Online appendix

A Previous research on rebels

Table A.1 summarizes all studies using survey experiments to study the appeal of rebels of which we are aware. It summarizes these studies on key dimensions of their research designs: the countries where the surveys were fielded; whether the study examines policy, ideology, or both; whether it examines policy or ideological congruence between respondents and the MPs portrayed in the survey vignette; whether it asks respondents to directly compare two MPs; and finally whether respondents rate MPs in one or multiple vignettes. Of course, these are not all the dimensions on which these studies vary. They also differ in the level of contextual information and the number of attributes that vary. The studies conducted in the US, for example, (e.g. Carson et al., 2010; Harbridge and Malhotra, 2011) frame voting against the party as an act of bipartisanship, which in the US context is often the case, but not always (see e.g. Duck-Mayr and Montgomery, 2022; Kirkland and Slapin, 2018). All other studies tend to refer to dissent from a party, rather than working with another party, as would be more common outside of the US.

By policy, we mean providing the policy context of votes — e.g., the vote was about telecommunications or food safety policy. By ideology, we mean providing information about the left-right ideological position that voting in a particular manner implies. Some studies give no information about the policy context or ideology of votes, simply stating that sometimes MPs may vote against their party. Others say that MPs vote on a particular policy but do not provide information about the direction in which the bill would shift policy or the ideology associated with voting in a particular manner. Still other studies provide information that would allow a respondent to discern the ideology of the MP without giving specific information about the bill on which rebellion occurred. Finally, when policy positions cleanly map onto a left-right dimension, offering information about policies and policy positions can also provide information about ideology.

Table A.1: Survey Experiments Capturing Support for Rebellion.

Study	Cases	Policy/Ideology	Congruence	Comparison	Multiple Ratings
Carson et al. 2010	US	Ideology	Yes	No	No
Harbridge & Malhotra 2011	US	None	No	No	No
Campbell et al. 2019	UK	None	No	Yes	Yes
Wagner et al. 2020	UK/DE/AT	Ideology	No	Yes*	Yes
Bøggild & Petersen 2020	US/UK/DK	Policy	No	No	No
Bøggild 2020	US/UK/DK	Policy	No	No	No
Besch & Lòpez-Ortega 2021	ES	Policy & ideology	No	No	No
This Study	UK/DE/IT/FR	Policy & ideology	Yes	No**	Yes

Note: * This study presented respondents with two descriptions of MPs simultaneously but not ask them to choose between them. ** We do implement a version of the experiment with a comparison in the second study to test for survey design effects.

B Experimental design appendix

B.1 Human subject recruitment and consent

The research was approved by the Ethics Committee at the University of Cologne and the University of Essex. Respondents were recruited through the commercial survey firm YouGov. YouGov compensates their participation through a reward scheme that allocates points redeemable for cash or with retailers. Compensation is said to adhere to local standards of fair pay (e.g. above local minimum wage regulations). Upon entering the YouGov pool of respondents, detailed information is given about the purpose and scope of studies in which respondents may be invited to participate as well as the rights of respondents.

After being invited by YouGov to participate in the online survey presented here, respondents were shown an initial consent screen informing them that the survey is part of an academic research study. The consent form used language approved by the Ethics Committee at the University of Cologne and following standard practices in online survey research. Additionally, the consent screen gave respondents information about how the data would be used and stored, as well as how the anonymity of responses is ensured. Respondents were asked to provide voluntary consent to continue with the study and they were given information on how to contact the investigators should they have any questions. Respondents who did not consent, did not continue with the study. The study did not involve any deception, nor did it intervene in political processes.

During the survey and experiment, YouGov stores observations for the defined variables on each subject on secure server space made accessible after the conclusion of the survey only to the authors. After the experiment is conducted, the data of respondents' decisions, already excluding any identifying information, is transferred to the authors' computers. Since no connection is established to the recorded data, confidentiality of the individual respondent is guaranteed. Even though data is provided on the respondent-level, no identifying information is provided; respondents are assigned a random number to keep track of the data produced in the survey and survey experiment.

B.2 Assumptions

In our case, the identification of the marginal means and the AMCE of the outcome measure for any attribute rests on three assumptions (Hainmueller, Hopkins and Yamamoto, 2014): First, the "no carry-over effects" assumption requires that respondents always react equally to identical choice tasks irrespective of what they have seen before (e.g. they do not change behavior from the first to the last choice task). As we show in Section 4.4, we do find violations of this assumption. We consider this violation and the robustness of our main findings in an additional analysis in our follow-up experiment in Section 5. Second, the randomization of attribute levels need to be carried out in such a way that respondents' choices are statistically independent of the vignette assignment. We ensure this through randomization within the survey software. Third, given our seven different versions of the vignettes that include or exclude the direction of the bill and public support, we have to assume that the number of attributes does not change responses; a larger number of attributes per profile should not lead to satisficing, in which respondents use choice heuristics to break down the complexity of too much information.

B.3 Main experiment

B.3.1 Selection of vignette versions to identify mediation

We implement seven specific versions of our vignettes but not all nine theoretically possible versions (see Table 4 in the manuscript). Recall that we use the different versions to test Hypothesis 2 and Hypothesis 3. They stipulate that the effect of rebellion is mediated by either policy congruence between the MP's behavior and the respondent's position, or the MP's behavior and the electorate's preferences (i.e., public opinion). We need to implement the *Baseline* version of the vignettes, in which we provide no information about the substantive direction of the MP's vote or about public opinion on the bill, in order to identify the total effect of rebellion (incl. mediation). Now, to test Hypothesis 2 and Hypothesis 3, we must provide information on the mediators and observe whether and to what extent this affects the effect of rebellion (compared to the *Baseline*) – we are fixing the mediator value, removing the mediated effect from the total effect. Accordingly, for Hypothesis 2 we need to implement the *Against voter* and *With voter* versions, covering both values that the assumed mediator can take. For Hypothesis 3, the relevant versions are *Against public* and *With public*. Note that since the hypotheses do *not* pertain to the interaction of the two mediators, these four additional versions together with the *Baseline* are – in principle – sufficient to test our hypotheses.

