

Coping With Covid: Two-Wave Survey

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Introduction

This document provides a selection of findings from a two wave survey conducted by Ben Ansell (Oxford), Martin W. Bauer (LSE), Jane Gingrich (Oxford), and Jack Stilgoe (UCL) on a representative sample of UK (ex-NI) residents using the polling company YouGov. The first wave took place on September 30th / October 1st 2020 and had 1642 respondents. The second wave surveyed the same group of respondents, receiving 1219 responses from the original 1642 participants (a retention rate of 74%), over the week commencing February 1st 2021.

This project received funding from the John Fell Fund at the University of Oxford (project number 0009190) and was approved by the Oxford's research ethics committee with approval number R71718/RE001. The experiment in the second wave was pre-registered with EGAP on Jan 31st 2021. Please address correspondence to ben.ansell@politics.ox.ac.uk

Key Take Home Points

1. **Willingness to take the vaccine** has *increased substantially since October 1st last year* - the proportion of people saying they would be 'very likely' to take the vaccine has increased from fifty percent to over three quarters. The percentage of people who are 'likely' or 'very likely' to take the vaccine has increased from 78% to 87%.
2. **Vaccine Rollout:** Around *thirteen percent of our sample had already received the vaccine in the first week of February*. Our survey is roughly consistent with the vaccine rollout in the UK bearing in mind that YouGov surveys will not reach people in nursing homes and will have limited reach in the over 80s (our oldest respondent is 84).
3. **Vaccine Refusal** There is a group of around *seven percent of the population who remain 'very unlikely' to take the vaccine* and this has not shifted greatly. However, a majority of the groups of people who 'didn't know' if they would take the vaccine or were 'unlikely' have now moved to 'very likely'.
4. **Demographics** There are no major gender differences any more in desire to take the vaccine, whereas women were substantially more cautious in October. *Age remains a strong predictor of willingness to take the vaccine*, though the 50-59 group appear to have converged towards their elders. *Lower income people remain less likely to be willing to take the vaccine* and this gap has if anything widened a little. There is only a weak positive relationship between education and willingness to take the vaccine. People whose education ended at 18 have jumped the most in their willingness (by almost 20 points). Finally, ethnic minorities were much less willing to take the vaccine in October and have moved towards White British (the most positive group) - however, this finding must be caveated by the fact that survey attrition was particularly high for ethnic minorities.

5. **Political factors** remain very strong predictors of willingness to take the vaccine. *People who voted Remain are consistently (and statistically significantly) about seven points more likely to be willing to take the vaccine than Leave voters or those who didn't vote in 2016. People who did not vote in 2019 are substantially less likely to want to take the vaccine than those who voted.* Among those who voted in 2019, voters for the Brexit Party or the Green Party in 2019 are the most unwilling to take the vaccine (though these are small groups so this is measured with uncertainty). SNP and Liberal voters are most positively inclined. When we ask about current vote intention, *supporters of Nigel Farage's new Reform UK party are strikingly less willing to take the vaccine (only just over 50%).* People who don't know who they will vote for and people intending to vote Green also appear less likely to want to take the vaccine. Every SNP supporter in our sample was willing to take the vaccine.
6. **Vaccine Nationalism** *does not appear to affect people's willingness to take the vaccine.* In our second wave survey we added a randomized wording of the question about willingness to take the vaccine. There were three arms to the experiment - a control question asking about willingness to take the vaccine, a treatment where the question mentioned that the UK was the first country to approve a vaccine: the US/German made Pfizer-BioNTech vaccine, and a treatment emphasizing the UK's role in developing the Oxford-AstraZeneca vaccine. We found no appreciable difference in attitudes towards taking the vaccine, whatever the question wording. Accordingly we treat the second wave vaccine question as unaffected by the treatment and directly comparable to the first wave.
7. **Vaccine policy approval:** We also asked four vaccine policy and government performance questions after the survey experiment. Again, we found no appreciable differences across question types. We found *strong overall approval* of the speed with which the regulator approved vaccines (69% approve or strongly approve), the government's overall performance in rolling out the vaccine (74% approve or strongly approve), and the priority order of vaccination - vaccinating the elderly and health workers before other key workers (78% approve or strongly approve). There is *substantially weaker support for the policy of delaying the second dose* (just 41% approve or strongly approve).
8. **Vaccine policy group differences:** There are no gender differences in policy approval. With age in general *older people have higher approval* - there is an especially sharp cutoff in attitudes towards the priority order at the age of 50 (the last age group to be covered by the JCVI priority!). Income, education, and ethnicity have little effect on policy approval. Political factors do have more impact. *People who voted Leave in 2016 are much more supportive of the government's vaccine rollout performance and of the policy of delaying the second dose* (and more marginally of the priority order). People who voted Conservative in 2019, or who support them now, are unsurprisingly much more supportive of the government's performance than Labour voters but they are also more supportive of the regulatory approval process, delaying the second dose, and the priority order.

Vaccine Acceptance

In both waves we asked a similar question exploring how likely people would be to take a vaccine against COVID-19. This was a four point question from 'very unlikely', to 'unlikely', to 'likely' to 'very likely'. We also dichotomised this variable by combining the first two and the last two categories. We refer to this latter measure as 'binary vaccine'. We permitted people to answer 'don't know'.

In the second wave our approach was slightly more complex. Firstly, by this point multiple vaccines had already been made available and so we were able to add an option 'already taken the vaccine'. In a number of our analyses below we combine those who have already had the vaccine with those who answer "very likely" as the top category in vaccine willingness. Secondly, we implemented a survey experiment when asking the question. The control group (1/3 of the sample, randomly drawn) were asked precisely the same question as in the first wave: "How likely would you be to take a vaccine against COVID-19 if you were offered one?"

There were two randomly selected treatment groups (each 1/3 of the sample) - both receiving prompts aimed at emphasizing 'vaccine nationalism' in order to see whether priming respondents to view the UK's vaccine program positively affected their willingness to take the vaccines.

The first treatment had the following question: “On the 2nd of December last year, Britain became the first country in the world to approve a vaccine against COVID-19 - the BioTech/Pfizer vaccine developed by German scientists and the US pharmaceutical company. How likely would you be to take a vaccine against COVID-19 if you were offered one?”

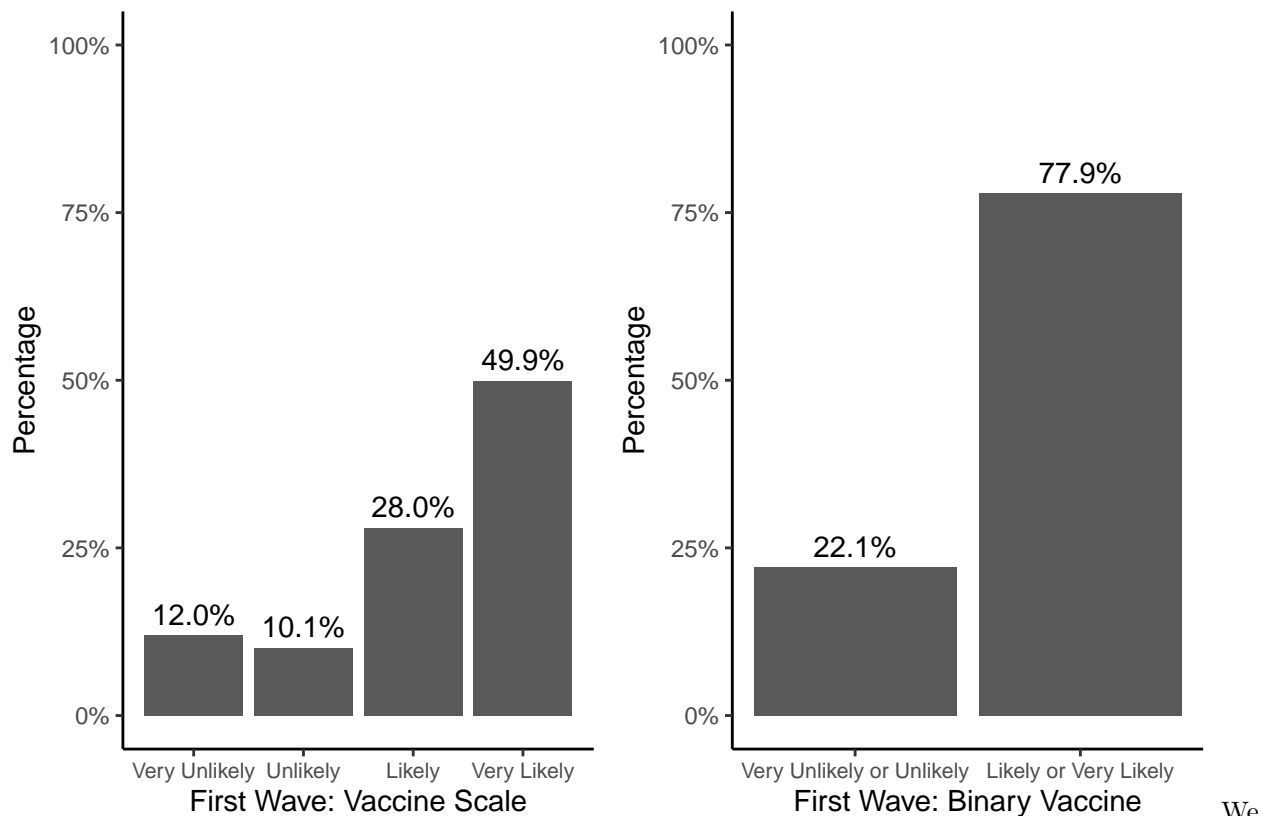
The second treatment had the following question: “On the 30th of December last year, Britain became the first country in the world to approve the Oxford / AstraZeneca vaccine against COVID-19 - developed by British scientists at the University of Oxford and the British company AstraZeneca. How likely would you be to take a vaccine against COVID-19 if you were offered one?”

As we shall see, the treatments had no measureable effect on the propensity of respondents to claim they were likely to take the vaccine. While this suggests that vaccine nationalism does not have an observable treatment effect - at least in our sample - it does mean that we can compare the first wave results more cleanly with *all* the second wave respondents (not solely the control group). There were also no measureable differences across sub-groups in the different treatments.

We begin with the first wave results for the question about willingness to take the vaccine, with Don't Knows (146 out of 1642) removed. We use survey weights to adjust the sample to more accurately reflect the UK population, however we also report the unweighted results.

First Wave (Oct 1st 2020) Attitudes to Taking the Vaccine

Likelihood of Taking Vaccine	Weighted	Unweighted
Very Unlikely	0.12	0.11
Unlikely	0.10	0.10
Likely	0.28	0.28
Very Likely	0.50	0.51



We can see from this table and figure that around in the first wave 77% of respondents who answered this

question claimed they would take the vaccine, with almost fifty percent of respondents claiming they were *very likely* to take it. It is notable that when we weight the survey appropriately the probability of wishing to take the vaccine declines slightly. This potentially reflects the possibility that groups that are hard to reach for surveys may also be more cautious about taking the vaccine.

We now look at the results for the second wave. Because some people have already had the vaccine we merge this group with those who have not had the vaccine but are “Very Likely” to take it. 158 people in our second round of the survey had received the vaccine, out of 1219 who took the survey and 1177 who answered the question. We weight this time by the survey weights given for the second wave. Unweighted and weighted the proportion of people who have had the vaccine is 13.4 percent (here we see that at least in weighting terms, there is minimal difference between those who have had and have not had the vaccine).

Second Wave (Feb 2020) Numbers Who Have Had Vaccine: Including Don't Know

Likelihood of Taking Vaccine	Weighted	Unweighted
Have Had Vaccine	0.13	0.13
Have Not Had Vaccine and Gave Answer	0.83	0.84
Responded Don't Know	0.04	0.03

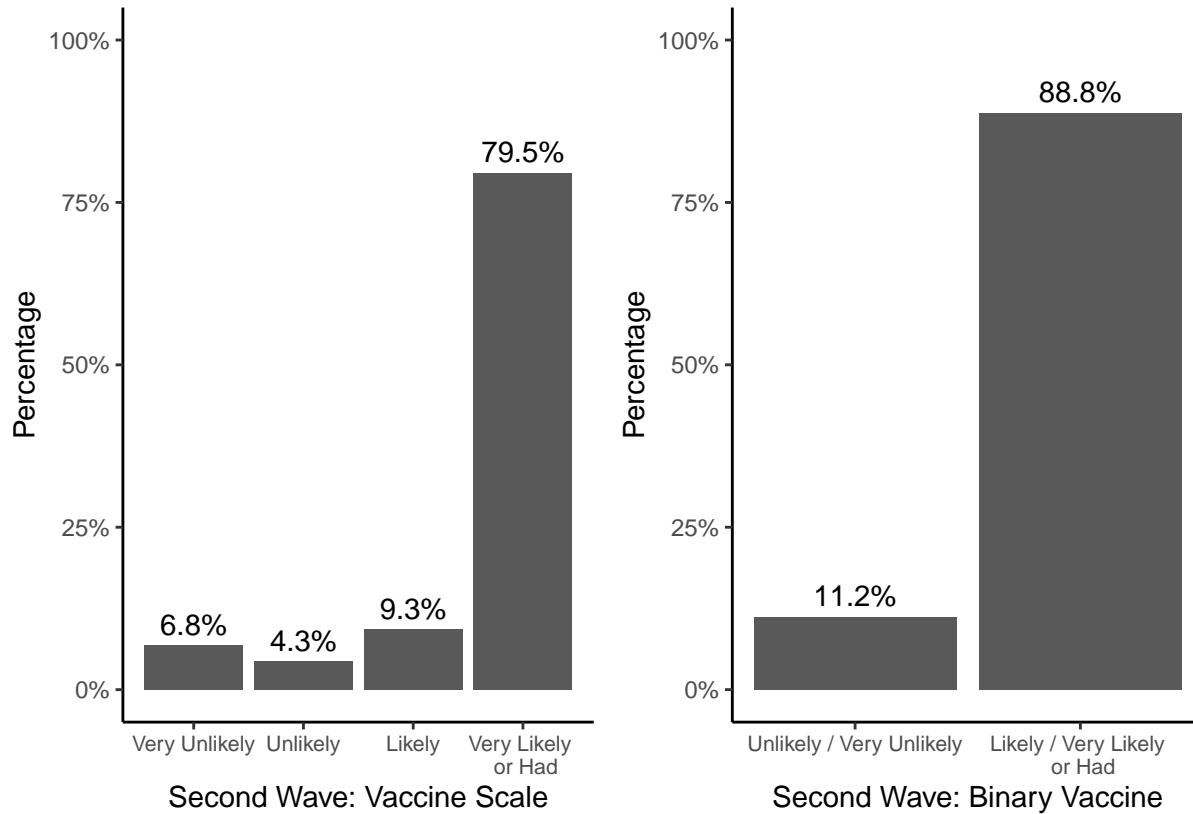
Second Wave (Feb 2020) Numbers Who Have Had Vaccine: Excluding Don't Know

Likelihood of Taking Vaccine	Weighted	Unweighted
Have Had Vaccine	0.13	0.13
Have Not Had Vaccine and Gave Answer	0.87	0.87

The next set of graphs show the weighted survey averages with the group who have already taken the vaccine included with the “Very Likely” group. We see almost eighty percent of respondents in the second wave are either very likely to take the vaccine or have already had it. Almost 89% of second wave respondents are either “likely”, “very likely” or have had the vaccine.

Second Wave (Feb 2020) Attitudes to Taking the Vaccine: Including Those Already Taken

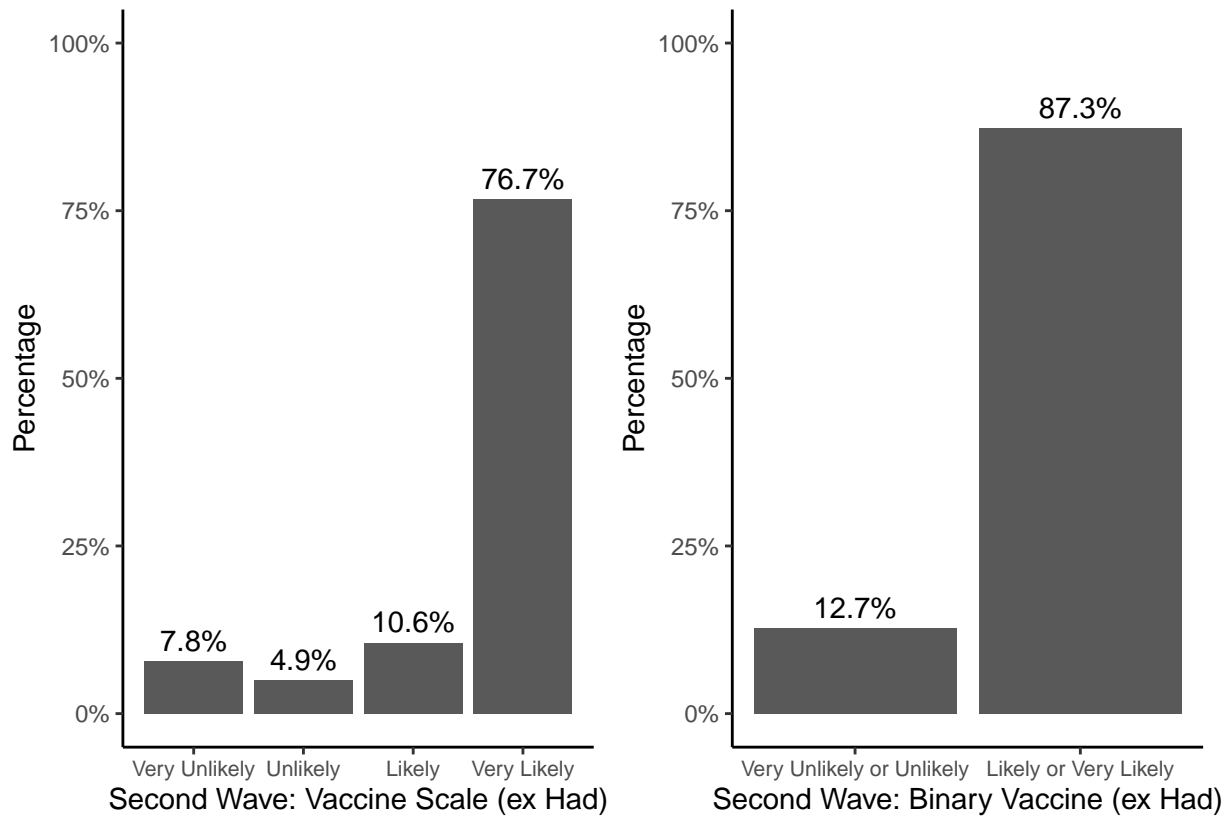
Likelihood of Taking Vaccine	Weighted	Unweighted
Very Unlikely	0.07	0.05
Unlikely	0.04	0.03
Likely	0.09	0.08
Very Likely	0.80	0.84



We now limit the sample in the second wave to those who have not yet had the vaccine. As above we weight this time by the survey weights given for the second wave. We begin by excluding Don't Knows and those who have already had the vaccine. As can be seen, aggregate support for taking the virus is again much higher than in the first wave, with the proportion of respondents answering "Very Likely" having increased from 49.7% to 76.7% and in the binary indicator, the percentage claiming they would be "Likely" or "Very Likely" to take the vaccine increasing from 78% to 87%. Accordingly, the big shift seems to have come in terms of people moving from "Likely" to "Very Likely".

Second Wave (Feb 2020) Attitudes to Taking the Vaccine

Likelihood of Taking Vaccine	Weighted	Unweighted
Very Unlikely	0.08	0.06
Unlikely	0.05	0.04
Likely	0.11	0.09
Very Likely	0.77	0.82



What about the *change* between waves 1 and 2. There does appear to be a large overall increase in support but what does it look like? We examine a two-way tabulation of the non-weighted data below (this shows the precise number of respondents in each category unweighted by survey weights).

We see overall a large shift towards Very Likely - even over a quarter of people who said they were “Very Unlikely” to take the vaccine in wave one answered they would now be “Very Likely”. Once we move to the other groups, a sizeable majority have shifted in each of them to “Very Likely”. Perhaps most striking is that of the people who said they were “Likely” (lukewarm supporters) in wave one, 82% of them are now “Very Likely”.

