



## Data report: online surveys Wave 2 & Polish 2021 online survey

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## Abstract

*The MOBILISE project examines why some people respond to discontent by protesting, others by migrating while yet others stay immobile. It focuses Ukraine, Poland, Morocco and Argentina and migrants from these countries who live in Germany, the United Kingdom and Spain. The first part of this paper reports on the second wave of the panel survey among migrants from Argentina, Poland and Ukraine, and the national population of Argentina and Ukraine. Across target groups, 12 to 21 per cent of wave one respondents completed the second wave.. This is higher than might be expected in the absence of interviewer encouragement or material incentives. Analyses of the results suggest attrition bias on age, education and political interest, but these are modest in size. There is no evidence of attrition bias on Facebook use or migration aspiration. The second part of the paper presents the set-up and results of an online survey among migrants from and nationals in Poland in early 2021. The paper compares the results of the migrant surveys in 2019 and 2021 to find that the composition of the samples obtained are very similar, though the cost per respondent in 2021 was considerably higher. The latter is mostly likely a result of a higher ad budget. The online national sample is higher educated, more interested in politics, more active on Facebook, less often supportive of the ruling party and more often aspires to migrate than the face-to-face sample. This mostly replicates the pattern we found in earlier analyses of the Argentinian and Ukrainian online and face-to-face national surveys.*

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## Introduction

The MOBILISE project investigates migration and protest intentions and behaviour as response to discontent in Ukraine, Poland, Morocco and Argentina. It covers both the general population in these countries and migrants who moved to Germany, the United Kingdom or Spain. One of the core data collection methods in the project is a two-wave panel survey. The first part of this report describes the second wave of the online survey data collection among the general population in Argentina and Ukraine, migrants from these two countries and migrants from Poland conducted between December 2020 and January 2022. It explains how respondents were (re)contacted and analyses attrition rates and bias. The set-up of the first wave of these surveys is documented in Ersanilli & Van der Gaag (2020).

The second part the paper describes and analyses the results of a new sample of migrants and the general population from Poland collected in 2021. As with the previous samples, respondents were recruited through ads on Facebook. The paper offers detailed information on the implementation and results of the survey to the benefit of researchers planning to conduct online (panel) surveys and/or users of the MOBILISE data.

## Data collection wave 2

At the end of first wave of the survey, respondents were asked *“We would like to send you another, shorter survey, 12-18 months from now. Would you be willing to participate again?”*. If they indicated willingness to participate they were asked to enter their email address. The email addresses were stored in a Qualtrics contact list together with the response ID. The response ID was meant to allow linking the waves of pseudoanonymized data. The invitation to participate in wave 2 was sent through Qualtrics to all email addresses in the contact list (see Appendix 1 for the text of the invitation email). The email contained a link to the wave 2 questionnaire. Respondents who did not click on the link, were sent reminders through Qualtrics. The timing of the invitation and reminders for each group are shown in Table 1. Most surveys are filled out within 24 hours of the invitation or reminders (see Figure 1). As respondents’ willingness and ability to participate may vary over the week, reminders were sent on different days of the week. Surveys were closed after no new respondents started the survey for several days.

**Table 1. Data collection period and reminders wave 2 surveys**

	Start date	Reminder 1	Reminder 2	Reminder 3	End date
Argentinian migrant	Dec 27, 2021 (Monday)	Jan 3, 2022 (Monday)	Jan 7, 2022 (Friday)	Jan 12, 2022 (Wednesday)	Jan 31, 2022
Argentinian national	Dec 27, 2021	Jan 3, 2022	Jan 7, 2022	Jan 12, 2022	Jan 31, 2022
Polish migrant	Dec 20, 2020 (Sunday)	Jan 4, 2021 (Monday)	Jan 13, 2021 (Wednesday)	N/A	Feb 1, 2021
Ukrainian migrant	Jan 14, 2021 (Thursday)	Jan 21, 2021 (Thursday)	Jan 30, 2021 (Saturday)	Feb 5, 2021 (Friday)	Feb 26, 2021
Ukrainian national	Jan 18, 2021 (Monday)	Jan 22, 2021 (Friday)	Jan 30, 2021 (Saturday)	Feb 5, 2021 (Friday)	Feb 26, 2021

The second wave of the Ukrainian migrant and national surveys and the Polish migrant survey were launched about a year after the first wave (see Table 1 and Ersanilli & Van der Gaag, 2020). For the Argentinian surveys, the second wave was conducted nearly two years after the first wave timed simultaneously with the second wave of data collection in Argentina.

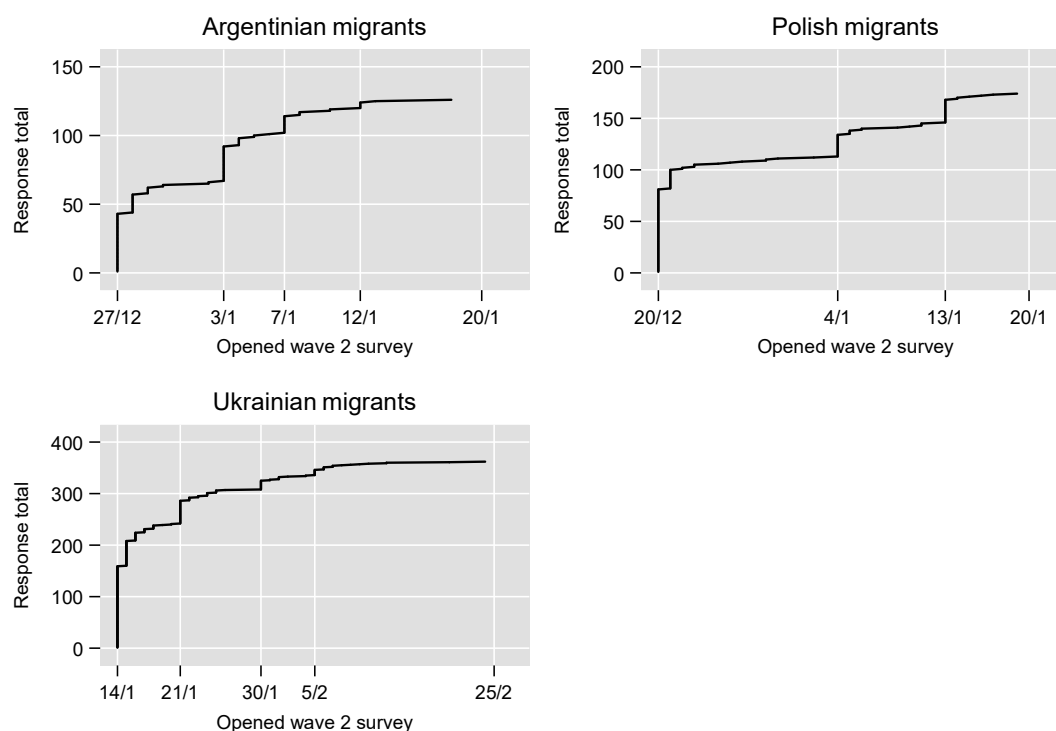
## Response

Qualtrics tracks whether the wave 2 invitation emails are delivered. According to Qualtrics documentation<sup>1</sup>, emails might bounce because the email address does not exist, the recipient servers does not accept emails or is temporarily down or the recipient inbox is full. In the latter two cases, Qualtrics automatically retries sending the email after some time. Table 2 shows the results per survey. For the Polish migrant sample, the number of emails that bounced is substantially higher than for the other samples. The number barely went down over subsequent attempts to send out the email. It is not clear why this is the case. The email addresses provided are not obvious fakes (exceptions include addresses such as [a@bc.de](mailto:a@bc.de)). The high share of bounced emails appears to have substantially lowered the wave 2 response rate for this group.

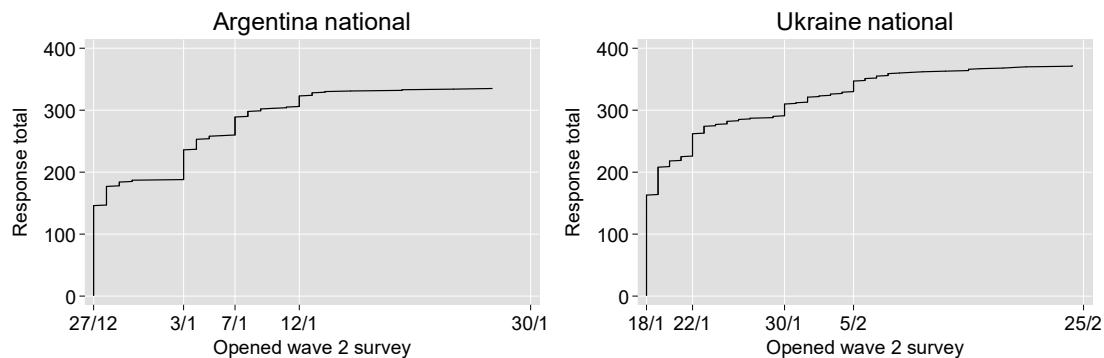
**Table 2. Email delivery success by survey.**

	Poland: migrants	Ukraine: migrants	Ukraine: national	Argentina: migrant	Argentina: national
Email addresses provided, of which	681	713	881	285	944
Incorrect format	0	10	23	0	0
Bounced at first attempt	164	30	59	11	72

Figure 1 shows the increase in total response over time. Sending reminder emails to respondents proved to be effective; there is a jump in response after each reminder.



<sup>1</sup> <https://www.qualtrics.com/support/survey-platform/distributions-module/email-distribution/email-distribution-management/> Last accessed March 3, 2022



**Figure 1. Number of respondents that started survey since invite and reminders.**

*Note: Complete surveys only.*

### Questionnaire

As the purpose of conducting the panel survey is to gauge change over time, the questionnaires mainly repeated questions from wave 1. Following the first data analysis and team discussions, several new questions were introduced. Wave 1 questions on which we do not expect change (e.g. voting in past elections) were dropped, with the exception of year of birth and gender which are used as a rudimentary check of respondent consistency over waves (see further down).

In the period between the two waves, migrant survey respondents may have moved away from the target countries (the United Kingdom, Germany, or Spain). Respondents of the national surveys, on the other hand may have emigrated from Ukraine or Argentina. While these cases were likely to be small in number, they are substantively relevant to the MOBILISE research question. These respondents were therefore offered a subset of the wave 2 questionnaire that was geared towards their new status as return/recent migrant. They were asked their reason for moving, and when they moved.