However, one might be concerned that respondents could engage in more complex cue-taking, drawing inferences from one mediator about the other. For instance, if they see a rebel that acts against their preferences (Against voter), they may assume that they are doing so to act in line with the public (With public). If both mechanisms work simultaneously, in such a situation the respondent might still support the MP strongly (assuming they represent voters in general). Yet, this would yield no or little evidence for our causal mechanism pertaining to respondents' preferences, as the provision of the additional information would not squeeze out the effect of rebellion, despite the mechanism being at work. By including the interacted conditions with the mediators being in tension (Against voter-With public and With voter-Against public) we make it possible to nevertheless identify the mediation if people engage in the reasoning described. For instance, the effect of rebellion should disappear if respondents see rebels vs. non-rebels that act against their own preferences but in line with the preferences of the public. In turn, the conditions in which the MP acts either in line or against both, the respondent and the public (Against voter-Against public and With voter-With public), appeared of less interest to us. For instance, if respondents learn that the MP acted against their preferences and they assume they also acted against voters' preferences, the effect of rebellion should still dissipate (sic!). The effect may decline more strongly than expected, but the mechanisms are reinforcing not countervailing. Hence, we concluded that these conditions are the least important for us to identify the mechanisms behind the rebellion effect, and therefore chose to exclude them given resource constraints.

B.3.2 Manipulation checks and data quality

Figure B.1: Average duration on vignette screen by vignette number for first experiment.

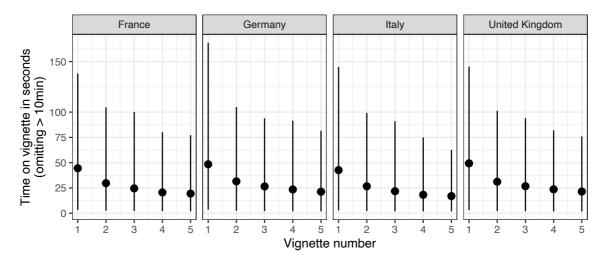
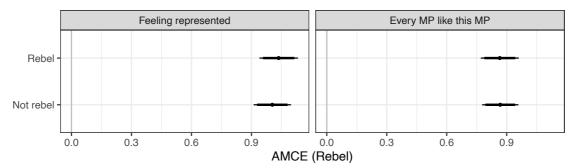


Figure B.2: Effect of receiving the *With voter* treatment (vs the *Against voter* treatment on outcome measure by rebel status. Estimates obtained from a regression of outcome measures on an indicator of the two treatments run separately by rebel status.



Note: We report 95% (thin line) and 90% confidence bounds (thick line) based on clustering standard errors at the respondent level.

B.3.3 Vignette details

Baseline condition: Attribute levels in italics *and* brackets were fully randomized, attribute levels *only* in brackets changed from one vignette to the other, but were dependent on other responses. In this condition, we only randomized the order in which the five bills appeared as attribute levels for bill type.

"Members of Parliament [adopted / rejected] a bill on [bill type 1:5]. The bill was [adopted / rejected] by [one vote / a large majority].

Think about the following Member of Parliament. [He / she] belongs to a party that is currently in [government / opposition]. [[He / she] voted for the bill whereas the party leadership voted against the bill. / [He / she] voted against the bill whereas the party leadership voted for the bill. / [He / she] voted for the bill and the party leadership voted for the bill. / [He / she] voted against the bill and the party leadership voted against the bill.]"

With voter condition: In one version of this condition, respondents saw a vote on a bill they liked, and MPs who voted for the bill, in another version they saw a bill they did not like and MPs who voted against the bill (not shown below). Which of these two versions was shown varied randomly from vignette to vignette. We use social spending as an example in the following vignette, but respondents saw one vignette for each bill type and the respective direction of the bill.

"Members of Parliament [adopted / rejected] a bill on [social spending²⁴] that [increases social spending by increasing taxes / decreases social spending in order to cut taxes²⁵]. The bill was [adopted / rejected] by [one vote / a large majority].

Think about the following Member of Parliament. [He / she] belongs to a party that is currently in [government / opposition]. [[He / she] voted for the bill whereas the party leadership voted against the bill. / [He / she] voted for the bill and the party leadership voted for the bill.]"

Against public condition: In this version of the against public condition, the public is against the bill and the MP votes for the bill. We only provide information on the bill type, not on its direction so that the respondent cannot infer anyone's position on the bill in question. In the second version of this condition (not shown here), the public is for the implementation of the bill, but the MP votes against it. Whether the public was for or against was randomly chosen for each vignette in this condition.

"Members of Parliament [adopted / rejected] a bill on [bill type 1:5]. The bill was [adopted / rejected] by [one vote / a large majority]. The majority of the public was [against]²⁶ the bill.

Think about the following Member of Parliament. [He / she] belongs to a party that is currently in [government / opposition]. [[He / she] voted for the bill whereas the party leadership voted against the bill. / [He / she] voted for the bill and the party leadership voted for the bill.] "

Against voter-with public condition: There are again two versions of this condition. In one version, the public and the MP are for the bill, whereas the respondents is against the bill. In another version (not shown below), the public and the MP are against the bill, whereas the respondents is for the bill. We fully randomize which of these two versions respondents see once assigned to this condition. We use again social spending as an example, but showed respondents one vignette for each bill type.

"Members of Parliament [adopted / rejected] a bill on [social spending²⁷] that [increases social spending by increasing taxes / decreases social spending in order to cut taxes²⁸]. The bill was [adopted / rejected] by [one vote / a large majority]. The majority of the public was [for]²⁹ the bill.

²⁴A bill of type 1:5

²⁵Showing the one that the respondent preferred.

²⁶Selecting the opposite of the MP's position.

²⁷A bill of type 1:5

²⁸Depending on preferences of the respondent.

²⁹Selecting the same position as the MP's position.

Think about the following Member of Parliament. [He / she] belongs to a party that is currently in [government / opposition]. [[He / she] voted for the bill whereas the party leadership voted against the bill. / [He / she] voted for the bill and the party leadership voted for the bill.]

Other conditions: The against voter condition follows the logic of the with voter condition, while showing MPs who vote for bills the respondent does not like (or vice versa). Likewise, the with public condition looks similar to the against public condition, only showing MP behaviour that goes against the public's will. The with voter-against public condition merges the with voter and against public conditions shown above into a single vignette that describes situations in which the MP follows the will of the respondents, but not the will of the public.