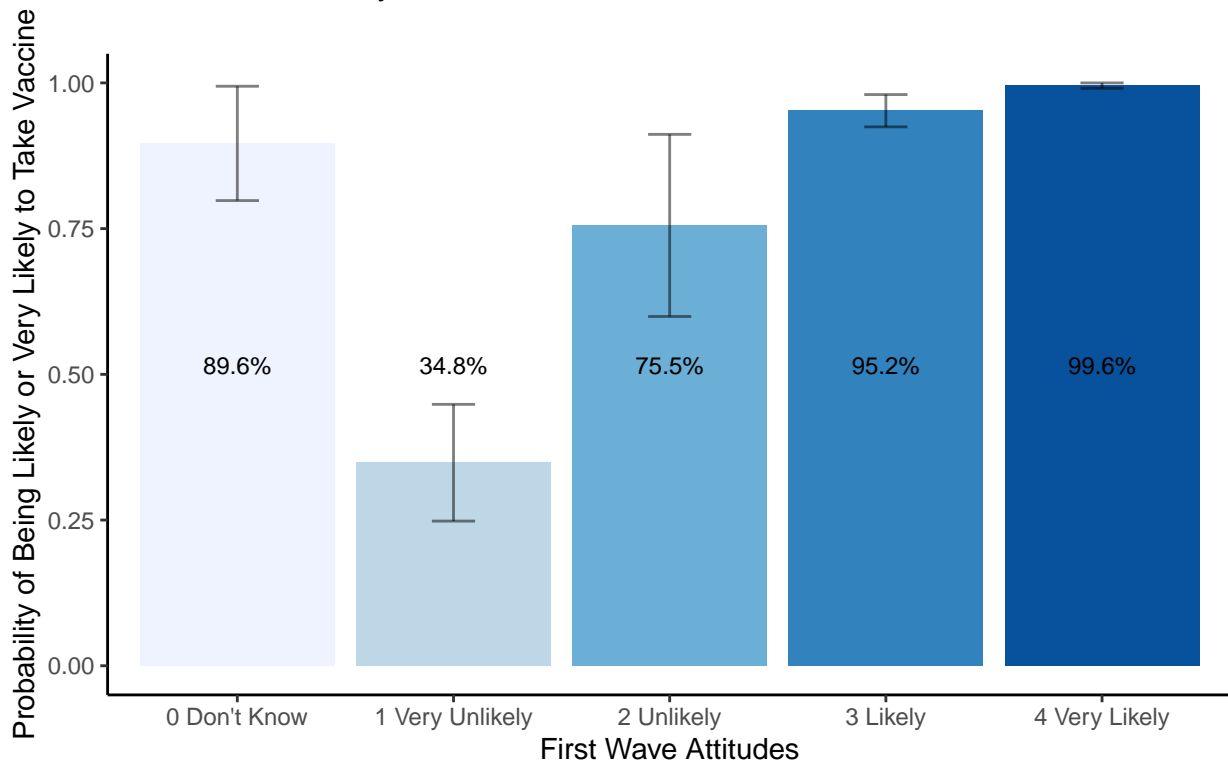
Crosstab of 1st to 2nd Wave Vaccine Preferences

	W2 Very Unlikely	W2 Unlikely	W2 Likely	W2 Very Likely or Had	W2 DK
W1 Very Unlikely	43.36%	11.50%	9.73%	26.55%	8.85%
W1 Unlikely	2.59%	10.34%	19.83%	58.62%	8.62%
W1 Likely	0.99%	3.29%	11.51%	82.24%	1.97%
W1 Very Likely	0.17%	0.17%	1.02%	98.31%	0.34%
W1 DK	2.11%	3.16%	14.74%	65.26%	14.74%

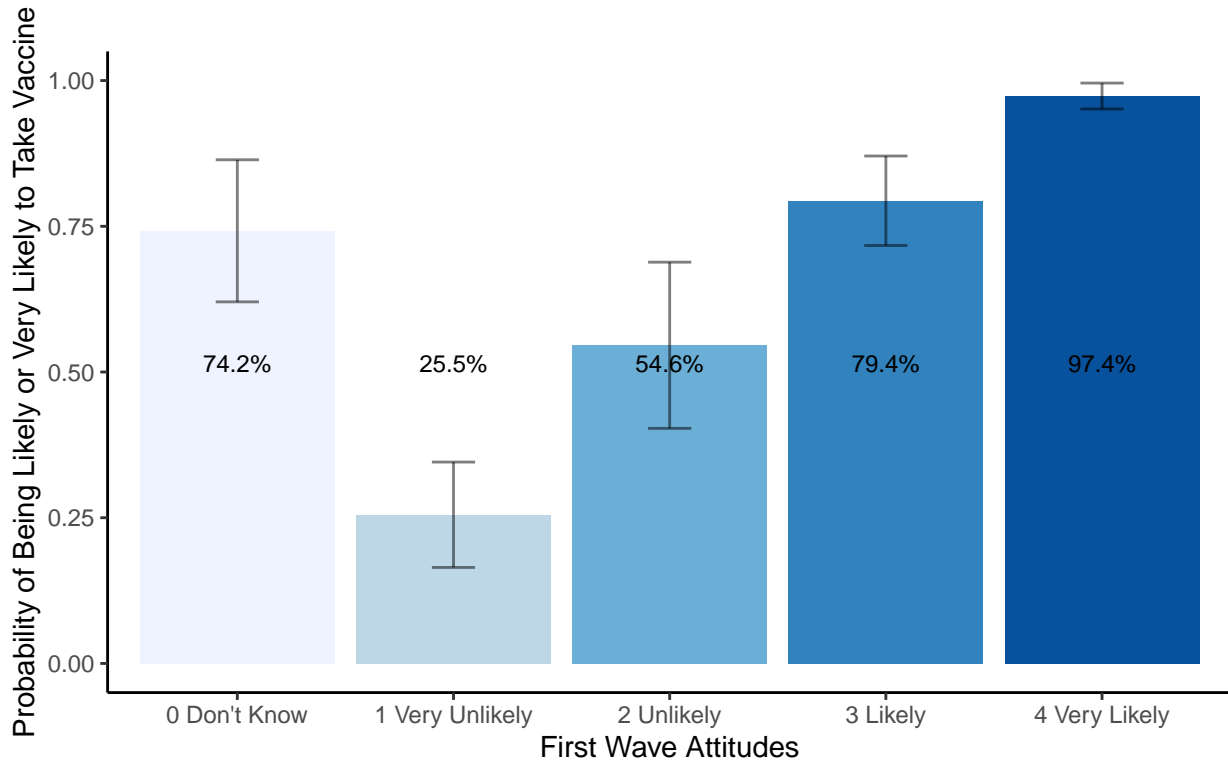
We now demonstrate this graphically (and weighting the sample appropriately). The figures show survey weighted means and 95% confidence intervals. We look first at probability of being “likely” or “very likely” to take the vaccine in the second wave (including those who have already had the vaccine), depending on the answer given in the first wave. Other than the group who were “very unlikely” to take the vaccine in the first wave we see that every other group - including those who answered “don’t know” or “unlikely” in the first wave - has above three quarters now saying they would be likely or very likely to take the vaccine. When, in the second figure, we restrict the answer to “very likely” in the second wave, we still see above fifty percent in every group save those who in the first wave said they were “very unlikely”. Importantly, around

three-quarters of those who answered don't know in the first wave now are very likely to take the vaccine.

Second Wave Probability of Being Likely or Very Likely to Take Vaccine by First Wave Vaccine Attitudes



Second Wave Probability of Being Very Likely to Take Vaccine by First Wave Vaccine Attitudes



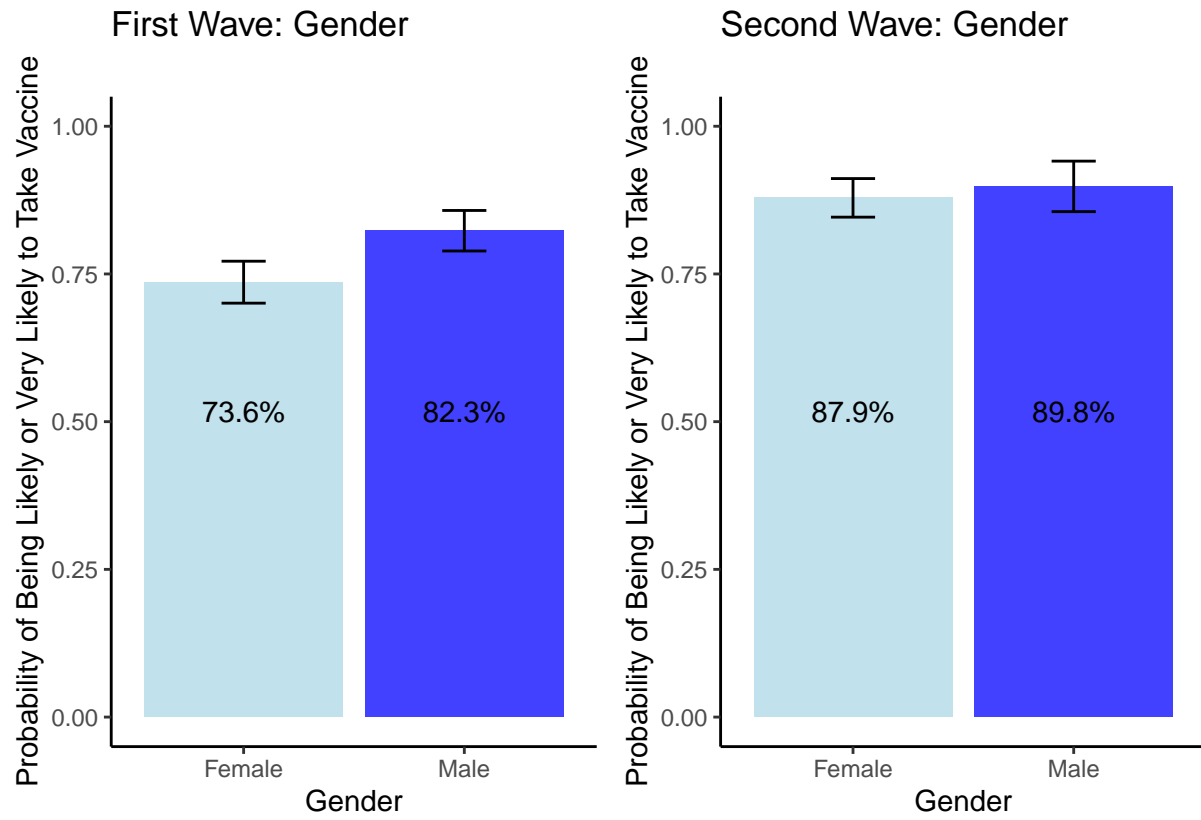
Differences By Group

Wave 2 Vaccine Acceptance

The following figures examine the binary vaccine indicator and look at the proportion of people who say they are “likely” or “very likely” to take the vaccine, or who have already had the vaccine. Each figure breaks the sample into different groups by demographics or political factors. The bar graphs show the mean proportions of vaccine willingness among each group, adjusted for survey weights and with 95% confidence intervals.

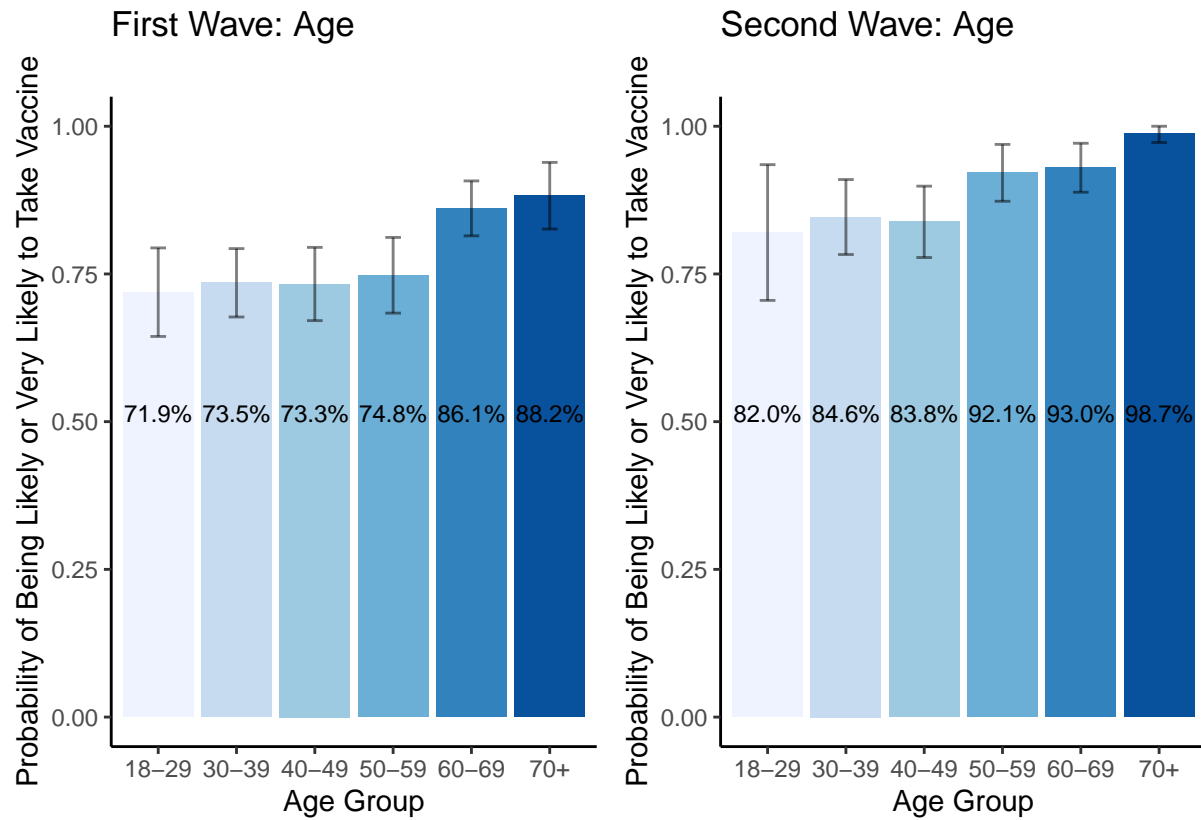
Gender

For gender we see a large gap in vaccine willingness in the first wave, with women 8.7 points less likely to want to take the vaccine. That gap has almost entirely vanished by the second wave.



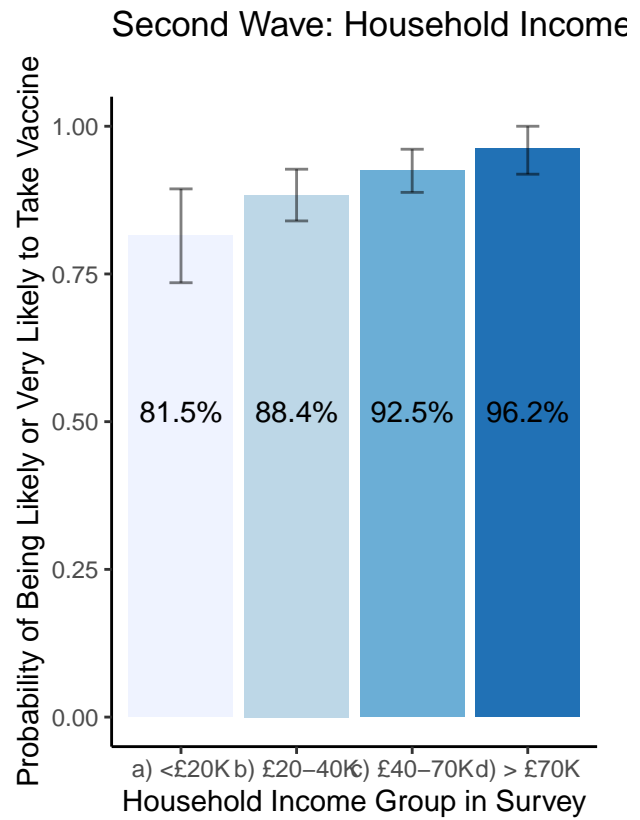
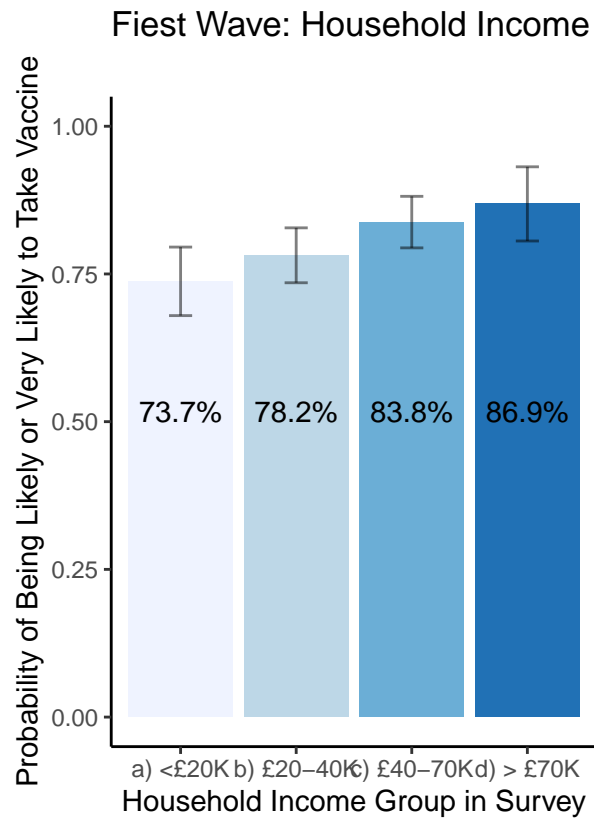
Age

In both waves of the survey we find large gaps by age, with the oldest group around sixteen percent points more likely to be willing to take the vaccine. Most groups have jumped up by ten percent points and the 50 to 59 group experiencing a large seventeen point jump.



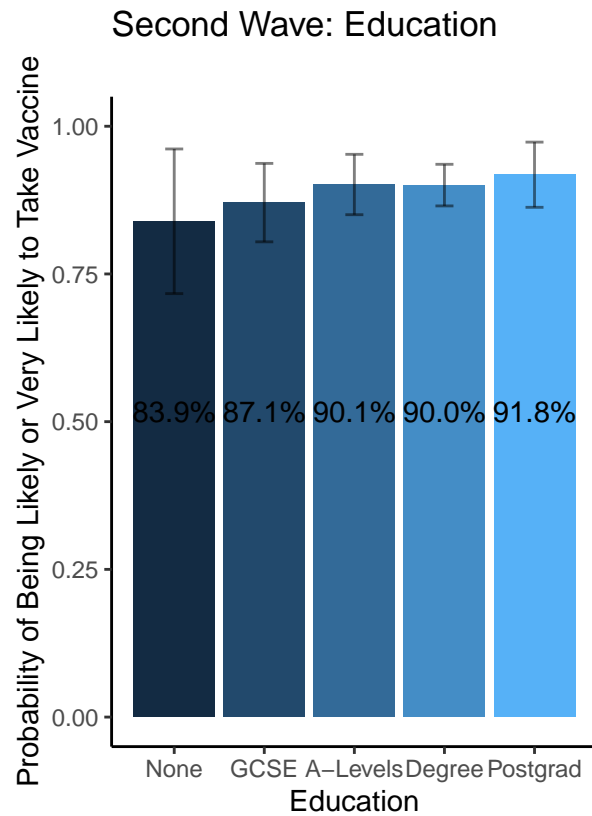
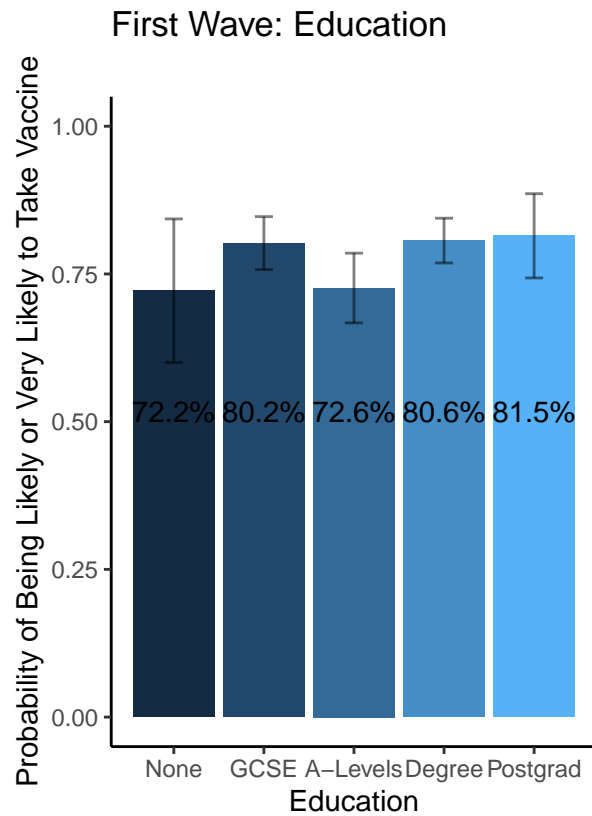
Household Income

In both waves there is a clear income gradient, with the bottom income group (household income under £20,000) thirteen points less likely to be willing to take the vaccine than the highest income group (household income over £70,000) in the first wave, with the gap widening slightly in the second wave.



