 2022). These divergent perspectives constitute a classic collective-action dilemma: the “tragedy of the commons” may lead stakeholders’ preferences to depart from those of the public. Our second research question, therefore, is: *To what extent do stakeholder preferences align with those of the general population (RQ#2)?* Given that physical health and mental health entail significant societal externalities and equity considerations, we expect stakeholders to attach greater importance to these domains than the general population (Hypothesis 2).

Finally, we expect individual valuation of mental versus physical health to vary according to personal experience and belief systems. Preferences for mental health are known to be shaped by attitudes toward mental illness, such as stigma (Pescosolido et al., 2015), as well as by political orientations that structure views on state responsibility and social support (Munsch et al., 2020). Recent studies have also shown that attitudes to the pandemic and its consequences were associated with political orientation (Backhaus et al., 2023; Phalippou and Wu, 2023; Wallace et al., 2022). Likewise, personal vulnerability and experiences of COVID-19 may increase the salience of physical health risks. Building on these insights, our third research question is: *What factors account for preferences regarding mental and physical health (RQ#3)?* We hypothesised that higher level of stigma, greater personal exposure to COVID-19, and right-leaning political orientations would be associated with a lower valuation of mental health relative to physical health (Hypothesis 3).

2. Method

This study is part of the larger RESPOND project (*Preparedness of health systems to reduce mental health and psychosocial concerns resulting from the COVID-19 pandemic*), a research endeavour aimed at helping to prepare the European mental health care system for future pandemics (RESPOND, 2024). RESPOND included 13 research partners from eight European countries and Australia.

The study used a discrete choice experiment (DCE) to elicit the preferences of the population and of stakeholders regarding policy consequences. A DCE is a framework for studying the relative strength of values for components of choices which can be described using different key features, known as attributes. Compared to observational designs, DCEs have two advantages: they allow the different attributes to be orthogonal to each other and be manipulated experimentally; they also reduce the risk of social desirability bias by confronting the respondent with difficult choices. DCEs reduce the risk of social desirability bias because respondents cannot simply endorse socially desirable attributes in isolation. Instead, they are confronted with explicit trade-offs between desirable outcomes, which limits the possibility of uniformly selecting the socially desirable option (Lancsar & Louviere, 2008; de Bekker-Grob et al., 2012). Based on random utility theory, DCEs assume that individuals select the option that maximises their utility, even if it involves accepting lower levels of certain attributes to gain more of others (Louviere et al., 2000). In the context of the COVID-19 pandemic, for example, the public might tolerate a higher risk of infection to reduce income loss (Mühlbacher et al., 2022). DCEs are a popular and widely used approach in health (Ryan, 1999), mental health (Rowen et al., 2022), and political sciences (Adserà et al., 2023).

The study followed the guidelines for designing DCE (Bridges et al., 2011; Hollin et al., 2020; Ryan et al., 1998). The choice tasks were framed from the perspective of a policymaker responsible for managing the pandemic and balancing competing societal outcomes for the whole population for which he or she is accountable. Rather than focusing on individual suppression measures—which vary widely in scope, target different socio-demographic groups, and have diverse effects—we defined policies in terms of their societal consequences (Adserà et al., 2023; Chorus et al., 2020).

These consequences were grouped into four domains salient during the pandemic. The population was sensitive to physical health, which was particularly threatened during the COVID-19 pandemic: risk of death, hospitalisation, cases of infection, and reproduction number. As the policy affected different aspects of daily life, however, including social life, mental health was also an important health-related value. The policies also impacted material well-being through income, employment, future taxes, and wealth. Finally, policies imposed restrictions on individual freedom through stay-at-home orders, travel bans, lockdowns, home-working, social distancing, bubble size restrictions, and the closure of cultural and sport venues. The public is more wary of these policies, which restrict freedom compared to more traditional public health policies (Lancsar et al., 2023), and may be willing to accept higher death rates in exchange for shorter and more lenient restrictions (Loría-Rebolledo et al., 2022).

The DCE was structured to reflect societal-level trade-offs, consistent with a policymaking perspective. Attribute selection followed a five-step process (Hollin et al., 2020): (i) a review of previously published studies (see [Supplementary Table S1](#)); (ii) exploratory face-to-face interviews with stakeholders in Belgium (n = 5) and the UK (n = 5) to identify the most critical attribute in each domain; (iii) a pilot test with an Amazon Mechanical Turks (AMT) sample (n = 200); (iv) a think-aloud piloting (n = 10) of the final version of the questionnaire to assess cognitive clarity; (v) a pre-testing of the final questionnaire with a sample of students (n = 20).

The definition of the criteria and wording of the choice task are shown in [Table 1](#). The DCE includes four attributes: (1) number of hospitalisations per 100,000, (2) the proportion of the active population

Table 1

Sample description, discrete choice experiment in European countries: a survey of the general population and stakeholders, 2022–2023 (n = 1760).

	Respondent type			
	General Population		Stakeholder	
	No	%	No	%
<i>Country:</i>				
Belgium	202	12.5	80	55.2
France	200	12.4	5	3.4
Italy	200	12.4	13	9.0
Spain	200	12.4	10	6.9
Sweden	201	12.4	2	1.4
UK	200	12.4	7	4.8
Netherlands	208	12.9	16	11.0
Germany	204	12.6	12	8.3
<i>Age:</i>				
18–19	29	1.8	0	0.0
20–24	139	8.6	1	0.7
25–34	266	16.5	11	7.6
35–44	297	18.4	25	17.2
45–54	282	17.5	50	34.5
55–64	248	15.4	46	31.7
65+	354	21.9	12	8.3
<i>Gender:</i>				
Male	781	48.4	73	50.3
Female	831	51.5	70	48.3
Other	3	0.2	2	1.4
<i>Political orientation:</i>				
Left	553	34.2	77	53.1
Centre	733	45.4	61	42.1
Right	329	20.4	7	4.8
<i>Has been hospitalised in relation to COVID-19 (yes, %)</i>		6.4		0.0
<i>Health status risk (Mean score 0–3 and std, good to bad)</i>		0.96 (0.92)		0.50 (0.72)
<i>Exposure to COVID-19 (Mean score 0–5 and std, low to high)</i>		1.47 (1.59)		1.98 (1.20)
<i>Stigmatisation of people with MI (Mean score 0–4 and std, low to high)</i>		1.49 (1.25)		0.44 (0.64)
<i>Familiarity with people with MI (Mean score 1–4 and std, low to high)</i>		1.29 (1.33)		2.26 (1.14)

