Supplementary material: Affective partisan polarization and moral dilemmas during the COVID-19 pandemic

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1 Research Design

1.1 Ethical Considerations

The study was approved by the Dean's office at ██ ██████ ██████, which serves in lieu of an ethics committee. Our research complies with GDPR requirements and all relevant ethical regulations, as documented in the German Research Foundation's Code of Conduct Guidelines for Safeguarding Good Research Practice. The research also adheres to the Principles and Guidance for Human Subjects Research approved by the APSA Council. In the following we discuss some additional considerations:

Participant recruitment and compensation: In partnership with the online survey firm respondi, panelists were invited to participate in a study on attitudes in the context of the COVID-19 pandemic. Participation was voluntary. The survey design and programming were implemented on our end. The access panel provider and its local partners compensate their participants with their standard rates of cash transfers or platform-specific currencies for voluntary participation. In our case, participants were compensated with 0.50€ in the US, 0.75€ in Poland and Germany, and 17 Korpus points in Brazil and Italy, for their participation in the 15 minute survey.

Informed Consent: At the beginning of the survey, we obtained voluntary and informed consent from participants. We explain the research project, study purpose, the risk and benefits and described direct contact details to inquire further information. Figure 1 provides a screenshot of the text as presented to the (US) participants. Participants in other countries received a translated but otherwise identical version.

Deception: The research design does not use any form of deception.

Confrontation with triage decisions: We renew voluntary consent before confronting respondents with the triage decisions to minimize the risk of re-traumatization due to respondents' personal experiences. The survey text reads: "Although these are not profiles of real patients, we are aware that this kind of decision could be unpleasant or repulsive to you. Therefore, if you do not want to make these decisions, you can skip the questions without answering them."

Confidentiality: The identities of research participants are kept confidential. Contacting details are kept with the survey firm respondi. The anonymized response data is stored with the researchers. The anonymized data will be shared with the research community.

Consent

Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Please contact the researchers if you need more information.

Research Project

The title of the research project is "Life in Times of COVID-19". This research project is being conducted by ████████████,
███

Purpose of the Research

This is a study on public opinion and behavior during the COVID-19 pandemic. Citizens in multiple countries are surveyed. Your participation is voluntary. Participation involves completion of a survey and the option to participate in another short follow-up survey. You may choose not to answer any or all questions.

Study Procedure

You will be asked a series of questions in an online survey - mostly you will answer by clicking boxes to supply your opinion or experience. You may choose not to answer any questions that you are not comfortable answering, and you can withdraw from the survey at any time.

Risks and Benefits

Risks to participation are minimal, and while there are no direct benefits, you will be helping to further scientific understanding of current public opinion and behavior. Researchers involved in the study will protect your personal information, and others will not be able to connect your responses to personally identifiable information. Any personal information that could identify you will be removed or changed before files are shared with other researchers or results are made public.

Contact

Questions about this project may be directed to ████████████████████████████ Any concerns can be directed to ████████████████████████████████████

I hereby confirm that I am at least 18 years old, that I have read, understood, and agree with the terms detailed above. Do you wish to participate in this survey?

I hereby confirm that I am at least 18 years old, that I have read, understood, and agree with the terms detailed above. Do you wish to participate in this survey?

> Yes

> No

Figure 1: Screenshot of informed consent

1.2 Conjoint Decision

Please look at the profiles of the two patients thoroughly and then make your decision.

Note: Each patient's percentage chance of survival already takes into account the other factors listed in their profile. For example: A 30-year-old patient with a 40% chance of survival and an 80-year-old patient with a 40% chance of survival have exactly the same chance of survival (40%)

	Candidate	
	A	B
Arrival at hospital	Same time	Same time
Partisanship	Independent	Democrat
Children	Yes	Yes
Age	42	76
Gender	Female	Male
Job	Professor	Professor
Chance of survival	50%	50%

Which patient would you prioritize for intensive medical care?

Patient A

Patient B

Figure 2: Example conjoint decision task

1.3 Survey Questions

This section gives details on the survey question of the online questionnaire that we rely upon in our analysis. The questions have been translated by a native in the respective languages.

- **Gender** Please state your gender. Male, Female, Other

- **Education** ADD

- **Year of birth** Would you please tell us your year of birth? 1920-2005

- **Children** Do you have children? No, Yes 1 child, Yes 2 children, Yes 3 children, Yes 4 or more children

- **Job employment status** What is your current employment status? Unemployed, [other categories]

- **Job** What is/was the name or title of your main job? Open item

- **Partisan affiliation** What do you think about the political parties in general? "I have a very negative view of this party" (-5) to "I have a very positive view of this party" (+5)

- **Partisanship (US)** Generally speaking, do you usually think of yourself as a Republican, a Democrat, an independent, or what?

  - Republican

  - Democrat

  - Independent

  - Something else (please specify):

  [If Democrat/Republican] Would you call yourself a strong Democrat/Republican or a not very strong Democrat/Republican?

  - Strong Democrat/Republican

  - Not very strong Democrat/Republican

  [If Independent] Do you think of yourself as closer to the Republican Party or to the Democratic Party?

  - Closer to the Republican Party

  - Closer to the Democratic Party

  - Neither

- **Partisanship (Other Countries)** In [country], many people tend to support a certain political party for a long time, although they also vote for another party from time to time. How is that with you: Are you generally inclined towards a particular party? And if so, which one?

  [If Party] How strongly or how weakly do you lean - all things considered - toward the party [...]? Strong, somewhat strong, moderate, somewhat weak, weak.

- **Job relevance** How essential do you consider the following professional groups to keep a country running? Categories: Doctors, Nurses,Cooks, Journalists, Professors, Police officers. Scale: Not essential at all, Not very essential, Somewhat essential, Very essential, Don't know

- **Attention Check** Thinking back on the previous questions: Which of the following people do you think has a higher chance of survival after intensive medical care?" The answering options are "An 80-year-old man with a 40% chance of survival after the use of intensive care measures", "A 40-year-old man with a 40% chance of survival after using intensive care measures", and "Both have the same chance of survival"

- **Experience with COVID** Do you know of anyone (including yourself, family, friends, acquaintances, colleagues, or neighbors) who has been infected by COVID-19? "No", "Yes, 1-3 people", "Yes, more than 3 people"

- **Compliance with COVID measures** With the pandemic that has taken place over the past few months, the following recommendations have been issued: Keep distance; wash hands frequently; wear masks if keeping a distance is not possible. To what extent do you comply with these recommendations? "I almost always follow them", "I try to adhere to them, but often I do not succeed (e.g., for professional reasons)" , "I barely adhere to them","I am not aware of these recommendations".

- **Risk behavior** In the last seven days: How often have you done the following? Categories: "Used public transport", "Visited a restaurant, café or bar", "Met with friends, relatives or acquaintances in person". Scale: Never, Once this week, Several times this week, Every day, Don't know.

2 Countries in study
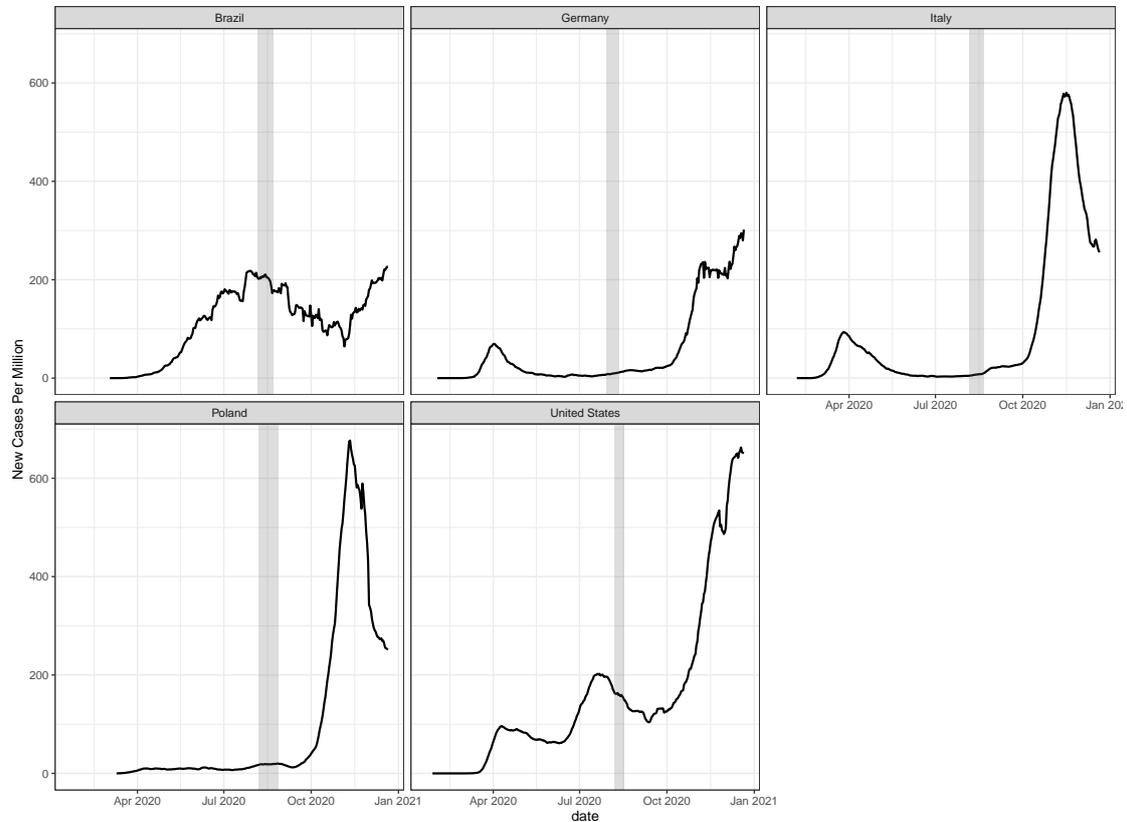
2.1 COVID Cases over time

Figure 3: Corona Cases 2020 in five countries under study. Source: Grey area shows field period of survey.

This section provides background on COVID-situation in the five countries. The field period in the five countries started on 29 July and ended on 28 August. During this time the countries were at different stages in terms of the spread of the corona-virus. Figure 3 shows the reported corona-cases in the countries in 2020. During the field period, the three European countries found themselves at comparable low levels in the summer. Both Italy and Germany had experienced a first wave in April, during which particularly Italy experienced high case numbers. In Brazil the numbers were at high levels during the field period, with around 200 new cases per one million. In the United States the cases decreased slightly during the field period, but were at higher levels compared to the European countries. During the field period, both Brazil and USA

were among the countries with most cases. All studies took place before the second wave increased case numbers in the European countries and the US.
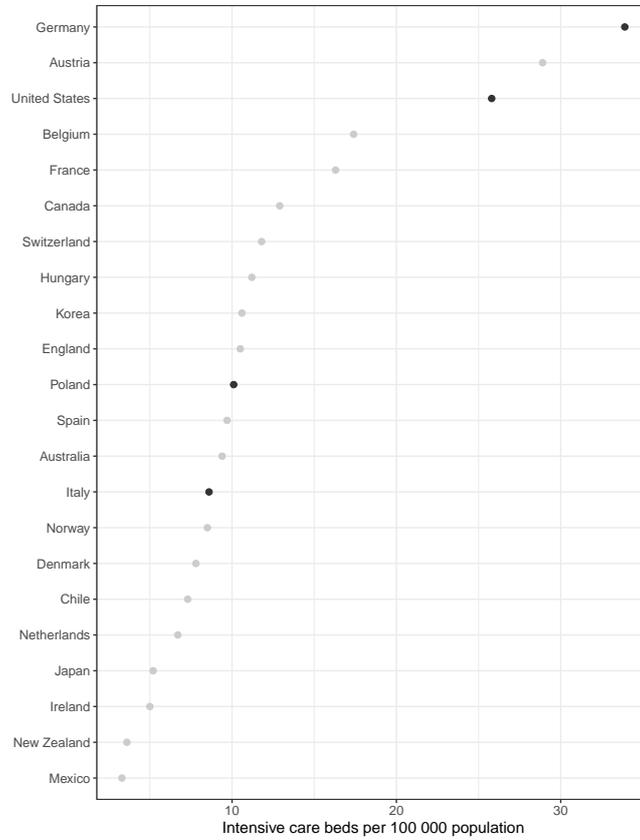
Figure 4: Intensive Bed Units in OECD Countries. Year in parenthesis. Source: . Countries in sample highlighted.

The countries differ with respect to their intensive care units. Figure 4 shows the number of intensive bed units per 100'000 population for OECD countries. Both Germany (33.9 ICU) and the United States (25.8) are found at the top end. Italy (8.6) and Poland (10.1) have lower levels and, hence, have potentially have deal with scare resources earlier. While not reported in the OECD Data, Brazil has a comparable share of IUC Beds with approximately 10 bed for every 10,0000 inhabitants [Palamim and Marson, 2020].