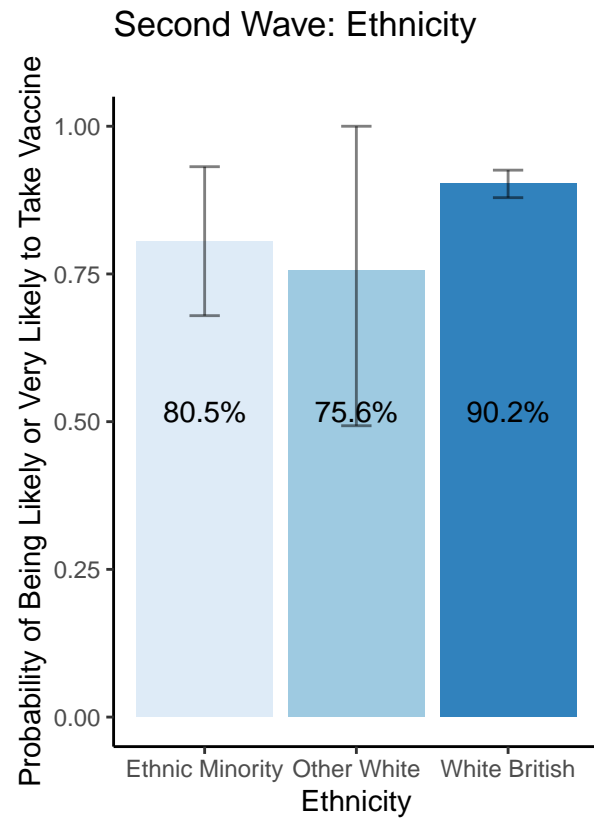
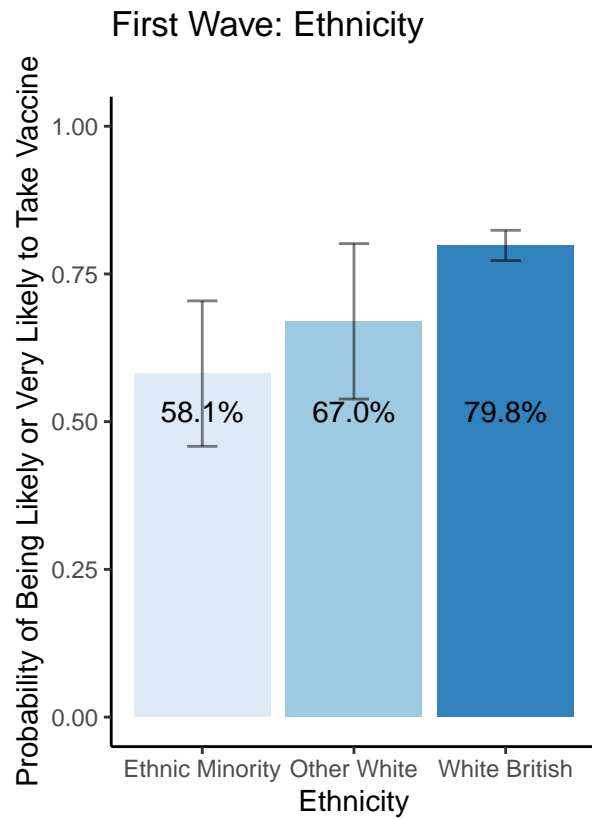
Education

Overall there does not appear to have been a large effect of education. Though on average more educated people are more likely to display vaccine willingness, this relationship is not statistically significant. There does, however, appear to have been a large jump in vaccine willingness among people whose highest education attainment is A-Levels or equivalent from the first to the second wave.



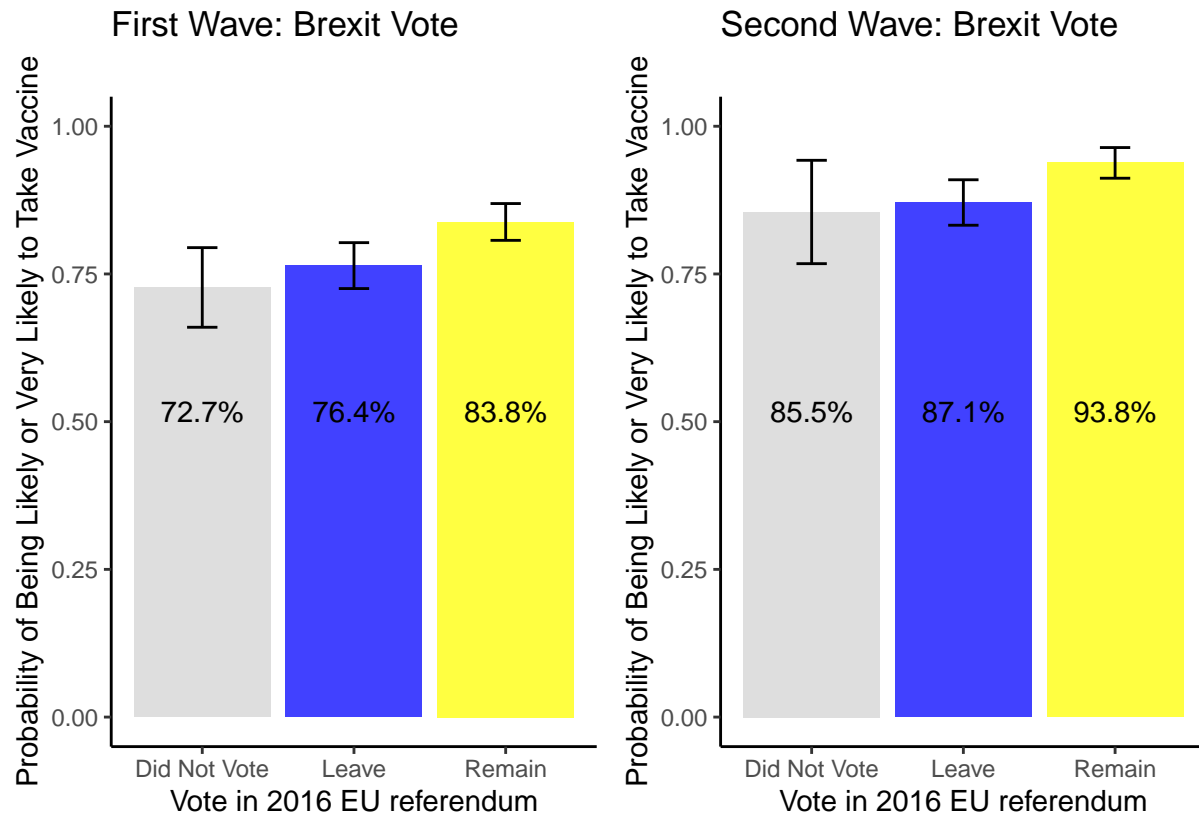
Ethnicity

In the first wave we find strong evidence of vaccine hesitancy among ethnic minorities, who were over twenty percent points less likely to wish to take the vaccine. That gap has narrowed to ten percent points in the second wave. However, we should take this finding cautiously. We had disproportionately large survey attrition among ethnic minorities, raising the possibility that this reflects changes to the sample rather than changed attitudes.



Brexit Vote

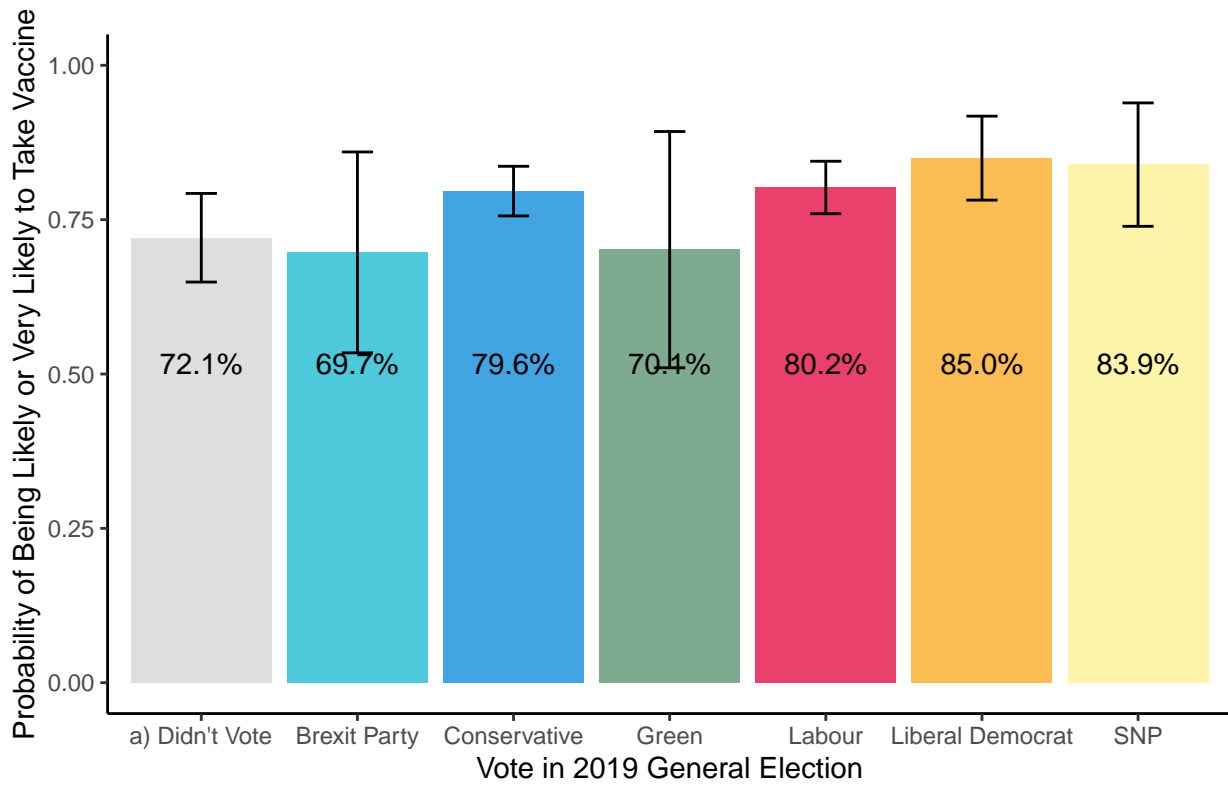
Across both waves we systematically see that people who voted Remain in the 2016 EU Referendum are around seven percent points more willing to take the vaccine than those who voted Leave or who did not vote in the referendum.



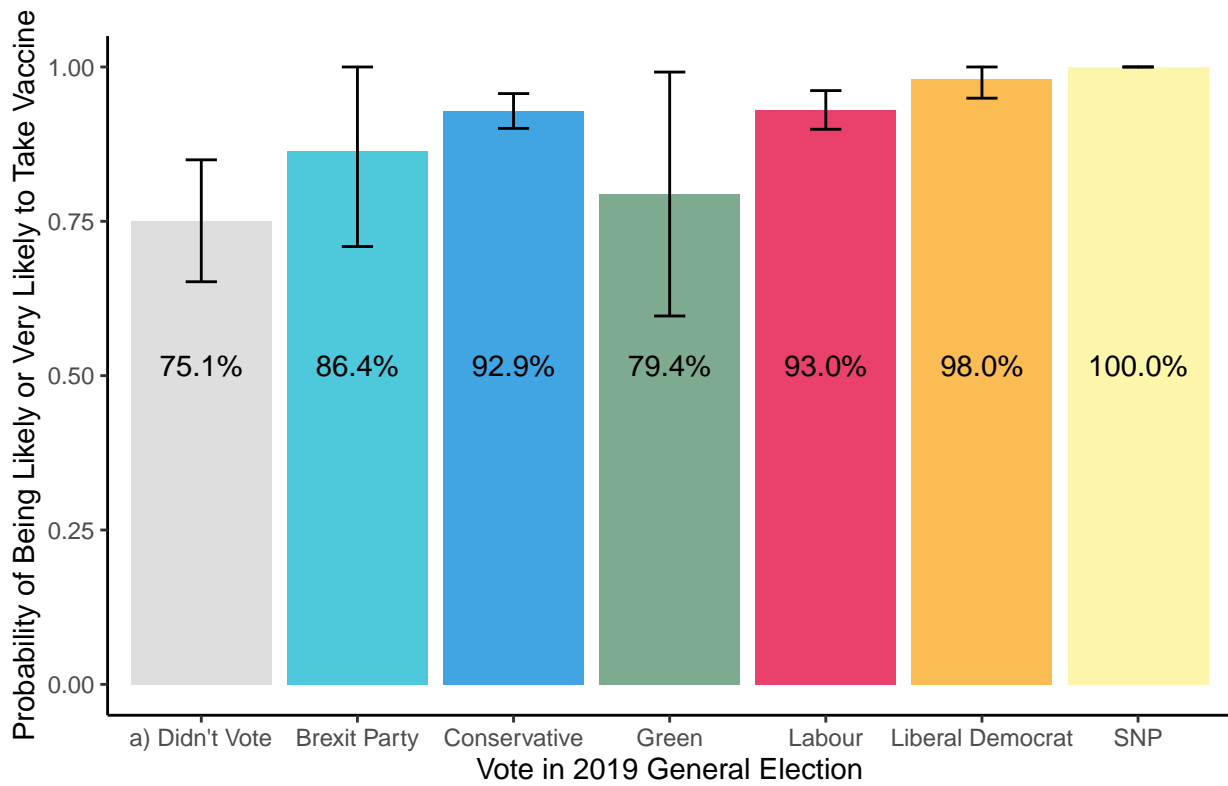
2019 General Election Vote

We see in both waves that people who did not vote in the General Election of 2019 have substantially lower levels of willingness to take the vaccine than most people who did vote. Furthermore, this group's willingness to take the vaccine only rose by three percent points as compared to thirteen points for Conservative voters and Labour and Liberal Democrat voters, and even larger increases for Brexit Party voters (albeit from a low base) and Scottish National Party supporters. Green Party voters appear less positively inclined towards taking the vaccine but their attitudes are measured with a good deal of uncertainty. Every single SNP supporter in our second wave was willing to take the vaccine.

First Wave: 2019 GE Vote

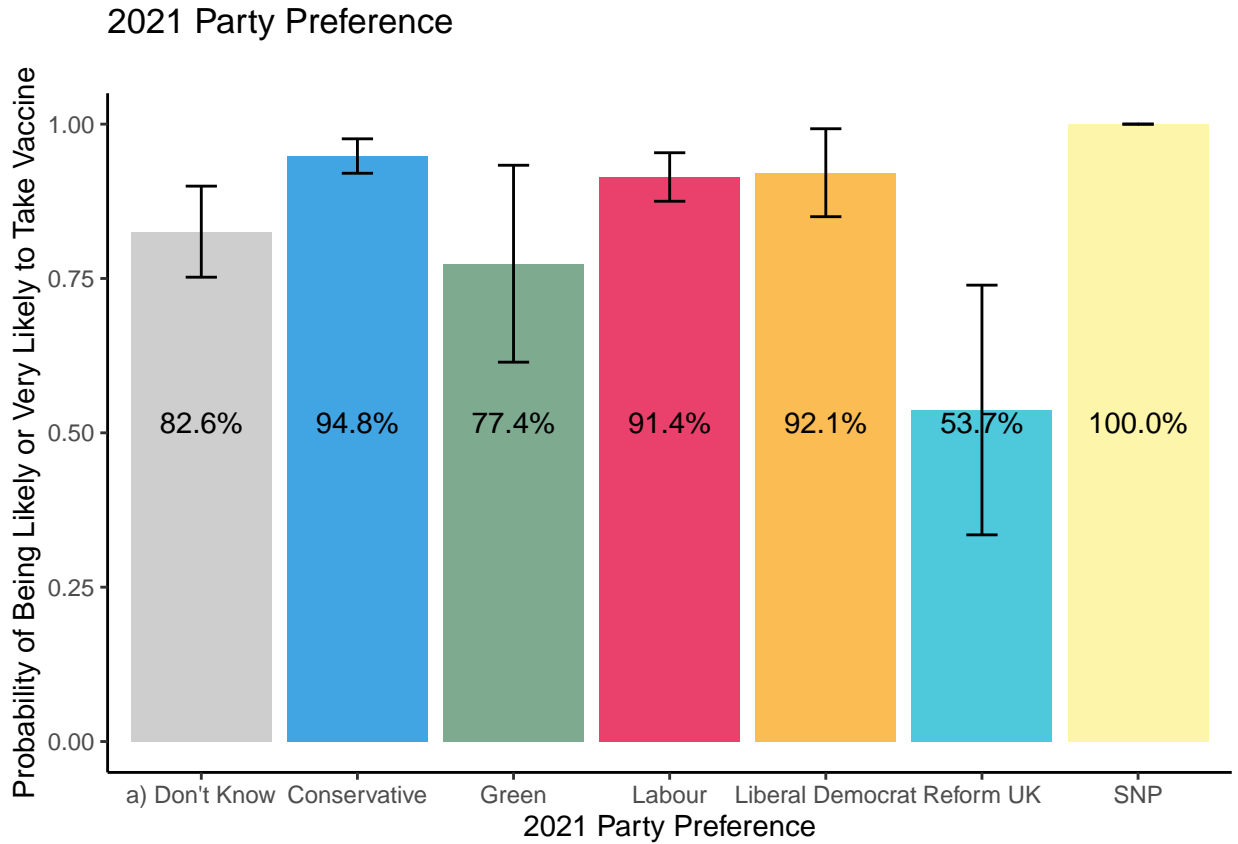


2019 GE Vote



2021 Party Preference

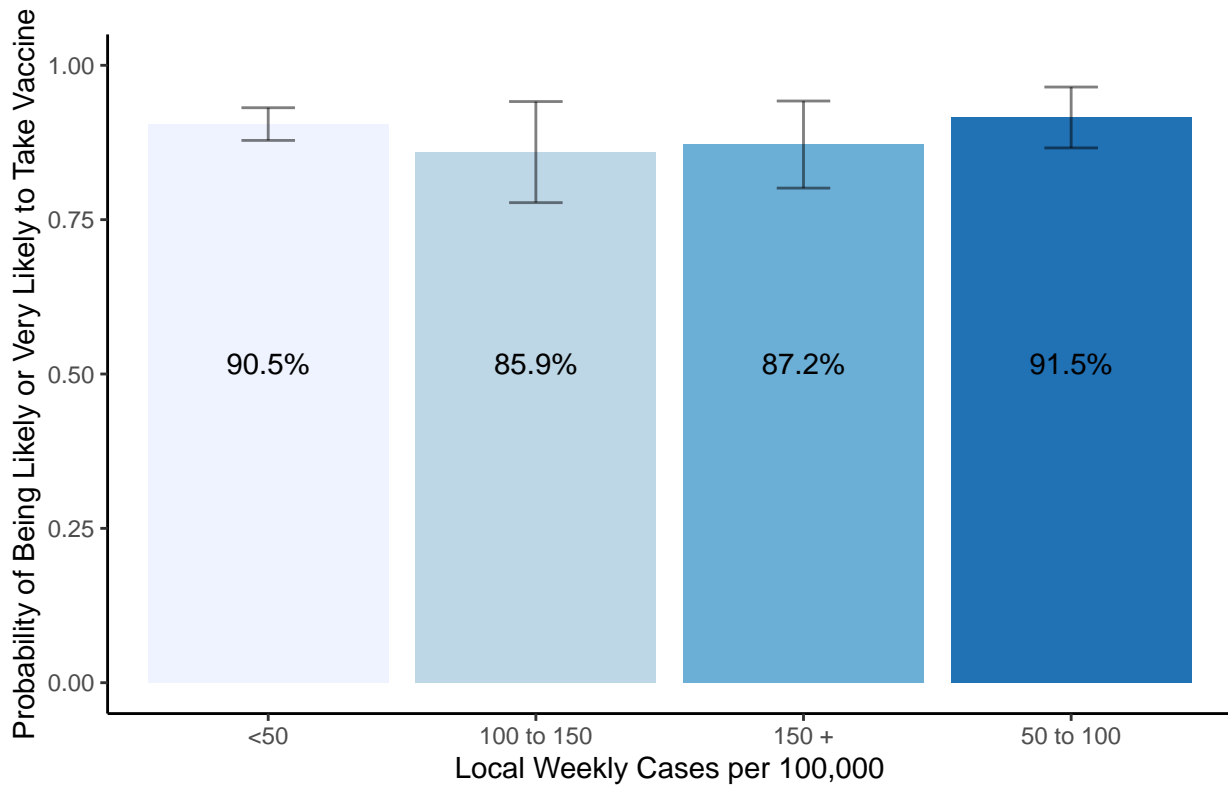
Again we see high support for taking the vaccine among people who currently intend to vote for the Conservatives, Labour, the Liberal Democrats, or the SNP. People who don't know who they would vote for are substantially less likely to wish to take the vaccine, as are Green Party supporters (again with substantial estimation uncertainty) and especially supporters of Nigel Farage's new Reform UK party, where only just over half of their supporters favour taking the vaccine.



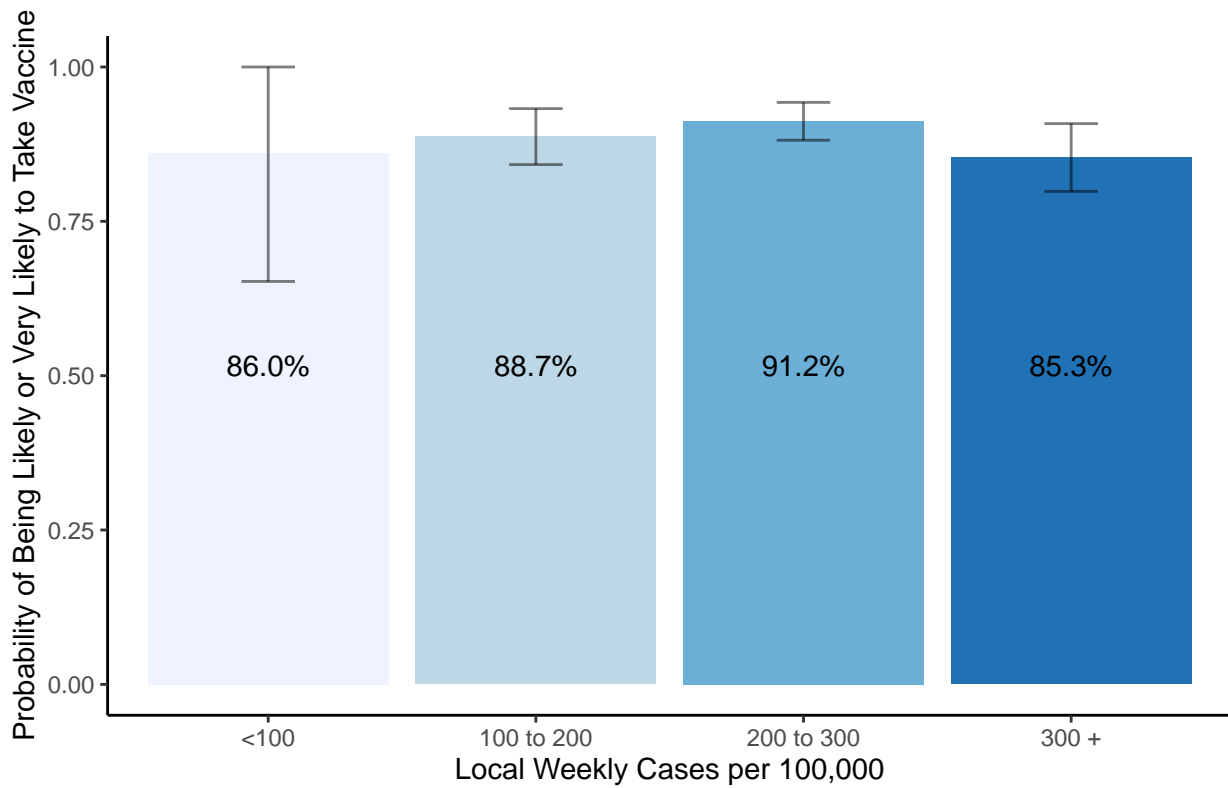
Cases

There is no strong evidence that local case rates (measured at the local authority level for the previous week's average of infections per 100,000) have any relationship with willingness to take the vaccine.