B.3.4 Treatment balance

Table B.2: Social demographics and political positions by treatments in the main experiment

	Baseline	Against voter-	With voter-	Against voter	Against public	With public	With voter
	(N = 1866)	(N = 1835)	(N = 1874)	(N = 1859)	(N = 1850)	(N = 1822)	(N = 1821)
Age							
mean (sd)	49.61 ± 16.47	49.13 ± 16.24	49.02 ± 16.41	48.84 ± 16.11	49.21 ± 16.22	48.77 ± 16.02	49.02 ± 16.29
mim	18	18	18	18	18	18	18
max	93	94	91	88	94	68	93
Gender							
Male	876 (46.95%)	872 (47.52%)	908 (48.45%)	887 (47.71%)	877 (47.41%)	850 (46.65%)	850 (46.68%)
Female	990 (53.05%)	963 (52.48%)	966 (51.55%)	972 (52.29%)	973 (52.59%)	972 (53.35%)	971 (53.32%)
Neither	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Education							
Primary education	48 (2.57%)	45 (2.45%)	33 (1.76%)	40 (2.15%)	43 (2.32%)	33 (1.81%)	46 (2.53%)
Lower secondary education	431 (23.10%)	422 (23.00%)	448 (23.91%)	439 (23.61%)	447 (24.16%)	438 (24.04%)	438 (24.05%)
Upper secondary education	742 (39.76%)	725 (39.51%)	749 (39.97%)	740 (39.81%)	720 (38.92%)	729 (40.01%)	710 (38.99%)
Post-secondary education	86 (4.61%)	85 (4.63%)	93 (4.96%)	89 (4.79%)	97 (5.24%)	85 (4.67%)	95 (5.22%)
Bachelor's or equivalent level	454 (24.33%)	444 (24.20%)	442 (23.59%)	438 (23.56%)	437 (23.62%)	430 (23.60%)	435 (23.89%)
Master's or equivalent level	85 (4.56%)	92 (5.01%)	89 (4.75%)	91 (4.90%)	81 (4.38%)	86 (4.72%)	83 (4.56%)
Doctoral or equivalent level	20 (1.07%)	22 (1.20%)	20 (1.07%)	22 (1.18%)	25 (1.35%)	21 (1.15%)	14 (0.77%)
Size of locality							
Big locality	986 (52.84%)	975 (53.13%)	986 (52.61%)	995 (53.52%)	970 (52.43%)	964 (52.91%)	982 (53.93%)
Medium-sized locality	601 (32.21%)	593 (32.32%)	623 (33.24%)	599 (32.22%)	628 (33.95%)	606 (33.26%)	588 (32.29%)
Small locality	279 (14.95%)	267 (14.55%)	265 (14.14%)	265 (14.25%)	252 (13.62%)	252 (13.83%)	251 (13.78%)
Social spending and taxes							
Increase social spending	618 (33.12%)	665 (36.24%)	656 (35.01%)	655 (35.23%)	664 (35.89%)	643 (35.29%)	610 (33.50%)
Decrease social spending	1,248 (66.88%)	1,170 (63.76%)	1,218 (64.99%)	1,204 (64.77%)	1,186 (64.11%)	1,179 (64.71%)	1,211 (66.50%)
Competence of the EU							
Increase EU competencies	697 (37.35%)	(%09'.22')	691 (36.87%)	701 (37.71%)	(37.68%)	684 (37.54%)	629 (34.54%)
Decrease EU competencies	1,169 (62.65%)	1,145 (62.40%)	1,183 (63.13%)	1,158 (62.29%)	1,153 (62.32%)	1,138 (62.46%)	1,192 (65.46%)
Ties to EU							
Strengthen ties to the EU	1,173 (62.86%)	1,151 (62.72%)	1,180 (62.97%)	1,187 (63.85%)	1,208 (65.30%)	1,165 (63.94%)	1,150 (63.15%)
Weaken ties to the EU	693 (37.14%)	684 (37.28%)	694 (37.03%)	672 (36.15%)	642 (34.70%)	657 (36.06%)	671 (36.85%)
Immigration							
Make it easier to immigrate	557 (29.85%)	559 (30.46%)	579 (30.90%)	572 (30.77%)	575 (31.08%)	555 (30.46%)	570 (31.30%)
Make it harder to immigrate	1,309 (70.15%)	1,276 (69.54%)	1,295 (69.10%)	1,287 (69.23%)	1,275 (68.92%)	1,267 (69.54%)	1,251 (68.70%)
Climate policy							
Establish new environ regs		1,430 (77.93%)	1,432 (76.41%)	1,436 (77.25%)	1,460 (78.92%)	1,418 (77.83%)	1,430 (78.53%)
Remove existing environ regs	379 (20.31%)	405 (22.07%)	442 (23.59%)	423 (22.75%)	390 (21.08%)	404 (22.17%)	391 (21.47%)

B.4 Follow-up experiment

2,795 respondents followed the invitation link to the follow-up experiment of which 105 did not consent to take part. Of the remaining 2,690 respondents, 2,307 finished the survey and 383 dropped out before. Of those 241 dropped out before treatment was assigned, while those 142 who passed the stage where treatment was assigned, distributed evenly across treatment groups: Baseline/Distraction 23 drop-outs (drop-out rate 0.05, Alternative outcome 31 (0.06), Characteristics 27 (0.06), Cognitive involved 37 (0.07), Paired vignette first 24 (0.05).

For the follow-up experiment, all vignettes have the same attributes and attribute levels as the *Baseline* condition in the first experiment, with the exception of showing one vignette less due to not showing the Competences of the EU issue in the UK after Brexit.

Treatments (for a visualization of the structure of treatments see Figure B.3 below):

Between reminder: Additional screen randomly assigned after vignettes 2 or 3: "Before moving to the next situation, we like to inform you that sometimes Members of Parliament speak out or vote against their party.

Before reminder: Additional Text box before first vignette "Sometimes Members of Parliament speak out or vote against their party. Perhaps you have heard about such an instance in the past. What are your views about this? with open-ended questions.

MP Traits: Asking about characteristics associated with MP as described in the vignette added randomly after either of the vignettes 2, 3, or 4.