2.2 Medical Guidelines for Triage Decisions

This section gives an overview of existing medical guidelines on triage decisions in the countries under study. We, first of all, adopt and extend Jöbges et al. [2020] description of medical guidelines for Italy, the USA, Germany, Brazil, and Poland. Germany, Italy, and the USA have dedicated institutions that provide guidelines and ethical recommendations. Poland and Brazil have no publicly available and published guidelines for triage decisions. In Poland, we rely on correspondence with the Polish Health Ministry confirming that triage decisions are guided by general rules of medical ethics. In Brazil, the health ministry responded to a freedom of information query that there are no central guidelines and decisions are made based on clinical assessments by hospitals.

	Italy	USA	Germany	Poland	Brazil
Issuing body	Italian Society of Anesthesia, Analgesia, Resuscitation and Intensive Care (SIAARTI)	Expert Panel Report of the Task Force for Mass Critical Care and the American College of Chest Physicians	Several intensive care professional associations/ Academy for Ethics in Medicine (AEM)	Addressed under general rules of medical ethics	No centralized guidelines
Status	Clinical ethical recommendation	Guide	Clinical and ethical recommendations	No specific guidance	No central guidance
Maximizing benefit	Maximize benefit for the largest number of people	Benefit to the greatest number of people Maintain the function of the healthcare system	As many patients as possible to benefit from medical care	Case by case assessment	Case by case assessment in the hospital

Equality	All patients (COVID and non-COVID are treated according to same criteria	All current and new patients presenting with critical illness	All patients who require intensive therapy Social criteria not permissible	All patients are treated according to same criteria	-
Equity	-	Equitably, with no preference to any particular illness	No discrimination	No discrimination	
Short-term survival	Probability of Survival	Acute illness Likelihood of benefit	Short-term survival prognostic score (SOFA)	Medical criteria as assessed by clinical doctors	-
Long-term Survival	Comorbidities and functional status	Comorbid conditions and acute illness using standardized assessments	Long-term prognosis Comorbidities General frailty (clinical frailty scale)	Medical criteria as assessed by clinical doctors	-
Life-span	Life expectancy Age limit "may ultimately need to be set"	A system based in age alone, . . . , does not account for differences in baseline mortality risk because of underlying health	No (de)prioritization "solely because of biological age"	-	-

Additional criteria	Proportionality of care; No "first come first serve	Prioritize key groups (e.g. staff, research volunteers, children and pregnant women) avoid lottery and "first come first served"	-	-	-
Source	Vergano et al. [2020]	Maves et al. [2020]	Marckmann et al. [2020]	Polish Ministry of Health, Department of Public Health Correspondence of 18 February 2021. Pol and	Brazil Ministry of Health freedom of information query

Table 1: Guidelines for triage decisions in the countries under study, adopted from Jöbges et al. [2020].

The guidelines and recommendations have implications for the attributes of the conjoint experiment. We summarize the implications in terms of expected effects of prioritizing a patient over another in Table 2. We leave out Brazil as from the available information it is not possible to formulate such expectations.

In Germany, Poland, the USA, and Italy we expect a positive effect of the chance of survival. For Poland, Germany this is the only criterion attribute that should matter according to the guidelines. In Italy age can have an additional effect on prioritization, as an age limit is discussed explicitly in the guidelines. In the USA guidelines, the job and age can have an additional impact on triage decisions. Most important none of the guidelines allow partisanship to play a role in the decision of how ICU Beds are allocated. But also the other attributes are not considered as part of the guidelines, such as gender, the time of arrival, and if a patient has children.

		Citation/reason

Italy

Job	Effect is not expected. Not mentioned.	-
Gender	Effect is not expected. Not mentioned.	-
Children	Effect is not expected. Not mentioned.	-
Chance of Survival	A positive effect is expected. Those with higher chance of survival will be advantaged.	"The underlying principle would be to save limited resources which may become extremely scarce for those who have a much greater probability of survival and life expectancy" (p.471)
Time of Arrival	Effect is not expected. Not mentioned.	-
Age	A negative effect is expected. Age limits are recommended to be set in worst cases. The older a patient, the less likely to be chosen for ICU	"An age limit for the admission to the ICU may ultimately need to be set" (p. 471)
Partisanship	Effect is not expected. Due to the amount of people included in the decision, it becomes less likely that there will be an effect of partisanship.	"The decision to withhold or withdraw life-sustaining treatments must always be discussed and shared among the healthcare staff, the patients and their proxies" (p.471)

USA

Job	Effect is expected. Job attributes should have a positive effect as long as the jobs are associated with essential and key services in the context of the Corona pandemic.	"Communities may choose to prioritize to key groups, to include health-care workers (HCWs), first responders, research volunteers, or others who are either perceived as risking their own safety for the public's benefit or who have a special role in pandemic response" (p.217)
Gender	Effect is not expected. Not mentioned.	-
Children	Effect is not expected. Not mentioned.	-
Chance of Survival	Effect is expected. People less likely to survive are also less likely to get ICU. People with too high survival chance also do not get ICU.	"We must recognize that patients less likely to benefit from critical care may not be provided those services" (p.217) However, too fit and healthy patients are excluded in the ICU allocation as well. Likelihood is based on SOFA score (p.218)
Time of Arrival	Effect is not expected.	First-come-first-served should be avoided (p.217)
Age	Positive effect is expected.	"Children [. . .] receive special priority in other schema, with the concept of saving not only the most lives but also the greatest number of years of life" (p.217)
Partisanship	Effect is not expected. Transparency requirement is expected prevent decisions making on grounds other than medical attributes.	"Patients who do not receive critical care because of a triage system must be supported, and the rationale for medical decision-making must be clearly communicated to them or their family members"

Germany

Job	Effect is not expected.	"According to German constitutional law, human lives must not be weighed against other human lives." (p.116)
Gender	Effect is not expected.	"According to German constitutional law, human lives must not be weighed against other human lives." (p.116)
Children	Effect is not expected. Not mentioned.	-
Chance of Survival	Positive effect is expected. The higher the success of ICU, the higher the likelihood of being chosen for ICU.	"[. . .] overall assessment should consider all important factors influencing the prospect of success (current illness, commodities, general health status). [. . .] This assessment also serves as the basis for any prioritization which may be necessary" (p.119)
Time of Arrival	Effect is not expected.	-
Age	Effect is not expected. It is forbidden to consider it as a variable in the decision-making process.	"According to the principle of equality, prioritization Are not permitted on the basis of calendar age, social characteristics, or specific underlying illnesses or disabilities."
Partisanship	Effect is not expected. The amount of responsible people makes it unlikely that partisanship have a significant effect. It would also be hard to measure partisanship of a patient, since the recommendation includes a list of indicators to consider during the arrival of patients	"Therefore, whenever possible, the decisions should be made according to the multiple-eyes principle" (p.116)

Poland

Job	Effect is not expected.	"Ordinary guidelines only focus on medical assessment of patient's health needs and available treatment methods made individually for each medical case." Correspondence with the Polish Ministry of Health, 19 February 2021
Gender	Effect is not expected.	Same as above.
Children	Effect is not expected.	Same as above.
Chance of Survival	Positive effect is expected. The higher the success of ICU, the higher the likelihood of being chosen for ICU.	Centrality of medical assessment of patients' health needs.
Time of Arrival	Effect is not expected.	Centrality of medical assessment of patients' health needs.
Age	Effect is not expected	Centrality of medical assessment of patients' health needs.
Partisanship	Effect is not expected. As decisions are left to clinicians and other doctors taking care of patients, there are no procedural safeguards, but the guidance provided to doctors require them to only take into account the medical assessment of the patients.	Same as above.

Table 2: Expected effects form the medical guidelines for the attributes of the conjoint experiment.

2.3 Political Parties

This section provides more detail on the party selection in the five countries. A vast share of the literature in on affective polarization focuses on the United States, where the central partisan divide is unequivocally between Republicans and Democrats. In multi-party contexts, the divide is more difficult to define in terms of single parties. For our study, we choose two parties that represent distinct ideological political camps. We first discuss the general left-right positions of the parties, afterwards discussing the COVID-lockdown positions of the parties.

2.3.1 General Left-Right Positions

In general, we select parties that are on the left and right of the political spectrum and that play a crucial role in the political debates during the field period. Figure 5 shows political positions from the Manifesto Project's RILE index [Volkens et al., 2020, Krause et al., 2020] for parties who gained more than 5% in the last available election before the field period. For comparison, the United States shows a clear divide between the republican and democratic party in the 2016 presidential election on the RILE index. In Poland we work with the Law and Justice Party (PiS) and the Civic Platform (PO) that in the 2015 parliamentary election advocated the most extreme positions in their manifestos. In Italy we pick Italia Viva, Matteo Renzi's new party, and the right-wing League of Matteo Salvini. In the 2018 elections Matteo Renzi was head of the center-left coalition lead by the Democratic Party. The RILE index for the League is more moderate compared to Go Italy of Silvio Berlusconi, but the Leagues success in the election and its restrictive stances on immigration make it a more ideal candidate for our experiment. In Germany, we choose the right-wing populist Alternative for Germany (AfD) and the Alliance90'/Greens. While the Left-party holds more left values on the RILE index, the Greens are perceived as the general opponent to the Afd on cultural dimension. In Brazil we choose the parties of the two presidential candidates Lula (PSL/Aliança) and Bolsonaro (PSL/Aliança) of the 2018 election. The rile index of the election campaigns of Lula "The People happy again" and Bolsonaro "Brazil above everything, god above everyone" shows clearly opposing camps.

2.3.2 COVID Lockdown Positions

The positions of the parties regarding lockdown measures are of further interest to our project. In each country, we conduct a small online media analysis to define positions on COVID lockdown measures for the left and right party of the conjoint experiment. Table 3 provides a summary.

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Party	Lock-down Position	Comment	Sources
US			
Democrat	In favor	In general democrat politicians are mostly in favor for stricter rules but Biden is more careful with new lockdown measures. On local level, politicians are stricter.	Opposed [Cunningham, 2020, dw., 2021, Brownstein, 2020, Ward, 2020, Gold, 2020, Stracqualursi, 2020]
Republican	Opposed	Most of Republicans are opposing strict measures, also on the local level. The last 5 states that did not impose shutdowns were Republican.	Opposed [Vogel et al., 2020, Ward, 2020, Zeleny, 2020, Wingerter and Hindi, 2020, Woodward, 2020]
Germany			
Alliance 90/The Greens	In favor	The greens are generally in favor for strict measures. Boris Palmer, a local green politician, is one of the few green politicians who publicly opposes stricter measures. However, the position about school closing is disputed.	Support [Ismar, 2021, bil, 2021, Gediehn, 2021, die, 2021, 2020, zei, 2020b]; Opposed [bil, 2021, die, 2021]
AfD	Opposed	In their corona position paper 2020 they claim that everything should be able to open again, thus they oppose new shutdowns in general.	Opposed [Fraktion, 2020, Fiedler, zei, 2021, 2020a]
Brazil			

PT (Lula)	In favor	The position of the PT is not really salient when it comes to pandemic restrictions. However, there we found one interview in which Lula speaks out for stricter measures.	Support [not, 2020, the, 2020]
PSL/Allianca (Bolsonaro)	Opposed	Bolsonaro clearly opposes strict measures and participated in anti-shutdown protests. He dismissed two of his health ministers in a short time which were in favor of shutdowns.	Opposed [Watson, 2020, Mello and Gaier, 2020, Charner, 2020, dw., 2021, bbc, 2020]

Poland

PO	In favor	The PO at least does not criticize the strict measures. The most salient topic, however, was that the presidential election was not postponed and that many claim that PiS uses Corona pandemic to increase their power.	Support [Matraszek, 2020, Zalewski, 2020]
PiS	In favor	The PiS and their prime minister are in favor of strict measures and imposed a shutdown when there were only 26 cases. Also in late December they supported a new shutdown.	Opposed [Barteczko and Florkiewicz, 2020], Support [Mailonline, 2020, reu, 2020,?]