The median survey duration is close to 20 minutes for all groups (Table 3). It is slightly lower than for the first wave. Some respondents completed the surveys days after first opening the link, skewing the mean duration upwards.

**Table 3. Survey duration in minutes by target group.**

	Median	Mean	SD	Min	Max	N
Argentinian migrant survey	20.6	881.9	3573.6	9.8	18897.7	109
Argentinian national survey	20.4	1138.1	3616.0	9.1	22970.7	286
Polish migrant survey	17.1	64.6	372.2	7.8	4351.5	149
Ukrainian migrant survey	18.7	334.6	1704.1	3.3	16970.6	310
Ukrainian national survey	21.2	278.5	1748.7	7.4	19994.6	323

*Note: Complete wave 2 surveys only.*

At the start of the survey, wave 2 respondents were asked where they live or work, listing only the target country/countries or 'other' as a potential answer. Some respondents mistakenly clicked 'other' in response to this question. In the open answer field they entered, for example, that they live in Dresden, which is in Germany. While the residence country was corrected during data cleaning, these respondents have item missing data. By clicking 'other', these respondents were led to the survey route meant for returnees/new migrants, which had several questions that would not make sense for these respondents' situation. This happened to two people in the Ukrainian migrant survey and to 18 people in the Ukrainian national survey. In the Polish and

Argentinian migrant surveys this did not occur. Table 4 shows that, as expected, the share of respondents who moved country between waves is low.

**Table 4. Moved country between waves**

	Argentina: migrants	Argentina: national	Poland: migrants	Ukraine: migrants	Ukraine: national
No change	91.7%	99.3%	97.3%	94.8%	100%
Return to origin	0.9%	-	0.7%	2.9%	-
Move to other country	7.3%	-	2.0%	2.3%	-
Leave origin	-	0.7%	-	-	0%
<i>N</i>	109	286	149	310	323

*Note: Completed wave 2 surveys only*

## Language

As for the first wave, the questionnaires for the second wave were available in the language(s) of the target group as well as in English. The Ukrainian survey was offered in Ukrainian, Russian, and English. Table 5 shows the language use per survey. The dispersion of language use is different from wave 1. For example, in the first wave, 99% of respondents of the Polish migrant survey filled out the survey in Polish, compared to 87% in the second wave. Further analyses show that all but one respondent who filled out the second wave in English, selected Polish in the first wave. The change in language is most likely due to how the survey link was distributed: in the first wave the URL distributed through the Facebook ads led directly to the survey in Polish. In the second wave the survey link was provide through emails, with Qualtrics generating a unique ID-based URL for each respondent. This URL led to the English language version. It was not possible to edit the URL to direct respondents to the Polish version. As a result, the survey was shown in English with the possibility to switch languages manually if the respondent desired. The first line of the survey text informed respondents in the language of their origin country how they could switch languages in the survey. While most respondents have done this, a minority did not.

**Table 5. Language use by survey.**

	<i>Migrant survey</i>	<i>N</i>	<i>National online survey</i>	<i>N</i>
Argentina	Spanish (98%) English (2%)	109	Spanish (97%) English (3%)	286
Poland	Polish (88%) English (12%)	149	N/A	
Ukraine	Ukrainian (69%) Russian (24%) English (7%)	310	Ukrainian (68%) Russian (31%) English (1%)	323

*Note: Complete wave 2 surveys only.*

## Matching across waves

In order to merge the first and second wave of the survey, we followed instructions from the Qualtrics survey software used for data collection. Qualtrics suggests generating a random ID for each respondent, and adding that as embedded data to the first wave of the survey. This ID is included in the contact list used to generate the invitations for the second wave and as embedded data in the second wave. The ID can then be used to connect responses from the two waves. When the wave 1 surveys were launched, Qualtrics suggested using a 5-digit ID. As the ID is drawn at random and not checked against previously assigned IDs, the same ID can be assigned to multiple respondents. This issue occurred several times in the MOBILISE dataset. An ID that does not uniquely identify respondents poses a problem for matching data across waves.



To solve the problem for the Ukrainian and Polish data, we added unique 6-digit respondent IDs (*respid*) to the wave1 data. Where possible we added this new unique ID to the wave 2 data, by matching it with the original 5-digit ID generated by Qualtrics. For cases where the 5-digit ID was not unique we used information on the respondent's email address contained in the raw wave1 and wave2 data to ensure the unique IDs were assigned to the same respondents in both waves.

For the Argentinian national and migrant surveys, new unique respondent IDs were assigned before the launch of the second wave of the survey and added to the contact list in Qualtrics. However the old ID rather than the new ID was copied into wave 2. Here too we had to match the new unique ID through the original ID when possible and otherwise with aid of the contact email addresses.

Since the start of the data collection, Qualtrics has changed its instructions and at the time of writing suggests a 12-digit random ID, significantly reducing the odds of ending up with duplicate IDs in the database.

The first wave contained duplicate email addresses and duplicate IP addresses. This suggests that some respondents filled out the survey multiple times (see Ersanilli & Van der Gaag, 2020). In line with other studies (Rosenzweig et al., 2020; Iannelli et al, 2020) we retained only the first (complete) copy of each duplicate email address and/or IP address. For the Ukrainian and Polish surveys the contact list for the wave 2 invitations contained respondents that were dropped during the duplicate removal. Some of these respondents did participate in wave 2. To maintain consistency, their entries<sup>2</sup> have been removed from the wave 2 dataset.

For a panel dataset it is crucial that both waves of the survey are completed by the same respondent. As an email address might be used by multiple people (e.g. by both members of a couple), and an online survey doesn't allow a visual check of who fills out the survey, we use demographic information as a rudimentary check of respondent identity. Respondents were asked for their gender and year of birth in both waves of the survey. Table 6 shows that for over ninety percent of the sample their reported gender and year of birth were the same in both waves. Mismatches in gender or year of birth are not necessarily due to a different respondent filling out the survey; respondents may have deliberately or accidentally clicked on a different gender, or misreported their year of birth. Researchers using the data may consider excluding these cases from their analyses. These cases have been retained for the analyses in this report.

**Table 6. Matching demographic information**

	Argentina: migrant	Argentina: national	Poland: migrants	Ukraine: migrants	Ukraine: national
Gender and year of birth match	94.5%	92.3%	92.0%	95.8%	98.1%
Mismatch year of birth and/or gender	0.9%	7.3%	4.7%	3.2%	1.2%
Missing information in one or more waves	4.6%	0.4%	3.4%	1.0%	0.6%
<i>N</i>	109	286	149	310	323

*Note: Completed surveys only*

## Attrition rate and bias

Attrition is a common issue in panel surveys. Two-thirds of wave 1 respondents agreed to be contacted for the second wave. This high share is remarkable given that the objective of the Facebook campaign was "traffic". Neundorff & Öztürk (2021) find that campaigns aimed at "traffic" result in significantly lower shares of contact details for recontacting than campaigns aimed at "conversion". While a high share of respondents indicated they would be willing to participate in

<sup>2</sup> Case numbers range from 1-4 across POL and UKR surveys.

the second wave, only a small share actually participated. Table 7 shows the share by survey. In some cases respondents may have not received the email invitation for wave 2 – they may have accidentally or deliberately provided an incorrect address or the invitation email was directed to their spam folder. In other cases respondents will have lost interest in participation. While the share of respondents who completed the second wave is modest, it is higher than might be expected given the absence of incentives, or an interviewer able to encourage participation.

**Table 7. Attrition rate by survey**

	Argentina: migrant	Argentina: national	Poland: migrants	Ukraine: migrants	Ukraine: national
Not willing to participate in wave 2	44.2%	31.0%	28.1%	33.7%	19.8%
Willing but did not participate	35.3%	51.9%	58.2%	41.7%	62.9%
Started wave 2 but did not complete	2.8%	2.5%	2.0%	3.5%	2.3%
Completed wave 2	17.8%	14.6%	11.7%	21.1%	15.0%
<i>N</i>	615	1,961	1,273	1,470	2,151

*Note: Completed wave 1 surveys only*

While the lower number of cases after attrition reduces the statistical power of analyses, the bigger challenge is that attrition might not be random but linked to respondent characteristics. Attrition bias can lead to biased estimates of developments over time. The following sections explore attrition bias on a set of core socio-demographic and dependent variables.

### ***Socio-demographic variables***

For migrants, we first examined attrition bias related to country of residence. Figure 2 shows there is some variation in the wave 2 completion rate<sup>3</sup> across the three residence countries. Chi-square tests reveal that for Argentinian and Polish migrants the relation is not significant, but there is a significant relationship between residence country and wave 2 completion for Ukrainian migrants<sup>4</sup>: the wave 2 completion rate in Spain is lower than the overall rate across countries.

In the first wave women were overrepresented among all target groups (see Ersanilli & Van der Gaag, 2020). As can be seen in Figure 3 the participation in wave 2 of men and women is similar for all survey groups. For all three migrant groups, chi-square tests reveal no significant relation between gender and wave 2 completion. However in the Argentinian and Ukrainian national surveys there is a significant relation; men are more likely to complete both waves than women<sup>5</sup>.

As pictured in Figure 4, the age structure of wave 2 respondents differs from those who did not participate in wave 2. The box and whisker plots show the age<sup>6</sup> distribution of respectively:

- 1) all wave 1 respondents who indicated in the final wave 1 question that they were unwilling to participate in w2,
- 2) those who indicated they were willing, but did not click on the link in the wave 2 invitation,
- 3) those who clicked on the link but did not complete all questions in the wave2 questionnaire,
- 4) those who completed the wave2 questionnaire and,
- 5) all respondents who completed the w1 questionnaire.