Alternative outcome: Variation of the outcome measure: "Based on this information, how much would you like to have this MP as your MP in the House of Commons?"

Paired vignette: Paired vignettes with two MPs.

Baseline: Vignettes 1 and 2 of *Between reminder* and *MP traits* treatments for both outcome measures.

We pool observations for the baseline in that way to maximize statistical power.

Before reminder Based on this information, n=493. t=2 Sometimes Members of Parliament speak out or vote 2 3 4 1 how much would you like this MP to have against their party. Perhaps you have heard about such an 1 2 3 4 instance in the past. What are your views about this?

Open text field, forced respons as your MP in the House of Commons? Alternative 3 4 1 2 outcome Sample n=495, t=4 "Before moving to the next situation, we like to inform you that sometimes Members of Parliament speak out or vote against their party. N=2367 Between reminder n=482, t=1 4 1 2 3 Characteristics questions 4 2 3 MP traits Paired vignette n=455. t=3 n=442, t=5 Outcome measures Note: (1) baseline replication runs for 2 vignettes, then Between reminder or MP traits treatment (2) t=5 runs through Baseline and Between reminder, t=1,2,3,4 run through t=5 as second "How well do you feel represented by this MP?" "Do you agree or disagree with the following statement? Every MP should be like this MP."

Figure B.3: Structure of treatments in the follow-up experiment

There is balance in social demographics and positions on the four policy issues across treatments for those respondents who finished the experiment (See Table B.4 below.)

Table B.3: Social demographics and political positions across treatments in the follow-up experiment

	Baseline	Alternative	Characteristics	Cognitive	Paired vignette
	Distraction (N=466)	outcome (N=480)	(N = 440)	involved (N=479)	first (N=442)
Age					
mean (sd)	50.70 ± 17.87	48.42 ± 18.02	50.67 ± 18.37	49.88 ± 17.62	48.19 ± 17.94
nim	19	18	18	18	18
max	06	91	98	93	88
Gender					
Male	250 (53.65%)	261 (54.38%)	247 (56.14%)	270 (56.37%)	251 (56.79%)
Female	214 (45.92%)	216 (45.00%)	191 (43.41%)	209 (43.63%)	188 (42.53%)
Neither	2 (0.43%)	3 (0.62%)	2 (0.45%)	0 (0.00%)	3 (0.68%)
Education					
No schooling	11 (2.36%)	18 (3.75%)	6 (1.36%)	19 (3.97%)	16 (3.62%)
Primary school	7 (1.50%)	7 (1.46%)	5 (1.14%)	16 (3.34%)	9 (2.04%)
9 years of schooling	101 (21.67%)	93 (19.38%)	88 (20.00%)	105 (21.92%)	78 (17.65%)
11 years of schooling	142 (30.47%)	132 (27.50%)	143 (32.50%)	132 (27.56%)	120 (27.15%)
Finished higher education	150 (32.19%)	175 (36.46%)	156 (35.45%)	153 (31.94%)	169 (38.24%)
Doctoral degree	18 (3.86%)	13 (2.71%)	11 (2.50%)	14 (2.92%)	10 (2.26%)
Size of locality					
Less than 2,000 inhabitants	48 (10.30%)	40 (8.33%)	40 (9.09%)	36 (7.52%)	43 (9.73%)
2,000 to less than 5,000	61 (13.09%)	56 (11.67%)	59 (13.41%)	67 (13.99%)	63 (14.25%)
5,000 to less than 20,000	92 (19.74%)	78 (16.25%)	73 (16.59%)	88 (18.37%)	83 (18.78%)
20,000 to less than 100,000	107 (22.96%)	129 (26.88%)	119 (27.05%)	122 (25.47%)	100 (22.62%)
100,000 to less than 1 million	109 (23.39%)	120 (25.00%)	94 (21.36%)	114 (23.80%)	113 (25.57%)
1 million or more	49 (10.52%)	57 (11.88%)	55 (12.50%)	52 (10.86%)	40 (9.05%)
Social spending					
Increase social spending	255 (54.72%)	241 (50.21%)	232 (52.73%)	260 (54.28%)	253 (57.24%)
Decrease social spending	211 (45.28%)	239 (49.79%)	208 (47.27%)	219 (45.72%)	189 (42.76%)
Ties to EU					
Strengthen ties to the EU	245 (52.58%)	251 (52.29%)	235 (53.41%)	253 (52.82%)	249 (56.33%)
Weaken ties to the EU	221 (47.42%)	229 (47.71%)	205 (46.59%)	226 (47.18%)	193 (43.67%)
Immigration					
Make it easier to immigrate	143 (30.69%)	131 (27.29%)	131 (29.77%)	125 (26.10%)	151 (34.16%)
Make it harder to immigrate	323 (69.31%)	349 (72.71%)	309 (70.23%)	354 (73.90%)	291 (65.84%)
Climate policy					
Establish new environ regs	317 (68.03%)	352 (73.33%)	323 (73.41%)	362 (75.57%)	321 (72.62%)
Remove existing environ regs $ 149 (31.97\%)$	149 (31.97%)	128 (26.67%)	117 (26.59%)	117 (24.43%)	121 (27.38%)

Table B.4: Social demographics and political positions for respondents who dropped out and those who finished the follow-up experiment. All of the drop-outs answered the age and gender questions (right in the beginning of the survey) but only 143 and 142 of them made it to the remaining questions about demographics and political attitudes. We show p-values from a test over difference in means (t-test for age) or over the contingency tables of the other variables (χ^2).