First Wave: Local Authority Case Rate



Second Wave: Local Authority Case Rate

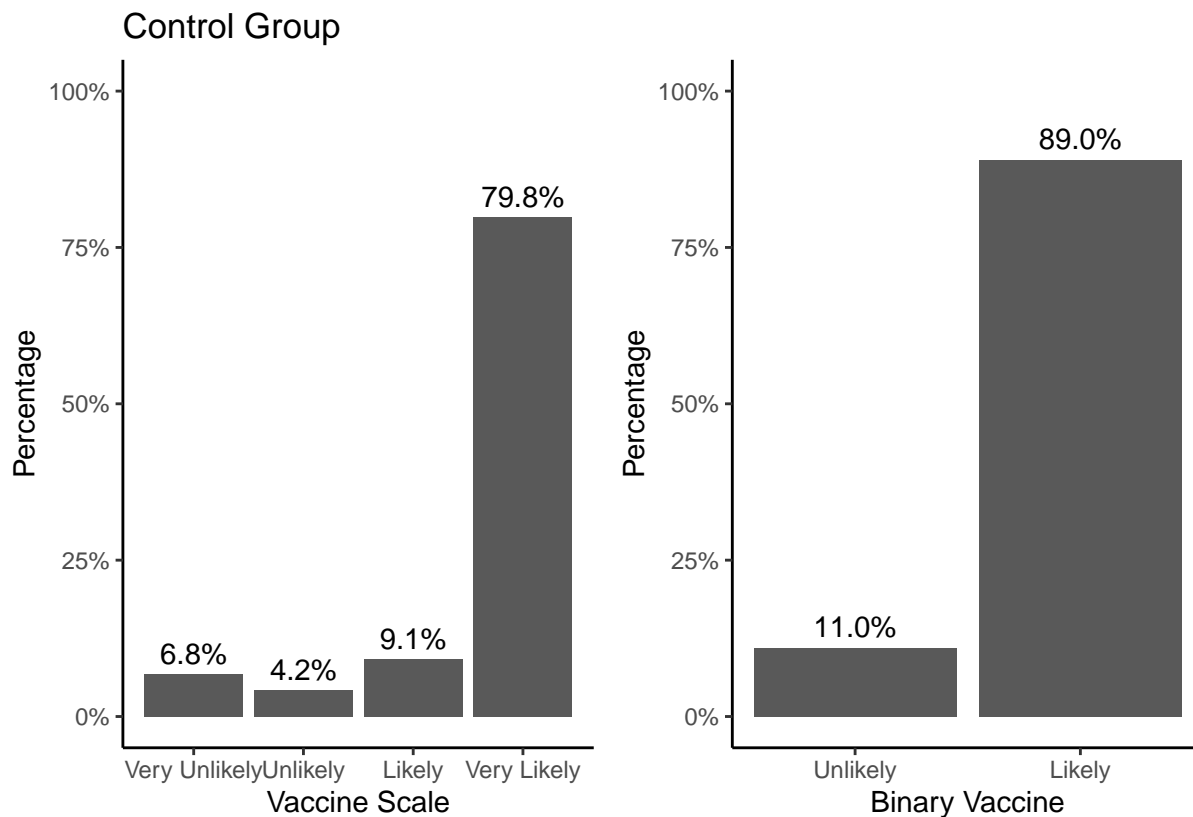


Experimental Treatments

We now compare attitudes towards taking the vaccine across the three groups: control, Pfizer treatment, and AstraZeneca treatment. We see some minor differences but these are fairly small scale in magnitude - particularly if we compare the binary treatments. They are not statistically significant in any analysis. There is some indication that the AstraZeneca prompt may have led to a slight shift from “Very Likely” to “Likely” but this is not statistically significant. Overall, there is no evidence that question wording affected responses in any systematic way, either directly or in interaction with group differences. We thus find no evidence supporting the conjecture that “vaccine nationalism” framing affects willingness to take the vaccine.

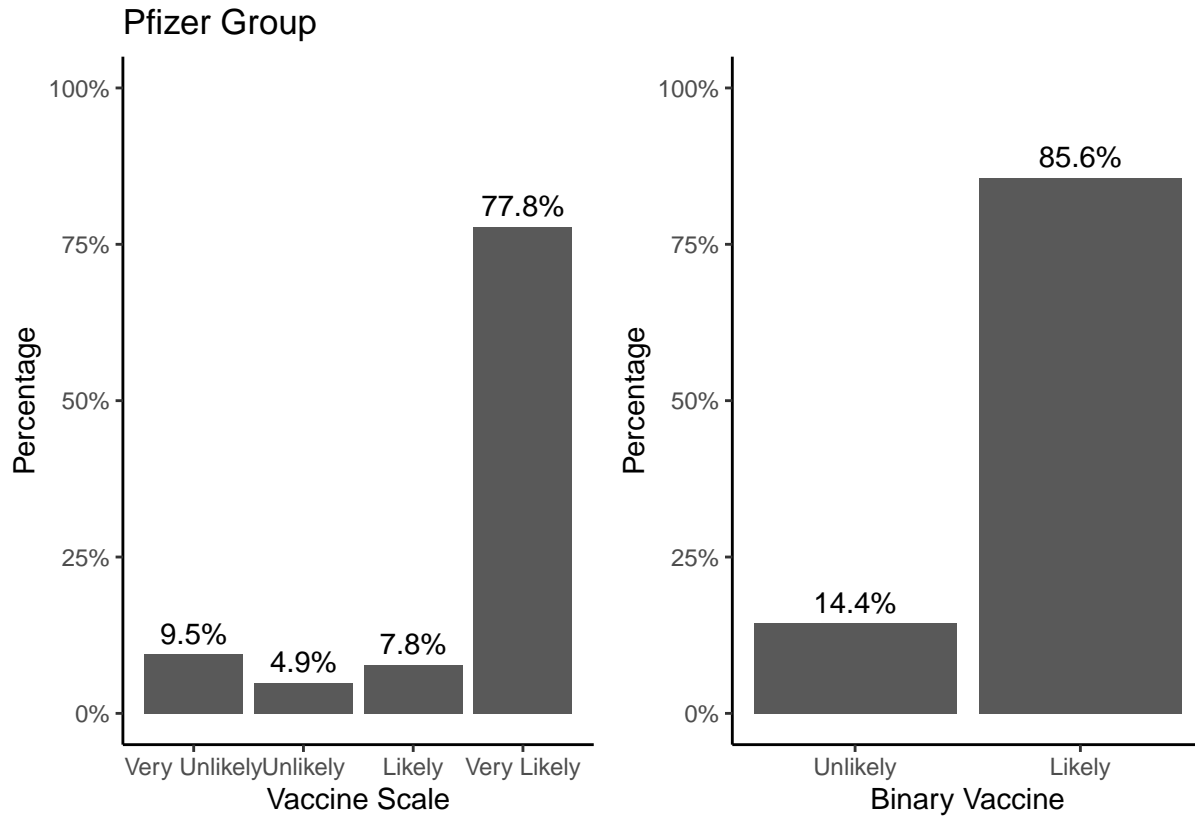
Second Wave (Feb 2020) Control Group

Likelihood of Taking Vaccine	Weighted	Unweighted
Very Unlikely	0.07	0.06
Unlikely	0.04	0.03
Likely	0.09	0.09
Very Likely	0.80	0.83



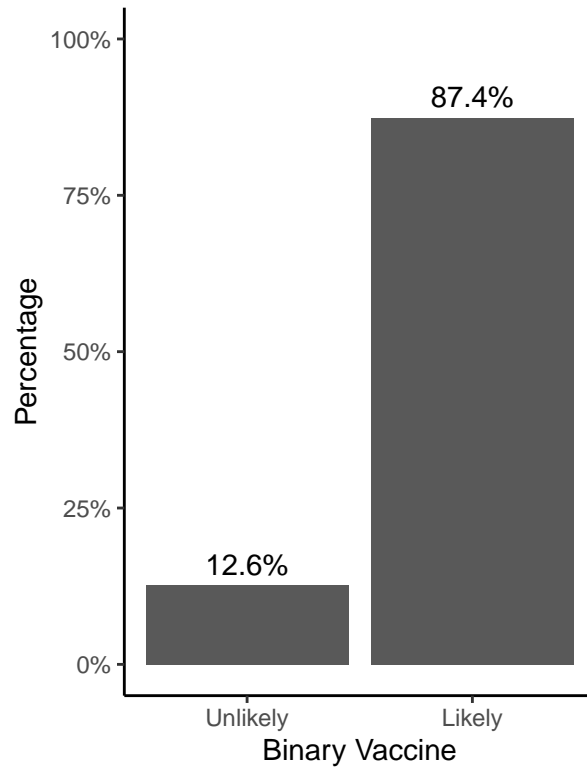
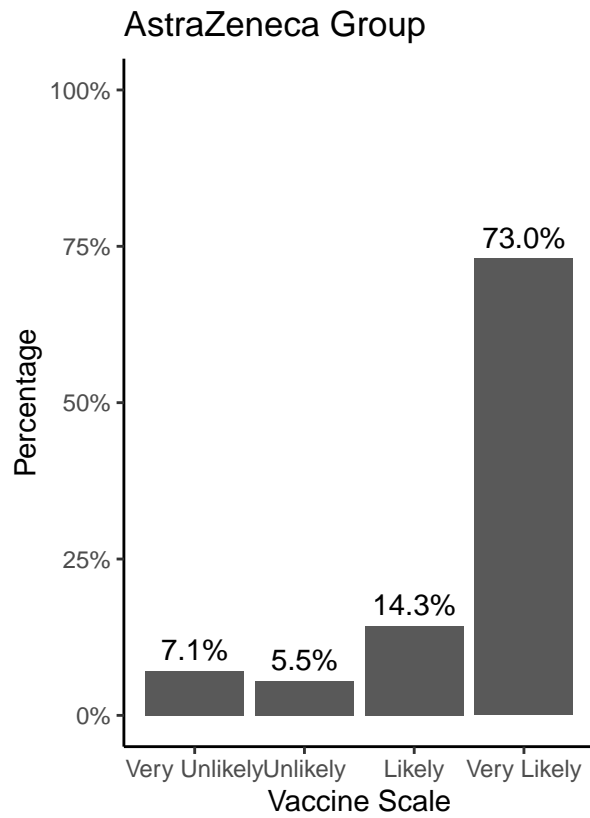
Second Wave (Feb 2020) Pfizer Group

Likelihood of Taking Vaccine	Weighted	Unweighted
Very Unlikely	0.09	0.06
Unlikely	0.05	0.05
Likely	0.08	0.07
Very Likely	0.78	0.82



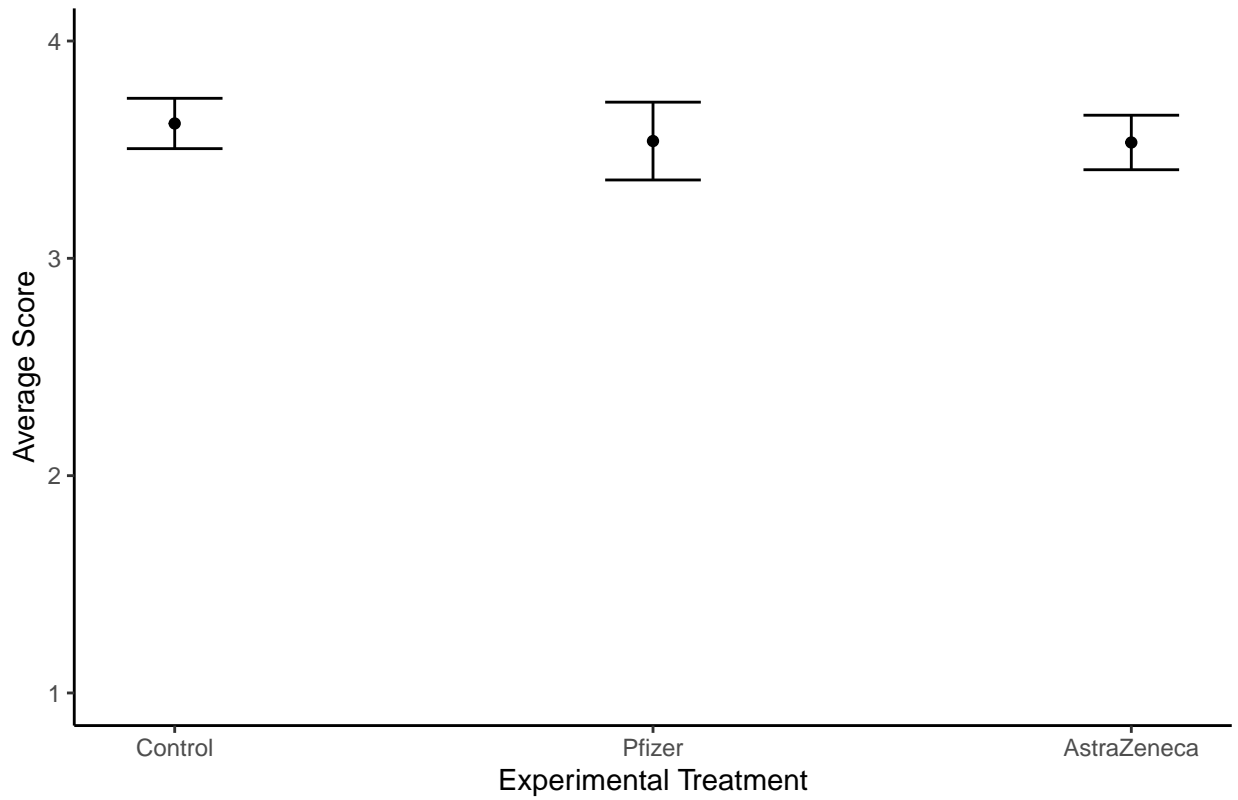
Second Wave (Feb 2020) AstraZeneca Group

Likelihood of Taking Vaccine	Weighted	Unweighted
Very Unlikely	0.07	0.05
Unlikely	0.06	0.04
Likely	0.14	0.10
Very Likely	0.73	0.81