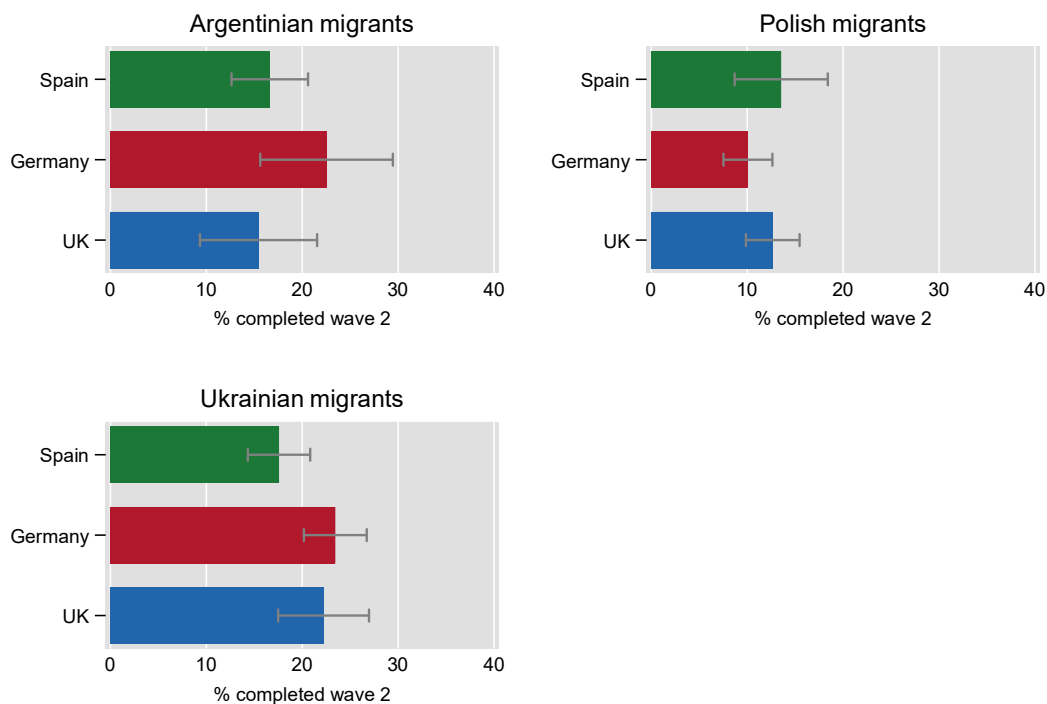
<sup>3</sup> Completion rate is measured as:  $N \text{ completed w2} / N \text{ completed wave 1}$

<sup>4</sup> Argentinian:  $\chi^2(1) = 0.9737$ ,  $Pr = 0.324$ ; Polish:  $\chi^2(1) = 0.0000$ ,  $Pr = 0.996$ ; Ukrainian  $\chi^2(1) = 1.3574$   $Pr = 0.244$

<sup>5</sup> Argentina:  $\chi^2(1) = 4.0994$ ,  $p < .05$ ; Ukraine  $\chi^2(1) = 13.4322$ ,  $p < .001$

<sup>6</sup> Respondents with year of birth before 1930 are excluded from the analysis, based on their implausibility (people aged 90+ filling out surveys they saw on Facebook are likely to be rare)

Results from ANOVAs show that for the Argentinian migrant survey the relation between age and openness to and actual wave 2 participation is not significant<sup>7</sup>. For the Polish migrant survey there is a significant ( $p<.001$ ) difference in the average age across 'attrition groups'. Those who completed wave 2 are on average two years younger ( $yrbrth=1977$ ) than those who completed wave 1 ( $yrbrth=1975$ ). Interestingly, those who indicated we could contact them but did not participate are on average two years older ( $yrbrth=1973$ ) than those who completed wave 1. For Ukrainian migrants, the difference is also significant ( $p<.001$ ). Those who completed wave 2 are on average three years younger ( $yrbrth=1982$ ) than those who completed wave 1 ( $yrbrth=1979$ ). As for Polish migrants, Ukrainian migrants who indicated we could contact them but who did not participate are on average two years older ( $yrbrth=1977$ ) than those who completed wave 1. The pattern is similar for the Ukrainian national survey. There is a significant relation<sup>8</sup> between attrition type and age; respondents who completed wave 2 are on average 3.5 years younger ( $yrbrth=1970$ ) than those who completed wave 1 ( $yrbrth=1966$ ) and respondents who indicated we could contact them but did not participate are on average 1 year older ( $yrbrth=1965$ ) than those who completed wave 1. For the Argentinian national survey, the age structure of wave 1 and wave 2 participants is very similar. For most groups we thus find attrition bias by age with older respondents dropping out more frequently.

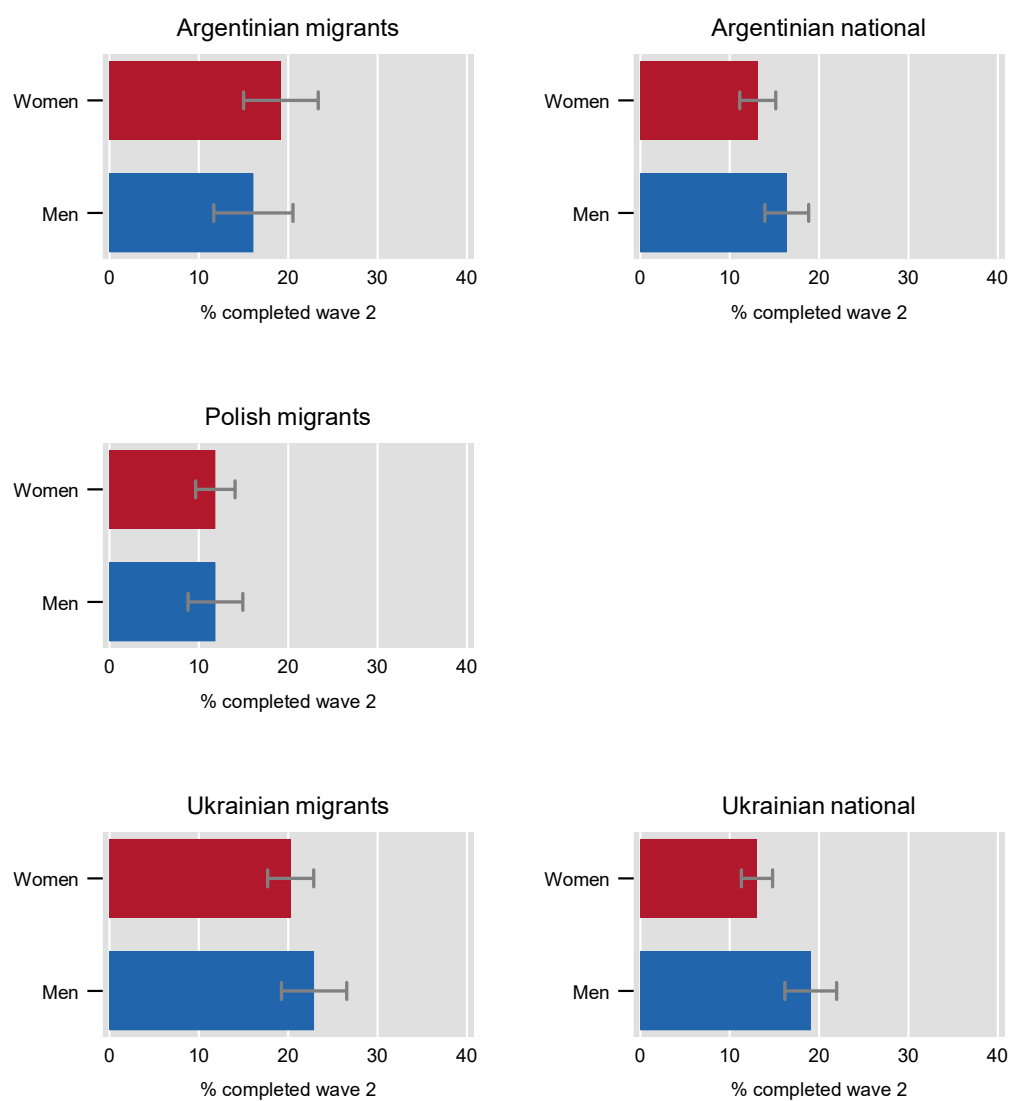


**Figure 2. Completion of wave 2 by residence country with 95% confidence interval**

*Note: Of completed wave 1 surveys*

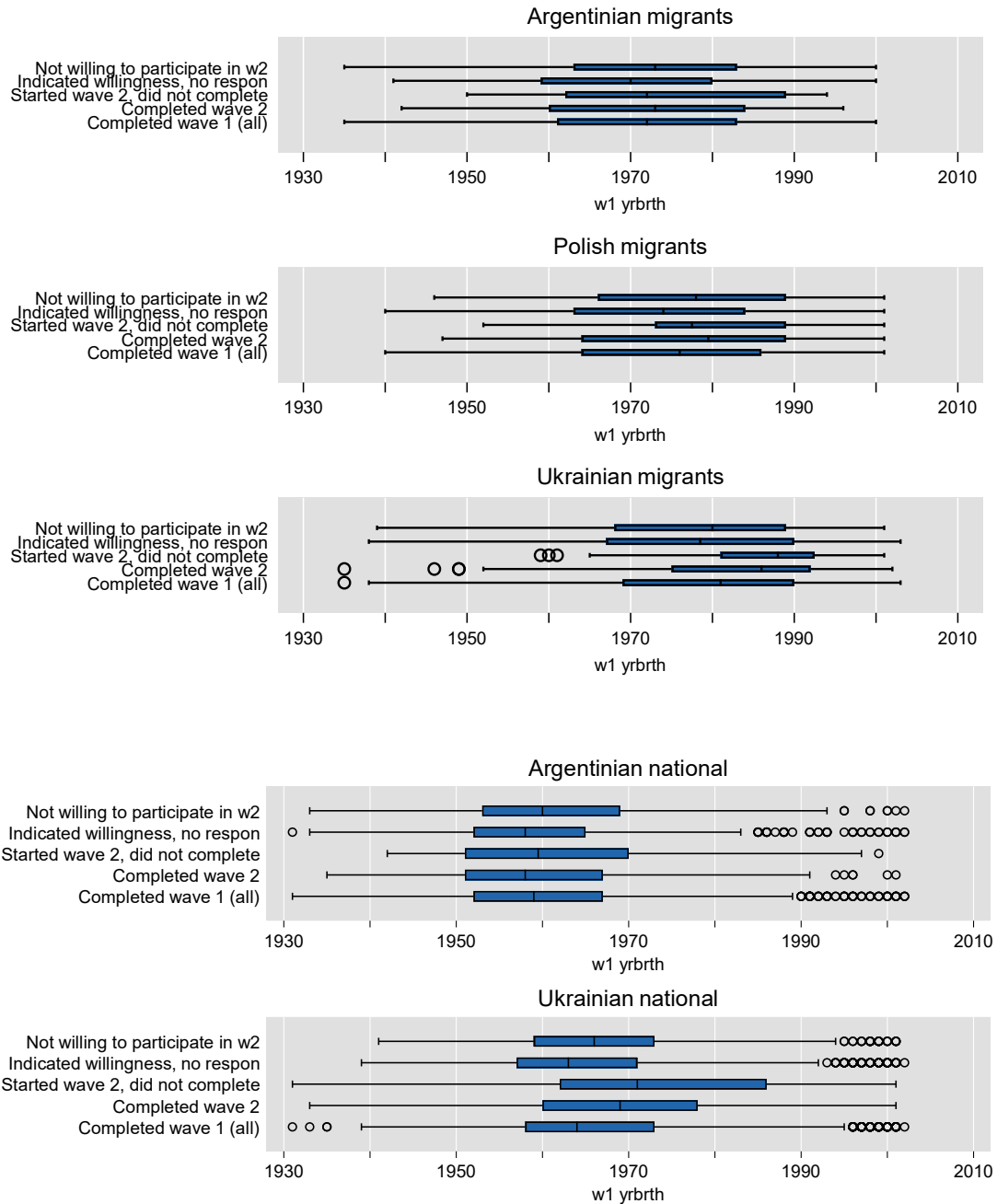
<sup>7</sup> Argentinian migrants:  $F(3,610)=1.22$ ,  $p=.30$ ; Polish migrants,  $F(3,1201)=8.81$ ,  $p<.001$ ; Ukrainian migrants,  $F(3,1448)=14.24$ ,  $p<.001$ .