who lose their job, (3) decrease in population movement, and (4) increase in psychological distress. Each attribute includes three levels which are defined using specific values and labels (mild, moderate, severe). Levels of hospitalisation (number of admissions per 100,000: 1,7,14) were defined according to the quartiles of hospitalisation rates for COVID during the first wave of the pandemic in 2020 (ECDC, 2022), unemployment levels (5%, 10%, 20%) were taken from the OECD employment monitoring (OECD, 2021c), and mobility levels were defined according to the changes in Google mobility statistics during the first wave (Google, 2022) (decrease in population movement: 15%, 40%, 85%). Psychological distress levels (10%, 20%, 40%) were defined according to a review of reviews of the mental health effects of the COVID-19 pandemic (Penninx et al., 2022).

An optimal D-efficient design was generated using prior estimates from the AMT pilot, considering main effects only. While the design may generate combinations that are not typically observed in practice, this is a common and necessary feature of DCEs to allow estimation of marginal rates of substitution. Thirty-six-choice sets of two profiles were generated and organised into six blocks of six-choice sets. Each respondent was randomly allocated to one of the six blocks. The designs were generated and evaluated with the SAS OPTEX Procedure and related macros (SAS, 2014). Although ratings are common in choice experiments, the policymaking process is often about making binary decisions such as turning specific measures on or off, so the respondents were instructed to select one option (see task description in [Box 1](#)).

Data and participants: This study covers eight European countries: Belgium, France, Germany, Italy, the Netherlands, Spain, Sweden, and

Box 1

“In order to tackle the COVID-19 pandemic, countries opted for different strategies. Some countries implemented highly stringent strategies, e.g. restricting social contact and activities, while other countries opted for flexible strategies, e.g. recommending contact limitation instead of prohibition. In the next questions, we imagine two fictitious countries, Country A and Country B. These two countries have chosen different strategies to tackle a pandemic similar to the COVID-19 pandemic. As a result, the two countries experience different outcomes in four areas: admissions to hospitals, employment, freedom of movement, and mental health. Based on the reported consequences, we ask you to choose which country opted for your preferred strategy, either COUNTRY A or COUNTRY B. At the time these strategies are to be implemented, no vaccine is available. You may also consider that, apart from the reported consequences, the situation in both countries is identical.”

	Country A	Country B
Number of new weekly pandemic-related hospital admissions per 100,000 inhabitants	1 (mild)	14 (severe)
Proportion of the active population who lose their job (%)	20 (severe)	5 (moderate)
Decrease in population's movements towards activity locations (%)	40 (moderate)	85 (severe)
Increase in psychological distress in the population (%)	10 (mild)	20 (moderate)

I prefer A ☐ B ☒

the United Kingdom, countries that represent a diverse group in terms of excess death rates and stringency of suppression policies during the COVID-19 pandemic in Europe (Hale et al., 2021; Wang et al., 2022). Two types of respondents were recruited: stakeholders and members of the general population. Stakeholders are people who were involved in the management of the COVID-19 pandemic during the 2020-22 period. We sought to identify a range of different stakeholders, approaching key health policymakers, civil servants in national and regional administrations, public health, social care, housing, and education planners, scientific advisory group members, representatives of professional associations, and media representatives (Varvasovszky and Brugha, 2000). Stakeholders were identified using a combination of strategies: initial lists from RESPOND project partners, systematic reviews of advisory body membership, and snowball sampling. General population samples were recruited to provide a comparison with stakeholder preferences. Based on the Johnson and Orme formula, a minimum sample of 125 was needed for our design and we aimed to recruit 200 respondents per country (de Bekker-Grob et al., 2015). The data collection was performed by a survey company (dedicated survey) with quota sampling based on age, sex, educational level, and region. Participants were recruited into a pre-existing online panel through targeted advertising (e.g., social media and search ads) and profiled to select respondents who met the study's eligibility criteria. A quota-based sampling strategy was then applied to draw participants from the panel. Eligible panel members were invited by email to participate in the survey. Participation was voluntary, and respondents received an incentive. Supplementary materials provide, for each country, evidence that the demographic and geographical distributions of the sample are comparable to those of the general population.

2.1. Measures

Although preferences are heterogeneous and personal, they are not random and a large body of research shows how perceptions of mental health are embedded in social roles and social contexts, and influenced by individual exposure (Pescosolido et al., 2015). This study investigated four main groups of determinants known to affect the preferences: (1) attitudes towards people with mental health problems, (2) personal risk of poor health or exposure to COVID-19, (3) political orientation, and (4) respondent type (stakeholder vs general population).

Attitudes toward mental health were assessed through two constructs: stigma and familiarity. Stigmatisation of mental health was measured with four items from the Eurobarometer that assess common stereotypes about people with psychological or emotional disorders. Respondents indicated their level of agreement on a four-point Likert scale with statements such as: individuals with mental illness (i) are

unpredictable, (ii) pose a danger to others, (iii) never recover, and (iv) are to blame for their condition. Responses were dichotomised (agree vs disagree), and a composite stigma score was created, ranging from 0 (low stigma) to 4 (high stigma). Familiarity with mental illness was measured using four items from the validated Familiarity Scale (Corrigan et al., 2001), assessing whether the respondent had lived with, worked with, or had close personal contact (e.g., neighbour or friend) with someone experiencing mental health problems. Scores ranged from 0 (no familiarity) to 4 (high familiarity).