Italy

Italia Viva	In favor	Since Italia Viva was part of the government coalition, they apparently did not oppose the shutdown. However, in one interview Matteo Renzi claims that the country should reopen again.	Opposed [Vagnoni, 2020, Santamaria, 2020]

Lega	In favor	The leader of the Lega, Salvini supports strict measures and early asserted that shutdowns are necessary.	Support [tim, 2020, Monticelli, 2020, Ellyatt, 2020], Opposing [Stefanoni, 2020]

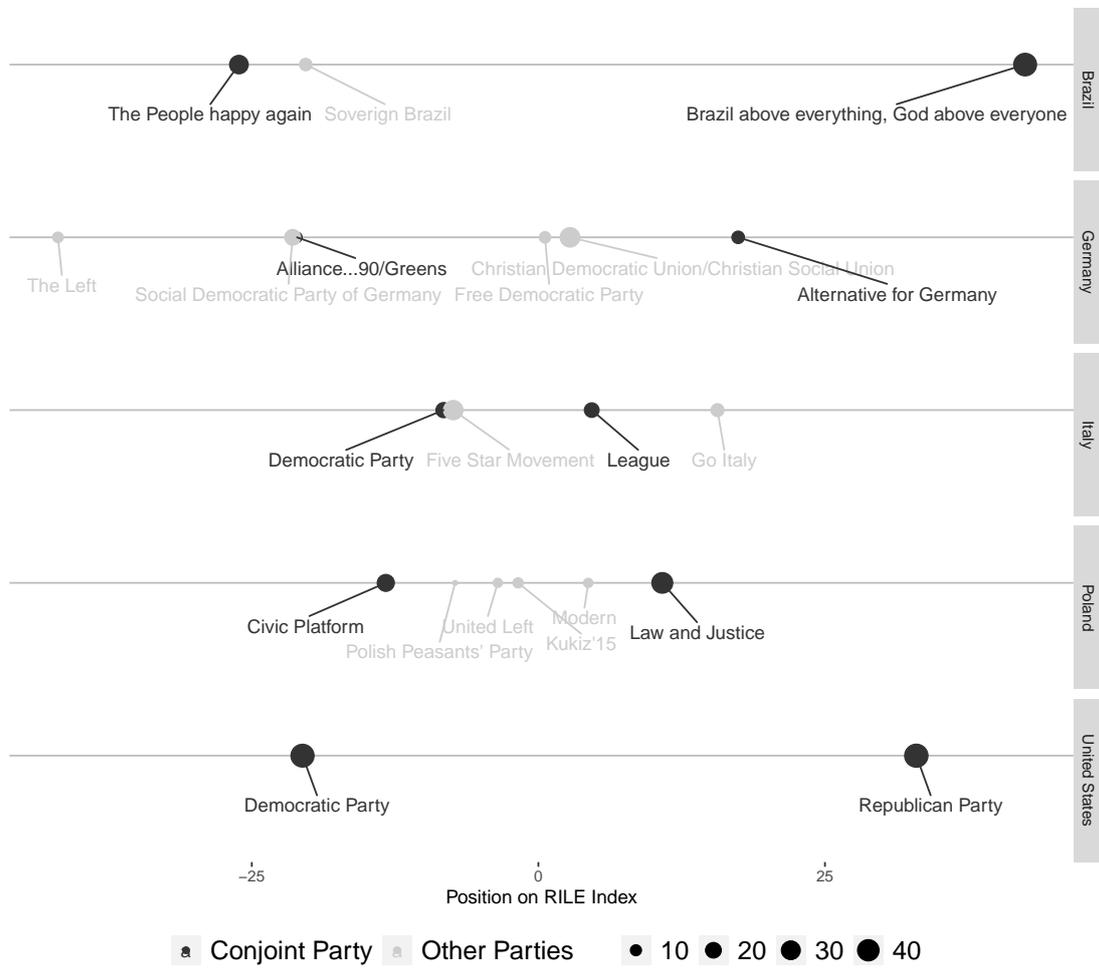Table 3: Party positions about lockdown measures for left and right parties in the conjoint experiment.

Figure 5: Party positions of left and right parties using the RILE index. The partisan labels used in the conjoint experiment are highlighted in black. The size of the points represents the vote share of the parties in the last general election.

3 Sample Information

3.1 Quota

We used quota samples based on Age Groups, Education, and Gender in the five countries. Table 1 provides information about the quotas and the actual shares in our surveys. For some of the categories we see small discrepancies to reach the sample size. E.g. in Brazil we slightly over sample Low Education groups (Quota 56% actual share in survey 31%) at the dispense of high and middle education groups. We do not expect the discrepancies to bias estimates of the main analysis.

Table 4: Quota and survey shares in different countries

Variable	Share Survey	Quota
Brazil		
Age 18-29	0.25	0.35
Age 30-39	0.25	0.24
Age 40-49	0.24	0.19
Age 50-59	0.12	0.12
Age 60-75	0.13	0.10
Education High	0.22	0.12
Education Low	0.31	0.56
Education Middle	0.47	0.32
Female	0.48	0.51
Male	0.48	0.49
Germany		
Age 18-29	0.15	0.18
Age 30-39	0.19	0.16
Age 40-49	0.19	0.17
Age 50-59	0.23	0.21
Age 60-75	0.24	0.28
Education High	0.39	0.35
Education Low	0.23	0.33
Education Middle	0.38	0.32
Female	0.49	0.51
Male	0.49	0.49
Italy		
Age 18-29	0.14	0.17
Age 30-39	0.16	0.16
Age 40-49	0.21	0.20

Age 50-59	0.21	0.22
Age 60-75	0.28	0.26
Education High	0.20	0.18
Education Low	0.33	0.38
Education Middle	0.38	0.42
Female	0.46	0.51
Male	0.46	0.49
Poland		
Age 18-29	0.18	0.19
Age 30-39	0.21	0.21
Age 40-49	0.20	0.19
Age 50-59	0.16	0.16
Age 60-75	0.25	0.24
Education High	0.39	0.24
Education Low	0.05	0.42
Education Middle	0.56	0.34
Female	0.49	0.52
Male	0.49	0.48
USA		
Age 18-29	0.20	0.22
Age 30-39	0.19	0.19
Age 40-49	0.18	0.18
Age 50-59	0.19	0.19
Age 60-75	0.23	0.23
Education High	0.41	0.43
Education Low	0.37	0.39
Education Middle	0.22	0.18
Female	0.47	0.51
Male	0.47	0.49

3.2 Attention Check

Country	Passed Attention Check
Brazil	0.66
Germany	0.59
Italy	0.60
Poland	0.57
USA	0.55

Table 5: Percentage of respondents who pass the attention check in different countries

The survey includes a question to evaluate if respondents read and understand the note on each of the the four conjoint decisions (See Figure 2). "Thinking back on the previous questions: Which of the following people do you think has a higher chance of survival after intensive medical care?" The answering options are "An 80-year-old man with a 40% chance of survival after the use of intensive care measures", "A 40-year-old man with a 40% chance of survival after using intensive care measures", and "Both have the same chance of survival"

The table reveals that around 60% in the different country samples correctly answer "both have the same chance of survival". Part of the respondents, hence, potentially still consider age and gender as contributing to the survival chance, calling for caution when interpreting the effects. To probe the consequences of this, we re-estimate the models among respondents who pass the attention and understanding check (see section 5.7).

4 Descriptive Statistics

4.1 Job Relevance Perception

Respondents rate the system relevance of the job categories similarly across countries. Figure 6 shows that most respondents name doctors and nurses as very essential, followed by police officers. There is variation regarding the perceived relevance of professors, otherwise the ordering is quite stable across the countries under study.
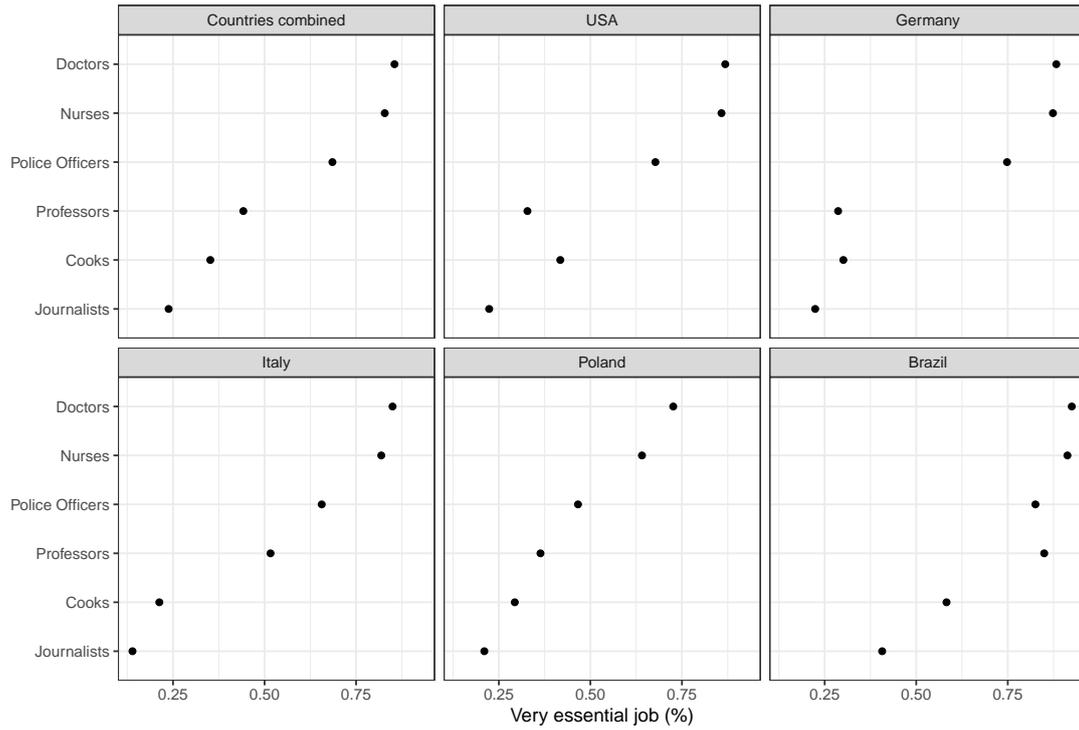

Figure 6: Perceived job relevance in countries under study. Figure shows percent that indicate that a job is very essential.

4.2 Affective Polarization

The distribution of affective polarization between the country specific parties in our study varies over the different contexts. Figure 7 shows the affective polarization measure, as the difference in rating scores, between the left and the right party. In Germany with with small right party, the measures is tilted against the right parties. In the other countries the measure distributes around zero. The figure further highlights the fixed cut point of -5 and +5 that are used to define left and right affectivly polarized respondents in the main text.
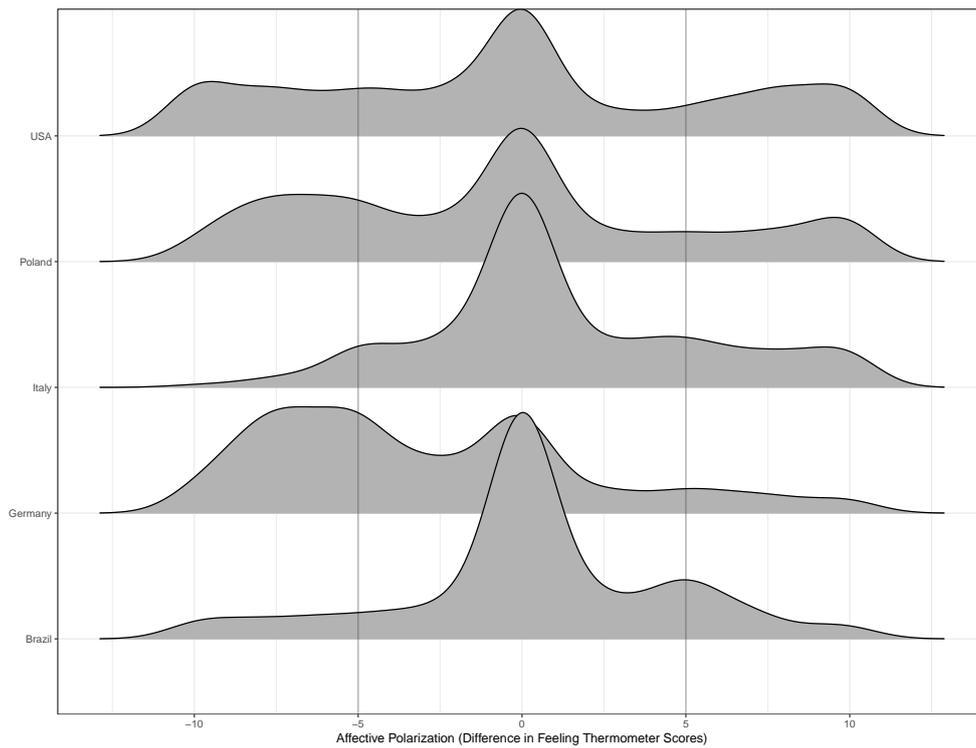
Figure 7: Distribution of affective polarization measure in different countries. Party rating score of the right party minus party feeling rating score of the left party