	Dropped out (N = 383)	Finished (N = 2307)	p-value
Age			< 0.01
mean (sd)	63.70 ± 15.73	49.57 ± 17.98	
min	18	18	
max	90	93	
Gender			0.42
Male	269 (70.23%)	1,279 (55.44%)	
Female	93 (24.28%)	1,018 (44.13%)	
Neither	0 (0.00%)	10 (0.43%)	
Education			< 0.01
No schooling	0/143 (0.00%)	70 (3.03%)	
Primary school	2/143 (1.40%)	44 (1.91%)	
9 years of schooling	28/143 (19.58%)	465 (20.16%)	
11 years of schooling	56/143 (39.16%)	669 (29.00%)	
Finished higher education	39/143 (27.27%)	803 (34.81%)	
Doctoral degree	6/143 (4.20%)	66 (2.86%)	
Size of locality			< 0.01
Less than 2,000 inhabitants	17/142 (11.97%)	207 (8.97%)	
2,000 to less than 5,000	19/142 (13.38%)	306 (13.26%)	
5,000 to less than 20,000	28/142 (19.72%)	414 (17.95%)	
20,000 to less than 100,000	37/142 (26.06%)	577 (25.01%)	
100,000 to less than 1 million	31/142 (21.83%)	550 (23.84%)	
1 million or more	10/142 (7.04%)	253 (10.97%)	
Social spending			0.84
Increase social spending	77/142 (54.23%)	1,241 (53.79%)	
Decrease social spending	65/142 (45.77%)	1,066 (46.21%)	
Ties to EU			1.00
Strengthen ties to the EU	78/142 (54.93%)	1,233 (53.45%)	
Weaken ties to the EU	64/142 (45.07%)	1,074 (46.55%)	
Immigration			0.68
Make it easier to immigrate	45/142 (31.69%)	681 (29.52%)	
Make it harder to immigrate	97/142 (68.31%)	1,626 (70.48%)	
Climate policy			0.25
Establish new environ regs	100/142 (70.42%)	1,675 (72.61%)	
Remove existing environ regs	42/142 (29.58%)	632 (27.39%)	

C Statistical appendix

C.1 Summary statistics of main experiment

Figure C.4: Distribution of outcome variables *every MP like this MP* and *feeling represented* by country in the first experiment.

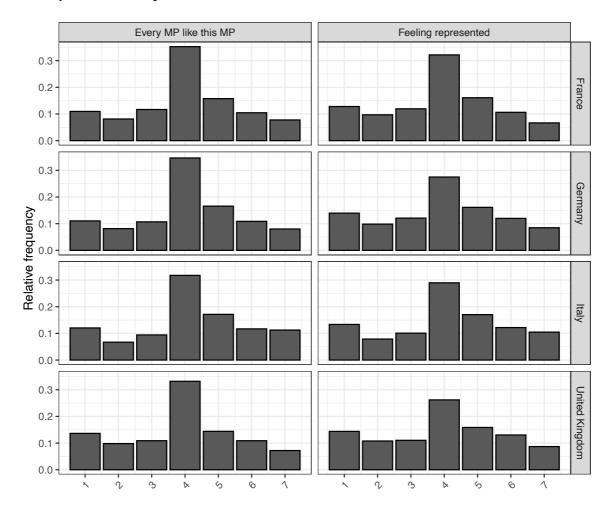
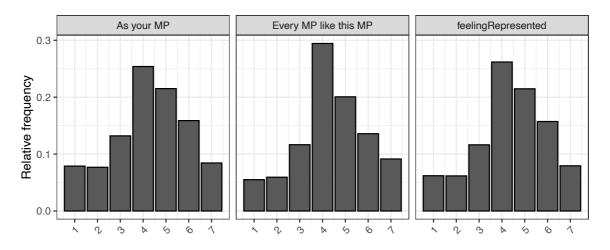


Figure C.5: Distribution of outcome variables *every MP like this MP*, *feeling represented*, *as your MP* in the second experiment (UK only).



C.2 Regression tables for main experiment

Table C.5: Regression of outcome measures on rebel status. Standard errors clustered at the respondent-level.

	Every MP like this MP	Feeling represented
Rebel	-0.025*	0.063***
	(0.014)	(0.014)
Constant	3.959***	3.976***
	(0.013)	(0.012)
\mathbb{R}^2	0.000	0.000
Adj. R ²	0.000	0.000
Num. obs.	70000	70000
RMSE	1.770	1.696
N Clusters	14000	14000

*p<0.1; **p<0.05; ***p<0.01

Table C.6: Regression of outcome measures on rebel status, indicator of treatment, and the interaction of the two variables. Standard errors clustered at the respondent-level.

	Agains	t public	With	public
	Feeling	Every MP	Feeling	Every MP
	represented	like this MP	represented	like this MP
Rebel	-0.031	0.088**	-0.031	0.088**
	(0.035)	(0.035)	(0.035)	(0.035)
Against public	-0.369***	-0.292^{***}		
	(0.046)	(0.044)		
With public			0.295***	0.266***
			(0.046)	(0.044)
Rebel × Against public	-0.001	-0.058		
	(0.050)	(0.049)		
Rebel × With public			-0.012	-0.045
			(0.049)	(0.048)
Constant	3.987***	4.001^{***}	3.987***	4.001^{***}
	(0.031)	(0.030)	(0.031)	(0.030)
\mathbb{R}^2	0.013	0.011	0.008	0.006
Adj. R ²	0.013	0.010	0.008	0.006
Num. obs.	20055	20055	19965	19965
RMSE	1.634	1.590	1.636	1.573
N Clusters	4011	4011	3993	3993

***p < 0.01; **p < 0.05; *p < 0.1

Table C.7: Regression of outcome measures on rebel status, indicator of treatment, and the interaction of the two variables. Standard errors clustered at the respondent-level.

	Agains	st voter	With	voter
	Feeling	Every MP	Feeling	Every MP
	represented	like this MP	represented	like this MP
Rebel	-0.031	0.088**	-0.031	0.088**
	(0.035)	(0.035)	(0.035)	(0.035)
Against voter	-0.599***	-0.531***		
	(0.046)	(0.045)		
With voter			0.406^{***}	0.337***
			(0.046)	(0.044)
Rebel × Against voter	0.027	0.018		
	(0.051)	(0.051)		
Rebel × With voter			0.059	0.016
			(0.052)	(0.051)
Constant	3.987***	4.001^{***}	3.987***	4.001***
	(0.031)	(0.030)	(0.031)	(0.030)
\mathbb{R}^2	0.028	0.025	0.016	0.012
Adj. R ²	0.028	0.024	0.016	0.012
Num. obs.	20080	20080	19965	19965
RMSE	1.719	1.674	1.691	1.622
N Clusters	4016	4016	3993	3993

^{***}p < 0.01; **p < 0.05; *p < 0.1

Table C.8: Regression of indicator whether a characteristic is mentioned considering the fifth vignette on rebel status. Standard errors clustered at the respondent-level.