We asked the respondents about their general health (“How is your health in general?”) and whether they had a long-term illness. Reporting poor or bad general health, having a chronic illness, or being aged 65 years or older was each scored as one point, with an overall score ranging from 0 to 3. Personal exposure to COVID-19 was ascertained by asking the respondents three questions: whether they had been infected, how severe the ensuing symptoms were (1 = no symptoms to 4 severe symptoms), and whether they had been hospitalised for COVID-19. A score ranging from 0 (no infection) to 5 (hospitalised) was computed.

Political orientation was measured using an 11-point self-placement scale, where 1 indicated extreme left and 11 indicated extreme right (Kroh, 2007). Responses were categorised into three groups: left (1–4), centre (5–7), and right (8–11).

Finally, respondents were asked to rate the impact of various suppression policies on mental health. For each policy, they were presented with a question such as: “Please rate how impactful you think [policy name] is on the mental health of the population.” Assessed policies included restrictions on gatherings, limits on social bubbles, mandatory remote working, lockdowns, closures of restaurants and bars, visit restrictions in care homes, school closures, and closure of cultural and indoor venues. Ratings ranged from 1 (very good for mental health) to 5 (very bad for mental health), and were subsequently categorised into three groups: good (1-2), neutral (3), and bad (4-5).

2.2. Statistical analysis

After describing the sample composition, a logistic regression was used to estimate the determinants of lexicographic choice, that is, when a respondent always chooses the lowest level of one attribute regardless of the values of the other attributes. The choice task was analysed using Bayesian mixed logit models, initially with each attribute included as a categorical variable. A mixed model allows makes it possible to account for respondent heterogeneity in preferences. This is an important consideration as this study covers several countries with varying levels of stringency in suppression policies and different outcomes related to the COVID-19 pandemic. This study also addresses different socio-demographic groups with varied experiences and concerns during the

pandemic. Moreover, the study targets two respondent types with different decision perspectives, individual and collective. The use of the Bayesian approach is justified by the complexity of the model, which includes a random slope for each attribute, in addition to the main and interaction fixed effects. Because Bayesian models do not require the optimisation of a likelihood function, they are less likely to encounter convergence problems and are less exposed to local maxima, as illustrated in a previous DCE, for specifications including both fixed and random coefficients (Regier et al., 2009). Respondent fatigue is common in discrete choice experiments, and the Bayesian framework may also allow for better handling of data of limited quality. All models were estimated using effect coding, meaning that the estimated preference for each attribute level is interpreted relative to the overall mean effect across all levels of that attribute. We computed the importance of each attribute as the ratio of the absolute value of each coefficient to the sum of the absolute values of all coefficients (Adserà et al., 2023), following the formula below for the weight of attribute W_a where β_a is the coefficient from the mixed logit model of attribute a .

$$W_a = \frac{|\beta_a|}{\sum_{i=1}^N |\beta_i|}$$

To compute marginal rates of substitution, we calculated willingness to accept an increase in the hospitalisation rate, using the hospitalisation rate as the payment vehicle. This involved re-estimating the models with the attributes as continuous variables. Willingness to accept (WTA) a trade-off for each attribute was calculated using the following formula, where β_i is the coefficient of the attribute of interest i and β_H is the coefficient for the attribute used as the payment vehicle (hospitalisation rate). WTA was computed by the continuous scaling of the attribute. The standard errors of the WTA were estimated using the delta method (Wooldridge, 2002). To verify whether attributes could reasonably be modelled as continuous, we inspected the relationship between coefficient estimates and attribute levels by plotting the estimated coefficients against the levels and superimposing a straight line between the lowest and highest values.

$$WTA_i = \frac{\beta_i}{-\beta_H}$$

Given the anticipated heterogeneity in the coefficients, a priori hypotheses related to the four determinants mentioned above were tested by running models with the interactions of each attribute (treated as continuous variables) with the following covariates: respondent type (general population vs stakeholders), stigmatisation of mental illness (high vs low), familiarity with mental illness (high vs low), subjective health status (poor vs good), exposure to COVID-19 (high vs low), and political orientation (left, centre, right). In a supplementary analysis, the country was added to the interaction analyses.

The opinions about eight key suppression policies were then summarised, and the percentage of the respondents who wanted a policy to be avoided in the future was computed (respondents were allowed to pick just one). The unadjusted and adjusted mean score for perceived impact on mental health (1 = very good, 5 = very bad) were computed for each respondent type and compared using analysis of variance (ANOVA) controlling for age, sex, country, educational level, level of stigmatisation, subjective health status, and political orientation.

All analyses were performed using SAS9.4.

2.3. Ethical review

Ethical approval was granted by the London School of Economics and Political Science (LSE Ethics reference number: 28146).

3. Results

3.1. Sample description

The sample exhibited a relatively balanced distribution across countries, age groups, and genders. Among stakeholders, however, the number of respondents was quite heterogeneous across countries, with Belgium accounting for most of the sample. Most respondents identified with centrist political viewpoints, with around a third (37%) leaning towards the left and fewer than a fifth (18%) towards the right. Of the stakeholders, 92% declared they had been involved in policymaking or decision-making, and most rated their influence on decision-making as somewhat influential (64%, Supplementary Table ST2). Civil servants (35.2%), experts (29.7%), and representatives of health professionals (28.3%) were the most frequent (non-exclusive) categories represented. Cabinet ministers and policymakers made up 20.7% of the sample.

Overall, lexicographic tendencies were observed in fewer than 15% of respondents (Fig. 1). Stakeholders showed a greater propensity for lexicographic decision-making concerning psychological distress (15%) but demonstrated a lower inclination for mobility restrictions (<1%). The general population also displayed the highest lexicographic tendencies regarding psychological distress (10%).