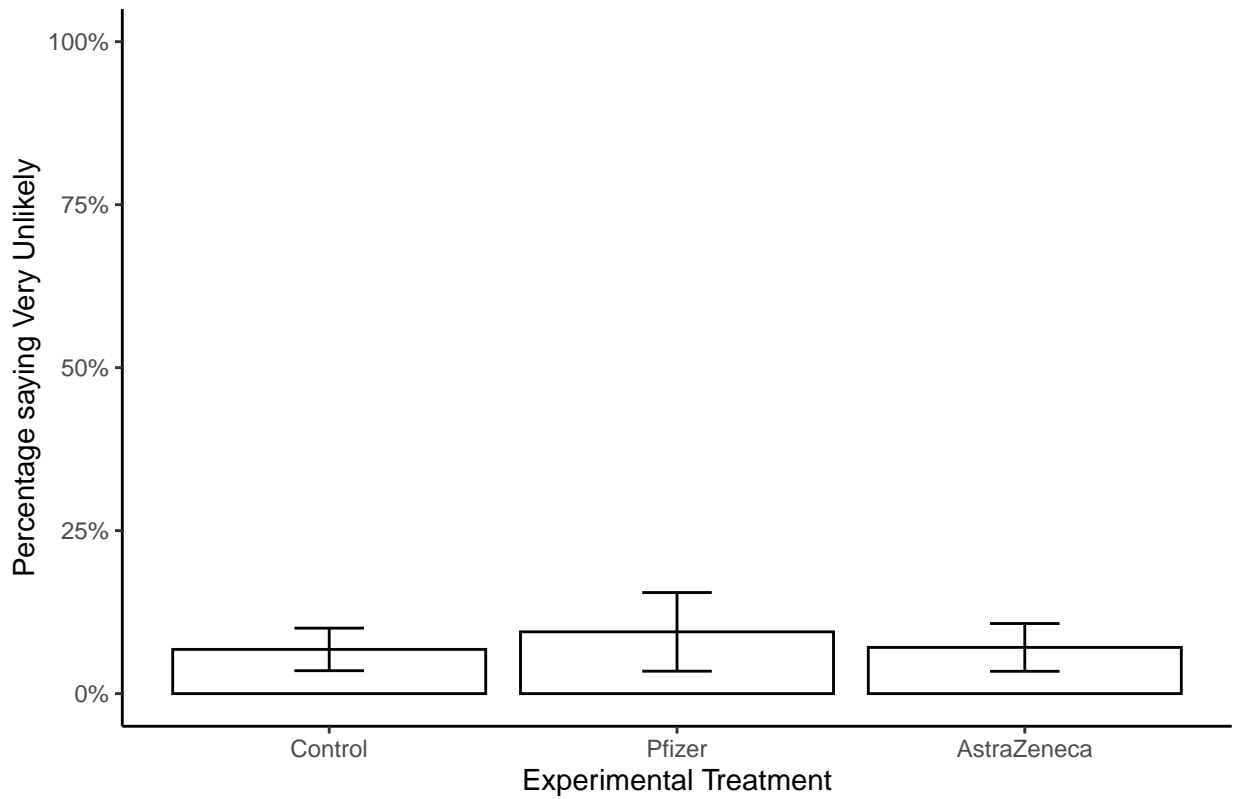


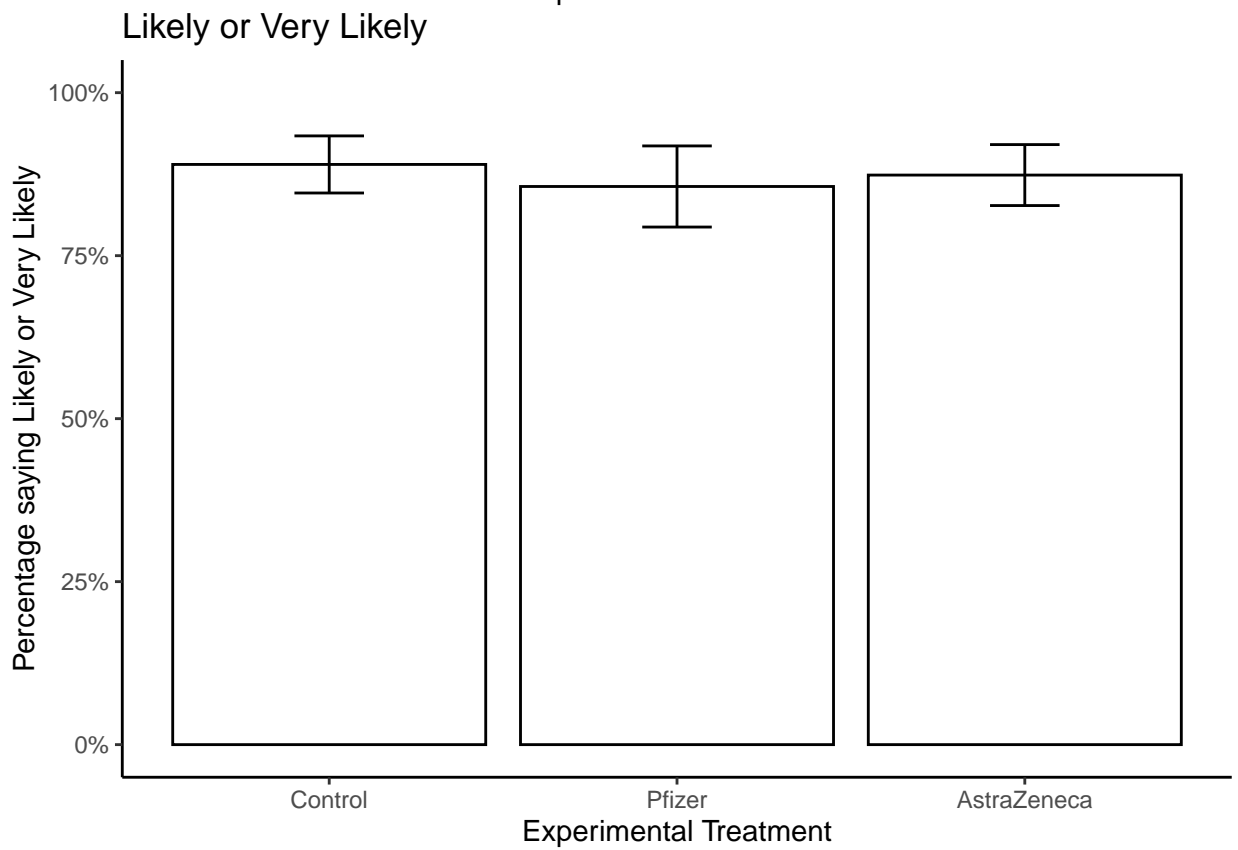
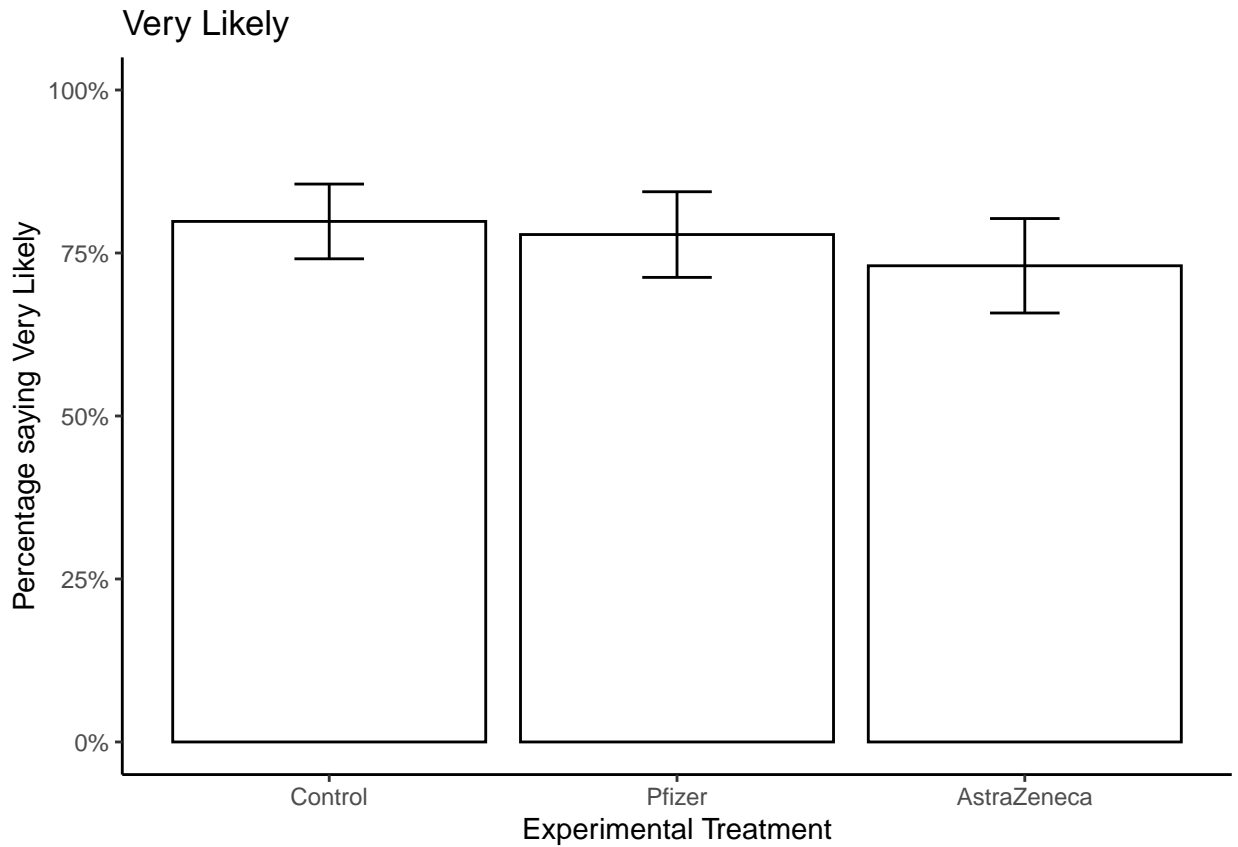
We can examine the statistical significance of the treatments by comparing them directly with one another and looking at their standard errors. Again we see no evidence of any treatment effect of the question wording given.

Average Score on Vaccine Attitudes



Very Unlikely





Sample Comparisons

We now look at comparisons between the sample in wave one and the group who were retained in wave two. The table below has three columns. The first shows wave one averages using wave one weights, which were designed to make the sample nationally representative. The second shows wave two averages with these wave one weights. The third shows wave two averages with wave two weights (thus adjusting this smaller sample to be nationally representative once more). In all three cases we use the group identifiers from wave one to make sure we are comparing like with like (a small number of people switch jobs or income groups in wave two).

As can be seen, there is negligible difference in the demographics or political attitudes of the three groups. Furthermore, and importantly for our findings, there is little difference between their attitudes towards taking the vaccine in wave one. Hence we have strong confidence that there is no differential attrition across different groups and that the participants retained in the second wave are highly representative of the first wave sample.

The one possible exception is ethnic minorities, where there is some slightly disproportionate attrition between waves (albeit from a low sample baseline - our poll like many national polls appears to have undersampled minorities). This can be seen most clearly in the middle column. While the second wave weights adjust for this, it is conceivable that those ethnic minorities who did not participate in the second wave might be systematically different in their vaccine attitudes.

	1st Wave (1st weights)	2nd Wave (1st weights)	2nd Wave (2nd weights)
Characteristic	N = 1,642 ¹	N = 1,204 ¹	N = 1,219 ¹
Age	48.66, (16.93)	51.14, (16.33)	48.59, (16.81)
Gender			
Female	51%	51%	51%
Male	49%	49%	49%
Household Income (scale)	7.2, (3.7)	7.1, (3.6)	7.0, (3.6)
EURef			
Can't Remember	2.2%	1.9%	1.9%
Did Not Vote	21%	19%	22%
Leave	40%	41%	39%
Remain	37%	38%	37%
GE 2019			
Brexit Party	2.1%	2.1%	2.1%
Conservative	45%	46%	45%
Green	2.5%	2.6%	2.4%
Labour	33%	31%	33%
Liberal Democrat	12%	12%	12%
Other	1.9%	1.6%	1.7%
Plaid Cymru	0.5%	0.5%	0.5%
SNP	3.9%	4.0%	4.0%
Education (scale)			
1	6.6%	7.2%	6.4%
2	28%	29%	30%
3	21%	20%	21%
4	35%	35%	34%
5	8.8%	8.9%	8.7%
Ethnicity			
Ethnic Minority	6.1%	5.2%	6.9%
Other White	4.4%	4.4%	4.8%
White British	89%	90%	88%
First Wave Vaccine Views			
1 Very Unlikely	11%	10%	11%
Mean, (SD); % ¹			

	1st Wave (1st weights)	2nd Wave (1st weights)	2nd Wave (2nd weights)
Characteristic	N = 1,642 ¹	N = 1,204 ¹	N = 1,219 ¹
2 Unlikely	9.2%	9.5%	10%
3 Likely	25%	25%	26%
4 Very Likely	45%	47%	45%
5 Don't Know	8.9%	7.8%	7.9%
Mean, (SD); % ¹			

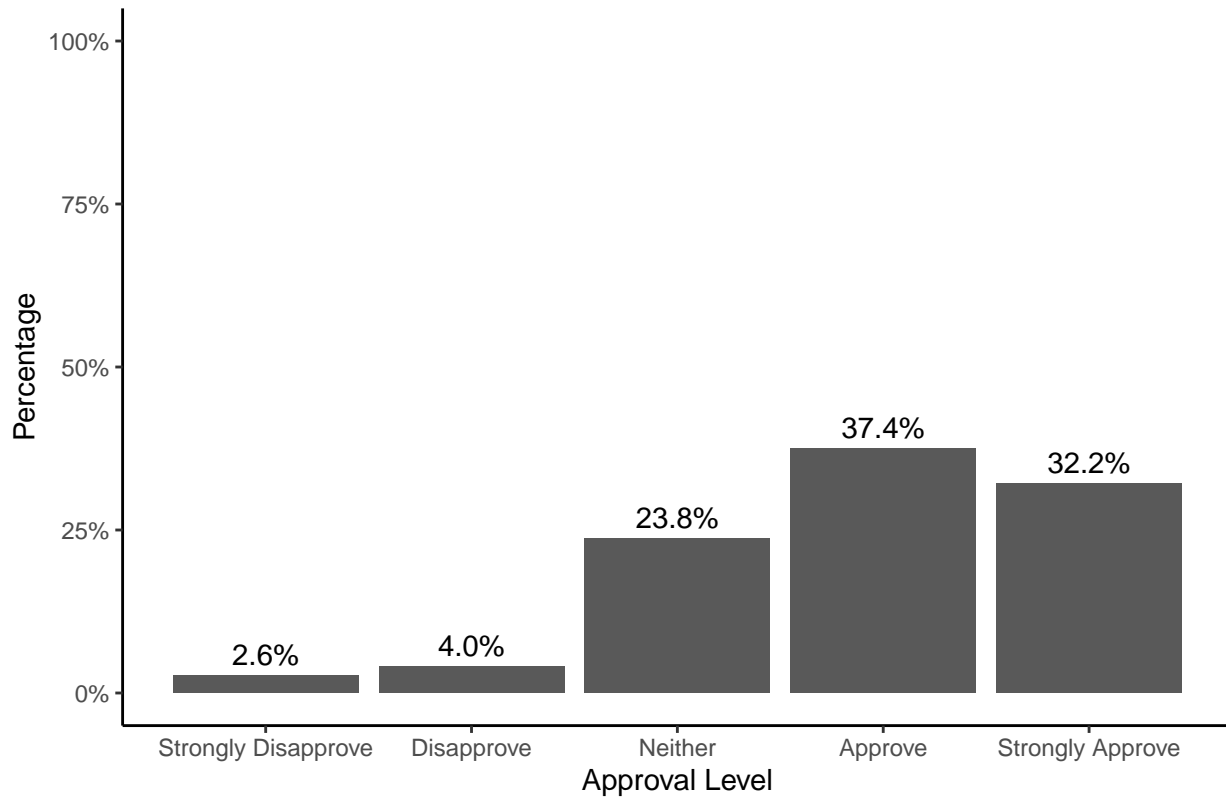
Vaccine Policies and Performance

In the second wave we asked four questions about government policies and performance related to vaccine. Whether people approved of (a) the speed of regulatory approval of the vaccines, (b) the government's performance in rolling out vaccinations, (c) the decision to allow a long delay between first and second doses, and (d) the prioritisation of the elderly and healthcare workers over other key workers such as teachers. Each answer was scored on a five point scale from "Strongly Disapprove" to "Strongly Approve"

Approval of the Speed of the Vaccine Regulatory Process

Approval Rating	Weighted	Unweighted
Strongly Disapprove	0.03	0.02
Disapprove	0.04	0.04
Neither Approve Nor Disapprove	0.24	0.21
Approve	0.37	0.37
Strongly Approve	0.32	0.36

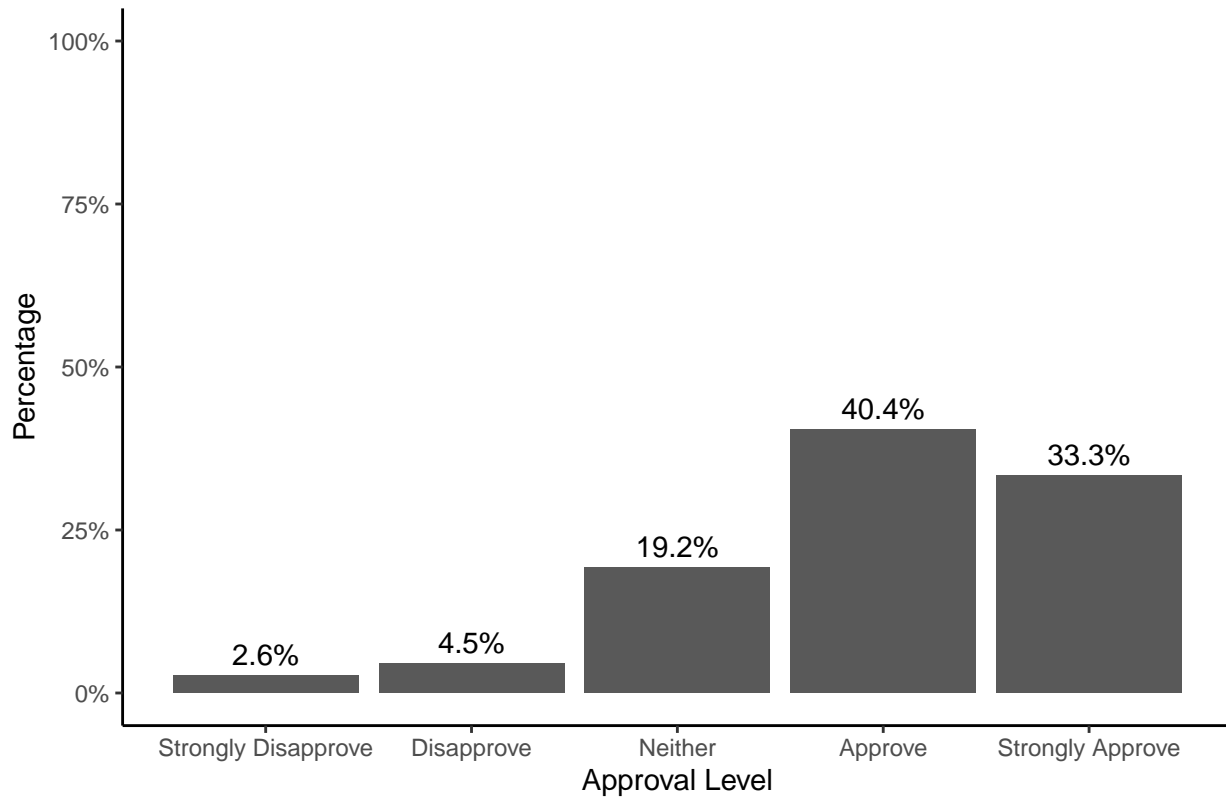
Approval of the Speed of the Vaccine Regulatory Process



Approval of Government's Performance in Rolling Out Vaccine

Approval Rating	Weighted	Unweighted
Strongly Disapprove	0.03	0.03
Disapprove	0.04	0.05
Neither Approve Nor Disapprove	0.19	0.18
Approve	0.40	0.38
Strongly Approve	0.33	0.36

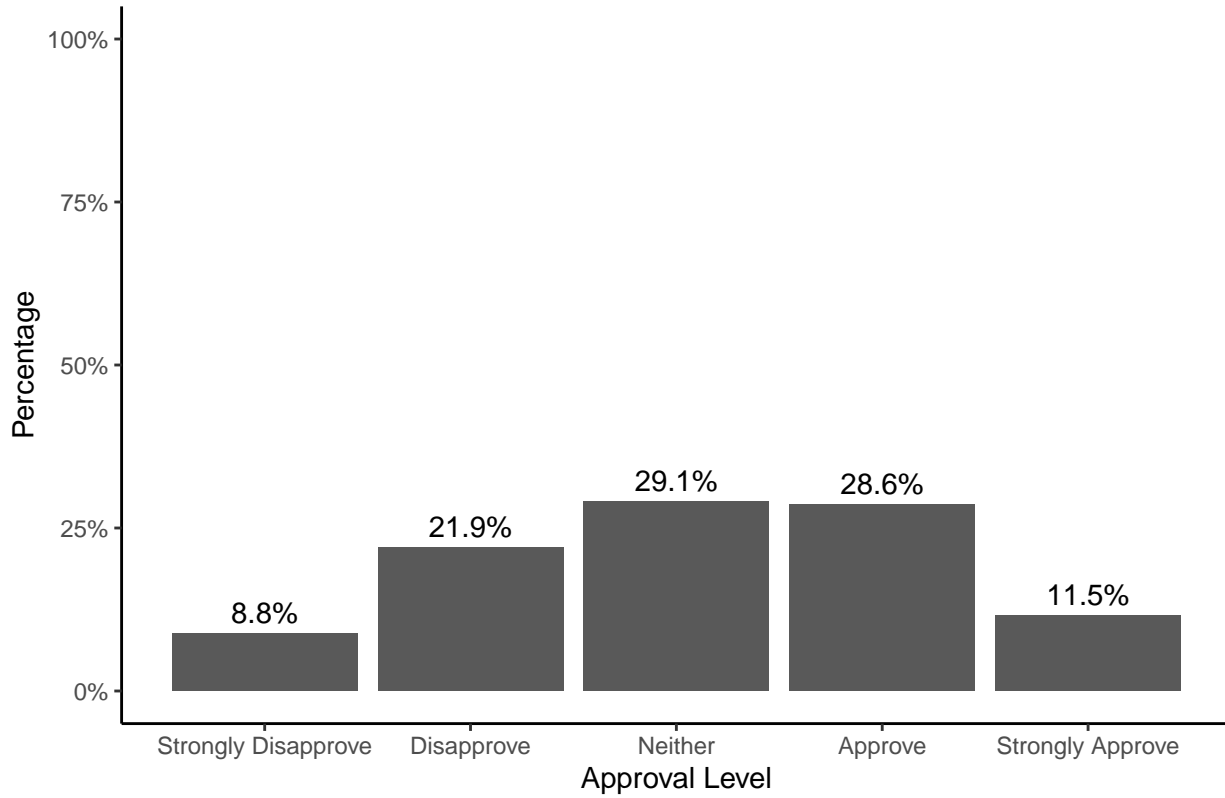
Approval of Government's Performance in Rolling Out Vaccines



Approval of the Decision to Delay Second Vaccine

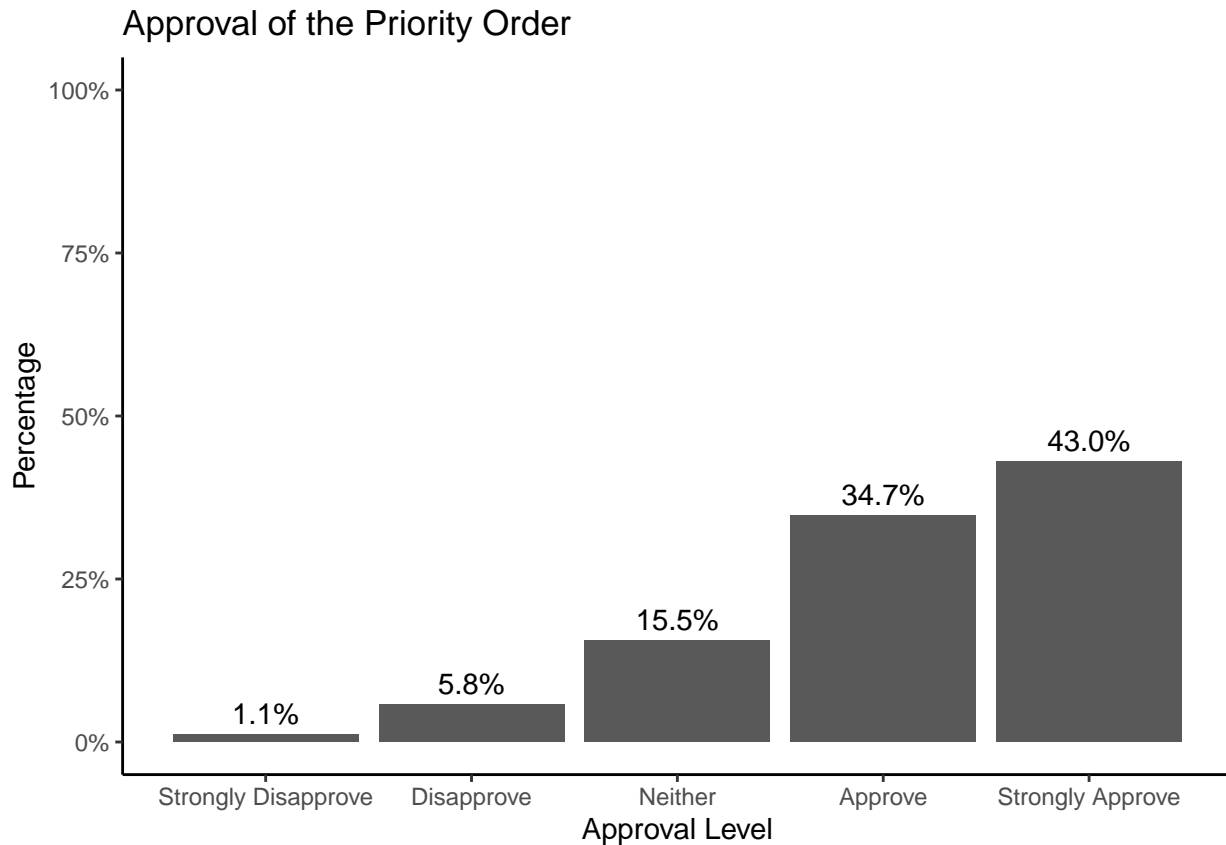
Approval Rating	Weighted	Unweighted
Strongly Disapprove	0.09	0.10
Disapprove	0.22	0.22
Neither Approve Nor Disapprove	0.29	0.27
Approve	0.29	0.30
Strongly Approve	0.12	0.11

Approval of the Decision to Delay Second Vaccine



Approval of the Priority Order

Approval Rating	Weighted	Unweighted
Strongly Disapprove	0.01	0.01
Disapprove	0.06	0.06
Neither Approve Nor Disapprove	0.15	0.14
Approve	0.35	0.34
Strongly Approve	0.43	0.45



Correlations

We now look at correlations across these measures. We see that there is a positive correlation between approving of the fast regulatory approval of the vaccine and willingness to take it. There is a weaker positive relationships between approving of the government’s performance in rolling out the vaccine and wishing to take it. Otherwise, support of the government’s performance tends to correlate positively with approving the decisions about regulatory approval, delaying the second dose, and the priority order.