			Strong	Defends	Willing		Loyal
			personal	interest of	to		to
	Independent	Honest	convictions	his/her voters	compromise	Decisive	party
Rebel	0.186***	0.065***	0.152***	-0.000	-0.001	0.019***	-0.292***
	(0.007)	(0.007)	(0.008)	(0.007)	(0.005)	(0.006)	(0.006)
Constant	0.127***	0.163***	0.228***	0.251***	0.099***	0.131***	0.349***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.004)	(0.004)	(0.006)
\mathbb{R}^2	0.050	0.007	0.027	0.000	0.000	0.001	0.132
Adj. R ²	0.050	0.007	0.027	-0.000	-0.000	0.001	0.132
Num. obs.	14000	14000	14000	14000	14000	14000	14000
RMSE	0.404	0.396	0.454	0.433	0.299	0.348	0.374

^{***}p < 0.01; **p < 0.05; *p < 0.1

Table C.9: Regression of indicator whether a characteristic is mentioned considering the fifth vignette on rebel status. Standard errors clustered at the respondent-level.

	Cowardly	Disrespectful	Irresponsible	Selfish	Unreliable	Untrustworthy	Stupid
Rebel	-0.019***	0.011***	-0.004	-0.002	0.023***	-0.001	-0.006
	(0.003)	(0.004)	(0.005)	(0.004)	(0.005)	(0.006)	(0.004)
Constant	0.052***	0.059***	0.099***	0.077***	0.105***	0.130***	0.050***
	(0.003)	(0.003)	(0.004)	(0.003)	(0.004)	(0.004)	(0.003)
R^2	0.002	0.000	0.000	0.000	0.001	0.000	0.000
Adj. R ²	0.002	0.000	-0.000	-0.000	0.001	-0.000	0.000
Num. obs.	14000	14000	14000	14000	14000	14000	14000
RMSE	0.200	0.245	0.295	0.265	0.321	0.336	0.212

^{***}p < 0.01; **p < 0.05; *p < 0.1

C.3 Regression tables for follow-up experiment

Table C.10: Regression of outcome measures on rebel status and vignette number for vignettes 1, 2, and 3 in the *Baseline*. Standard errors clustered at the respondent-level.

	Every MP like this MP	Feeling represented
Rebelled	-0.168	0.187*
	(0.107)	(0.110)
Vignette 2	0.022	0.153
	(0.102)	(0.103)
Vignette 3	-0.084	0.131
	(0.131)	(0.131)
$Rebelled \times Vignette 2$	-0.021	-0.194
	(0.158)	(0.157)
Rebelled × Vignette 3	0.210	-0.084
	(0.186)	(0.191)
Constant	4.323***	4.092***
	(0.079)	(0.080)
R^2	0.003	0.002
Adj. R ²	0.000	-0.000
Num. obs.	2063	2063
RMSE	1.618	1.642
N Clusters	906	906

*p<0.1; **p<0.05; ***p<0.01

Table C.11: Regression of indicator whether respondent associated being independent, having strong personal convictions, and being loyal to the party on rebel status and vignette number when associations are elicited. Standard errors clustered at the respondent-level.

	Independent	Strong personal convictions	Being loyal
Rebelled	0.273***	0.266***	-0.345***
	(0.081)	(0.084)	(0.077)
Vignette number	0.010	0.002	-0.001
	(0.014)	(0.015)	(0.018)
Rebel × Vignette number	-0.019	-0.016	-0.004
	(0.022)	(0.023)	(0.021)
Constant	0.153***	0.208***	0.466***
	(0.051)	(0.055)	(0.066)
\mathbb{R}^2	0.051	0.051	0.161
Adj. R ²	0.050	0.050	0.159
Num. obs.	1865	1865	1865
RMSE	0.443	0.455	0.412
N Clusters	1865	1865	1865

^{***}*p* < 0.01; ***p* < 0.05; **p* < 0.1

C.4 Robustness of main results

Overview: First, we test Hypothesis 2 and 3 taking the sample of observations with policy congruence of the voter and the MP to be the observations in the *With voter* and *With voter* Against public treatments. Similarly, for the observations with policy congruence of the public and the MP we consider the *With public* and Against voter-With public treatments. We present different possible definitions of policy congruence (e.g., policy congruence of rebel and voter could be seen as being present in the *With voter* and *With voter-Against public* or just in the *With voter* treatment. We consider the complete set of possible definitions in main text and appendix. Second, with respect to the test of Hypothesis 1, it is reasonable to expect variation in our results by authoritarian values, populist attitudes, trust in government, and interest in politics. To illustrate such heterogeneity, we present our main analysis by appropriate subsets defined by different levels of authoritarian values, populist attitudes, and trust in government in addition to a pooled display. Third, variation in the test results of Hypothesis 1 may also exist with respect to country and the issue considered in the bill featured in the vignettes.

The overall effect of rebellion for the outcome measure *every MP like this MP* is robust to varying the issue of the bill as well as to considering variation in participants authoritarian values, populist attitudes, trust in government, and interest in politics (except that it disappears for those high in authoritarian values). The rebel effect on *feeling represented*, however, is only statistically significant for 1 out of the 5 issues; it persists as negative effect for participants high in authoritarian values, with weak populist attitudes, and high trust in government but turns to a positive effect for those with strong populist attitudes and low trust in government. The positive rebel bias on *every MP like this MP* does not exist in Italy whereas Italy is driving the negative effect of rebellion on *feeling represented*. See Figures C.7 - C.9.

We consider further variables potentially inducing variation in treatment effects: whether a respondent is a supporter of the senior or junior coalition partner in the government and how far away is the next election. We neither find a significant difference in the rebel effect across the former sub-grouping (See Figure C.13) nor for the latter sub-grouping (See the by-country-figure referenced above - the next elections were further away in the UK than in France/Italy, and there further away still than in Germany).

Figure C.6: Difference between total rebel effect τ (Rebel) and rebel effect when respondents learn that the MP shares their policy positions, τ (Rebel | Congruent with voter), does not share their policy positions τ (Rebel | Not congruent with voter), shares the public's policy positions, τ (Rebel | Congruent with public), does not share the public's policy position τ (Rebel | Not congruent with public), as well as the same quantities pooling the treatments with voter and with voter-against public, with public and against voter-with public, against voter and against voter-with public, and against public and with voter-against public.