<sup>8</sup> Argentina national:  $F(3,1946)$ ,  $p<.05$ ; Ukraine national:  $F(3,2138)=18.06$ ,  $p<.001$



**Figure 3. Wave 2 completion by gender with 95% confidence interval**

*Note: Of completed wave 1 surveys*

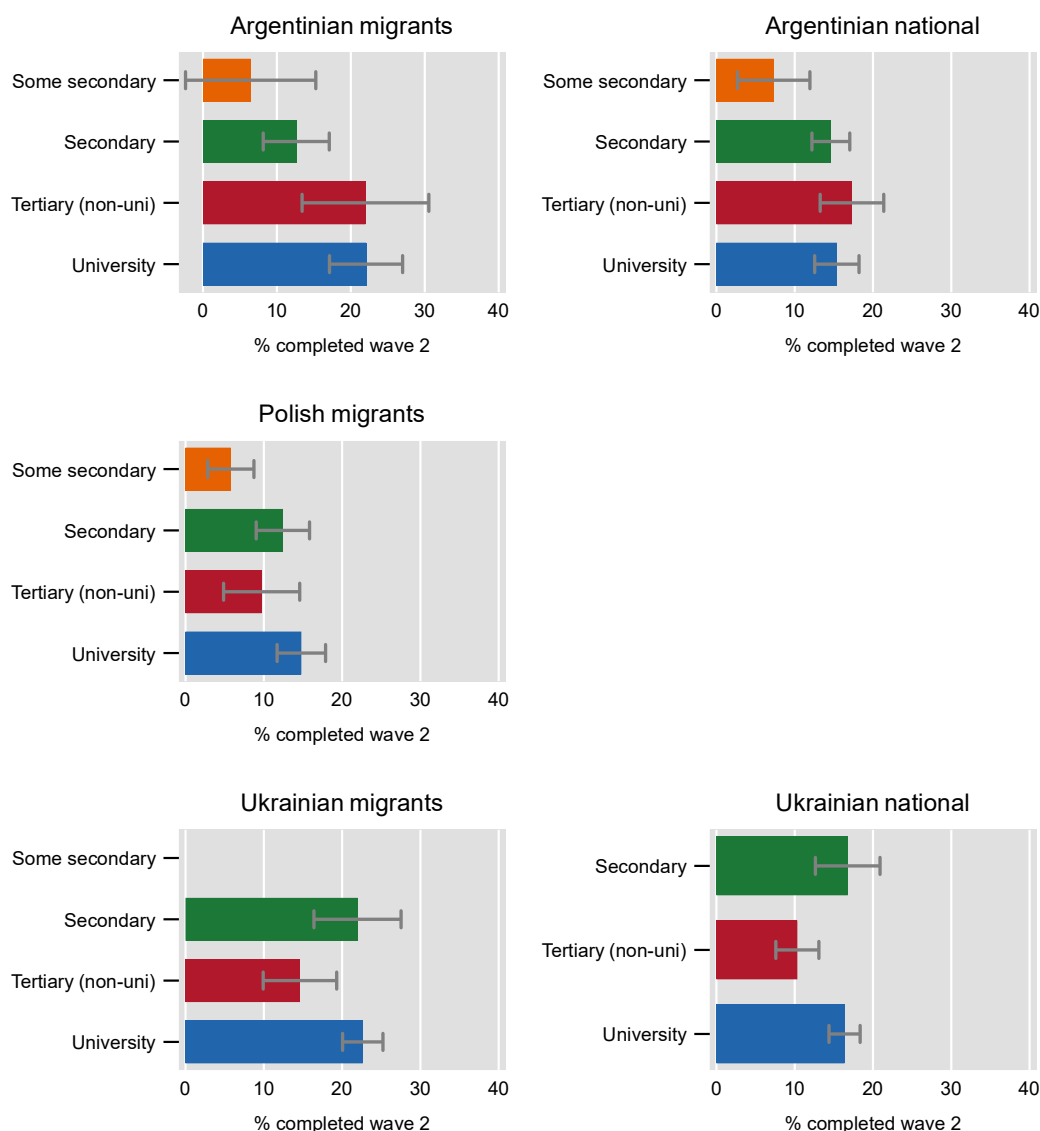


**Figure 4. Attrition by year of birth. Box & whiskers plots.**

*Note: Of completed wave 1 surveys*

As is often the case in samples recruited through Facebook ads (see e.g. Neundorff & Öztürk, 2021), the samples in the MOBILISE study were biased towards the higher educated. Figure 5 shows wave 2 completion rate by level of education. Chi-square tests reveal that the relationship between education level and wave 2 completion is significant for all surveys, except the Argentina

national online survey<sup>9</sup>. It is important to note that the category “tertiary non-uni” in the Ukrainian migrant and national survey was broad and may therefore have been ambiguous. While the tests show a relation between education and wave2 completion, the relation is not simply linear, as can be seen in graphs in Figure 5. This remains after controlling for age and gender (see Appendix 2, Table A2.1.)



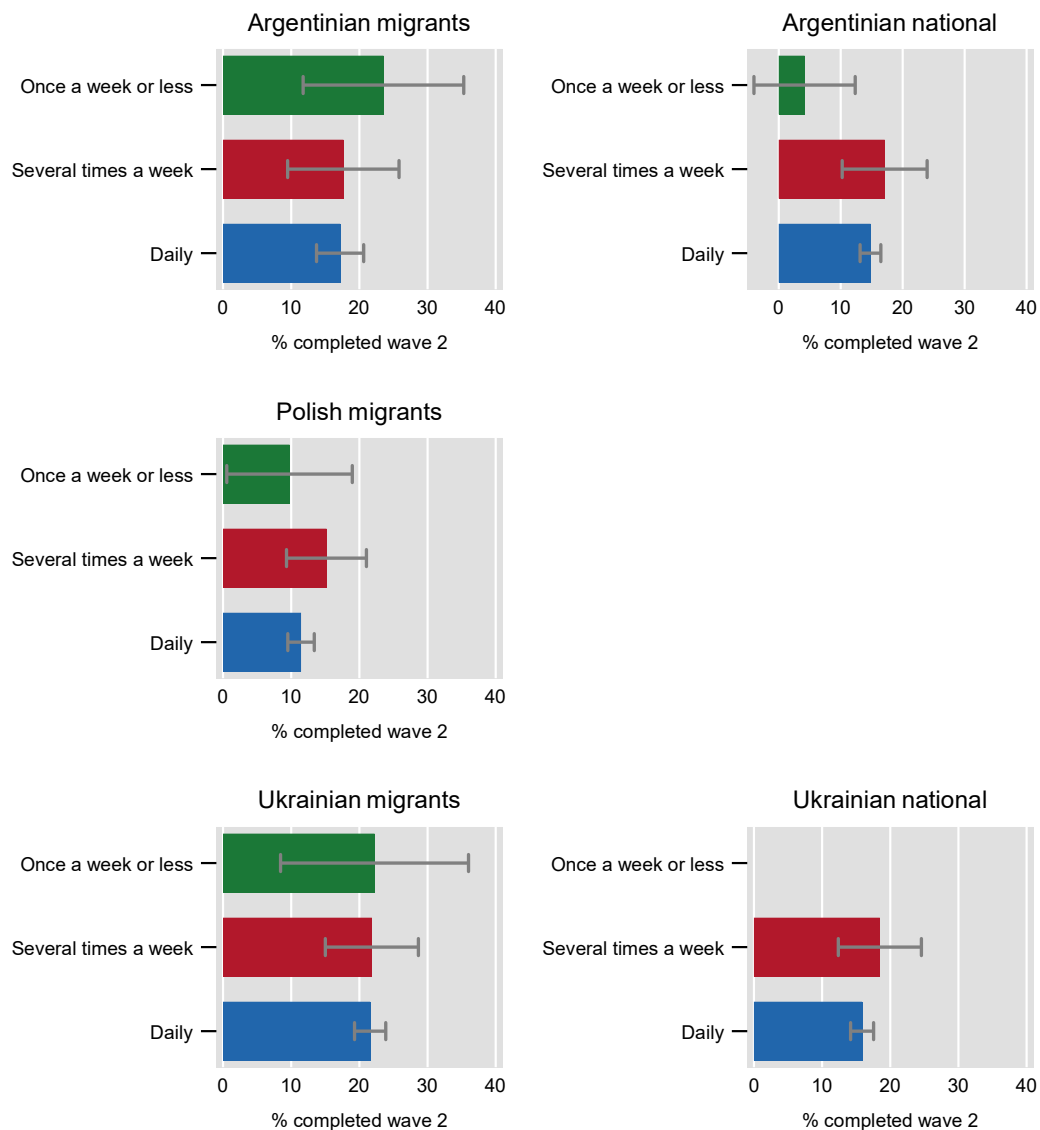
**Figure 5. Wave 2 completion by level of completed education with 95% confidence intervals**

*Notes: completed wave 1 surveys only. Primary education, and, for Ukraine national, incomplete secondary education are excluded as  $N < 10$ . None of the respondents from the Ukrainian migrant survey with incomplete secondary education, participated in wave 2.*

<sup>9</sup> Argentinian migrants:  $\chi^2(3)=11.0466$ ,  $p < .05$ ; Polish migrants  $\chi^2(3)=13.5188$ ,  $p < .01$ ; Ukrainian migrants  $\chi^2(3)=9.4451$ ,  $p < .05$ . Argentina national:  $\chi^2(3)= 7.2947$ ,  $p = 0.063$ ; Ukraine national:  $\chi^2(3)= 10.8726$ ,  $p < .05$

## Facebook use

As the wave 1 respondents were recruited via Facebook ads, they are generally frequent Facebook users. The comparison between respondents of the national face-to-face and online surveys in Argentina and Ukraine showed that frequent Facebook users are overrepresented in the online samples. As Figure 6 shows, the wave 2 completion rate shows minor variation by Facebook usage at the time of the first survey. Chi-square tests show the relation between frequency of Facebook and wave 2 completion is not significant.