Correlation Across Different Vaccine Measures

	Speed of Approval	Likelihood of Taking	Speed of Approval	Government Performance	Delaying 2nd Dose
Speed of Approval	.49				
Government Performance	.30	.42			
Delaying 2nd Dose	.12	.30	.38		
Priority Order	.21	.34	.35	.14	

Preferences By Group

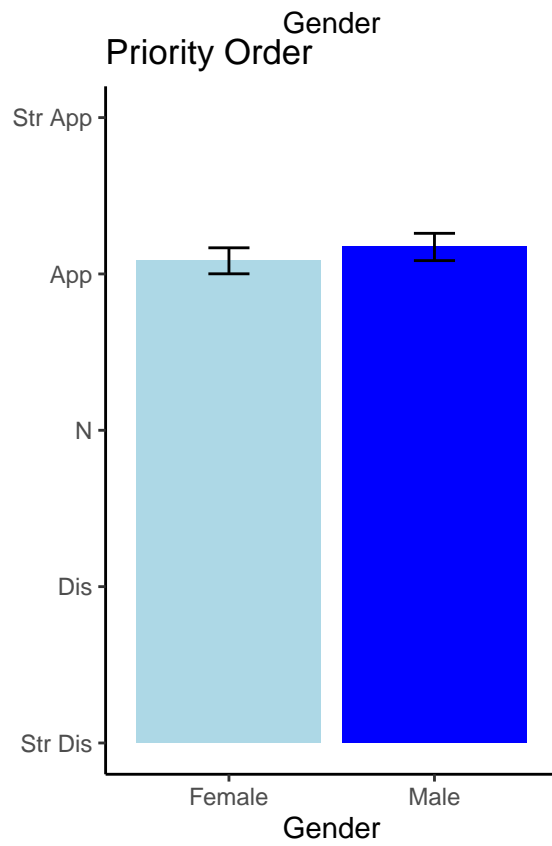
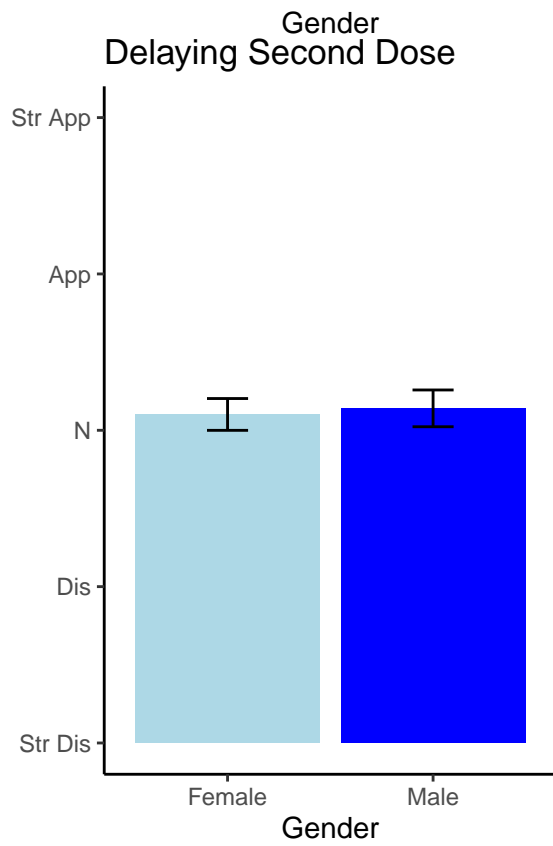
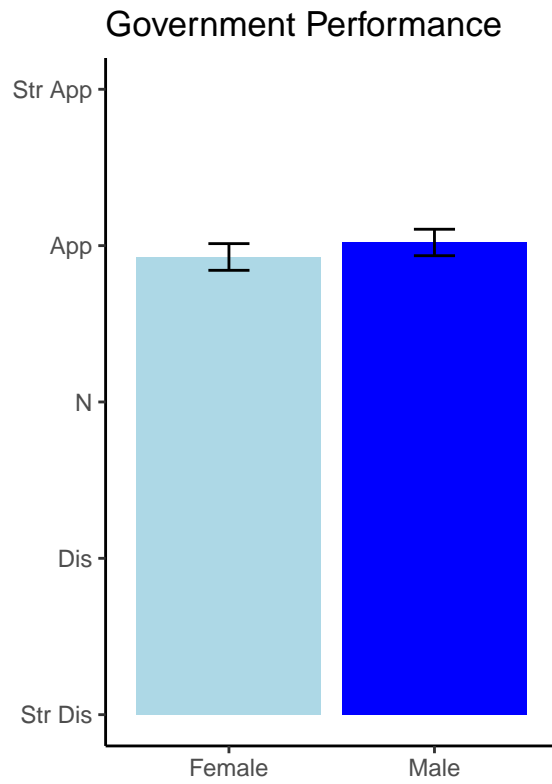
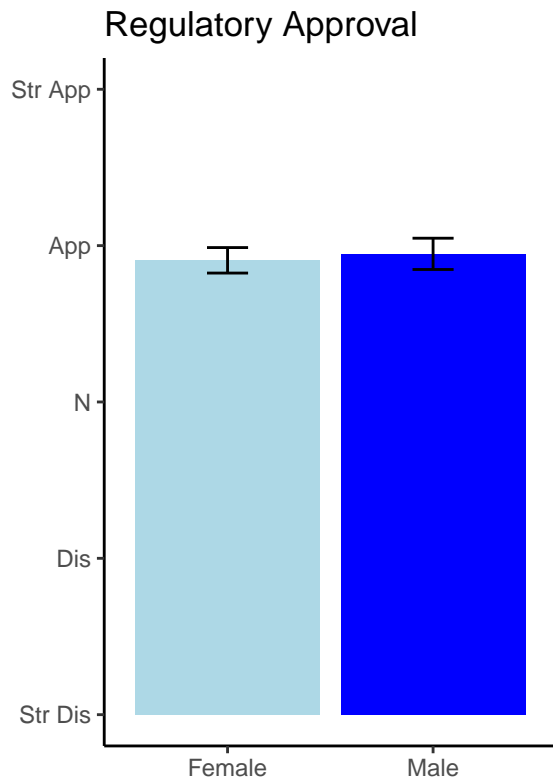
We now examine differences in support for these policies by the various demographic and political characteristics we examined above. There are relatively few demographic differences in policy support, with the exception of age, where older people are more likely to approve of the government’s performance, the regulator’s speed,

and especially the priority order (which favours older people!). There is a sharp discontinuity in the latter at age 50, precisely when group 9 of the Joint Committee on Vaccination and Immunisation's priority list begins.

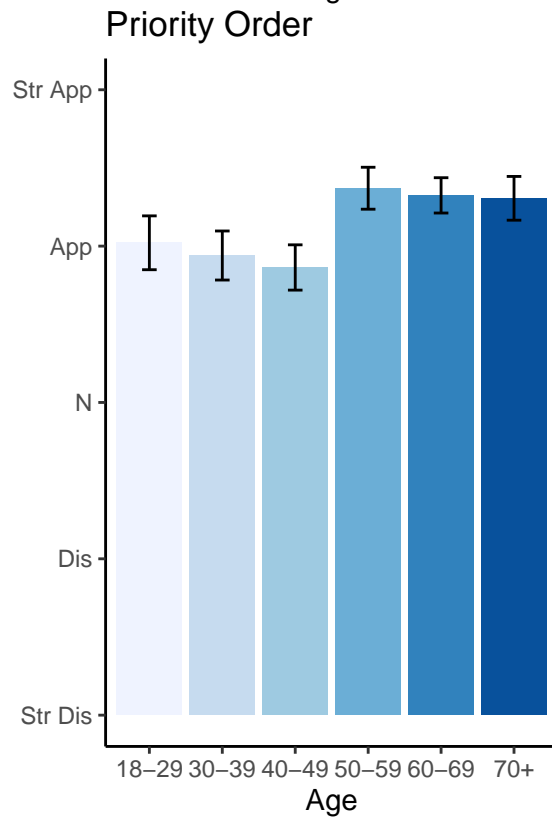
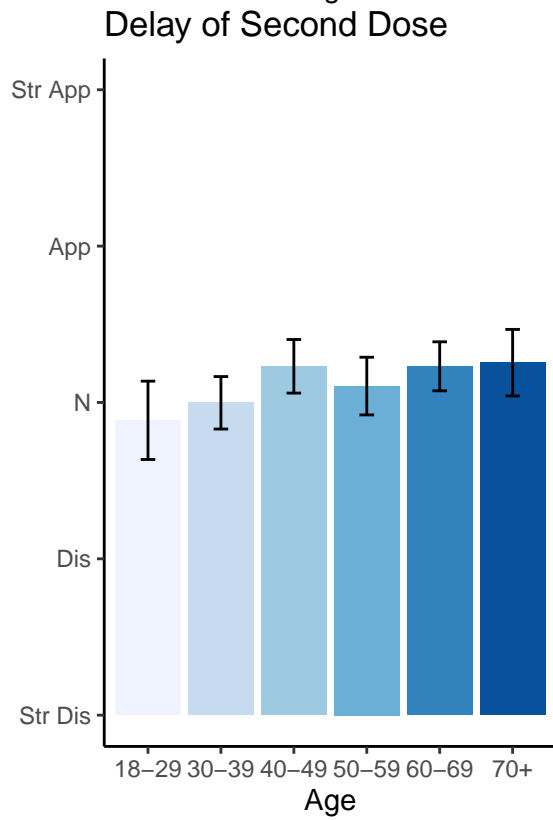
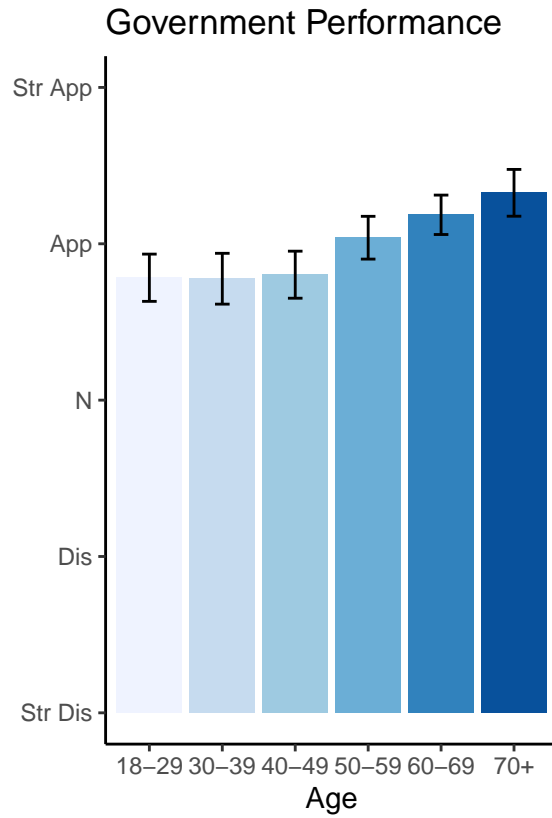
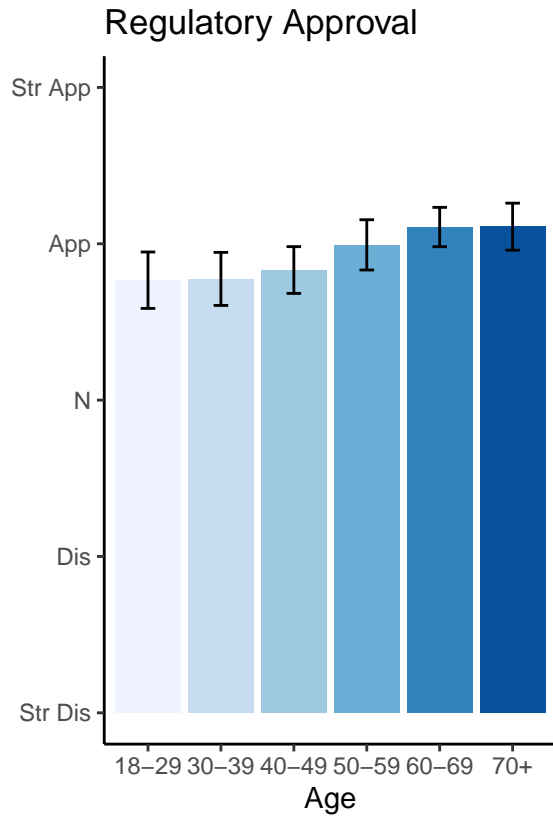
For political factors, there is some evidence that Brexit voters are more supportive of the government's performance rolling out the vaccine and of the policy of delaying the second dose. 2019 General Election vote is unsurprisingly a very strong predictor of approval of the government's performance, with Conservative voters much more approving than Labour, Lib Dem, and SNP voters, as well as compared to non-voters. Conservatives are also more supportive of the policy of delaying the second dose than most other groups. There is some gap between Conservative and Labour voters in approving the priority order, which may reflect the Labour policy of advocating vaccinating teachers more quickly than government policy. These patterns are broadly similar when we look at current vote intention.

Finally, there is little evidence that local case levels affect views of government vaccine policies except for approval of the government's performance in rolling out the vaccine, which appears lower in places with lower COVID infection rates, which could simply reflect a correlation between such rates and political attitudes (for example, low infection rates in Scotland and West Wales).

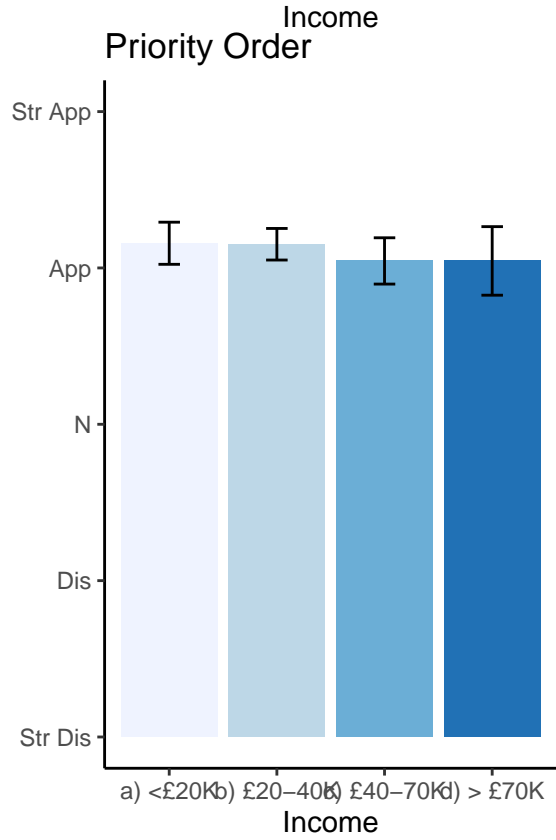
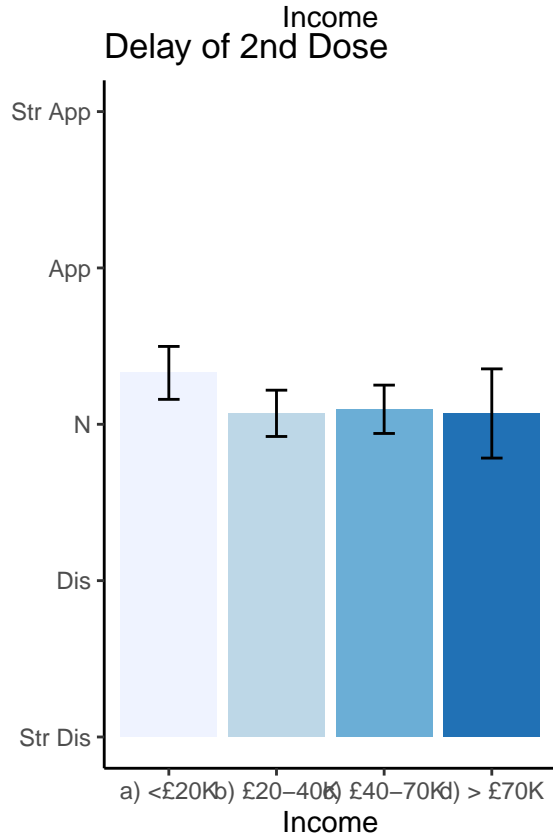
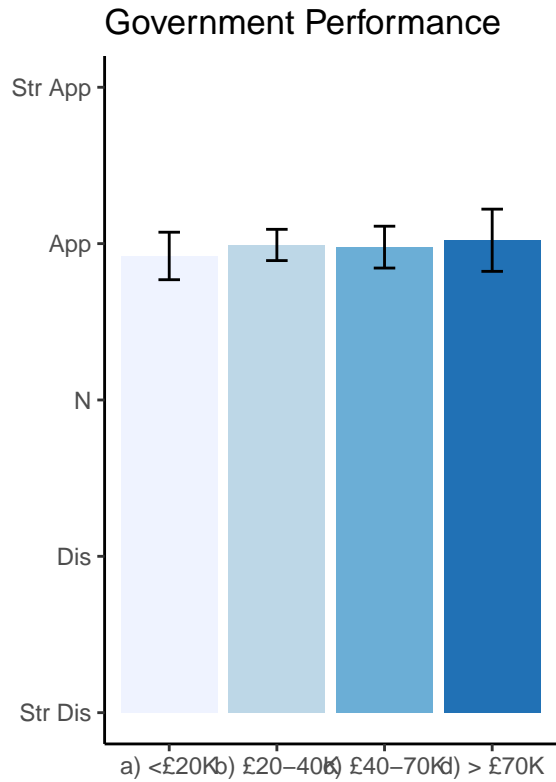
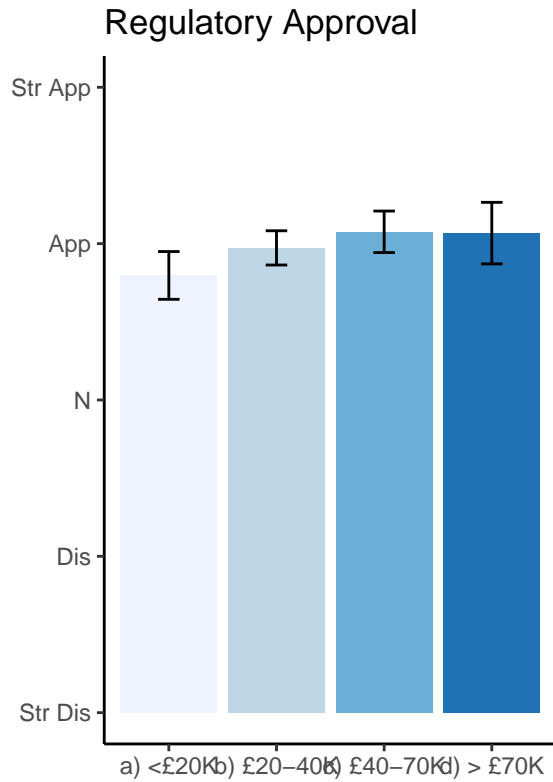
Gender