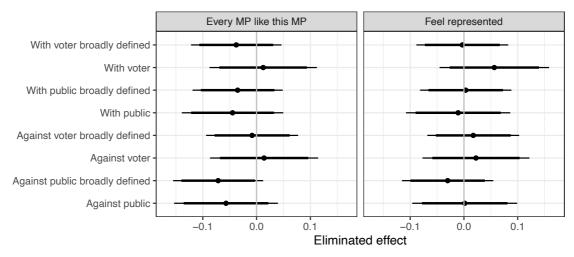
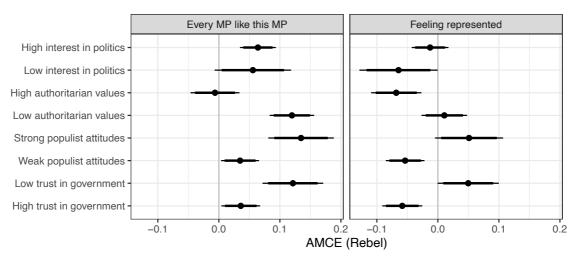


Figure C.7: AMCE on outcome measures feeling represented and every MP like this MP for all attributes by a median split of political interest, authoritarian values, populist attitudes, and trust in government.



 $Note: We \ report \ 95\% \ (thin \ line) \ and \ 90\% \ confidence \ bounds \ (thick \ line) \ based \ on \ clustering \ standard \ errors \ at \ the \ respondent \ level$

Figure C.8: AMCE on outcome measures feeling represented and every MP like this MP for all attributes and by bill.

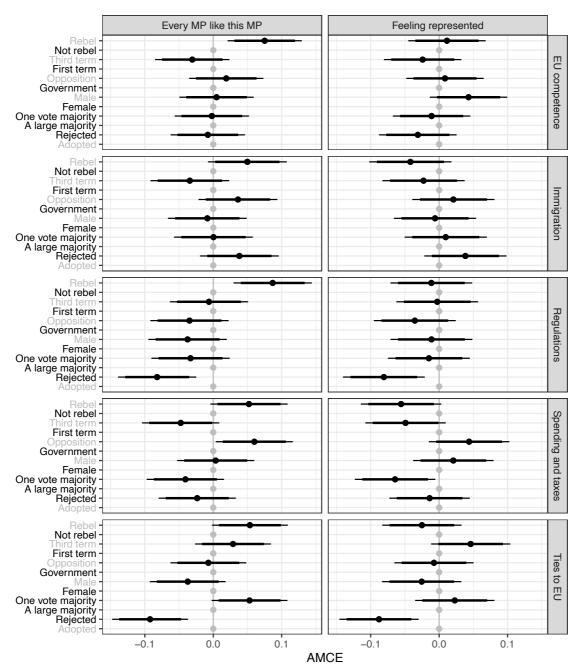


Figure C.9: AMCE on outcome measures feeling represented and every MP like this MP for all attributes and by country.

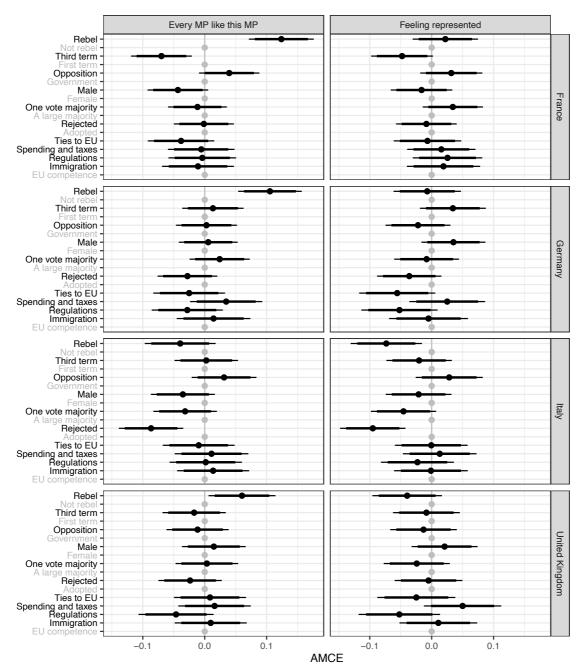


Figure C.10: AMCE on outcome variables *feeling represented* and *be like this MP* by attribute and congruence treatment.

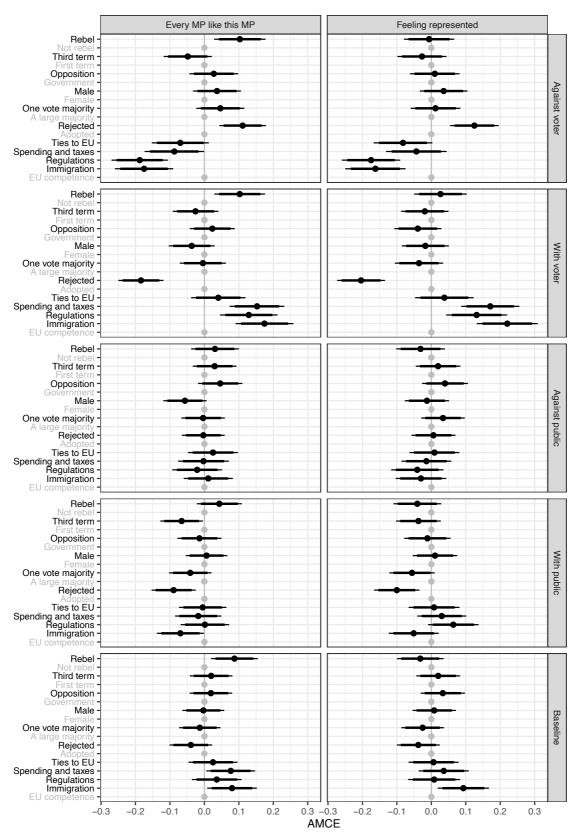


Figure C.11: AMCE on outcome variables *feeling represented* and *be like this MP* by attribute and congruence treatment.