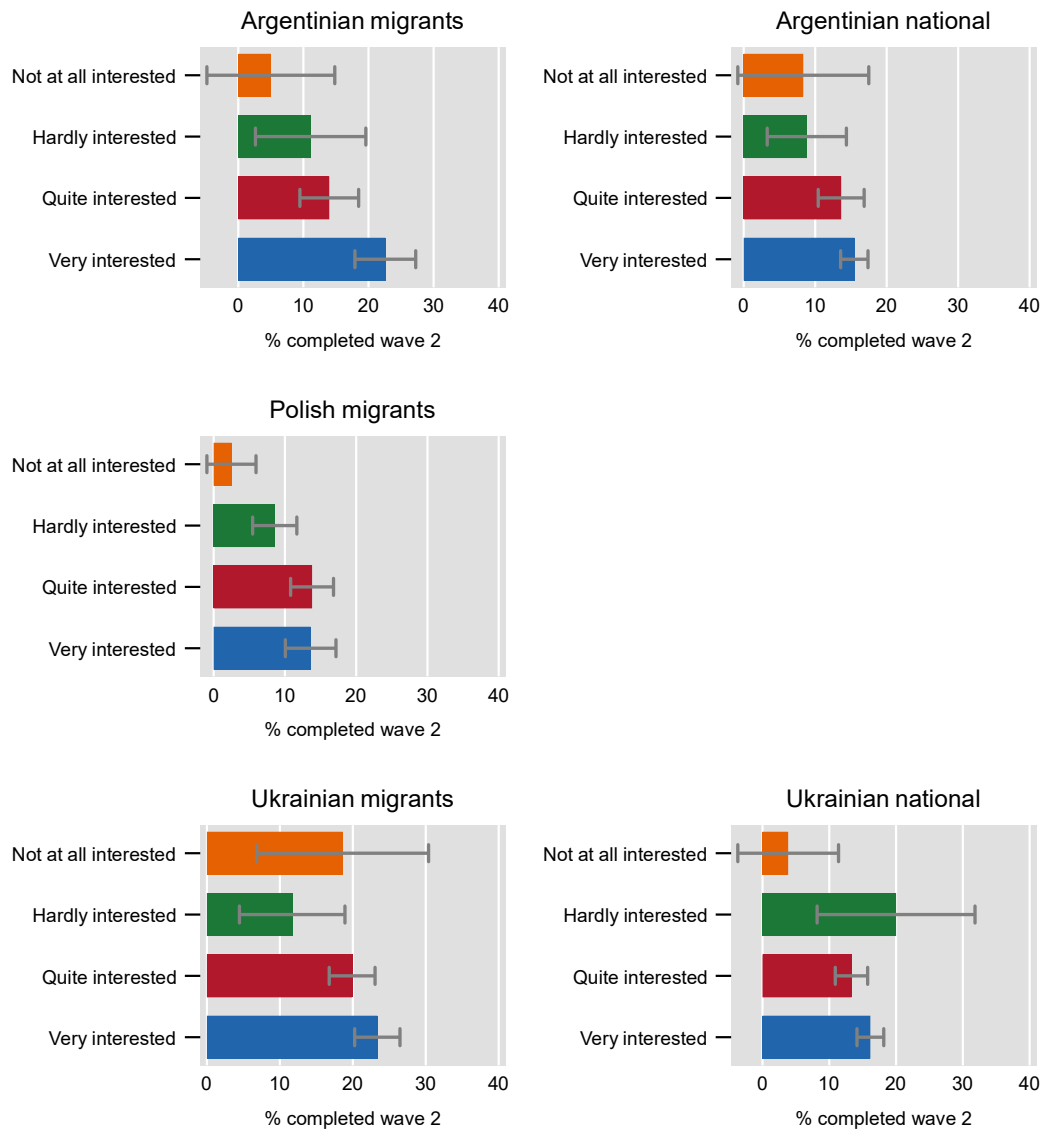


**Figure 6. Wave 2 completion by Facebook use at the time of wave 1, with 95% confidence intervals**

*Notes: completed wave 1 surveys only. The categories “never”, “less than once a week”, and “once a week” contain comparatively few cases and have therefore been merged. For the Ukrainian national survey, none of the wave 1 respondents who use Facebook once a week or less (N=12) participated in wave 2, therefore this group is not displayed in the graph.*

## Political interest

Political interest among respondents of the first wave was high. In the national surveys online respondents were more interested in politics than respondents of the face-to-face surveys (Ersanilli & Van der Gaag, 2020). Neundorf & Öztürk (2021) also found that participants recruited through Facebook ads in their four country survey showed more political interest than national representative samples.



**Figure 7. Wave 2 completion by level of political interest at wave 1 with 95%CI**

*Note: completed wave 1 surveys only.*

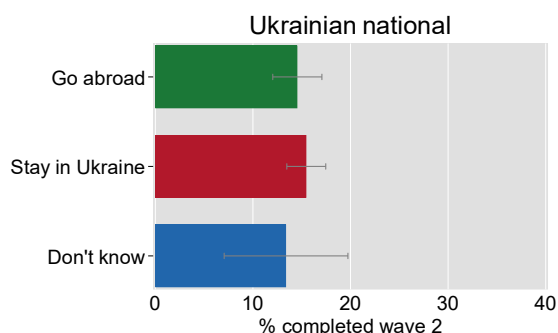
Figure 7 shows the wave 2 participation rate by level of political interest (as reported in wave 1). The figure suggests attrition bias in political interest, mostly enlarging the bias already present in the first wave. Logistic regression analyses shows that Argentinian migrants who are “quite” ( $p < .05$ ) and “not at all” ( $p < .10$ ) interested in politics are significantly less likely to complete the wave 2 questionnaire compared to those “very interested”. Differences remain after controlling



for level of education. Polish migrants who are “Not at all” ( $p < .05$ ) and “hardly” ( $p < .10$ ) interested in politics are significantly less likely to complete the wave 2 questionnaire than those “very interested”. Education level partly explains this relation (see Appendix Table A2.2). The pattern for Ukrainian migrants is slightly different. Ukrainian migrants who are “quite” or “hardly” interested are significantly less likely (both  $p < .05$ ) to participate than those “very” interested, but difference between those “not at all” with “very” is not significant. Controlling for education does not change these findings. For the Argentinian national survey none of the differences in wave 2 participation between political interest levels are significant at the  $p < .05$  level. For the Ukrainian national survey, only the difference between “quit” and “very” is significant after controlling for education. As can be seen from the large confidence intervals, the number of respondents in the lower political interest categories are comparatively low. The absence of differences in wave 2 completion between political interest levels should therefore be interpreted with care.

### ***Migration aspiration***

One of the key variables in the national survey is migration aspirations. This variable was included in wave 1 for the online survey in Ukraine but not Argentina. Figure 8 show completion of wave 2 by migration aspiration in wave 1. The ‘don’t know’ category is included as it is comparative large (over 5% of completed w1 surveys). There is no attrition bias on this variable.



**Figure 8. Wave 2 completion by migration aspiration with 95% confidence intervals**

*Note: completed wave 1 surveys only.*

## Polish 2021 national & migrant survey

Protests are one of the key variables in the MOBILISE project. There was a spark in protests in Poland in response to a Constitutional Tribunal ruling on October 20, 2020 restricting the right to abortion. The MOBILISE team launched an online survey to gather information about protest participants, the general population of Poland and Polish migrants. Respondents were recruited via Facebook ads. The survey and ad campaign were organised and run by Piotr Goldstein, Karolina Lebek and Olga Onuch. This paper reports only on the ads targeting migrants and the general population. The design and results from the ads targeting protesters will be discussed in a separate paper that also presents the strategy and outcomes of a survey targeting protesters in and from Belarus in 2020.

### *Questionnaire*

The survey was programmed in Survey Monkey. The questionnaire offered multiple routes fitting the respondents' situation; i.e. living in Poland, or abroad. This is different from the earlier online surveys which offered separate questionnaires for nationals and migrants.

The questionnaire was available in both Polish and English. The link to the survey was set up to lead to the Polish language version. For respondents who switched from Polish to English<sup>10</sup>, it is not possible to determine through which link (Facebook ad) they arrived at the survey. Given the focus on the performance of the Facebook ads, these respondents are excluded from the analyses in this paper.

### *Facebook ads*

The ads were run from a different ad account from the 2019 ads. Ad-sets were set-up in Facebook with separate ads to attract the different target groups. Migrants are again defined as people born in Poland but currently residing abroad. While the survey population includes all migrants, this report only examines the success of the ads and any bias in recruiting migrants living in the three MOBILISE target destination countries, Germany, Spain and the UK.

As in 2019, the ads were again launched from the MOBILISE project Facebook page, using the same images as in the first round (see Appendix 3). The ad text was slightly different from the 2019 round. The ads targeting migrants read<sup>11</sup>:

*Headline:* Sociological study

*Body text:* Have you come from Poland and live in [target country]? We invite you to participate in an international research project

The ads targeting the general population read:

*Headline:* Sociological study

*Body text:* Do you live in Poland? We invite you to participate in an international research project

Participants were not offered any (financial) incentives for their participation.

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<sup>10</sup> 103 respondents changed the survey language from Polish to English, out of which 46 completed the survey. Most of these respondents resided in the UK (37) or Poland (38).

<sup>11</sup> The ads in 2019 read: *Headline:* Poles abroad; *Body text:* Were you born in Poland and live in Germany, Great Britain or Spain? If so, please complete the survey!; *Link description:* We invite you to complete the survey!