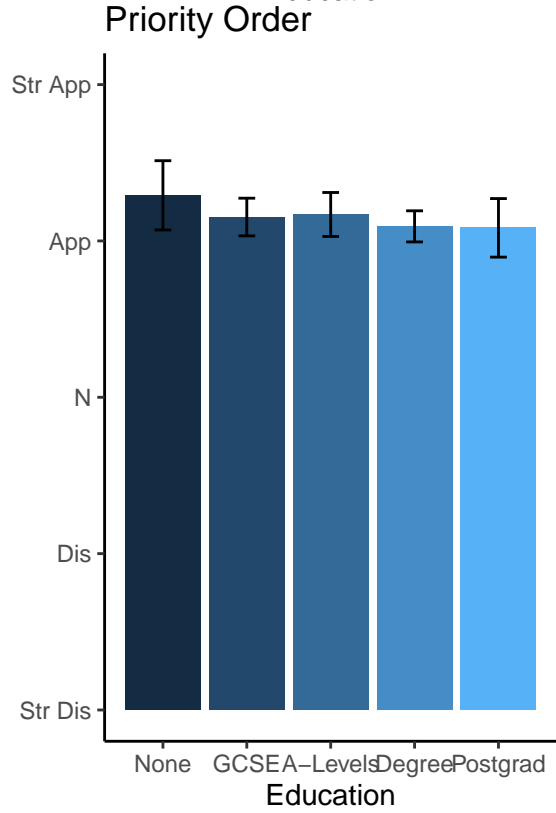
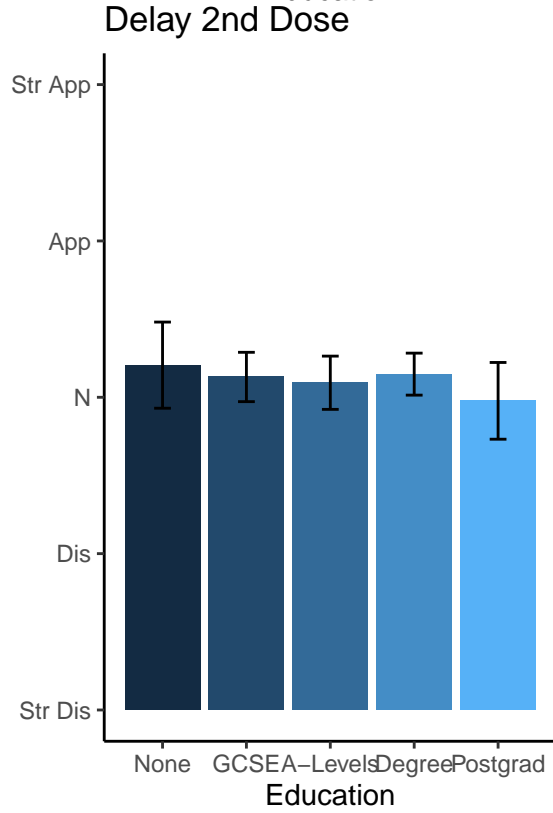
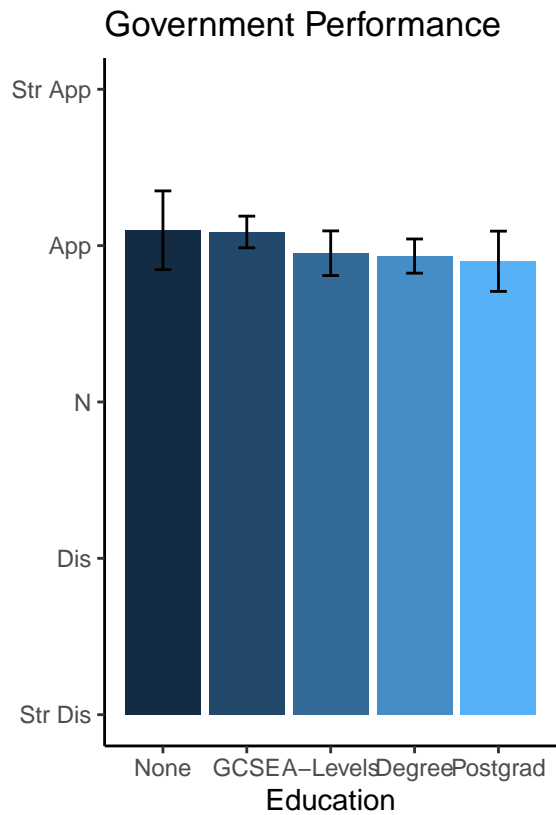
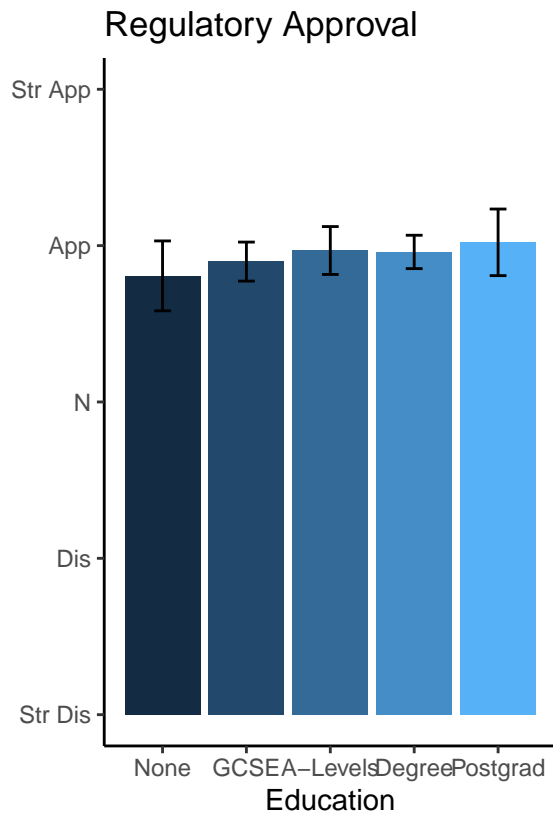
Age Group



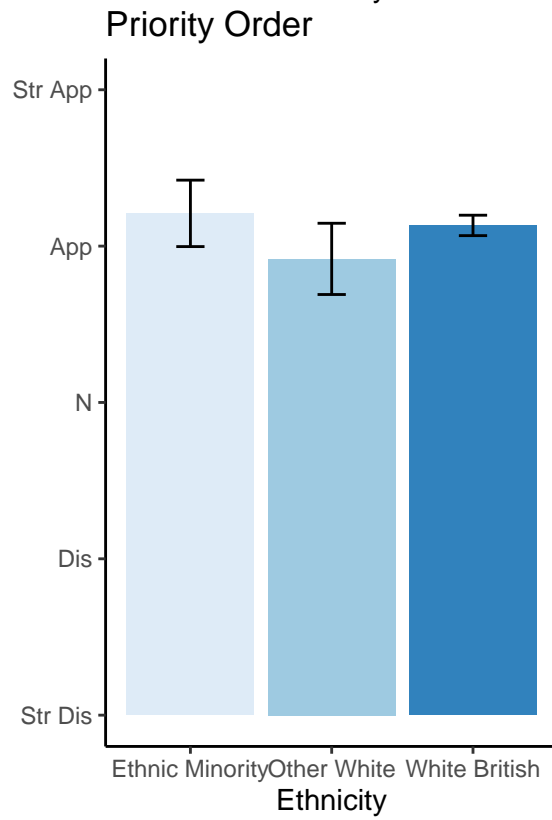
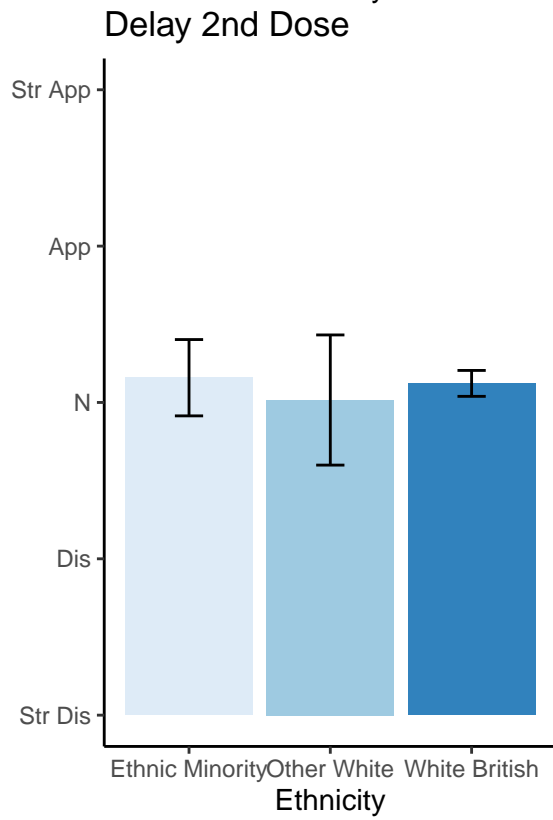
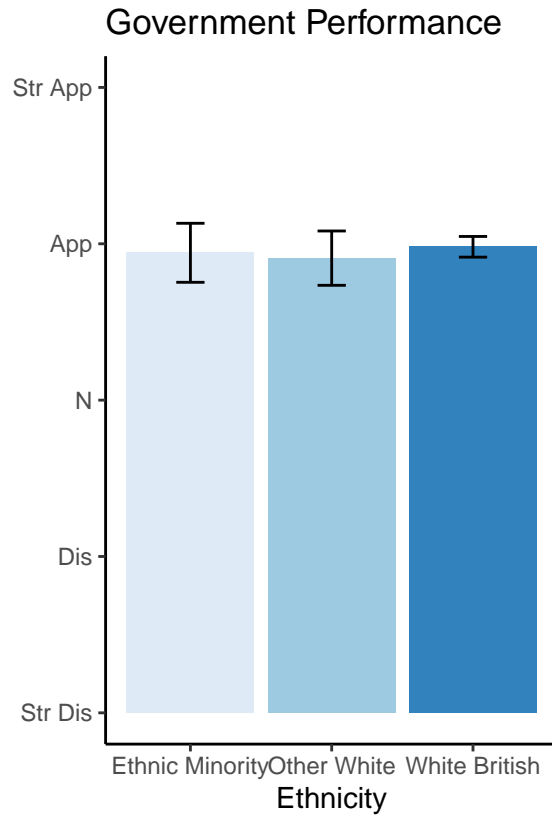
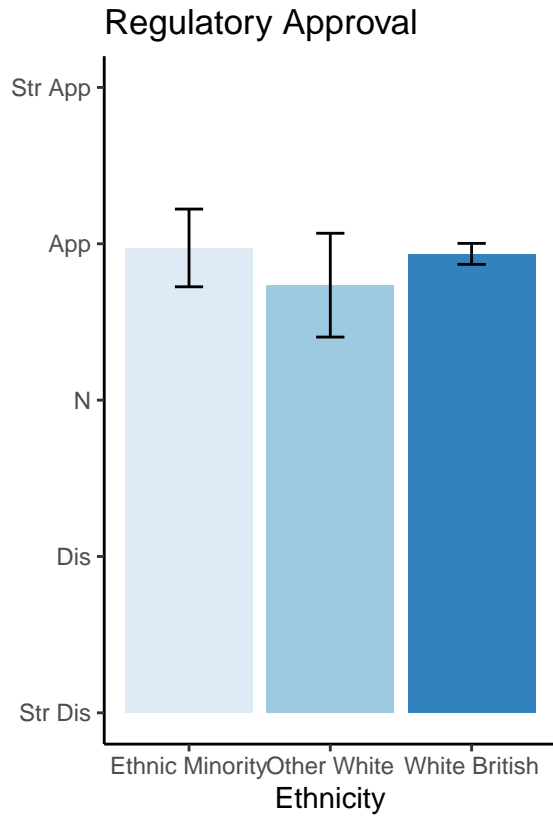
Household Income



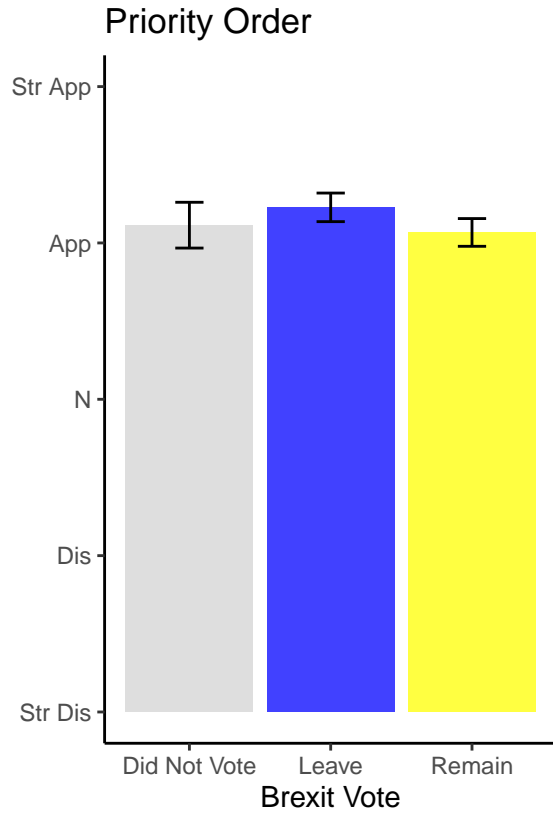
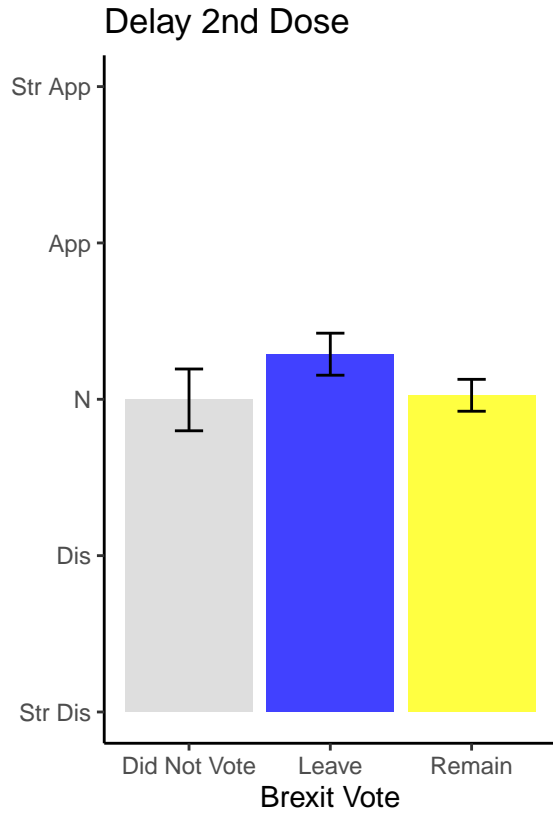
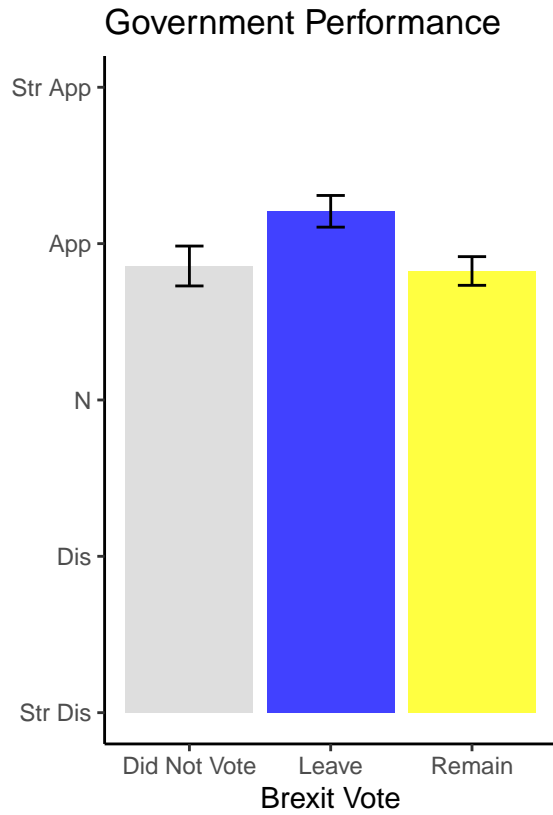
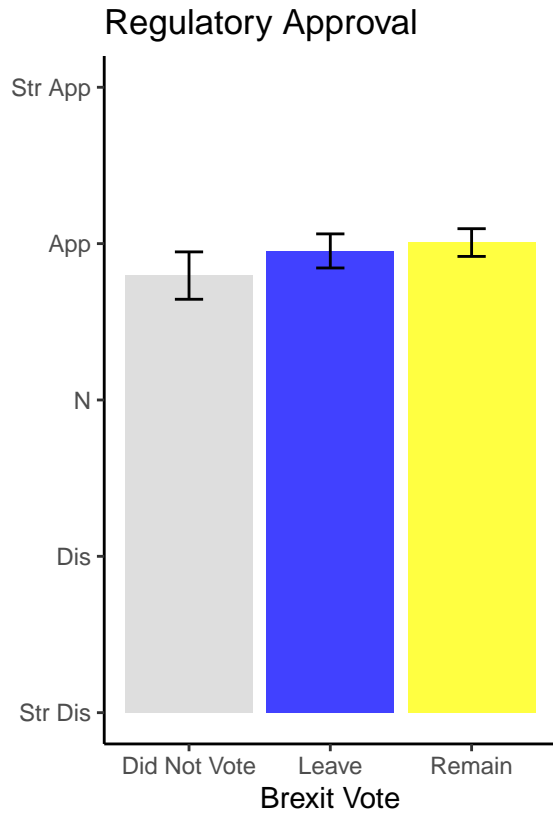
Education Level