3.2. Preferences

The results of the Bayesian mixed logit regression are presented in Table 2, for the general population and for the stakeholders, along with

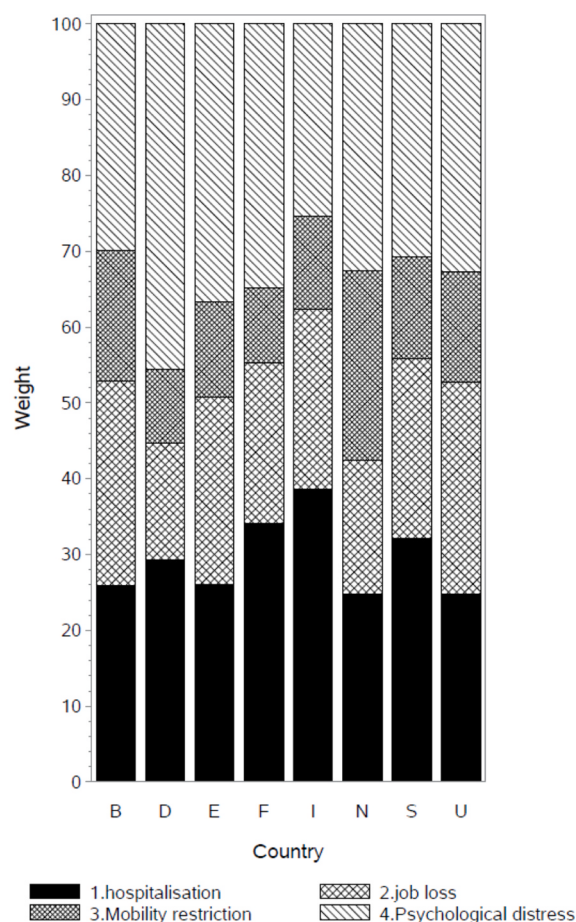


Fig. 1. Attribute weights by country for the general population ¶ B=Belgium; D = Germany; E = Spain; F=France; I=Italy; N=The Netherlands; S=Sweden; U=United Kingdom. ¶Weights are computed as the ratio of the absolute value of each coefficient to the sum of the coefficients' absolute value.

Table 2

Results of the mixed logit regression: fixed and random coefficients and willing to accept per type of respondent.

		Respondent type											
		Population (n = 1600)					Stakeholders (n = 145)					Comparison	
		fixed effects¶			Random effects§		Fixed effects¶			Random effects§			
Attribute	level	Coef.	STDE	WTA† & CI‡	Coef.	STDE	Coef.	STDE	WTA† & CI‡	Coef.	STDE	Difference	95CI Difference
No of new weekly pandemic-related hospital admissions (per 100,000)													
	1	0.66	0.05				1.87	0.31					
	7	0.21	0.04		0.28	0.04	0.56	0.18		0.78	0.19	0.35	(0.01, 0.73)
	14	−0.87	0.06		0.74	0.09	−2.43	0.37		3.46	1.14	−1.55	(-2.33, −0.84)
Proportion of the active population who lose their job (%)													
	5	0.54	0.05	−0.67			1.7	0.3	−0.71				
	10	0.16	0.03	(-0.78,-0.55)	0.29	0.04	0.36	0.17	(-0.94,-0.5)	0.73	0.16	0.2	(-0.13, 0.54)
	20	−0.70	0.06		0.47	0.06	−2.06	0.33		1.55	0.5	−1.36	(-2.03, −0.70)
Decrease in population's movements towards activity locations (%)													
	15	0.43	0.04	−0.1			0.08	0.2	0.05				
	40	0.03	0.03	(-0.13,-0.07)	0.3	0.03	0.03	0.17	(-0.02,0.11)	0.78	0.17	0	(-0.34, 0.34)
	85	−0.47	0.05		0.72	0.08	−0.11	0.21		1.07	0.34	0.35	(-0.07, 0.79)
Increase in psychological distress in the population (%)													
	10	0.86	0.05	−0.63			2.51	0.3	−0.67				
	20	0.18	0.03	(-0.73,-0.54)	0.3	0.04	0.55	0.17	(-0.89,-0.49)	0.68	0.14	0.36	(0.02, 0.69)
	40	−1.04	0.06		1.02	0.1	−3.05	0.35		1.87	0.41	−2.01	(-2.64, −1.28)

¶Mean parameter of the posterior distribution and its standard deviation, effect coding; § random variance component; †Willing to accept (WTA) is the ratio of the respective coefficient to the beta for hospitalisation. They are computed with the attributes as continuous variable, see method for computational details. ‡Higher posterior distribution credible interval.

Table 3

Attribute weights according to type of respondent.

		Respondent type			
Attribute		Population		Stakeholders	
	level	Weight¶ (%)	CI95%	Weight¶ (%)	CI95%
No. of new weekly pandemic-related hospital admissions (per 100,000), ref = 1					
	7	0.058	(0.040,0.078)	0.061	(0.023,0.099)
	14	0.238	(0.205,0.271)	0.265	(0.187,0.348)
Proportion of the active population who lose their job (%), ref = 5					
	10	0.043	(0.026,0.062)	0.040	(0.007,0.079)
	20	0.190	(0.159,0.223)	0.225	(0.157,0.300)
Decrease in population's movements towards activity locations (%), ref = 15					
	40	0.009	(0.008,0.027)	0.004	(0.033,0.040)
	85	0.127	(0.103,0.152)	0.012	(0.032,0.059)
Increase in psychological distress in the population (%), ref = 10					
	20	0.050	(0.032,0.068)	0.060	(0.025,0.096)
	40	0.284	(0.254,0.314)	0.333	(0.2600,0.404)

¶Weights are computed as the ratio of the absolute value of each coefficient to the sum of the coefficients' absolute value. Standard error with the Delta method.

the test of the difference between the stakeholders and the general population. For each respondent type and attribute, the table provides the fixed (preferences) estimates and random estimates (heterogeneity). In the general population, across all four criteria, the lowest level of risk was consistently the most likely to be chosen (positive fixed effects coefficients), and the highest level of risk was the least likely to be chosen (negative fixed effects coefficients). The intervals between coefficients for each level of each attribute suggested a dose-response relationship between the level of each outcome and country choice: as the attribute level increased (e.g., more hospitalisation, greater psychological distress), the corresponding utility decreased in a stepwise fashion. Heterogeneity was more pronounced for the highest level of risk and for psychological distress. The population was willing to accept a 0.63% increase (95CI: -0.73, -0.54) in psychological distress in exchange for 1 less hospitalisation per 100,000 people. The results were similar for stakeholders but with wider intervals. Compared with the general population, stakeholders attached stronger negative utility to the highest level of psychological distress (-3.05 vs -1.04, Table 2) and to the highest level of hospitalisation (-2.43 vs -0.87, Table 2), indicating greater reluctance to accept a high level of risk. Stakeholders were

willing to accept a 0.67% increase (95CI: -0.89, -0.49) in psychological distress in exchange for 1 fewer hospitalisation per 100,000 people. By contrast, stakeholders were almost indifferent to changes in movement restriction. Heterogeneity was high, particularly for the highest level of risk of hospitalisation and for psychological distress. This was expected given the smaller sample size for the stakeholders.