As in 2019, the campaign aim of the ads was to ‘traffic’. Having learned from the 2019 MOBILISE surveys, separate Facebook ads were set-up to target each of the three destination countries in MOBILISE. The campaign used a daily ad budget of 30 EUR for each of the three ads targeting migrants. The total ad budget for migrants was nearly a third higher than in the first round of MOBILISE surveys but spent in a shorter time frame: 31 days compared to 68 days in the first round (see Appendix 5). The budget for the national survey was about three times as high as for the national surveys in Ukraine and Argentina and spent in a longer time frame; just over a month compared to 12 and 22 days in Ukraine and Argentina respectively (see Ersanilli & Van der Gaag, 2020). To reduce oversampling of older people, the ads for the national survey targeted different age groups with the ad targeting those aged 18-45 assigned a substantially higher budget than the ad targeting the over 45s and the general ad.

Table 8 shows the performance of the ads in the 2021 round. For the migrant surveys the target population is defined as people born in Poland and living in Germany, Spain or UK<sup>12</sup>. For the national survey the target is defined as people living in Poland (irrespective of age). As we didn’t work with country specific ad-sets in the first wave of the Polish migrant survey, it is difficult to make a direct comparison of ad performance. However a comparison of the totals across the ad-sets of 2021 with that from 2019 suggest similarities as well as some notable differences. Across the three countries, the ads in 2021 had a lower reach; i.e. fewer people were shown the ad on Facebook. However the 2021 ad targeting only UK respondents had a reach about 6 times as large as the ad from 2019.

The share of links clicks among those reached by the ad is comparable; about six percent across the three destination countries (see Appendix 5). Interestingly, while the targeting settings were the same, the share of target group members among all links clicks is lower than in the first round (see Appendix 4). It could be that Facebook adjusted its algorithm, leading to poorer target group identification (see Rampazzo et al, 2021). Alternatively, the small difference in phrasing between the ad headlines – “Sociological study” in round 2 vs “Poles abroad” in wave 1 – may have had little effect on the overall appeal of the ad, but may have attracted different people. Another possibility is that the simultaneous running of ads targeting people in and outside Poland reduced the targeting precision of the ad-sets.

The costs-per-click are higher than in the 2019 round (see Appendix 5). The costs per target group respondent are more than double that in 2019. One possibility is that there was more competition to show ads to the target groups of the survey than in 2019, driving up the price of the ads. Alternatively, the higher budget resulted in the campaign buying more expensive ads.

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<sup>12</sup> The 2021 surveys captures residence through a range of questions. For the purposes of the analysis in this paper, country of residence is captured by “Normally, do you live in Poland or abroad?” and if “abroad”, “In which country do you live in normally?” which were asked midway through the survey. For respondents who did not answer these questions (mainly because they dropped out of the survey) the answer to the questions “Are you currently in Poland?” and “If you are outside of Poland, in which country are you currently based?” were used to determine country of residence. To maximize comparability to the wave 1 report, “target group” includes cross-country hits e.g. respondents living in Germany who clicked on the link in the ad targeting migrants in Spain. This is the case for 7 respondents (completed surveys N=3) in the migrant survey. Migrants from the three target destination countries responding to the ad targeting people in Poland (N=41, completed surveys N=9) and respondents living in Poland recruited via the migrant ads (N=24, completed surveys N=10) are classified as “non-target” for the purposes of this paper, but can of course be included in other types of analyses of the dataset.

**Table 8. Performance of MOBILISE Facebook ads**

	Targeting	Start date	End date	Cost	Reach	Link clicks	Cost-per-click	Opened survey	Answered filter questions	Target group
<b>Migrants</b>	Germany	Jan 29, 2021	March 1, 2021	€ 780.80	61,918	3,416	€ 0.23	889	782	751
	Spain	Jan 29, 2021	March 1, 2021	€ 781.21	16,024	1,737	€ 0.45	343	301	291
	UK	Jan 29, 2021	March 1, 2021	€ 781.57	60,415	2,972	€ 0.26	898	769	739
<b>National</b>	All aged 18+	Dec 26, 2020	Jan 5, 2021	€ 803.55	282,244	6,551	€ 0.12	2,520	2,245	2,204
	Age 18-45	Jan 4, 2021	Feb 1, 2021	€ 1,035.64	497,790	11,924	€ 0.09	1,958	1,429	1,386
	Age 46+	Jan 4, 2021	Feb 1, 2021	€ 351.10	127,464	4,996	€ 0.07	884	678	659

	Targeting	Cost per target group respondent	Completed surveys	% Completed of target group	Cost per completed survey (target group respondent)
<b>Migrants</b>	Germany	€ 1.04	403	53.7%	€ 1.94
	Spain	€ 2.69	139	47.8%	€ 5.62
	UK	€ 1.06	407	55.1%	€ 1.92
<b>National</b>	All aged 18+	€ 0.36	1,263	57.3%	€ 0.64
	Age 18-45	€ 0.75	780	56.3%	€ 1.33
	Age 46+	€ 0.53	313	47.5%	€ 1.12

*Note: 'Target group' is defined as "Born in Poland and living in Germany, Spain or UK" for migrants and "born in and living in Poland" for the national survey ads.*

Table 8 shows the share of completed surveys. For Polish migrants this is considerably higher than in the 2019 round of data collection (around 35% compared to around 50% in 2021), despite the similar median duration of the survey (see Table 6 and Ersanilli & Van der Gaag, 2020). A potential explanation is the high drop-out at the matrix question at the start of the 2019 MOBILISE survey. The lay-out of these questions seems to deter respondents from continuing the survey. The costs per completed survey are nevertheless higher in the 2021 survey; €1.92-€5.62 across destination countries compared to €1.34 in the 2019 survey targeting Polish migrants. This is considerably higher than the €0.45 per completed survey in the 2015-2016 study of Polish migrants by Pötzschke & Braun (2017).

The cost per respondent of the national survey is much higher than for the national online surveys conducted in Argentina and Ukraine; €0.64-€1.33 compared to €0.10 and €0.03-€0.06 respectively. The higher costs might be a result of the larger ad budget, of more competition with other ads in the same period or of the small difference in phrasing of the ad - “Sociological study” rather than “Survey of the Polish population” – attracting fewer people thus requiring the ad to be shown more often to obtain a similar number of respondents.

As the 2021 survey did not collect data on IP addresses or other location data, it is not possible to determine whether the location entered by respondents differs from the location of their IP address. In previous MOBILISE surveys, the match was over ninety per cent (Ersanilli & Van der Gaag, 2021). There is no reason to assume it is (substantially) different for this survey.

### ***Survey duration***

Depending on their migrant status, respondents were routed through the questionnaire differently. The duration for both routes was however similar at a median of around 20 minutes (see Table 9).

**Table 9. Survey duration in minutes by target group.**

	Median	Mean	SD	Min	Max	N
Polish migrant survey	21.6	221.1	1541.8	7.1	22816.9	949
Polish national survey	20.3	125.0	985.8	6.1	23365.7	2356

*Note: Complete surveys only.*

### ***Sample composition and bias***

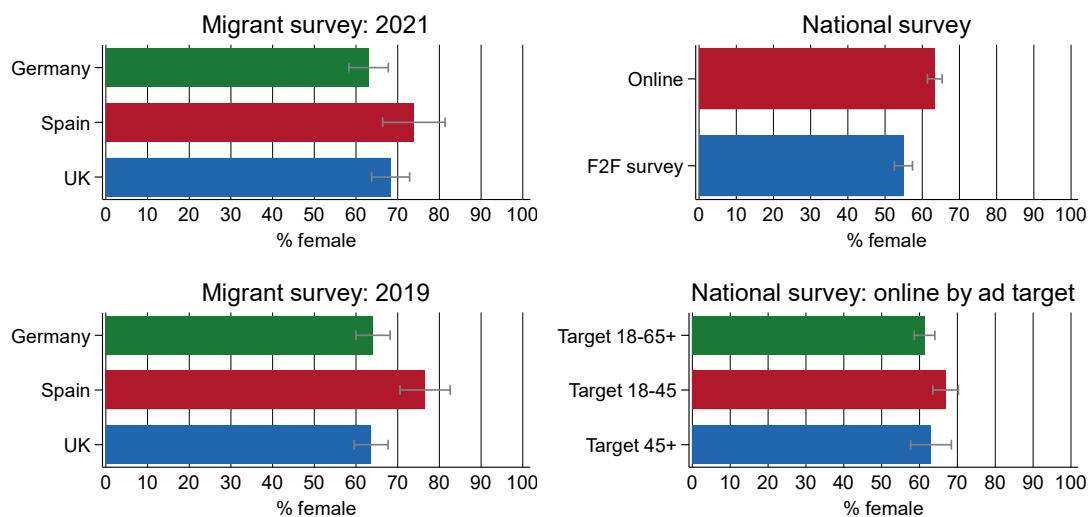
This section discusses the composition of the sample for several socio-demographic, social media and political variables. For the migrant survey, we compare the sample of composition with that of the 2019 survey round. To allow a rough assessment of sampling bias, data from the national sample are compared to unweighted data<sup>13</sup> from the MOBILISE national face-to-face survey conducted in Poland between August 20 and September 24, 2019. For the comparison we only use the main representative sample (N=1,618) from the face-to-face survey, not the booster from the five major urban areas.