4.3 Experience with COVID

The respondents in the countries differ in respect to their experience with COVID infections. Figure 8 shows that especially in Brazil respondents knew people that have been infected with COVID. Only 20% reported that they do not know a person infected with COVID. In the U.S. sample around 40% say that they know one to three persons. In Italy around 30% knew one to three persons who were infected. The numbers are lower for Germany and Poland, where up to 80% in our sample did not know an infected person.
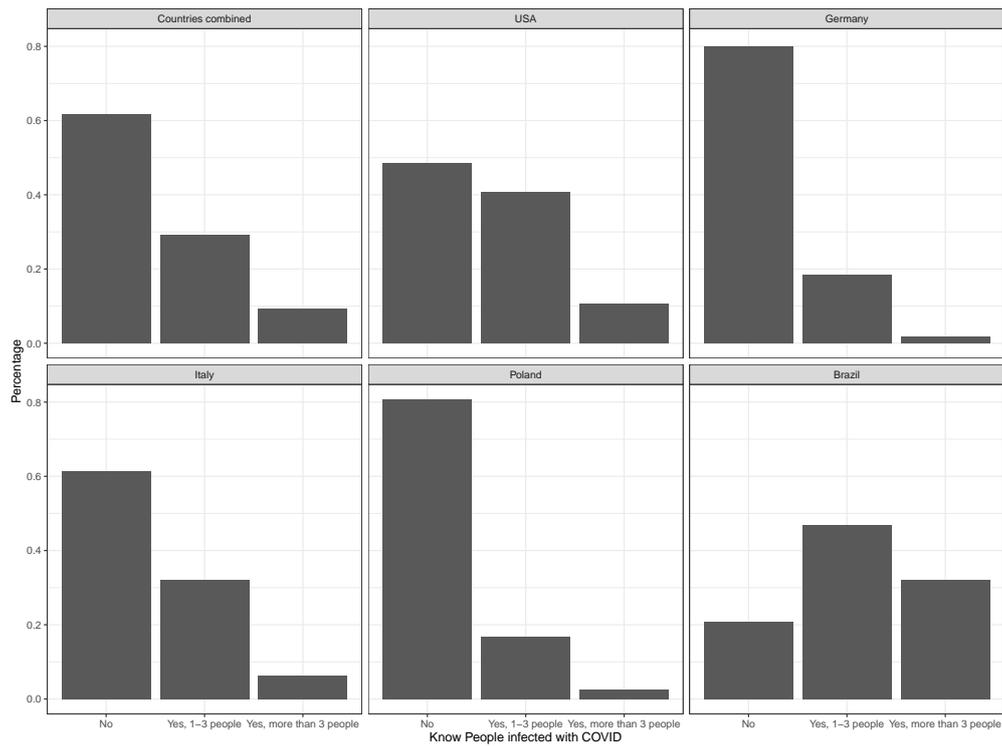
Figure 8: Experience with COVID. Percentage of respondents who know of anyone who has been infected by COVID-19 in different countries.

4.4 Compliance and risk behavior

The survey further includes items about compliance and risk behavior. To analyze the compliance with corona recommendations (keep a distance; wash hands frequently; wear masks if keeping a distance is not possible) of different partisan groups in comparison, we plot the proportion of partisans who state that they always comply from the left and right party in Figure 9. The percentage who always comply with recommendations differs between partisan groups and countries. In the USA we observe that Republicans on average only comply with 70% and Democrats with around 87%. The same holds for Germany, where right partisans are far less likely to state that they always comply with corona recommendations. The pattern that right partisans comply less is not reflected in our data for the other countries. In Italy, we observe no clear difference (also due to the small share of Italy Viva supporters). In Poland partisans from the left and right party comply at equal rates and more often than non-partisans. In Brazil, right partisans state that they comply at higher rates.
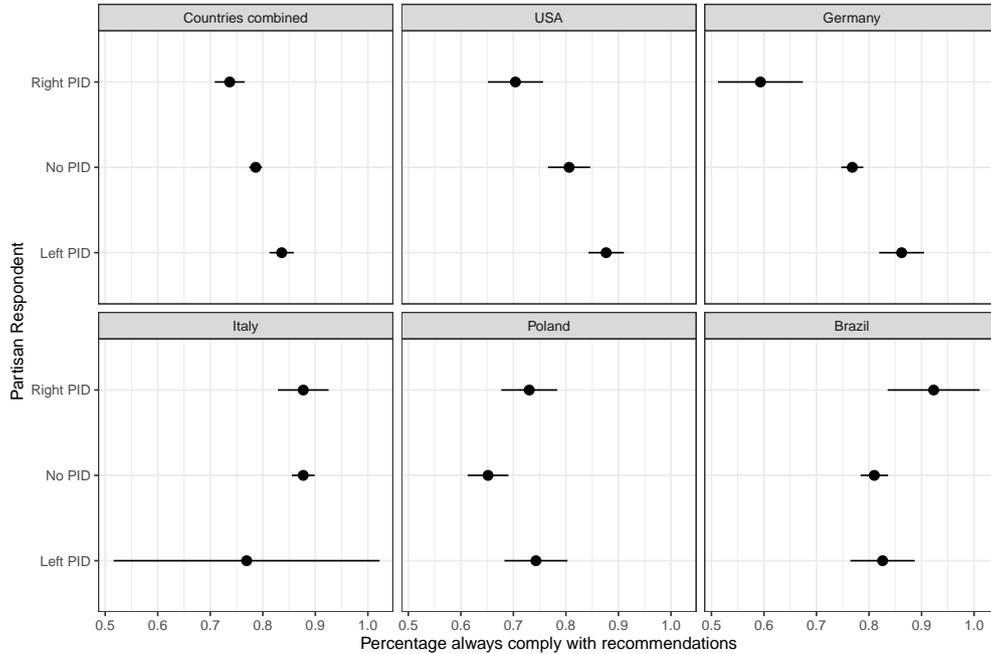

Figure 9: Compliance with health recommendations. Percentage of respondents who always comply with recommendations for partisanship groups and countries.

We further plot the reported risk behavior across Partisan groups in Figure 10. We form an index from three items that ask how often respondents engage in risk behavior (Met with friends, relatives, or acquaintances in person; Visited a restaurant, café, or bar;

Used public transport). The figure shows a similar pattern compared to the compliance behavior. In Germany and the US, right partisans also admit to slightly more risky behavior. In the other countries, their right partisans are not more clearly engaging in risky behavior. Only in Brazil, the results counter the tendency we observed with the compliance question. Right partisans seem to slightly more frequently in risk behavior.
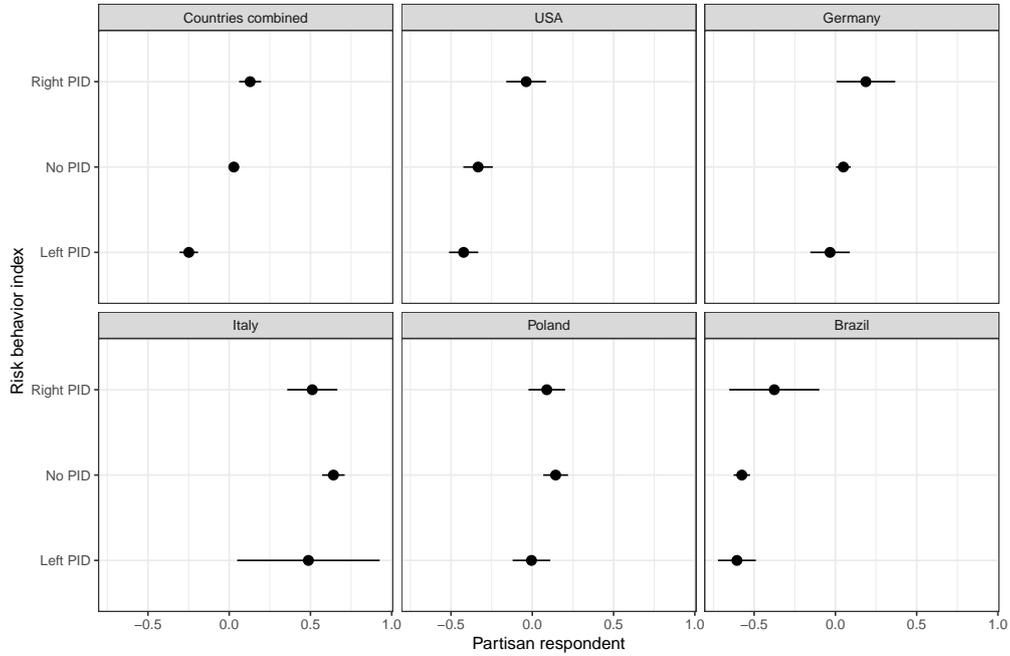

Figure 10: Risk behavior. Distribution of risk behvior index for partisanship groups and countries. Index contains three items: meet with friends, visit restaurants, use public.

5 Additional Analysis

In this section, we describe additional results from the conjoint analysis. Some of the additional results are part of the pre-registered analysis (5.4, 5.6, and 5.5). Other parts of the additional results are included because of suggestions and reviewer points we received on the paper (5.2,5.3,**??**, 5.7, and 5.9).

5.1 Average marginal component effects

Next to the marginal means in the main text, we can present the average marginal component effects on prioritizing a patient with a certain attribute. The results are reported in Figure 11 and give insights in the extend of the effects.
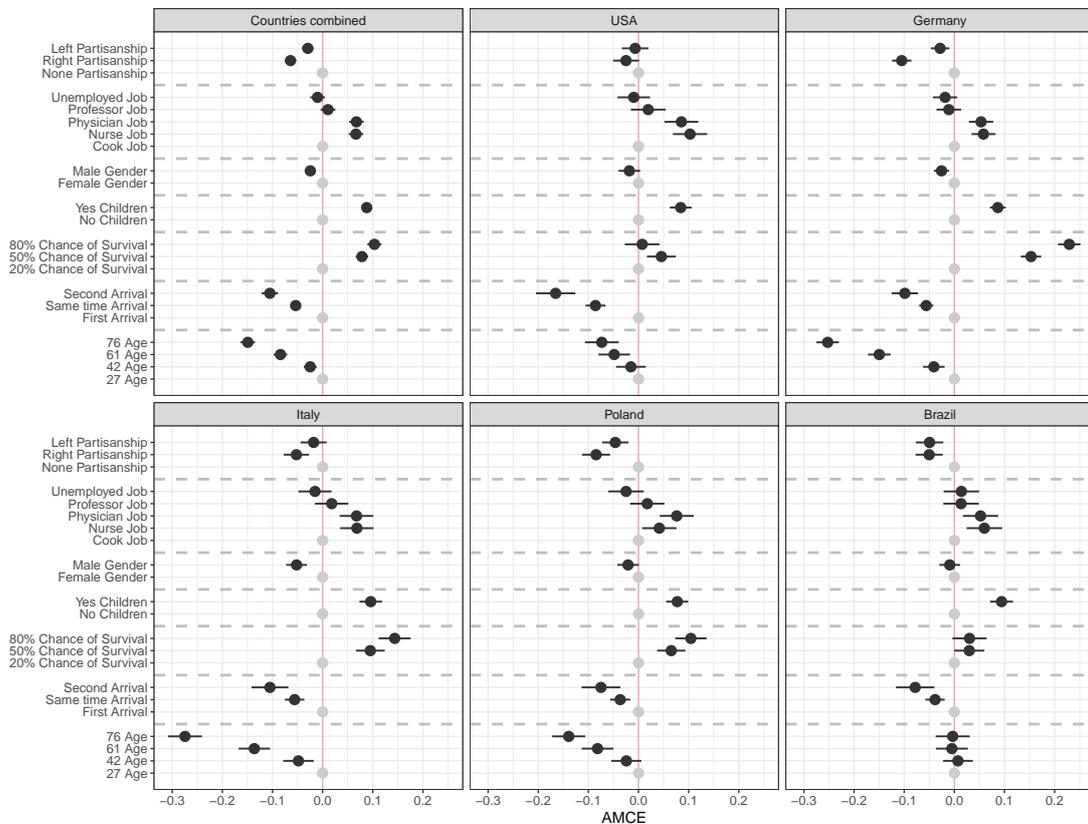

Figure 11: Average Marginal Component Effects of triage patient attributes in paired conjoint experiment. For all countries combined, USA, Germany, Italy, Poland and Brazil.

In all countries combined we estimate that respondents are around 3%-pts. less likely to prioritize left-partisan patients and 6%-pts less likely to prioritize right-partisan pa-

tients compared to none-partisans. The partisan effects vary over the countries. The effects further highlight the relevance of features that are found in the medical guidelines, such as the chance of survival. Respondents prioritize patients with a high chance of survival (80%) 10%-pts more compared to patients with a low chance of survival (20%). Age also matters a great deal: Respondents are 15%-pts. less likely to prioritize a 76 year old patient compared to a young patient.