The plots (see supplementary materials) showed that the coefficients followed an approximately linear pattern, supporting the continuous specification for the WTA. A slight departure from linearity was observed, however, for the intermediate level of hospitalisation.

3.3. Weights of the four domains of well-being

The importance the respondents placed on the four attributes is shown in Table 3. Among the general population, psychological distress accounted for 33% (0.284 + 0.05) of all the included attributes, and hospitalisation accounted for 29% (0.058 + 0.238). Movement restriction accounted for 14%. Stakeholders placed slightly more importance on psychological distress (39%) and less on movement restriction (1.6%) than the general population.

Table 4

Interactions of the effect of hospital admission and psychological distress on preferences: results of the mixed logit regression: fixed and random coefficients.

Covariates:	Coefficient¶	STDE	95CI
Main effects:			
No. of new weekly pandemic-related hospital admissions (per 100,000)	-0.25	0.05	(-0.34, -0.16)
Proportion of the active population who lose their job (%)	-0.12	0.01	(-0.14, -0.10)
Decrease in the population's movements towards activity locations (%)	-0.02	0.00	(-0.02, -0.01)
Increase in psychological distress in the population (%)	-0.20	0.02	(-0.24, -0.15)
Interaction effects:			
Hospital admission*Having been hospitalised for COVID-19 (yes vs no)	0.00	0.06	(-0.12, 0.12)
Hospital admission*Exposure to COVID-19 (score)	0.00	0.01	(-0.02, 0.02)
Hospital admission*Health risk (score)	-0.01	0.01	(-0.04, 0.01)
Hospital admission*Familiarity with people with MI (score)	-0.01	0.01	(-0.03, 0.01)
Hospital admission*Stigmatisation of people with MI (score)	-0.01	0.01	(-0.03, 0.01)
Hospital admission*political orientation (score)	0.00	0.01	(-0.01, 0.01)
Hospital admission*influence on decision-making (score)	0.02	0.02	(-0.01, 0.05)
Hospital admission*Stakeholders vs general population	-0.08	0.03	(-0.13, -0.03)
Psychological distress*Having been hospitalised for COVID-19 (yes vs no)	0.07	0.03	(0.01, 0.12)
Psychological distress *Exposure to COVID-19 (score)	-0.00	0.00	(-0.01, 0.01)
Psychological distress *Health risk (score)	-0.00	0.01	(-0.01, 0.01)
Psychological distress *Familiarity with people with MI	-0.01	0.00	(-0.01, 0.00)
Psychological distress *Stigmatisation of people with MI	0.02	0.00	(0.01, 0.02)
Psychological distress *political orientation (score)	-0.00	0.00	(-0.01, 0.00)
Psychological distress *Stakeholders vs general population	-0.05	0.01	(-0.07, -0.03)
Psychological distress *influence on decision-making (score)	0.02	0.01	(0.01, 0.04)
Random component:			
No. of new weekly pandemic-related hospital admissions (per 100,000)	0.13	0.01	(0.11, 0.15)
Proportion of the active population who lose their job (%)	0.08	0.01	(0.07, 0.10)
Decrease in the population's movements towards activity locations (%)	0.01	0.00	(0.01, 0.01)
Increase in psychological distress in the population (%)	0.04	0.00	(0.03, 0.04)

¶Coefficients and standard error estimated in one model with fixed and random coefficients and their respective credible interval (CI).

Fig. 1 displays the attribute weights by country. The part-worth for psychological distress ranged from 25% in Italy to 45% in Germany and ranked the highest in all countries except Italy and Sweden. In contrast, the part-worth for hospitalisations varied from 25% in the Netherlands (similar to the UK and Belgium) to 39% in Italy. Mobility restrictions received the lowest weight in all countries except the Netherlands, where it ranked second (tied with hospitalisations).

3.4. Interaction analyses

The results of the interaction analyses are presented in Table 4, where the attributes are analysed as continuous variables. One key finding which differed from our initial expectation is that stakeholders demonstrated a greater preference for lower rates of hospitalisation and for psychological distress than the general population (Hospitalisation Beta for stakeholders vs. general population = -0.08, CI: -0.13 to

-0.03; Psychological distress: -0.05, CI: -0.07 to -0.03). That preference varied, however, depending on the stakeholders' self-reported influence during the COVID-19 pandemic decision-making processes. Those with high self-reported influence on decision-making showed less preference for low levels of psychological distress than those with less influence (Beta = 0.02, CI: 0.01 to 0.04).

Another key finding is that a higher level of stigmatisation of individuals with mental illness (MI) correlated with a weaker preference for lower levels of psychological distress (Beta = 0.02, CI: 0.01 to 0.02). Familiarity with individuals with MI, however, did not influence preferences for lower psychological distress levels. We also found that having been hospitalised for COVID-19 was associated with a lower preference for low psychological distress (Beta = 0.07, CI: 0.01 to 0.12), but this effect did not extend to other health-related variables, such as general health status or overall exposure to COVID-19 during the pandemic. Political orientation was not associated with preferences for hospitalisation or psychological distress. This finding was consistent across all the categorical definitions of political orientation (left, centre, right).