#### ***Socio-demographic variables***

As in the previous MOBILISE online surveys, women make up the majority of respondents (see Figure 9). The share of female respondents among migrants in the UK, Germany and Spain is very

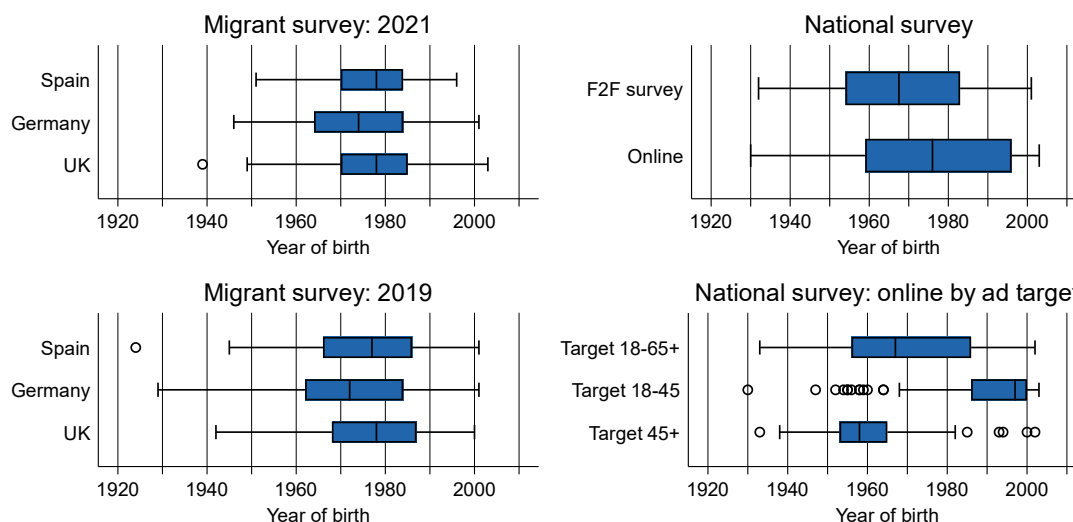
<sup>13</sup> The weights in the f2f data are post-stratification weights voivodship (province) of residence, type of domicile (rural and urban area), sex, age group, education. Similar weights can be constructed for the Facebook data. As the goal is to compare the composition of the samples, weights are left out of the comparative analyses,

similar to that of the 2019 round of the survey, suggesting that women again have been oversampled compared to the respective migrant populations (see Ersanilli & Van der Gaag, 2020). In the first wave of the MOBILISE national face-to-face survey in Poland, women made up 55% of the sample compared to 63% in the online survey. So here too the online survey appears to oversample women.



**Figure 9. % female respondents by residence country (migrant) and survey mode (national) with 95% confidence interval**

*Note: Complete surveys only.*



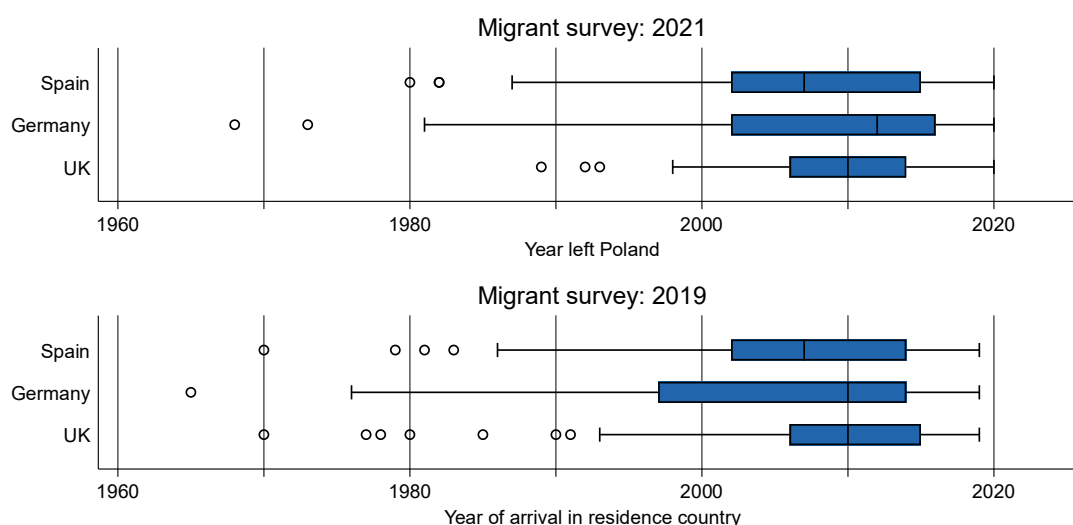
**Figure 10. Year of birth by residence country (migrant) and survey mode (national), box & whiskers plot.**

*Note: Complete surveys only.*

The age structure of the migrant sample is very similar to that in the 2019 round, with the median year of birth lying between 1970 and 1980 for all three residence countries. For Germany the age

structure is again very similar to that of the general Polish migrant population. For the national survey, the sample from the online survey is younger than that of the face-to-face survey. As can be seen from Figure 10, the age targeting of the ads had a marked influence on the age of the sample from the online survey. The ad without age restrictions (18-65+) resulted in a sample with an age structure comparable to that of the face-to-face survey. This contrasts with the findings from the national surveys in Ukraine and Argentina where the online samples were considerably older than the face-to-face samples (Ersanilli & Van der Gaag, 2020). Analyses of the face-to-face samples show that Facebook use decreases with age in all three countries, but that the drop is most pronounced in Poland and least in Argentina. In the Polish face-to-face sample, 77%<sup>14</sup> of 18-30 year olds use FB daily, compared to 20% of those aged 46-65 and 6% of those aged 66 and over. For Ukraine this is 50%, 17% and 5% and for Argentina 65%, 41% and 13% respectively. This suggests the more representative sample in Poland – at least in terms of age – collected through the ad without age targeting, is at least in part a result of the bigger difference in Facebook use between age groups in Poland compensating for a higher participation inclination in older age groups.

In the 2019 round of the Polish migrant survey, a large share of respondents were fairly recent migrants. In the 2021 survey round respondents were asked when they left Poland, rather than when they arrived in their current country of residence. Figure 11 shows that most respondents are relatively recent emigrants. The median year of emigration by country of residence is very close to the median year of arrival reported by respondents in the 2019 round in all three countries of residence.



**Figure 11. Year of emigration by residence country and survey year, box & whiskers plot.**

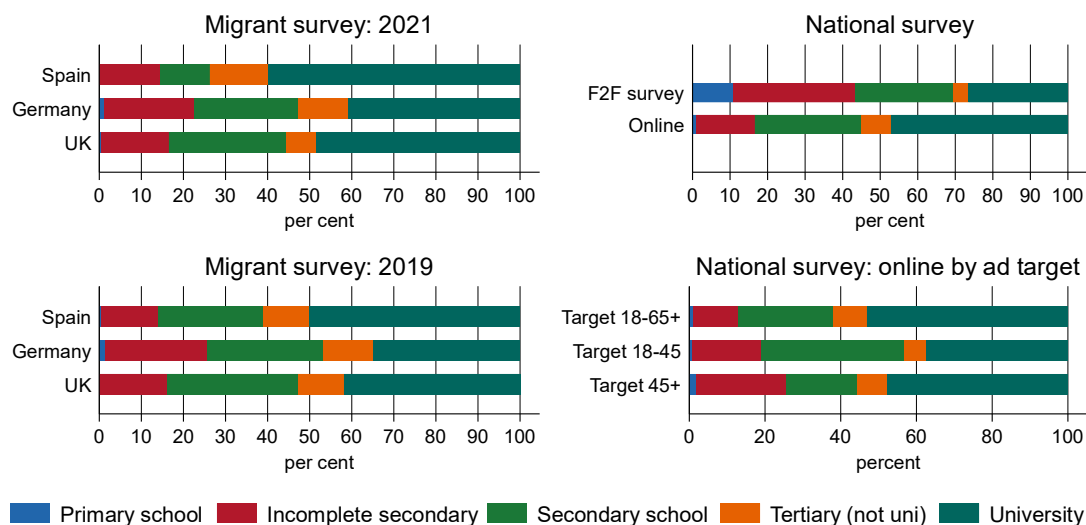
*Note: Complete surveys only. Respondents who entered years prior to 1948 were excluded from the graph.*

Figure 12 shows the education composition<sup>15</sup> of the sample. For migrants the education level is very similar across both rounds of the survey. As in the previous MOBILISE online surveys, the

<sup>14</sup> Calculated as percentage of full sample (excl booster, no weight applied), incl those who don't use social media or internet at all.

<sup>15</sup> Grouped as 1) no school /only elementary; 2) lower level secondary school or higher level without a degree (Gymnasium, Zasadnicze zawodowe (także SPR), Średnie ogólnokształcące bez matury, Średnie zawodowe bez matury); 3) Higher level secondary school with a degree (Średnie ogólnokształcące z maturą,

level of education of respondents is high. For the national survey it is notably higher than in the face-to-face survey. The share of respondents with a university degree is more than twice as high in the online sample compared to the face-to-face sample. This education bias is not a result of the age targeting; all three ads drew an oversample of highly educated respondents.

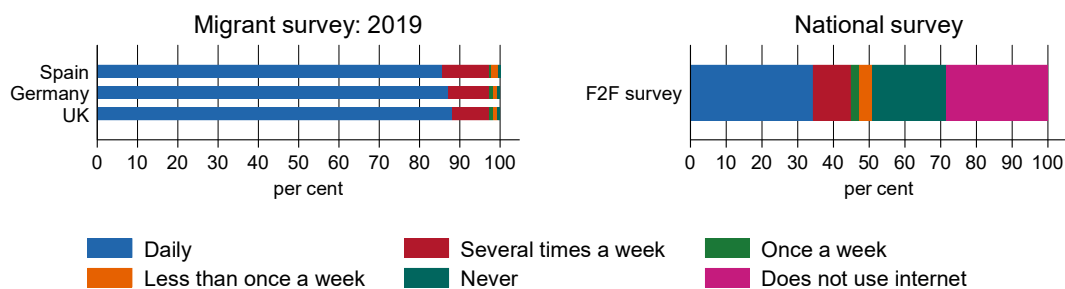


**Figure 12. Level of education attended by residence country (migrant) and survey mode (national)**

*Note: Complete surveys only.*

### Social media use

The 2021 survey did not ask how often people use social media. The results from the 2019 surveys show frequent use among migrant respondents, but less than half of face-to-face survey respondents using social media at least once a week (see Figure 13).