5.2 Marginal Means conditional on Affective Polarization

This section presents the marginal means conditional on affective polarization. While the main text presents the average marginal component interaction effects between left/right partisan patients, here we show the marginal means for all type of patients. Figure 12 shows the same pattern of out-party animus among left and right affectivly polarized respondents and in-party favourtism for right respondents.
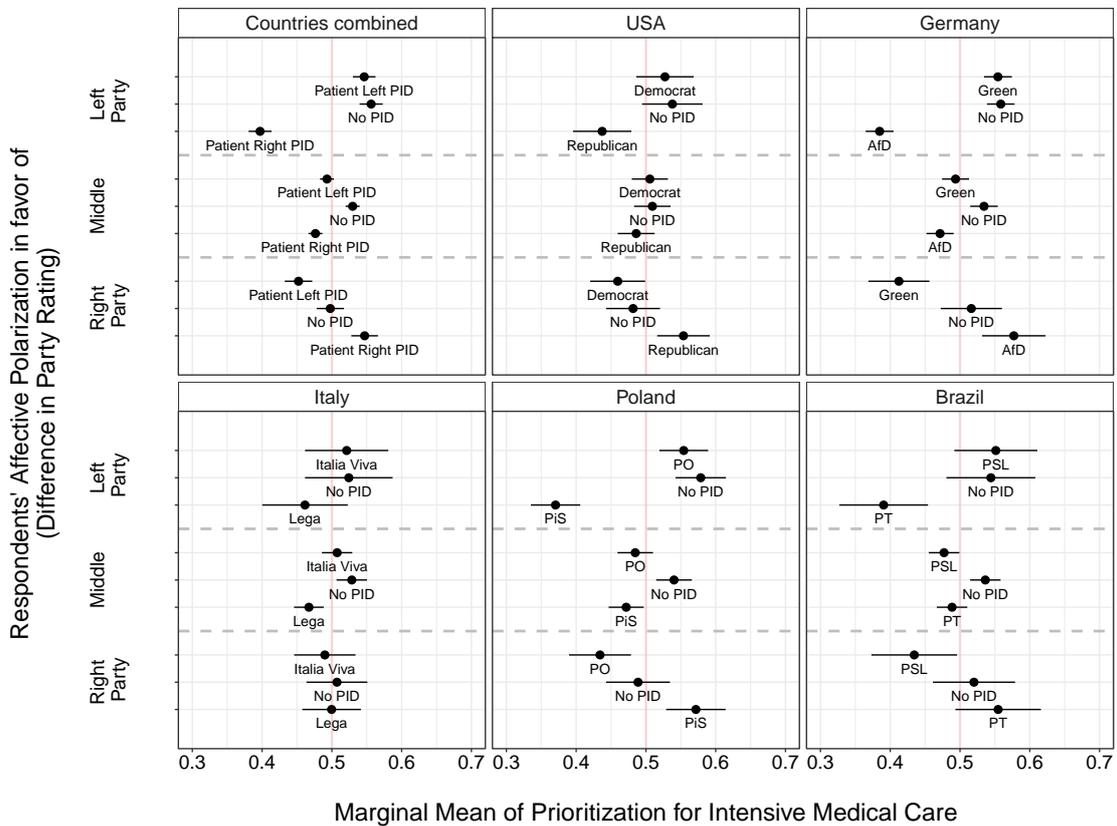

Figure 12: Marginal Means for Affective Polarization of triage patient attributes in paired conjoint experiment. For all countries combined, USA, Germany, Italy, Poland and Brazil.

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5.3 Average Marginal Component Interaction Effect Affective Polarization (Percentiles)

This section presents ACMIE for affective polarization measure, but using 33% and 66% percentiles instead of fixed cut-offs at -5 and +5 to define left and right affectively polarized respondents. Figure 13 shows that results are quite comparable. We identify out-party animus among left and right affectively polarized respondents. Only the in-group favouritism effect of right respondents is not as pronounced. With the alternative coding in many contexts, we code more respondents as right affectively polarized, although they do not show strong differences in rating scores between the left and right party (as Figure 14 shows). This probably waters down the in-party favouritism effect that we identify with the main text cut-points measure and with the partisanship of the respondents (seeSM 5.5).
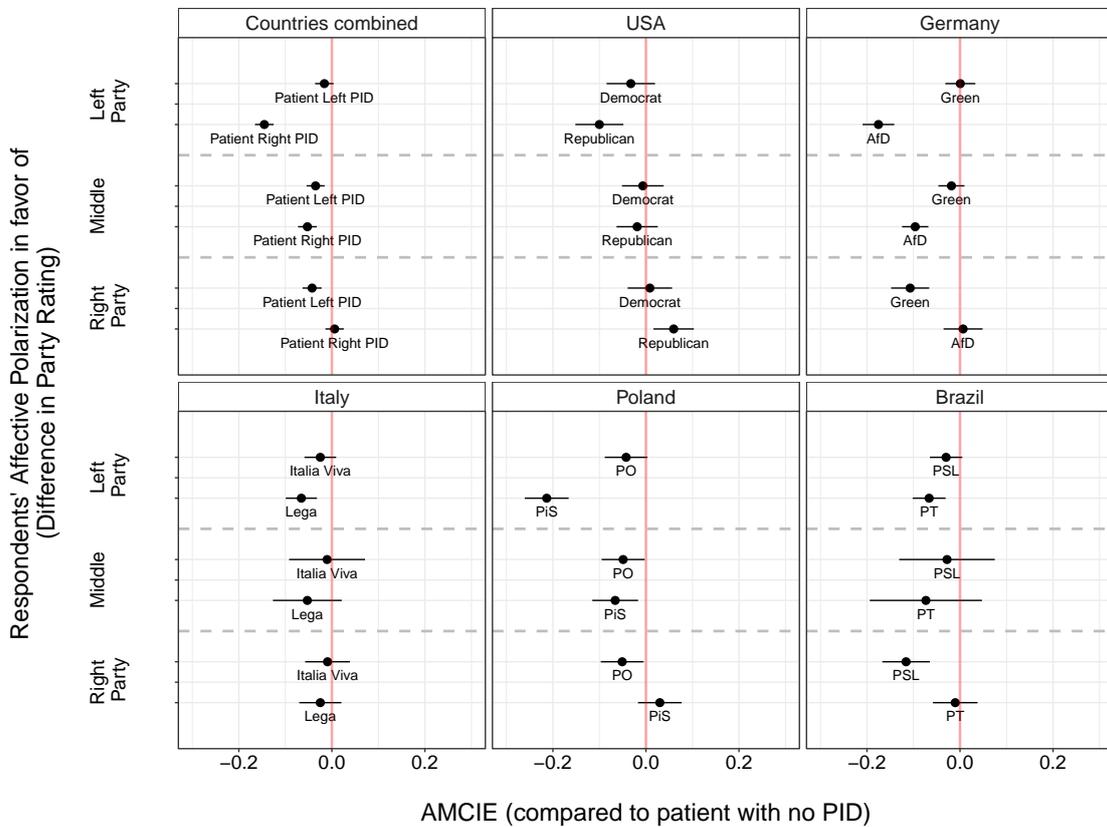

Figure 13: Average Marginal Component Interaction Affective for Affective Polarization of triage patient attributes in paired conjoint experiment. For all countries combined, USA, Germany, Italy, Poland and Brazil.
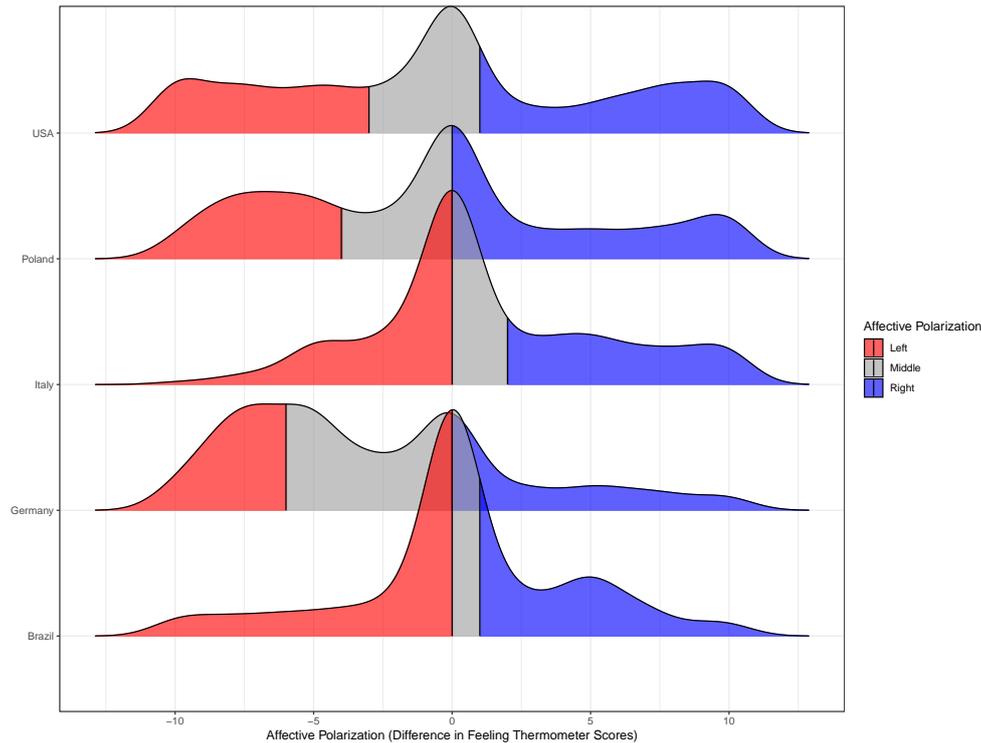
Figure 14: Distribution of affective polarization measure in different countries. Party rating score of the right party minus party feeling rating score of the left party. Shows 33%- and 66% percentiles used as alternative cut-points.

5.4 Average Marginal Component Interaction Effect for Sociodemographics

The pre-analysis plan (6) contains additional conditional hypotheses (H8a-H8c). The hypotheses expect: older (younger) respondents to prefer older (younger) patients (H8a), male (female) respondents to prefer male (female) patients (H8b); and respondents with children to prefer patients with children (H8c). In this section, we report on the results using the Average Marginal Interaction effects of the respective patient attributes with respondent covariates.

Figure 15 shows the estimates of the interaction effects and reveals no consistent support for the hypotheses over the countries. In the US the children interaction effect is significantly different from zero (4.7 %-pts., a p-value below 0.05). This implies that respondents with children are even more likely to prefer patients with children (11.4%-pts increase if the respondent has children, compared to a 6.7%-pts. increase if the respondent does not have children). In the other countries, we find no clear interaction effect. In the US and Brazil, male respondents are also more likely to choose male
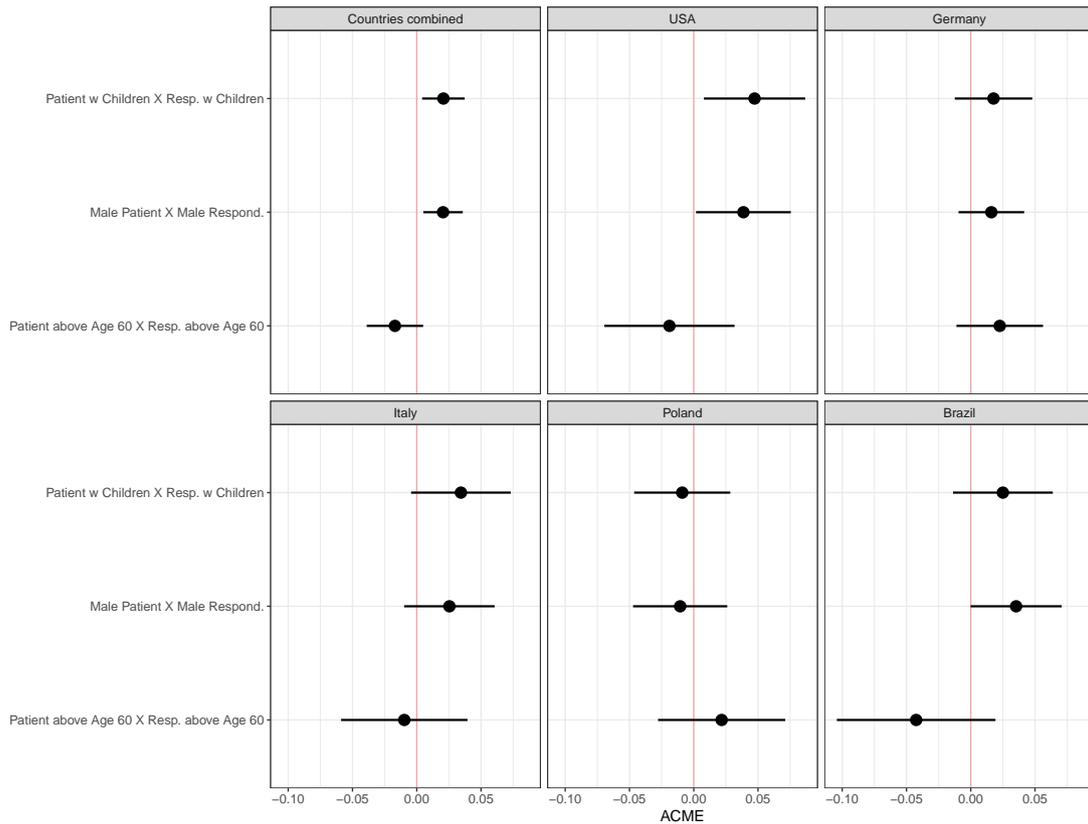
Figure 15: Attribute level importance

patients (3.9 %-pts. in the US and 3.5 %-pts. in Brazil). Combining this with the direct effect shows that female respondents slightly downgrade male respondents in the US (-3.7%-pts.), but male respondents' prioritizing is not affected by the gender of the patient. There is no clear support for this hypothesis in the other countries. We find no support for the Age hypothesis in any of the countries. When we combine all countries this yields support for the hypothesis that priories differ based on gender and children of the respondent.