To test for country differences, we ran the same interaction analyses with country as an additional covariate for hospitalisation and psychological distress. Most coefficients and random components remained very similar to the original model. We did, however, observe some country-specific variations. For example, compared with Belgium (reference), Germany expressed stronger preferences for reducing hospitalisations (Mean β = -0.07, SE = 0.04; supplementary material) and psychological distress (Mean β = -0.03, SE = 0.01), whereas Spain showed weaker preferences for reducing hospitalisations (Mean β = 0.14, SE = 0.03) and psychological distress (Mean β = 0.03, SE = 0.01).

3.5. Views of respondents on specific policies regarding effects on mental health

Table 5 presents the orientations of stakeholders and of the general population regarding each policy, focusing on their perceived effects on mental health. The left side of the table categorises the opinions of both groups, labelling policies as bad, good, or neutral. The variable "% rejected" represents the percentage of respondents who would prefer that a given policy was avoided in the future. The right side of the table provides two scores (one unadjusted mean score and one adjusted score) on a scale ranging from 1 (very good) to 3 (neutral) to 5 (very bad). The final two columns test the differences between the scores for stakeholders and those for the general population.

Almost all the policies were rated as bad or very bad for population health by at least 50% of both groups, with the exception of working from home. The lockdown emerged as the most disliked policy, whereas working from home was rated the most positively. Of the remaining policies, few were assessed as significantly negative. Stakeholders consistently evaluated all suppression policies more negatively than the general population, with particularly pronounced disparities for two measures: restrictions on bubble size and the closure of schools and educational institutions. Nearly all stakeholders viewed these policies as harmful to the population's mental health, whereas only about half of the general population shared this view.

By contrast, the general population viewed working from home more positively than stakeholders did. Although the lockdown was the policy most rejected among the general population, school closures were the most rejected by stakeholders. The closure of large public venues and gatherings was the policy least rejected by both groups. After adjusting for several covariates (see adjusted means), the differences between the two groups were significantly reduced. ANOVA analyses indicated that this reduction was primarily attributable to differing levels of stigmatisation, with a mean score of 0.44 (95% CI: 0.24–0.64) for stakeholders compared to 1.49 (95% CI: 1.43–1.55) for the general population. Two differences, however, persisted: school closures were deemed more

Table 5

Impact of suppression policies on population mental health by type of respondent: percentage and chi-square.

Suppression policy	Respondent type	%bad	%good	%neutral	Chi2	p	% Rejected‡	Mean score †	Adjusted Mean ‡	Difference ¶	P
Restrict. Gatherings	Stakeholder	60.7	2.8	36.6	36.8	<0.01	1.4	3.2	3.2	0.09	0.37
	Population	43.2	24.1	32.7			5.8	3.6	3.1	.	.
Restrict. bubble size	Stakeholder	92.4	1.4	6.2	87.0	<0.01	11.7	3.4	3.5	0.33	<0.01
	Population	52.4	21.4	26.2			14.9	4.2	3.1	.	.
Working from home	Stakeholder	42.1	11.0	46.9	36.8	<0.01	0.7	2.9	3.1	0.24	0.02
	Population	27.3	35.3	37.4			6.9	3.3	2.8	.	.
Lockdown	Stakeholder	92.4	2.1	5.5	46.6	<0.01	28.3	3.7	3.3	0.12	0.26
	Population	64.7	16.5	18.8			42.7	4.2	3.2	.	.
Pub closures	Stakeholder	66.2	1.4	32.4	23.2	<0.01	.	3.6	3.1	−0.31	<0.01
	Population	57.8	16.2	26.0			6.0	3.7	3.4	.	.
Visit restrictions	Stakeholder	94.5	0.7	4.8	62.5	<0.01	15.2	3.7	3.6	0.33	<0.01
	Population	61.9	17.8	20.4			10.7	4.4	3.3	.	.
School closures	Stakeholder	93.1	0.7	6.2	66.3	<0.01	41.4	3.6	3.8	0.47	<0.01
	Population	59.1	18.3	22.7			9.5	4.5	3.3	.	.
Indoor venue closures	Stakeholder	74.5	1.4	24.1	32.2	<0.01	1.4	3.5	3.2	−0.05	0.63
	Population	53.9	17.2	28.9			3.6	3.8	3.2	.	.

†Mean score (1 = very good for mental health, 5 = very bad); ‡ Mean score adjusted for country, sex, age, educational level, stigmatisation, subjective health status and political orientation. ¶ Difference between stakeholders' score and population scores and *p* value for difference = 0. § Percentage of the respondent willing to avoid the policy because it is too harmful for the mental health of the population (chi2 with respondent type = 145.3, *p* < 0.001).

negative by stakeholders, whereas pub closures were assessed more negatively by the general population.

4. Discussion

During the COVID-19 pandemic, most countries restricted movement, social contact, and public activities to control viral contagion and prevent the collapse of healthcare systems. Consequently, policymakers embarked on a large-scale trade-off between different domains of population well-being as they had to make decisions very quickly and with limited information. Thus, the pandemic provided an interesting context in which to assess the relative importance of those preferences in a public emergency. While several studies have assessed public preferences regarding suppression measures, few have examined how these preferences relate to the broader consequences, both intended and unintended, of such policies. We investigate preferences regarding four key domains salient during the COVID-19 pandemic: physical health, mental health, employment, and civil liberties. We compared the preferences of health policy stakeholders with those of the general population.