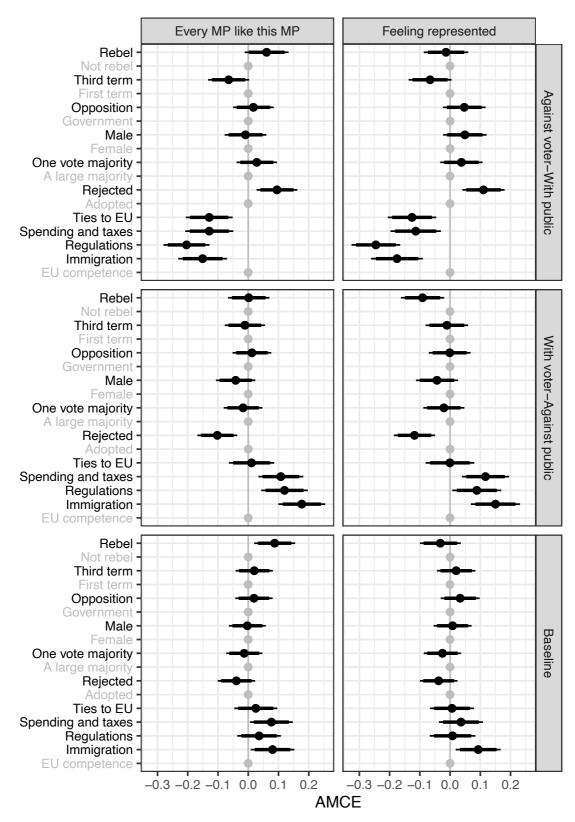


Figure C.12: AMCE of the rebel attribute (vs no rebel) on outcome variables *feeling represented* and *be like this MP* by number of rebels encountered in past vignettes.

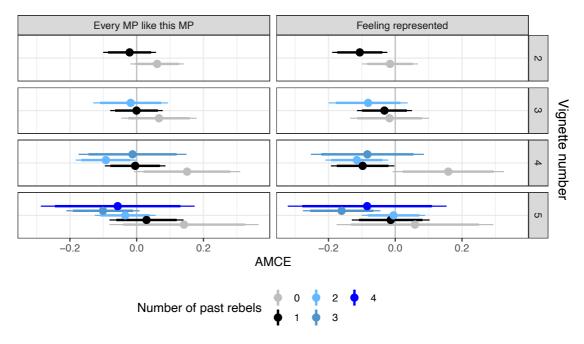
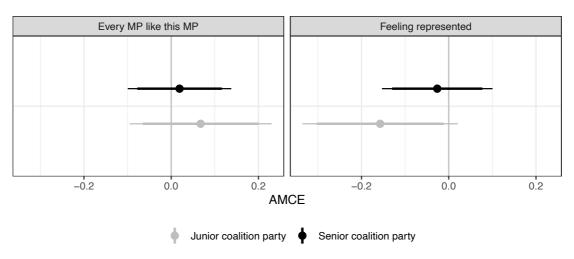
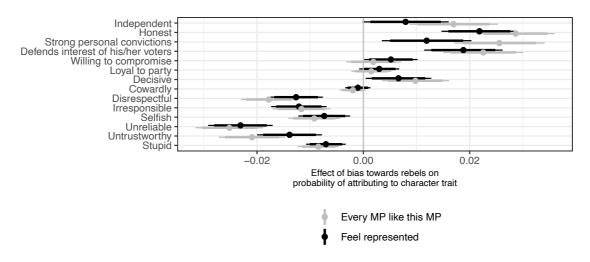


Figure C.13: AMCE of the rebel attribute (vs no rebel) on outcome variables *feeling represented* and *be like this MP* by senior vs junior coalition partner in Germany.



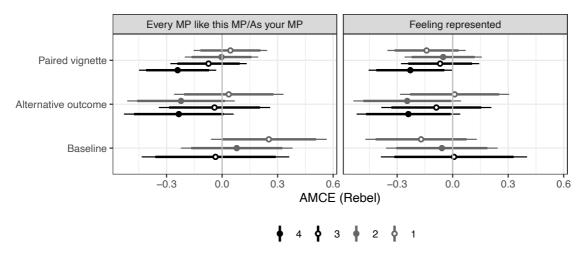
To further investigate what character traits respondents attribute to rebels, we only look at those respondents that saw at least one rebel across all vignettes and calculate the difference in how they rated rebels compared to non-rebels on our two outcome measures (*feeling represented* and *every MP like this MP*). This provides a measure of "rebel preference". We then further subset on those respondents that saw a rebel in the last vignette and attributed traits to them. To see how a strong preference for rebels is associated with attributing certain character traits to them, we regress whether a respondent associated a trait with a rebel on their rebel preference in a linear probability model. Figure C.14 shows that the rebel lovers (according to both outcome measures) have a significantly higher probability to attribute 'independence, 'honesty', 'strong personal convictions', and the willingness to 'defend the interests of his/her voters' to the rebel MP. In addition, they are less likely to attribute negative traits to the rebel MP such as being 'disrespectful', 'irresponsible', 'selfish', 'unreliable', 'untrustworthy', and 'stupid'.

Figure C.14: Relationship between respondent level bias towards rebels and their attribution of character traits.



C.5 Additional analysis of follow-up experiment

Figure C.15: AMCE of rebel attribute on outcome variables *feeling represented* and *be like this MP* for vignettes 1 and 2 in the *Baseline* as well as all vignettes in the *Alternative outcome* and *Paired vignette* treatments.



 $Note: We \ report \ 95\% \ (thin \ line) \ and \ 90\% \ confidence \ bounds \ (thick \ line) \ based \ on \ clustering \ standard \ errors \ at \ the \ respondent \ level$

Analysing the open-ended responses in the *Before reminder* treatment shows that the initial rebel effect is driven by participants who show a positive sentiment towards rebellion in the open-ended question. While there are more participants with positive sentiments, those expressing neutral or negative feelings are also well-represented; the latter reject rebel MPs from the first vignette. Interestingly, the rebel effect tapers off for those with positive sentiments as well but later; it turns to zero from the third vignette.

Figure C.16: AMCE of rebel attribute on outcome variables *feeling represented* and *every MP like this MP* by vignette and whether participants expressed positive, neutral, or negative sentiment towards the act of rebellion in the *Before reminder* treatment.