5.5 Average Marginal Interaction Component Effect Partisanship

The pre-analysis plan (Section 6) further expects a conditional effect of a patient's partisan orientation based on the partisanship of the respondents (H8d). "Respondents with a partisan affiliation prefer patients with the same or ideologically similar partisan affiliation over patients with an ideologically dissimilar partisan affiliation." We test the hypothesis using the partisanship identity of the respondents, coding a one if the re-

spondents identify with the right or left party in the different countries.[1] The analysis is similar to the main analysis based on rating differences between the two parties, except that we only consider the conditional effects among partisan identifiers.
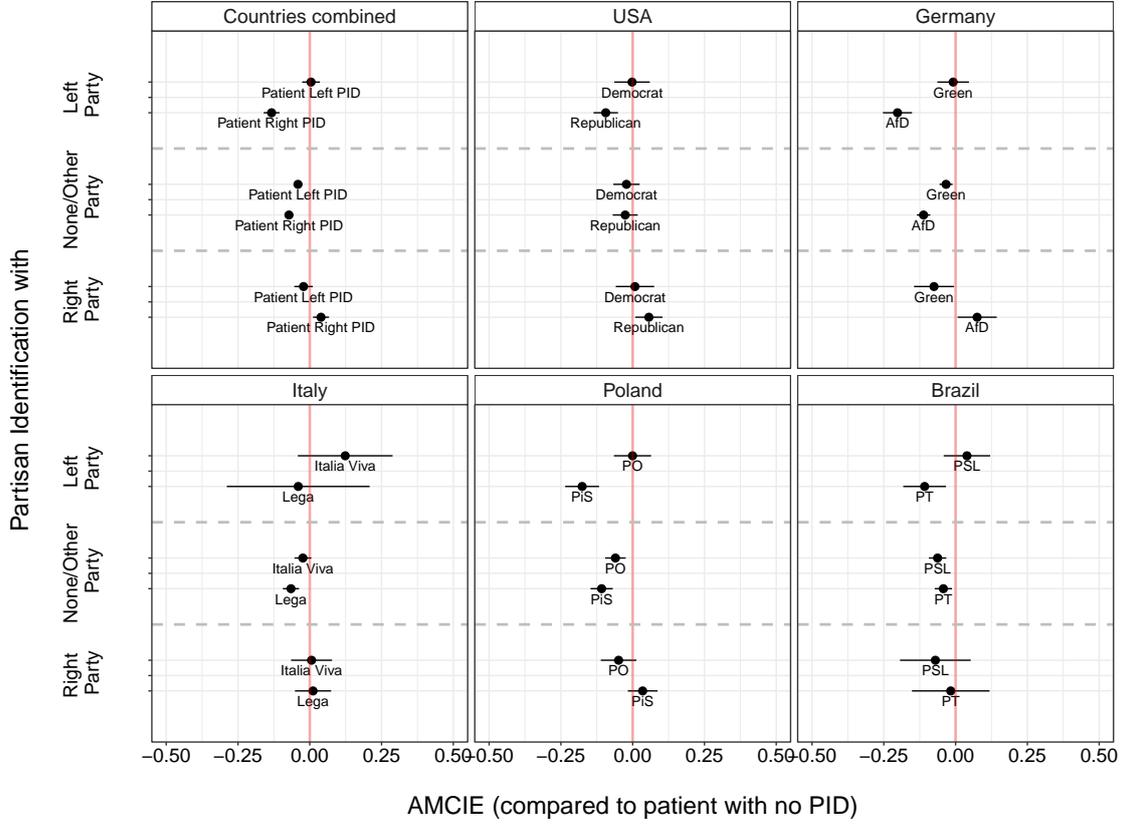

Figure 16: Average Marginal Interaction Component Effect of patients' party affiliation with partisanship of respondent in paired conjoint experiment. For all countries combined, USA, Germany, Italy, Poland and Brazil.

The results are reported in Figure 16, reveal similar patterns compared to the analysis based on the affective polarization scores. In the combined country sample, left partisan respondents downgrade right partisans. This pattern exists in the USA, Germany, Poland, and Brazil. In Italy, the number of Italia Viva partisans is too small to estimate precise effects. We also estimate a small positive effect among respondents with right partisanship in prioritizing a right party patient. This indication of in-group favoritism is present in the USA and Germany. Interestingly, the effects for patients with left partisan alignment are not as strongly moderated by partisanship. E.g. in the US, neither

---

[1]The corresponding survey question follows the standard three-step question format in the US and a two-step question format in the other countries (see Section 1.3).

democratic nor republican respondents treat patients with a democratic affiliation differently compared to patients without an affiliation. This pattern holds in most of the contexts and shows that non-political consequences seem to focus on the right rather than left patients' partisanship.

5.6 Average Marginal Interaction Component Effect with Linear Interaction Effect

The pre-analysis plan specifies a linear interaction effect between the affective polarization (rating scale difference between two parties) and the partisan attribute of the patient.
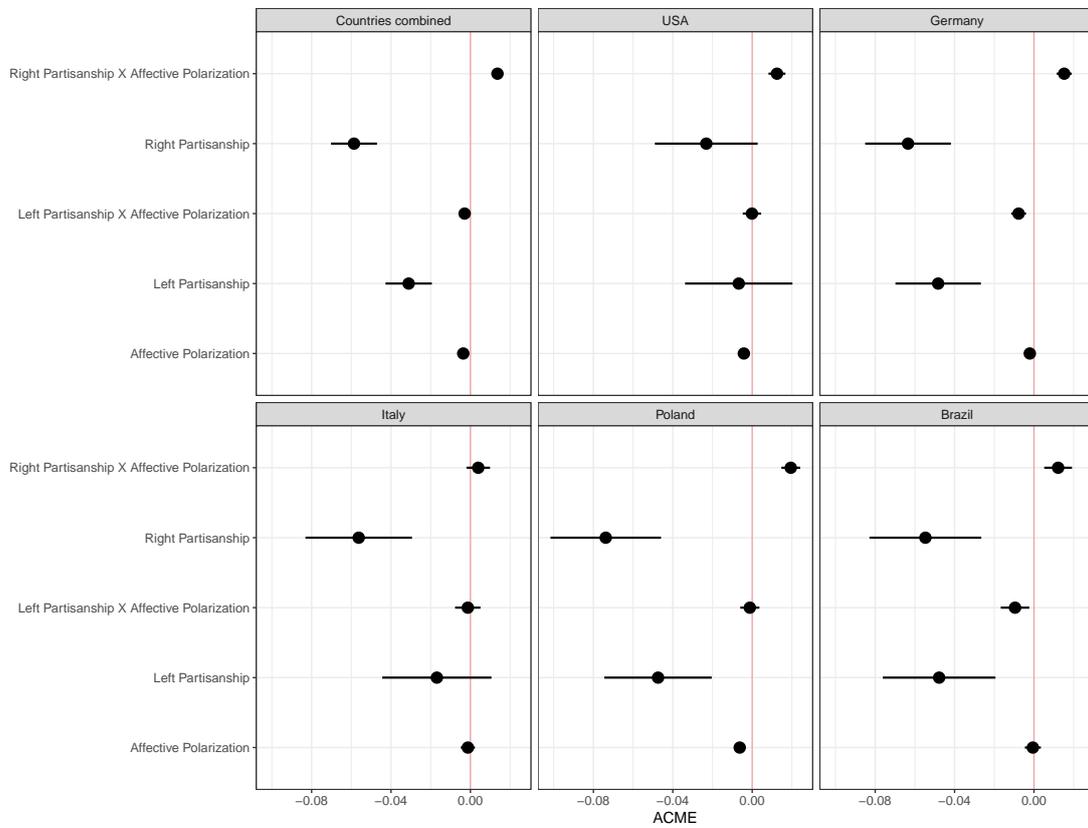

Figure 17: Average Marginal Interaction Component Effect of patients' party affiliation with partisanship of respondent in paired conjoint experiment. For all countries combined, USA, Germany, Italy, Poland and Brazil.

Figure 17 outlines that the parameter estimates with a linear interaction model lead to the same conclusions. We generally find positive interaction effects for the affective

polarization measure with a right affiliation of a patient. This implies that more negative affective polarization measures (which indicate higher rating scores for left parties), further decrease the negative effect on the right partisan affiliation of the patient. This general pattern is present in all country contexts except for Italy. It differs slightly to the extent to which patients with equal rating scores (affective polarization equal to zero) downgrade patients with partisan affiliation. In the US, for patients with zero affective polarization, we estimate no significant effect of democratic or republican affiliation compared to a non-partisan patient. But we do for the other countries. The interaction effects are again not as strong for left patients. Here we only estimate significant negative interaction effects in Germany and Brazil that are smaller, compared to the interaction effects we observe for a partisan patient.

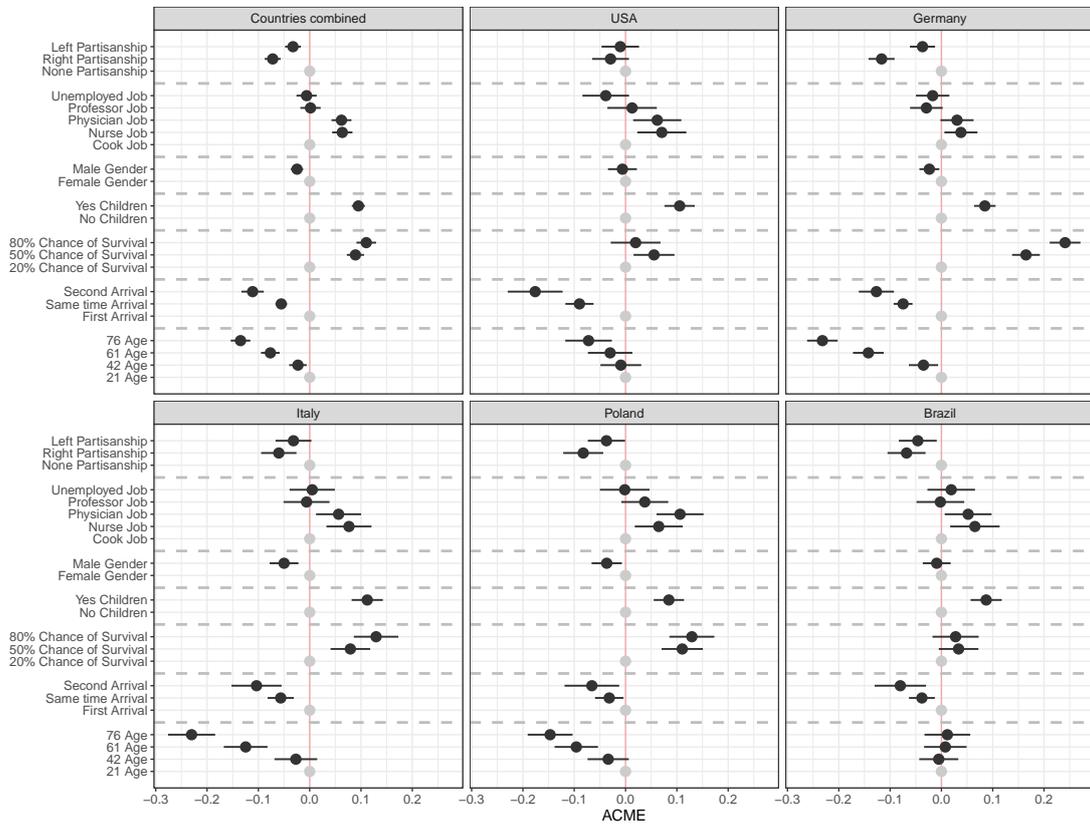## 5.7 Evaluating Effects among Respondents who Pass the Attention Check

Figure 18: Average Marginal Component Effects of triage patient attributes in paired conjoint experiment when excluding respondents who do not pass the attention check.

This section reports on the results when excluding respondents who do not pass the attention check in our survey (see Section 5.7). The effect estimates are almost unchanged compared to the analysis of the full sample, as Figure 18. The estimation uncertainty increases due to the around 40% smaller sample.

5.8 Evaluating Attribute Importance from Open Survey Answers

This section describes the procedure for analyzing the content of the open question: "What characteristics of a patient would be most important to you in deciding who should have access to intensive care first? Note: You can name characteristics mentioned in the questions just answered as well as other characteristics."

The content of open responses was analyzed using two custom dictionaries containing words and phrases in the following categories. (Note that these are not directionally-coded, so that if 'age' is matched this may indicate that younger or older patients should be preferred): age (any mention of an age, age range, or age cohort) remaining_life, survival_chance (how likely the patient is to survive the triage process), race, party, children, family, sex (male or female), education (level of education), poverty, job (job type), system_relevance (the societal importance of the patient's job), nationality, health (the patient's previous state of health), arrival_order (whether a patient came in before, after, or at the same time as another), and prev_condition.