4.1. Main findings

Preferences: hypotheses 1 and 2

While respondents valued all four wellbeing domains, they did not weight them equally. Psychological distress and hospitalisation risk emerged as the most influential attributes, whereas restrictions on freedom of movement had the least impact. The similarity in the level of importance attached to psychological distress and to the risk of COVID-19-related hospitalisation by the general population and stakeholders was unexpected (compared to Hypothesis 1) and differed from the results of another study (Chorus et al., 2020). In particular, the COVID-19 pandemic has been linked to declining mental health (Bonati et al., 2022; Kunzler et al., 2021). One possible explanation lies in the timing of the data collection: our study took place in 2022–2023, after multiple pandemic waves, when both the public and policymakers had directly experienced the mental health impacts of prolonged restrictions. By contrast, the study by Chorus et al. was conducted during the initial wave in April 2020, before many of those consequences were fully visible. It is highly probable that respondents to our survey expressed their views at the time of the survey, rather than their views at the time that the policies were decided or implemented. Therefore, we can argue that the pandemic and policies related to its management have revealed the importance of mental health for the population's well-being. To some

extent, the results likely reflect the views of the stakeholders and the population should a new public emergency happen. Our results are also supported by recent work in the United States, where respondents were willing to forgo 1.6 to 3.4 beneficiaries of non-mental health programmes in exchange for one additional beneficiary of a mental health programme (Johnson et al., 2021). These findings suggest that, despite persistent underfunding, both public and stakeholder preferences reflect a more balanced valuation of mental and physical health.

The two groups also differed in their valuations: stakeholders assigned less importance to movement restrictions and greater importance to reducing psychological distress than the general population, providing partial support for Hypothesis 2. The comparisons with other studies are limited because of the populations surveyed and because the attributes differ, including how COVID-19 risks were defined. Yet, overall, the studies found that citizens had a lower preference for reduced restrictions than for reduced health-related or economic losses (Belle and Cantarelli, 2022; Mühlbacher et al., 2022). For example, a study of German citizens revealed that, out of nine attributes, the four associated with restrictions on individual freedom (contact, facilities, curfew, or sharing of personal data) had the least impact on choice (Mühlbacher et al., 2022). This may explain the relative ease with which governments implemented broad suppression policies: public preferences tended to prioritise physical health and economic outcomes over civil liberties during acute phases of the pandemic. However, this does not imply that civil liberties lack long-term value. Other studies show that the public strongly supports democratic norms. A cross-national DCE conducted in the US, France, and Brazil found that democracy was consistently prioritised over income and equality; in France, public health coverage was valued on par with democracy (Adserà et al., 2023; Goehring and Hanlon, 2024). However, it is possible that under exceptional circumstances, citizens may be relatively willing to accept movement restrictions for a limited period of time.

Differences between groups: Hypothesis 3

This study examined three sources of experiential and belief-system heterogeneity: attitudes towards people with mental illness, personal exposure to COVID-19 risk, and political orientation. We found partial support for our Hypothesis 3. Respondents with higher levels of stigmatising attitudes towards people with mental illness placed significantly less weight on psychological distress than on hospitalisation risk, suggesting that stigma reduces the perceived importance of mental health. Social closeness to individuals with mental health problems, however, had no measurable impact on preferences, indicating that beliefs may be more influential than interpersonal experience. Those

beliefs may also have shaped how respondents understood the concept of “psychological distress”, which refers to an individual and subjective experience. Psychological distress is certainly less visible than the physical suffering faced by patients in Intensive Care Units (ICU) at the peak of the first wave.

We also found weak evidence that general health status shaped preferences. While individuals who had been hospitalised for COVID-19 (6% of our sample) placed less importance on psychological distress, this pattern did not extend to those with chronic conditions, poor self-rated health, or prior COVID-19 infection—findings that diverge from those of [Chorus et al. \(2020\)](#). Finally, the left-right polarisation was not associated with a difference in preferences. People who self-affiliated with the centre placed slightly more importance on psychological distress than those on the left or right extremes of the political spectrum, indicating that psychological distress was not a political cleavage ([Munsch et al., 2020](#)).

Specific policies

How did these preferences translate into specific policies? The lockdown, care service restrictions, and educational institutions closures were deemed the most negative policies, whereas working from home was the most positive policy. Apart from full lockdown, however, few policies stood out as highly negative for population mental health. The general population and stakeholders did not necessarily agree on the specifics of the policies. Stakeholders generally had more negative views of suppression policies than the general population, particularly about the closure of educational institutions and the restriction of bubble sizes. The general population was more positive about working from home. The closure of large public venues and gatherings was the most rejected policy by both stakeholders and the general population. School closures were viewed more negatively by stakeholders than by the general population, whereas pub closures were viewed more negatively by the general population than by stakeholders. Our analysis suggests that there is a discrepancy between stakeholders and the general public because the level of stigmatisation of mental illness is lower among stakeholders than in the general population. This finding is consistent with the generally negative public view of people with mental illness ([Pescosolido and Martin, 2015](#)) and the persistent social exclusion of people with mental health problems ([Angermeyer et al., 2014](#)).

Limitations

This study has two limitations, related to its context and sampling. This study was carried out after the COVID-19 pandemic, so the responses may have been influenced by lessons learnt during the pandemic, in particular, criticisms of how social and mental health issues were taken into account during decision-making processes. That may explain the similar levels of importance respondents placed on physical and mental health: preferences uncovered by this study might incorporate the lessons learned from the pandemic experience.

Second, the sampling design had several limitations. The population sample was not probabilistic but based on a quota sampling strategy. Although this approach aims to match national distributions for age, sex, and region, we cannot rule out selection bias arising from participants self-selecting into the survey. While this non-probability sampling strategy limits the generalisability of the findings to the wider population, it does not affect the internal validity of the discrete choice experiment, as the estimation of preference parameters relies on random variation in experimentally controlled choice attributes rather than on population representativeness. In addition, stakeholder recruitment was uneven across countries as sample sizes in France, the UK, and Sweden were limited. Two contextual factors may account for this. First, mental health debates were especially prominent in Belgium at the time of data collection, and key local actors facilitated engagement. Second, research fatigue was possibly a factor as individual tiring of participating in research, particularly stakeholders who were exposed for a long time ([Patel et al., 2020](#)). Third, this study may have over-sampled participants with a left-leaning political orientation. According to the 2024 European Social Survey (ESS), which uses the same left-right

self-placement item, the proportion of left-leaning respondents was lower than in our sample (ESS: 26%; RESPOND: 34%). In contrast, the proportion of right-leaning respondents was similar across both samples (ESS: 22%; RESPOND: 20%). However, as political orientation was not significantly associated with the main outcomes of interest, we do not expect this imbalance to have materially affected our findings.