Ethnicity

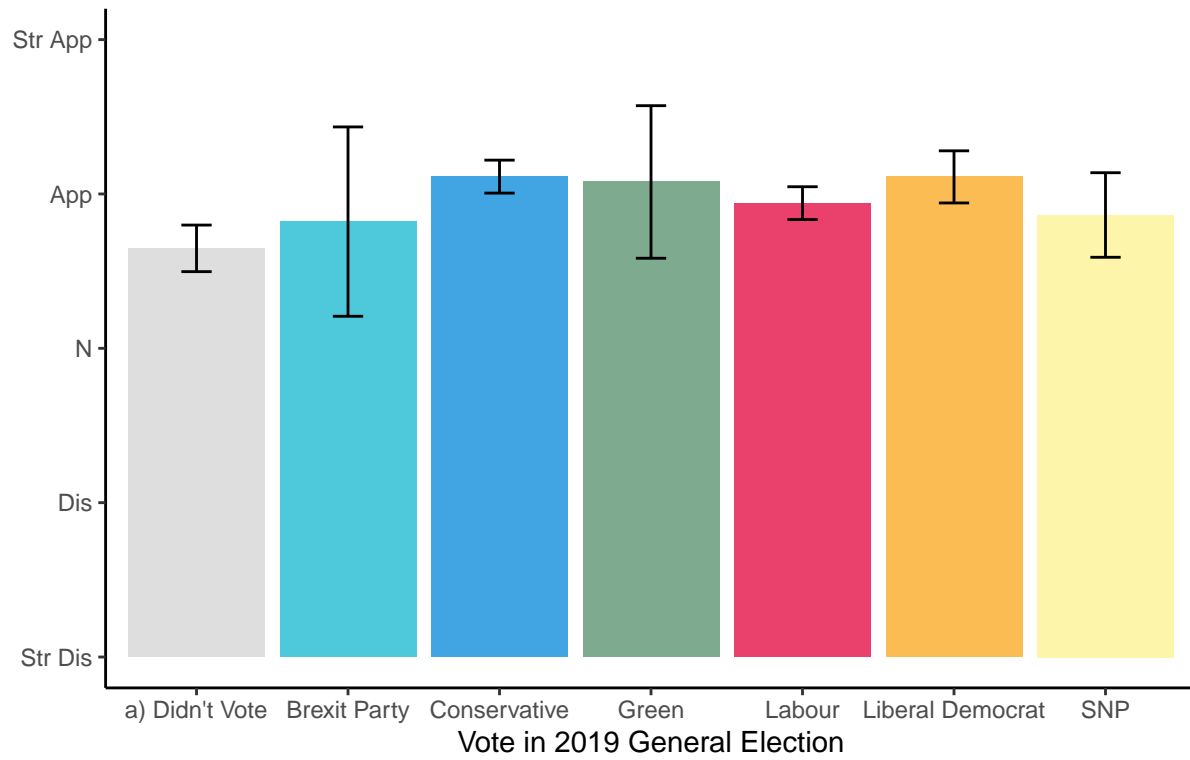


2016 Referendum Vote

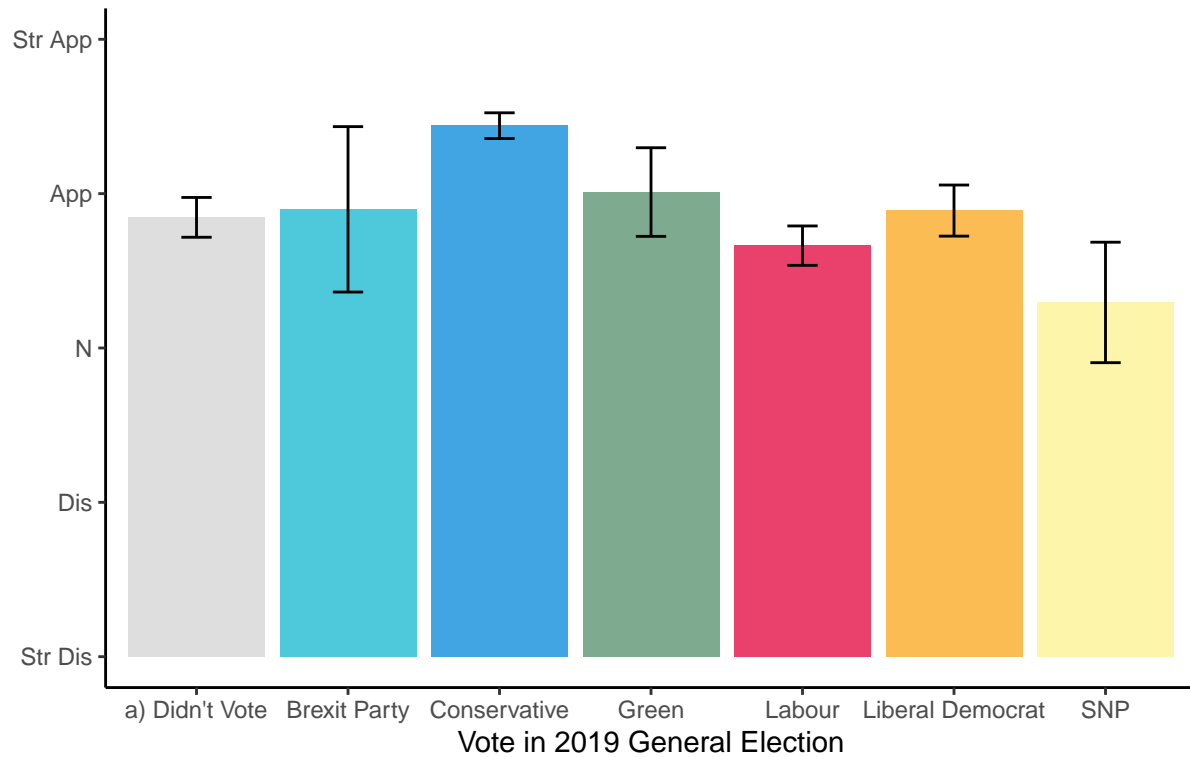


General Election 2019 Vote

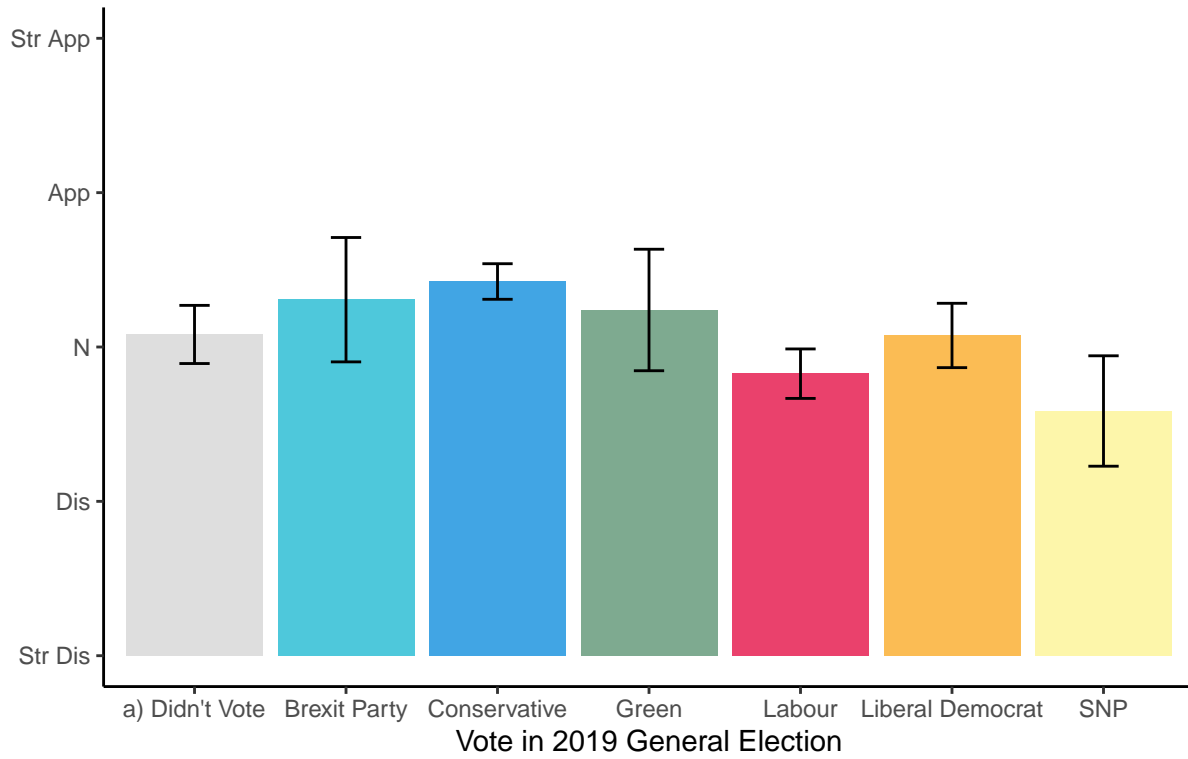
Regulatory Approval



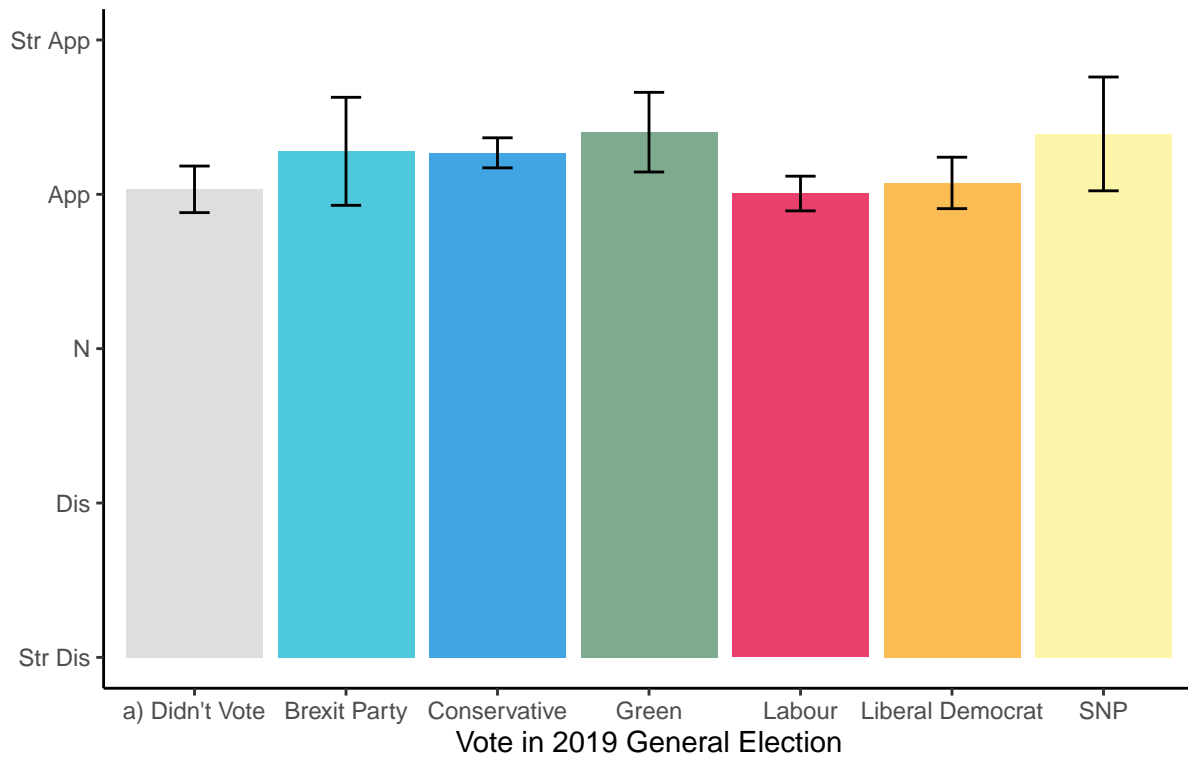
Government Performance



Delay of 2nd Dose

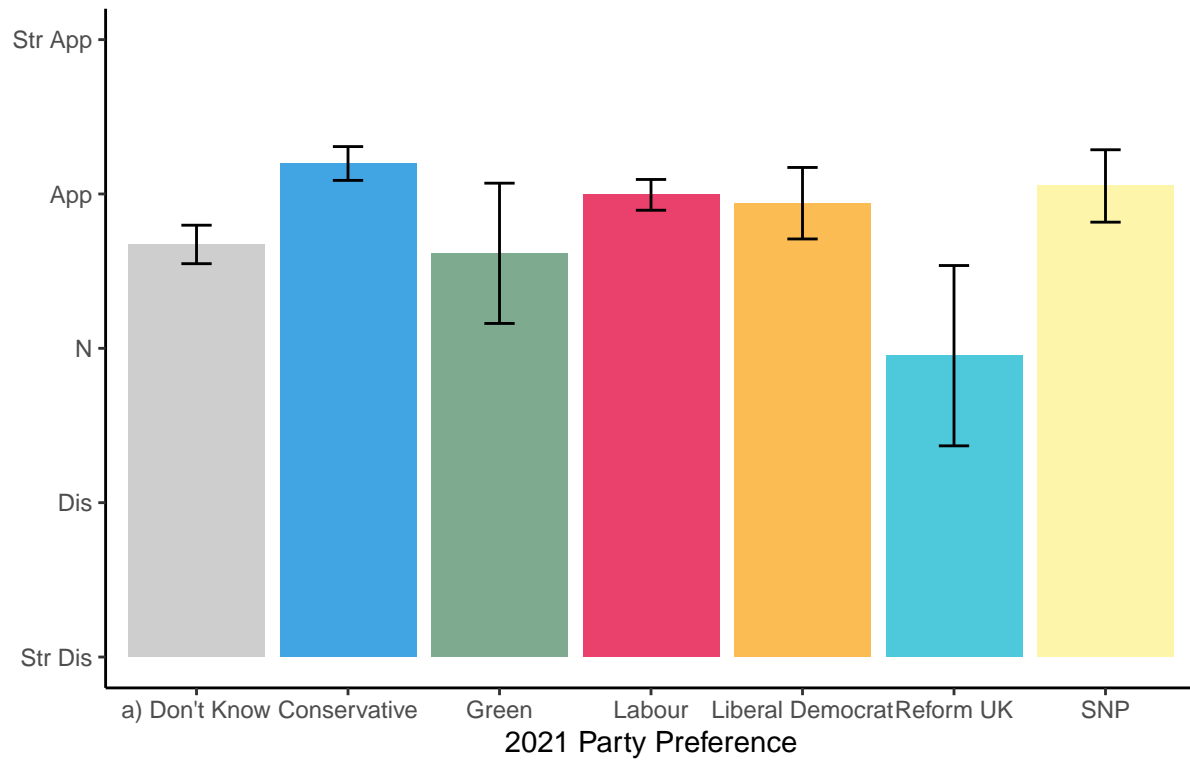


Priority Order

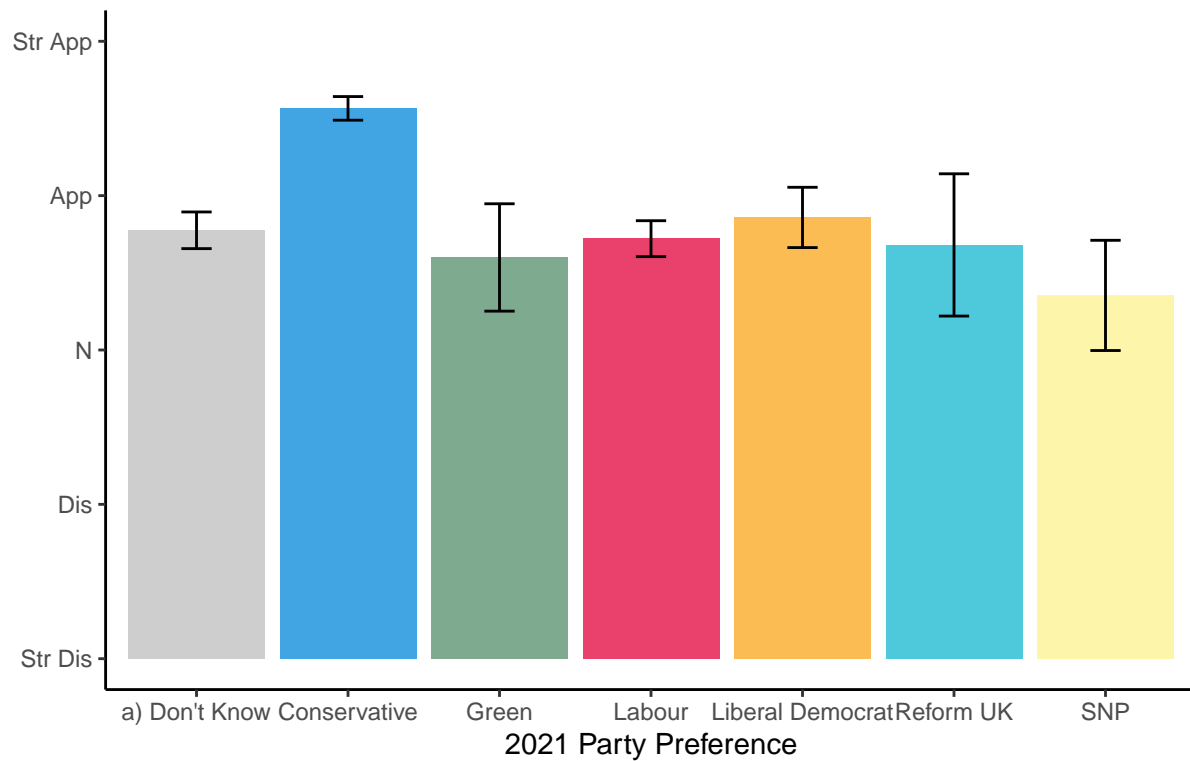


Vote Intention

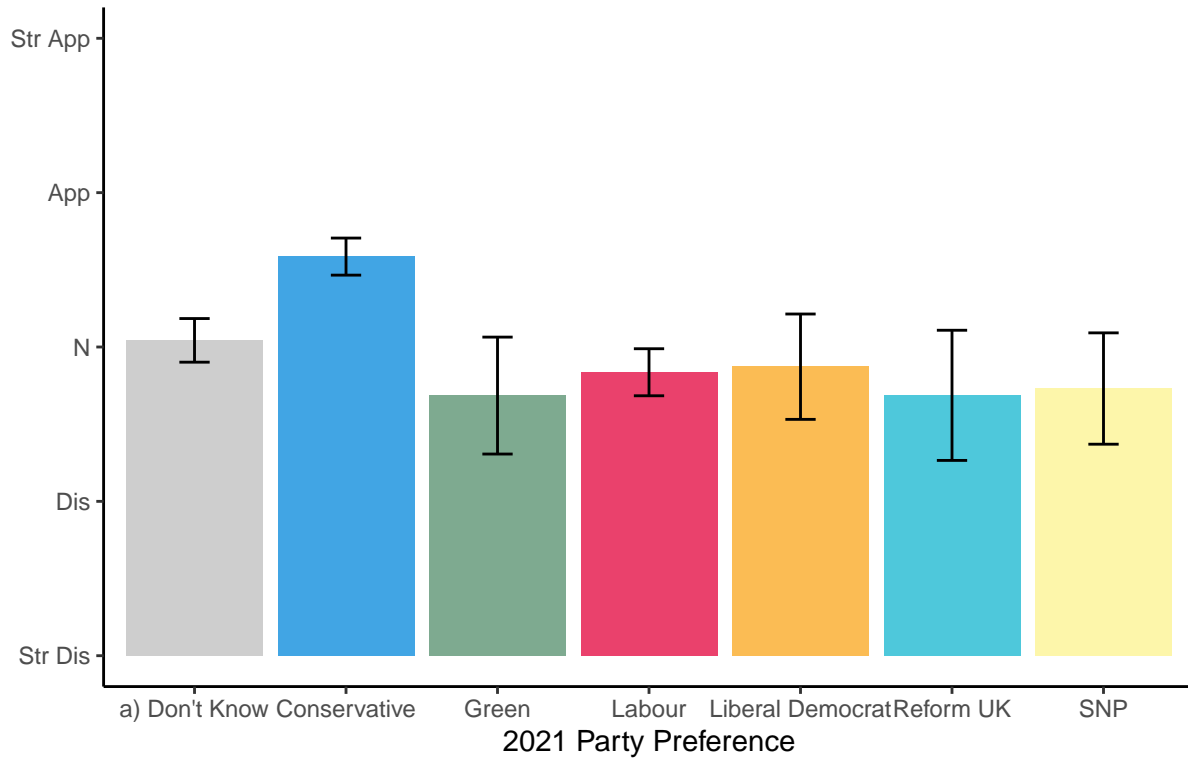
Regulatory Approval



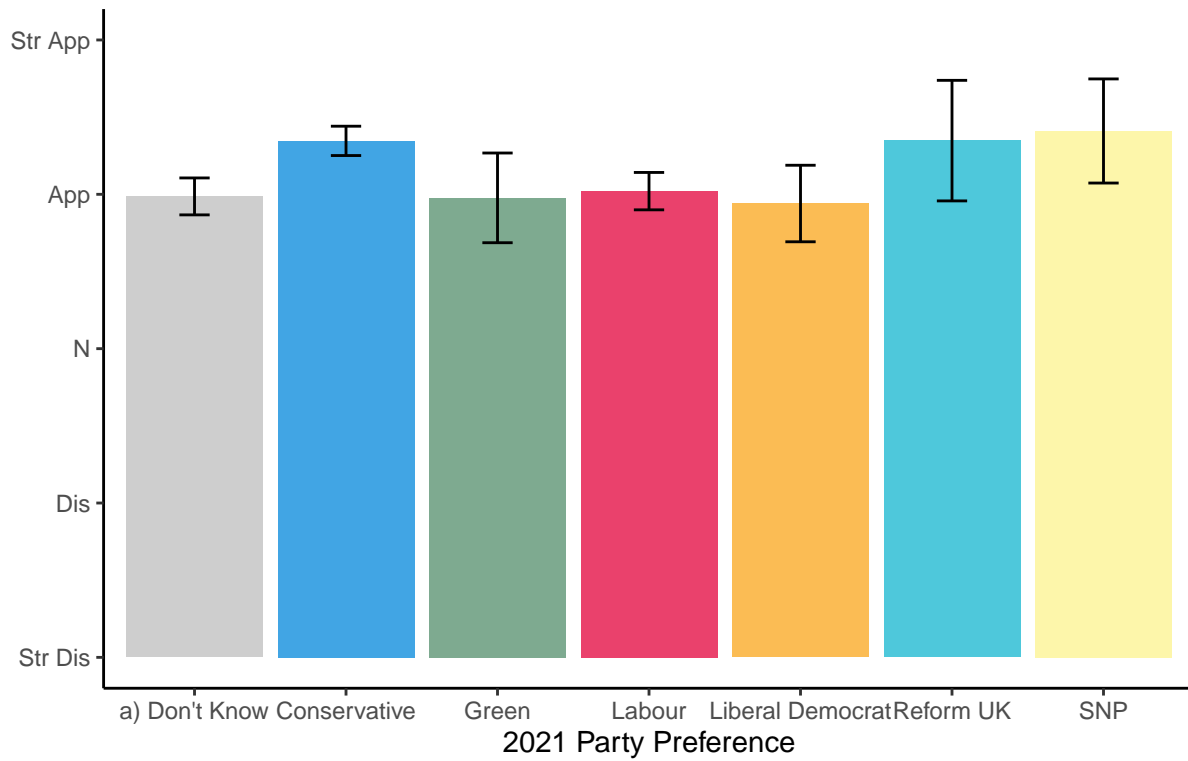
Government Performance



Delay of 2nd Dose

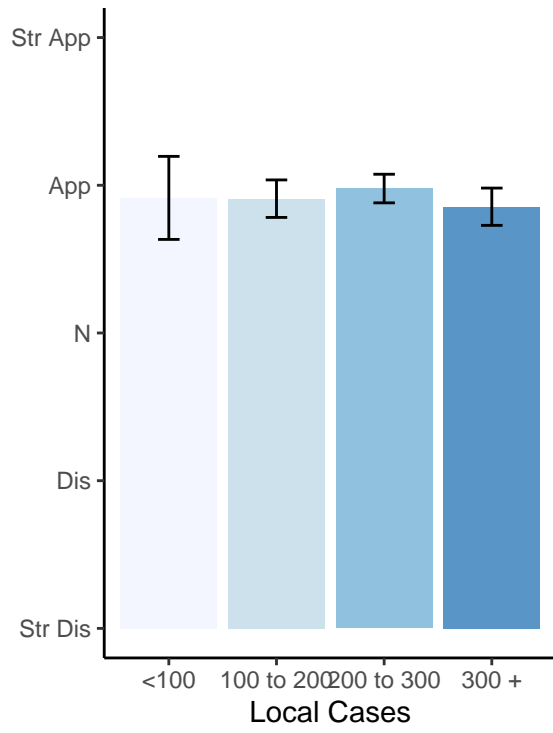


Priority Order

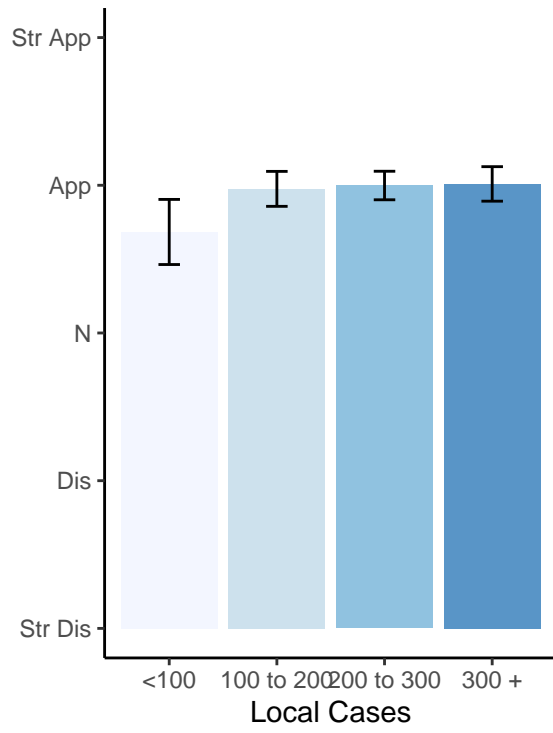


Cases

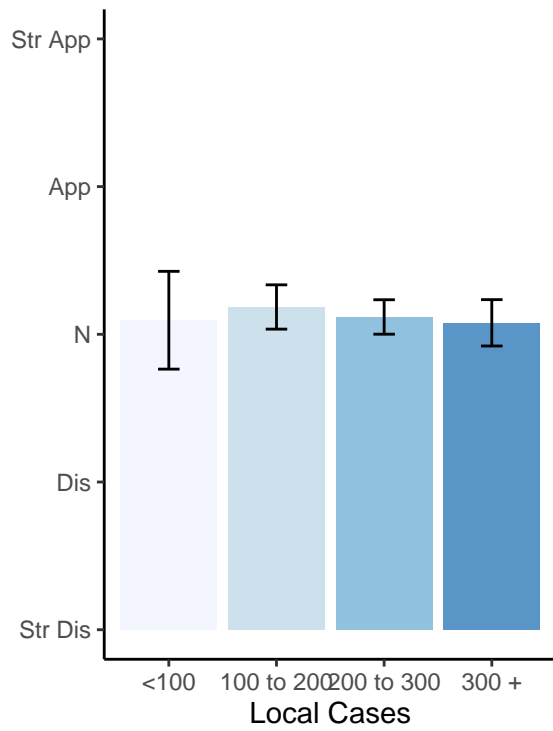
Regulatory Approval



Government Performance



Delay of 2nd Dose



Priority Order