Two dictionaries with these categories were developed, one for the German responses and one in English to be applied to the US responses and machine translations of the other country responses. Each dictionary were developed from complete vocabulary lists from each country's responses which should maximize coverage, and checked using random keyword-in-context evaluations. There were sufficiently few mentions of party that the evaluation of the importance or unimportance of party affiliation were hand-coded after the dictionary analysis.

Figure 19 show the distribution of responses by country with party responses marked in red. Table 6 shows that of those who responded, only between 1.1% and 2.5% mentioned party and Figure 20 shows that a majority of these mentions emphasized that party should *not* matter to triage decisions. From hand coding the German data we also find that 7 of the 25 responses noting the importance of party single out the AfD, presumably as being particularly unworthy e.g. "All the AfD voters are facists". However, the number of responses is very small and interpreting the intent of the respondent requires interpretation, so these observations should not be over-interpreted.
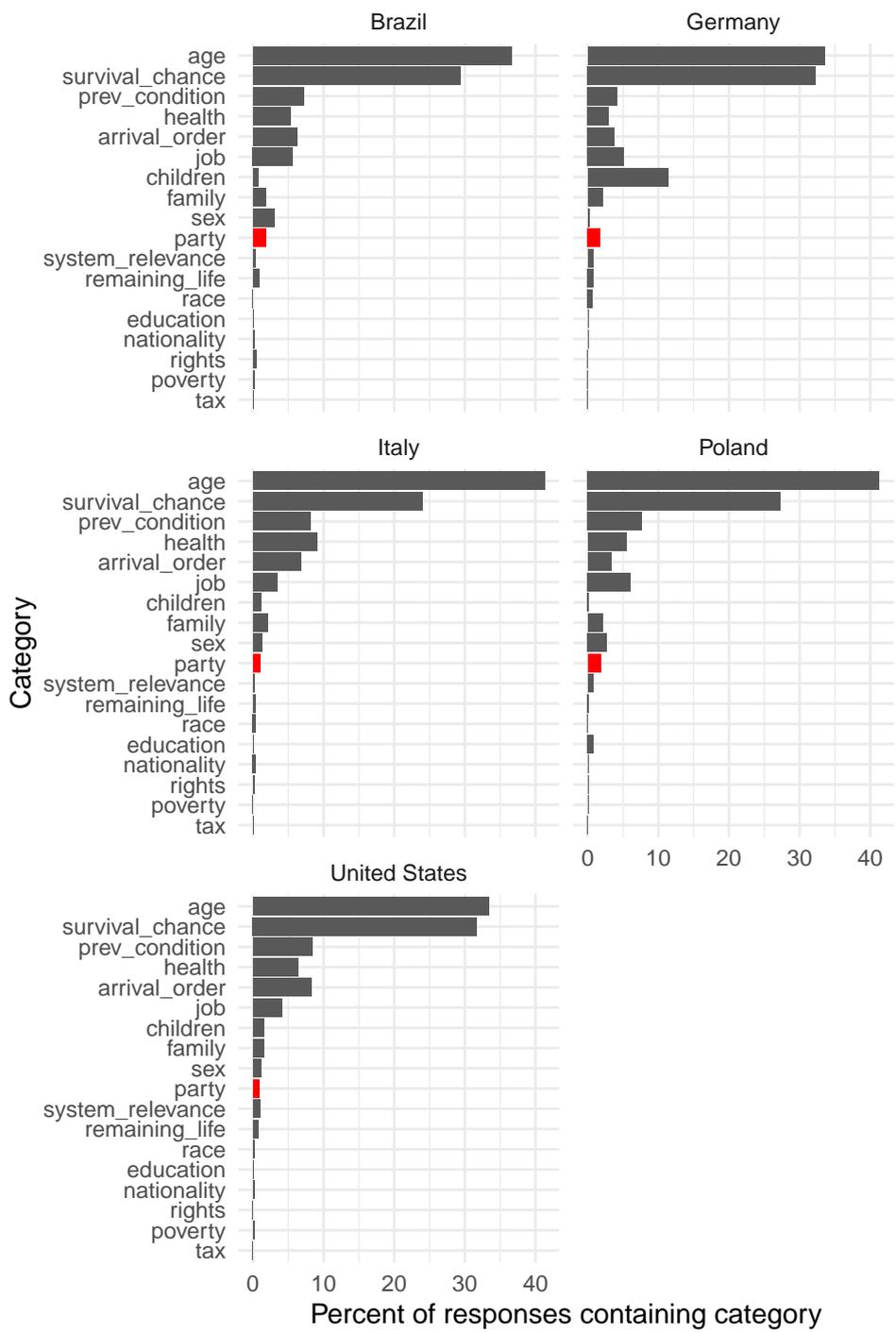
Figure 19: Topic matches in each country's open responses. Percentage of responses that mention party shown in red. Note: open response may match more than one category.

Table 6: Open question response breakdown. Responses are shown in counts and as a percentage of respondents, and mentions of party affiliation are shown as counts and as a percentage of responses.

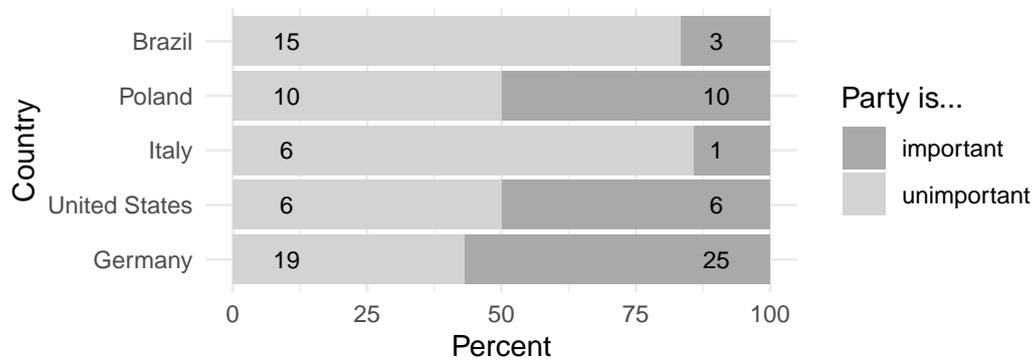|	Germany	U.S.A.	Italy	Poland	Brazil
Respondents	2044	1078	1103	1097	1093
Responses (%)	1802 (88.2)	1001 (92.9)	870 (78.9)	954 (87)	838 (76.7)
Party (%)	45 (2.5)	12 (1.2)	10 (1.1)	21 (2.2)	18 (2.1)

Figure 20: Proportion of respondents who said party affiliation was important vs unimportant. Actual number of responses in each category shown numerically.
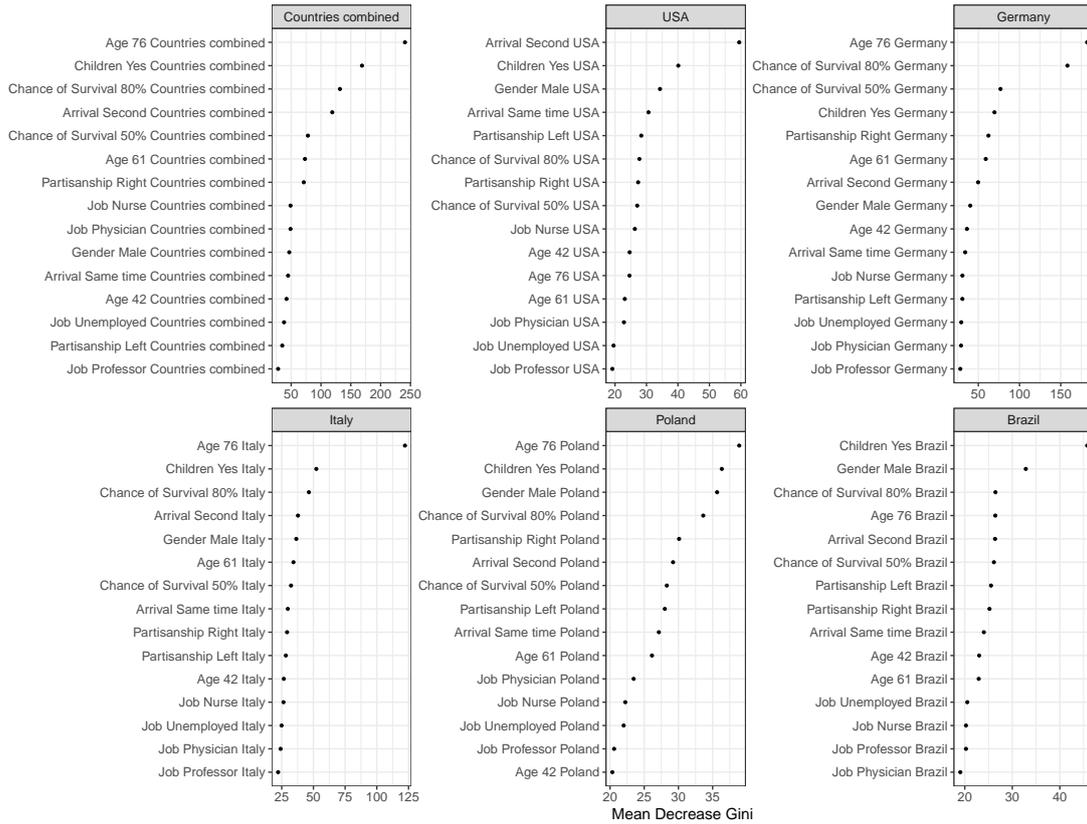
40

Figure 21: Attribute level importance

5.9 Evaluating Attribute Importance using Random Forests

To probe the importance of different features in respondents decision process, we report on the results of the variable importance if we employ random forests to model the decision process. As an ensemble of decision trees we can analyse the contribution of different variables to the model fit when variables are included in the forest. We use the mean reduction in the GINI as our measure of variable importance. It measures the gains of purity by splits of a given variable. If the variable is useful, it tends to split the patient correctly in being prioritized or not.

Figure 5.9 shows the results and confirms the importance of attributes such as Age, Children, and Chance of Survival in the combined country sample. Right partisanship of the Patient is more important compared to left partisanship, but both are generally found lower in the variable importance list. The Results vary slightly for the different country samples. In the US, arrival at the hospital is of central importance. In Germany, Italy, and Poland it is the old age of the Patient. In Brazil, children and gender seem to

play an important role in this analysis. In none of the countries, partisanship is found among the top three variable importance.

6 Pre-Analysis Plan

We pre-registered the study prior to data collection on August 12, 2020 at `https://osf.io/sv9ck`. For the review process the supplementary material include an anonymized version of the pre-analysis plan in the next section.

6.1 Anonymized Pre-Analysis Plan

Preregistration plan for:

Citizen Preferences in a Fundamental Rights Dilemma: Evidence from a Triage Experiment in Five Countries

1. **Title**

   Citizen Preferences in a Fundamental Rights Dilemma: Evidence from a Triage Experiment

2. **Authors**

   -

3. **Description**

   We implement a paired conjoint with forced choice experiment to elicit citizen preferences in the moral dilemma of triage decisions. The experiment is framed in the context of the looming consequences of the COVID-19 pandemic on resource allocation in hospitals. We aim to identify (a) key heuristics applied in the population to make these ethically difficult choices, (b) how they vary across subpopulations, and (c) how they vary across countries.

4. **Hypotheses**

   Hypotheses on the individual patients' attributes

   H1: Patients with higher chances of survival are preferred over patients with lower chances of survival.

   H2: Patients who are admitted first to the hospital are preferred over patients who are admitted later.

   H3a: Patients with system-relevant jobs (operationalized as physicians, nurses) are preferred over patients with non-system-relevant jobs (operationalized as professors, cooks) or people without a job.

   H3b: Patients with system-relevant jobs (as perceived by the respondent) are preferred over patients with non-system-relevant jobs (as perceived by the respondent).

   H4: Female patients are preferred over male patients.

   H5: Patients with children are preferred over patients with no children.

   H6: Younger patients are preferred over older patients.

Non-discrimination hypothesis

H7: Higher chance of survival constitutes the most important or only criterion to select patients.

Social identity/in-group bias hypotheses

H8a: Older (younger) respondents prefer older (younger) patients over younger (older) patients.

H8b: Male (female) respondents prefer male (female) patients over female (male) patients.

H8c: Respondents with children prefer patients with children more than respondents with no children.

H8d: Respondents with a partisan affiliation prefer patients with the same or ideologically similar partisan affiliation over patients with an ideologically dissimilar partisan affiliation.

Affective polarization hypothesis

H9: For respondents with strong levels of affective polarization, patients' partisanship constitutes a more important criterion than for respondents with low levels of affective polarization.

H10: For partisans a patients' partisanship constitutes a more important criterion than for independents.