The scenarios presented in this DCE were not real situations but hypothetical ones. This raises the question of ecological validity: do these trade-offs reflect how people actually make decisions in real life? Respondents in our study were asked to evaluate scenarios that closely mirrored policy dilemmas debated during the pandemic, such as hospitalisation risk, psychological distress, movement restrictions, and job loss. The survey was conducted after the second wave, when many respondents had experienced repeated cycles of lockdown and reopening. Those lived experiences likely made the hypothetical tasks more concrete. Respondents were also asked to consider population-level consequences, reflecting a utilitarian reasoning that may not always mirror everyday self-interested behaviour. This framing is, however, appropriate for the type of policy decisions the study aims to inform. Governments must weigh aggregate consequences, and individuals are capable of adopting this perspective when facing collective challenges, such as compliance with social distancing rules. Our DCE therefore captures decision-making that is relevant at both the collective and individual levels. To further assess validity, we tested whether respondents who perceived certain suppression measures as harmful to mental health were more sensitive to psychological distress in the DCE. We considered the interaction between the psychological distress attribute and two belief items: perceived mental-health impact of (a) lockdowns and (b) social-bubble restrictions (rated from ‘very good’ to ‘very bad’ for mental health; see Methods and [Supplementary Table S4](#)). As expected, respondents who viewed these measures as more detrimental to mental health assigned greater negative utility to increases in psychological distress (see supplementary materials). These patterns support the convergent validity of the elicited preferences. While we recognise the limitations in relation to ecological validity, our design was explicitly crafted to reflect the policy calculus faced by decision-makers and is supported by evidence that links expressed beliefs to choice behaviour.

Conclusion - Implications

Physical and mental health were of equal importance to participants’ choices, whereas concerns about civil liberties appeared to take a backseat. Participants prioritised safety over freedom when faced with a potentially life-threatening crisis, recognising that the benefits of liberty can only be enjoyed if one is alive and safe. Moreover, a sense of security is a cornerstone of positive mental health and well-being. The main conclusion of this study is that in exceptional circumstances, the general population may accept—and even endorse—severe restrictions on individual liberties in order to preserve both physical and mental health. However, such measures must be clearly communicated to enhance the sense of security and, in turn, help safeguard mental health. Suppression measures should be accompanied by supporting measures to help individuals comply with such policies and cope with their potential negative impacts. Examples of such measures include mitigating job insecurity, providing strategies and tools for maintaining social bonds (especially for the most vulnerable) even when physical distancing is necessary, and offering other forms of targeted support.

The equal importance assigned to physical and mental health in participants’ choices raises critical questions about how these domains were weighted in the design of pandemic strategies. For example, policies such as social distancing and bubble restrictions—widely implemented during COVID-19—have been linked to declines in mental health, particularly among older adults ([Mendez-Lopez et al., 2022](#)). These impacts are exacerbated by the longstanding underinvestment in mental health services across OECD countries, where mental health accounts for just 5% of total health spending despite contributing 15% to the global disease burden ([OECD, 2021b](#)). Our findings underscore the

need to adopt a principle of parity between mental and somatic health in both funding and policy planning. Suppression measures should be evaluated not only for their epidemiological effectiveness but also for their mental health consequences, with a focus on avoiding measures with unfavourable cost–benefit profiles (Haug et al., 2020). Our study also indicates that stakeholders may make more balanced trade-offs between physical and mental health, as they are less likely to stigmatise people with mental health conditions.

Ethical review

Ethical review for the DCE was granted by the London School of Economics and Political Science (LSE Ethics reference number: 28146).

Funding

Preparedness of health systems to reduce mental health and psychosocial concerns resulting from the COVID-19 pandemic, Grant Agreement European Commission No 101016127.

CRediT authorship contribution statement

Vincent Lorient: Writing – original draft. **Pablo Nicaise:** Conceptualization, Data curation, Writing – original draft, Writing – review & editing. **Wagner Silva Ribeiro:** Conceptualization, Data curation, Writing – review & editing. **Mark Harrison:** Data curation. **A-La Park:** Conceptualization, Data curation. **David McDaid:** Conceptualization, Data curation.

Acknowledgements

This paper has benefited from the methodological insights of Prof. Axel Mühlbacher (Duke University, USA) and Prof. Martina Vandebroek (KULeuven, Belgium), as well as from the comments of the RESPOND Consortium members during the meeting in Madrid (October 2024). The paper has also benefited from comments during the Seventeenth Workshop on Costs and Assessment in Psychiatry, Venice (March 2025). In particular, we are especially grateful to Prof. Alisa Busch (Harvard University, USA) for her valuable suggestions. We are also grateful for the valuable comments of two anonymous reviewers.

This study was conducted with the support of the colleagues from the RESPOND Consortium. We would like to express our deep gratitude to the coordinator, Marit Sijbrandij (VU Amsterdam, The Netherlands), and to the country teams. Belgium: Pierre Laloux, Katharina Seeber, Camille Duveau, Pierre Smith (UCLouvain); Germany: Raffael Kalisch, Jutta Winterling, Papoula Petri-Romão (Leibniz Institute for Resilience Research – LIR, Mainz); Italy: Antonio Lora (Department of Mental Health and Addiction Services, ASST Lecco), Corrado Barbui and Marianna Purgato (University of Verona); Spain: José-Luis Ayuso, Roberto Mediavilla Torres, and Kerry Rodríguez-McGreevy (Autonomous University of Madrid – AUM), Josep-Maria Haro, Mireia Félez Nobrega, and Anna Monistrol-Mula (Fundació Sant Joan de Déu, Barcelona); France: Maria Melchior and Bertrand Redonnet (INSERM); Sweden: Ellenor Mittendorfer (Karolinska University); Australia: Richard Bryant (University of New South Wales).

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.socscimed.2026.119067>.

Data availability

Data will be made available on request.

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