Design Plan

5. **Study type**

We devise a paired conjoint with forced choice experiment embedded in cross-sectional surveys fielded in the United States, Germany, Brazil, Italy, and Poland.

6. **Blinding**

No blinding is involved in this study.

7.   Study design

We conduct a paired between-subject conjoint with forced choice experiment. Respondens have to choose between two patients that are described by the following seven attributes: gender, age, job, having children, chances of survival, timing of arrival at hospital, and partisanship. The categories of these attributes, which are displayed in the Variables section, are randomly varied to generate different profiles. Each respondent is exposed to four pairs of patients.

8.   Randomization

Respondents receive the profiles of two patients with categories for each characteristic which are fully randomized with the exception of "arrival at hospital", where the second patient's value is determined by the first patient's value (first → second, second → first, same time → same time). The order of the profile characteristics is randomized across respondents but remains fixed across profile pairs within respondents.

Sampling Plan

9.   Existing data

No previously existing data will be analyzed.

10.   Data collection procedures

Participants will be recruited from online access panels administered by the Respondi company or their partners. No incentives other than the participation incentives provided by Respondi will be given. Participants must be at least 18 years old and reside in the country of interest. Panelists will be sampled according to quotas of gender, age and education.

11.   Sample size

The German sample will consist of 1,800 respondents. The other country samples will consist of 1,000 respondents each.

We evaluated the power of the conjoint experiment to detect component effects of attributes on the basis of values from previous conjoint studies on this topic and the assumption that attributes had the effect of raising or lowering the average component

effects by a constant probability amount between 0.025 per level for age job party and arrival time and effects of 0.15 for gender and 0.05 for survival chances. Across a thousand simulations of 1000 subject experiments we computed power greater than 0.8 to detect all but three effects. Specifically the change of job from 'unemployed' to 'cook', from ages 76 to 61 (with power around 0.5) and one party effect from indifference (with power around 0.6). All other effects were detected with power 0.9 or higher. Simulating a 1800 subject experiment brought previously higher powered effects to nearly 1, raised the power of the 'cook' and age 61 component effects to between 0.7 and 0.8, and the effect of party preference to around 0.9.

Simulation code for the power analyses can be found at
https://github.com/conjugateprior/coronjoint

Variables

12.   Manipulated variables and outcome measure

The attributes and attribute levels are provided in **Table 1**. **Figure 1** shows how the experiment is introduced with an explanation.

Table 1: Patient attributes and attribute levels

Gender	Female, male
Age	27, 42, 61, 76
Children	Yes, no
Job	Unemployed, Physician, Nurse, Professor, Cook
Partisanship	**USA**: Republican, Democrat, Independent **Germany**: AfD, Grüne, No party preference **Brazil**: PSL/Aliança (Bolsonaro), PT (Lula), No party preference **Poland**: PiS, PO, No party preference **Italy**: Lega, Italia Viva, No party preference
Chance of survival	20%, 50%, 80%
Arrival at hospital	{First, Second}, {Second, First}, {Same time, Same time}

Figure 1: Explanation of conjoint task

Please read the following very carefully.

Very high numbers of COVID-19 (coronavirus) cases would overwhelm the healthcare system. In extreme cases, medical staff would then have to decide which patients should receive intensive medical care and which should not.We would like to know how you would decide this question.

In the following you will see pairs of patients with differing characteristics. Please look carefully at the two patient profiles and tell us which patient you would prioritize for access to intensive medical care.

Note: Although these are not profiles of real patients, we are aware that this kind of decision could be unpleasant or repulsive to you. Therefore, if you do not want to make these decisions, you can skip the questions without answering them.

Please think again of the questions you just answered.

What characteristics of a patient would be most important to you in deciding who should have access to intensive care first? *Note*: You can name characteristics mentioned in the questions just answered as well as other characteristics.

---

13. **Additionally measured variables**

Variable	Question	Scale
Gender	Please state your gender	Male, Female, Other
Year of birth	Would you please tell us your year of birth?	1920-2005
Age	2020 - year of birth	
Children	Do you have children?	No, Yes 1 child, Yes 2 children, Yes 3 children, Yes 4 or more children
Job employment status	What is your current	Unemployed, [other

	employment status?	categories]
Job	What is/was the name or title of your main job?	Open item
Partisan affiliation	What do you think about the political parties in general ?	"I have a very negative view of this party" (-5) to "I have a very positive view of this party" (+5)
Affective polarization	Absolute difference between partisan affiliation ratings of parties under study in conjoint experiment	
Partisanship (US)	Generally speaking, do you usually think of yourself as a Republican, a Democrat, an independent, or what? ● Republican ● Democrat ● Independent ● Something else (please specify): [If Democrat/Republican] Would you call yourself a strong Democrat/Republican or a not very strong Democrat/Republican? ● Strong Democrat/Republican ● Not very strong Democrat/Republican [If Independent] Do you think of yourself as closer to the Republican Party or to the Democratic Party? ● Closer to the Republican Party ● Closer to the Democratic Party ● Neither	
Partisanship (Other Countries)[1]	In [country], many people tend to support a certain political party for a long time, although they also vote for another party from time to time. How is that with you: Are you generally inclined towards a particular party? And if so, which one? [If Party] Wie stark oder wie schwach neigen Sie - alles zusammengenommen - der Partei [..] zu? ● strong ● somewhat strong ● moderate	

1 In Germany, the question will be asked as part of a later wave in the survey to the same respondents.

	● somewhat weak ● weak	
Job relevance	How essential do you consider the following professional groups to keep a country running?	Categories: Doctors, Nurses,Cooks, Journalists, Professors, Police officers Scale: Not essential at all, Not very essential, Somewhat essential, Very essential, Don't know
Perceived job system relevance	Jobs rated as "Very essential" or "Somewhat essential" coded as system-relevant, jobs rated as "Not essential at all" or "Not very essential" coded as non-system-relevant	

Analysis Plan

14. Statistical models

We will estimate *Average Marginal Component Effects* (AMCEs) and *Average Component Interaction Effects* (ACIE) for the profile attribute. Those effect estimates are equivalent to OLS estimates. For the estimation we will make use of the `lm()`, `cluster.vcov()` and `coeftest()` functions provided in the R. In later specifications we will also add respondent characteristics to the model equations.

We first estimate all models separately for different country samples.

The first specification includes only the main effects of the profile attributes (thus operationalizing H1-H6). Standard errors will be clustered on respondents. The exact code for this first step of the analysis is as follows.

Hypotheses on the individual patients' attributes

```
m.0 <- lm(y ~ chance +  gender + age + job + child + arrival +
partisanship, data=triage.dat)
vcov_id <- cluster.vcov(m.0, cbind(triage.dat$id))
coeftest(m.0 , vcov_id)
```

For presentational purposes we will rely on the graphical display of our model results.

Social identity/in-group bias hypotheses

The next set of specifications we test the social identity/in-group bias hypotheses. For this we include respondent characteristics (age, gender, pid). Importantly, we will interact this respondent characteristics with profile characteristics (thus operationalizing H8a-H8d). Each interaction corresponds to one hypothesis and we will test them separately.

```
m.8a <- lm(y ~ chance +  gender + age*age_resp + job + child +
arrival + partisanship, data=triage.dat)
vcov_id <- cluster.vcov(m.8a, cbind(triage.dat$id))
coeftest(m.8a , vcov_id)


m.8b <- lm(y ~ chance +  gender*gender_resp + age + job + child +
arrival + partisanship, data=triage.dat)
vcov_id <- cluster.vcov(m.8b, cbind(triage.dat$id))
coeftest(m.8b , vcov_id)


m.8c <- lm(y ~ chance +  gender + age + job + child*child_resp +
arrival + partisanship, data=triage.dat)
vcov_id <- cluster.vcov(m.8b, cbind(triage.dat$id))
coeftest(m.8b , vcov_id)
```

For the partisanship hypothesis we rely on two operationalizations. We first create two dummy variables that take on a value of one if the respondent strongly or somewhat strongly (in the US strong and not very strong) identifies with the respective parties mentioned in the conjoint experiment, and zero otherwise (`resp_pid1` and `resp_pid2`). Secondly, we rely on two measures of party views corresponding to the two parties in the patient profile description (`resp_pview1` and `resp_pview2`). The two operationalizations are used in separate model specifications and interacted with the partisan patient attributes.

```
m.8d.1 <- lm(y ~ chance +  gender + age + job + child + arrival +
partisanship1*resp_pid1 + partisanship2*resp_pid2 ,
data=triage.dat)
vcov_id <- cluster.vcov(m.8d.1, cbind(triage.dat$id))
coeftest(m.8d.1 , vcov_id)


m.8d.2 <- lm(y ~ chance +  gender + age + job + child + arrival +
partisanship1*resp_pview1 + partisanship2*resp_pview2 ,
data=triage.dat)
vcov_id <- cluster.vcov(m.8d.2, cbind(triage.dat$id))
coeftest(m.8d.2 , vcov_id)
```

Affective polarization hypothesis

We also test the affective polarization hypothesis (H9). We construct a measure of affective polarization from the rating scores. For this, we take the absolute difference in the rating scores of the two parties in the conjoint experiment (affective_pol) and include it as covariate in the model specification. The specification includes an interaction with the partisanship attributes.

```
m.9 <- lm(y ~ chance +  gender + age + job + child + arrival +
partisanship1*affective_pol + partisanship2*affective_pol,
data=triage.dat)
vcov_id <- cluster.vcov(m.9, cbind(triage.dat$id))
coeftest(m.9 , vcov_id)
```

Open Question Format Importance of Attributes

To test H10, we further analyze data from the open question format which characteristics of a patient are most important to youtube respondents. We classify the open questions by hand into the different characteristics in the conjoint experiment and a category others. We allow for the naming of multiple categories in one answer. The outcome is the share of respondents that name a certain category.

This allows us to see what characteristics are generally perceived as important and further test H10. We use a two-sided t-test to analyse if the share of partisans (which we code as all respondents that hold any strong or somewhat strong partisan affiliation, same as above) who give partisanship as a reason is higher compared to respondents without a partisan affiliation.

```
t.test(importance.party ~ pid.yesno)
```

Pooled analysis

We further pool the data to get at the average effects across country contexts. As the sample size varies for the different countries, we weigh by sample size in the pooled analysis. For this we recode the partisan attribute such that partisan_left corresponds to the left party in each country context (Democrats, Grüne, PT (Lula), PO, Italia Viva) and the right parties partisan_right (Republican, AfD,PSL/Aliança (Bolsonaro), PiS, Lega). We cluster standard errors on country and Respondent ID.

```
m.pooled <- lm(y ~ chance +  gender + age + job + child + arrival
+ partisanship, data=triage.dat, weights=sample.size)
vcov_id.country <- cluster.vcov(m.pooled, cbind(triage.dat$id,
triage.dat$country))
```

```
coeftest(m.pooled, vcov_id)
```

15. Transformations

See above under 13.

16. Inference criteria

We will rely on classical frequentist statistical inference and the conventional $p<.05$ cut off for statistical significance. All tests will be two-tailed and while our conjoint experiment includes multiple profile dimensions and attributes, we will not correct the p-values for multiple hypotheses.

17. Data exclusion

We will use the full samples and will not exclude any observations from the analysis.

18. Missing data

We will rely on model specific listwise deletion of observations with missing variable values.

19. Exploratory analysis

6.2 Deviations from Pre-Analysis Plan

Although the results we present are based on the pre-analysis plan we registered prior to obtaining the data (see details anonymised regestriation plan 6), there are a few areas in which we had to deviate from the plan. For the sake of transparency, we report each of these changes here:

- We present more descriptive statistics from the survey as pre-registered and that have not been described in the exploratory analysis section of the pre-analysis plan.

- Next to average marginal component effects, we also calculate the marginal means and present them in the appendix.

- In the pre-analysis plan we wrongly stated that we intend to use the "absolute difference in rating scores". To capture if respondents are left-leaning or right-leaning affective polarized we have to use the total difference and report on these results instead.

- For the ease of interpretation the main text, moreover, presents results from a categorical version of the affective polarization measure. This has not been pre-registered but makes it easier to interpret the results in terms of in-group and out-group effects. The appendix still presents the results with the linear interaction (SM 5.6), and probes the robustness using an alternative cut-offs fr the categorical variable (SM 5.3).

- We slightly deviate from the pre-analysis plan to evaluate the partisanship hypothesis. We include the interaction of each patient partisanship attribute with both respondent partisanship categories. E.g. *partisanship1*resp_pid1 + partisanship2*resp_pid2 + partisanship2*resp_pid1 + partisanship1*resp_pid2* instead of just *partisanship1*resp_pid1 + partisanship2*resp_pid2* in *m.8d.1*. This permits us to capture in group-favouritism as well as out-group animus.

- We refrain from using the rating scores plus partisanship (model *m.8d.2*) to test the partisanship hypothesis, as the rating scores are now already part of the revised affective polarization hypothesis.

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