**Figure 13. Social media use by residence country (migrant) and survey mode (national)**

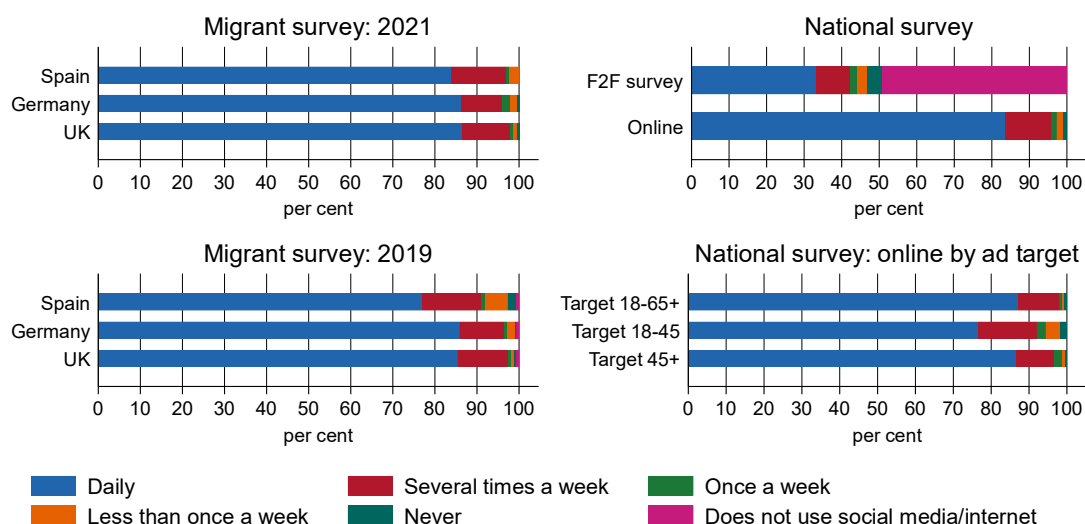
*Note: Complete surveys only.*

Unsurprisingly, Facebook use is high across both rounds of the migrant survey and for the online national survey (see Figure 14). Among 2021 migrant survey respondents, Facebook use is even

Średnie zawodowe z maturą (technikum, liceum zawodowe lub techniczne)); 4) tertiary non-university (Pomaturalne lub policealne); 5) University.



somewhat higher than among 2019 respondents. It seems the higher ad budget and higher cost per respondent did not result in more participation from less frequent Facebook users.



**Figure 14. Facebook use by residence country (migrant) and survey mode (national)**

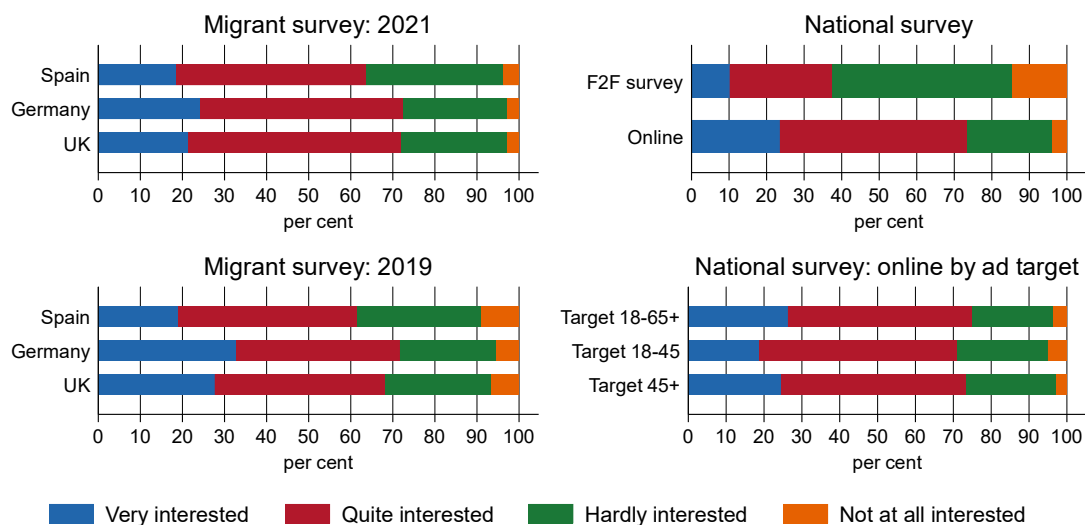
Note: Complete surveys only.

#### Political interest and voting

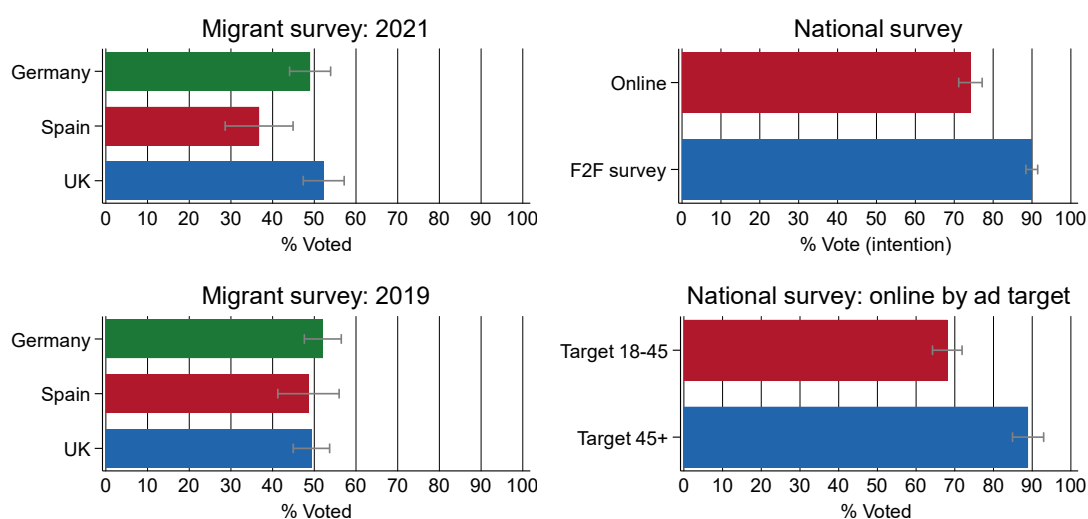
As in the previous MOBILISE migrant and national online surveys, respondents indicate a strong interest in politics. As for the Ukraine and Argentine sample, the Polish national online sample displays a substantially stronger interest in politics than the face-to-face sample. A similar pattern was found in other studies (e.g. Neundorff and Öztürk, 2021). As the 2021 survey data was collected during/after large-scale protests in Poland, it could be that political interest in the population rose compared to 2019. However as the pattern in online vs face-to-face respondents is very similar to the other MOBILISE national (online) surveys, sampling bias is a more likely cause of the stronger political interest among online respondents.

The higher political interest in the national online sample does not translate to a higher electoral participation rate. Face-to-face survey respondents report substantially more electoral participation than online survey respondents. It might be that the face-to-face rate is inflated because it is more sensitive to the social desirability bias in reporting electoral participation than in the online survey (Dahlgaard et al, 2019). We did however not find a similar pattern for the Ukrainian and Argentinian MOBILISE surveys. Furthermore as the face-to-face survey was conducted before the parliamentary elections the face-to-face data report vote *intention* rather than behaviour which may have inflated the rate. Declared participation (intention) among respondents of both the face-to-face and the national survey is considerably higher than the official turn-out of 61.74%<sup>16</sup> (see Figure 16).

<sup>16</sup> <https://sejmsenat2019.pkw.gov.pl/sejmsenat2019/pl/frekwencja/Koniec/sejm/pl/adm> accessed April 14, 2022



**Figure 15. Political interest by residence country (migrant) and survey mode (national)**  
*Note: Complete surveys only.*



**Figure 16. Voted/vote intention in 2019 parliamentary elections by residence country (migrant) and survey mode (national)<sup>17</sup>**  
*Note: Complete surveys only.*

Among those (intending to) vote, supporters of the ruling PIS are overrepresented among the face-to-face sample and underrepresented in the online sample (see Table 10). Among online respondents supporters of the left (Lewica) are strongly overrepresented.

<sup>17</sup> As the vote question was introduced halfway through the data collection for the 2021 online survey, there are too few observations in the 18-65+ target (which was the first ad to run, see Table 8).

**Table 10. Party preference in 2019 parliamentary election by mode.**

	National F2F (intention)	National Online Total	National Online 18-45	National Online 46+	Election results
Prawo i Sprawiedliwość (wraz z Solidarną Polską i Porozumieniem)	58.5%	13.7%	10.0%	20.9%	43.59%
Koalicja Obywatelska (Platforma Obywatelska, Nowoczesna, Zieloni, Inicjatywa Polska)	22.6%	29.5%	18.6%	50.0%	27.40%
Koalicja Polska (Polskie Stronnictwo Ludowe, Kukiz '15)	6.1%	4.9%	6.0%	2.8%	8.55%
Lewica (Sojusz Lewicy Demokratycznej, Wiosna, Razem)	7.9%	38.7%	47.6%	21.4%	12.56%
Konfederacja Wolność i Niepodległość (KORWiN, Ruch Narodowy, Braun)	2.6%	10.9%	14.6%	3.9%	6.81%
Bezpартyjni i Samorządowcy	1.4%				
Skuteczni Liroya-Marca	0.5%				
Prawica	0.5%				
Other party		2.4%	3.2%	1.1%	
<i>I plan to spoil the ballot</i>	0.2%				1.11%
<i>Hard to say</i>	17.8%	2.8%	3.1%	2.4%	
<i>Refuse to answer</i>	2.7%	9.0%	7.9%	10.5%	
<i>N</i>	1,361	603	392	209	

Note: Complete surveys only. Parties' shares as percent of valid votes and answers

**Table 11. Candidate preference in 2020 presidential election by mode.**

	National F2F (Round 1, intention)	Election results (Round 1)	National Online (Round 2) Total	National Online (Round 2) 18-65+	National Online (Round 2) 18-45	National Online (Round 2) 46+	Election results Round 2
Robert Biedron	3.6%	2.22%					
Włodzimierz Czarzasty	0.5%						
Andrzej Duda	57.5%	43.5%	20.6%	22.1%	16.1%	24.1%	51.03%
Jarosław Kaczyński	2.9%						
Janusz Korwin-Mikke	1.2%						
Władysław Kosiniak-Kamysz	2.9%	2.36%					
Paweł Kukiz	1.7%						
Katarzyna Lubnauer	0.2%						
Barbara Nowacka	0.8%						
Ryszard Petru	0.1%						
Grzegorz Schetyna	0.4%						
Beata Szydło	1.7%						
Rafał Trzaskowski	2.1%	30.46%	79.4%	77.9%	83.9%	75.9%	48.97%
Donald Tusk	18.2%						
Adrian Zandberg	0.5%						
Szymon Holownia		13.87%					
Krzysztof Bosak		6.78%					
Stanisław Żółtek		0.23%					
Marek Jakubiak		0.17%					
Paweł Tanajno		0.14%					
Waldemar Witkowski		0.14%					
Mirosław Piotrowski		0.11%					
Other	6.0%						
<i>I plan to spoil the ballot</i>	0.3%	0.3%	2.9%	2.3%	4.0%	2.5%	0.86%
<i>Hard to say</i>	18.5%		0.5%	0.5%	0.7%	0.0%	
<i>Refuse to answer</i>	2.0%		8.5%	8.3%	7.9%	10.6%	
<i>N</i>	1,419		2,019	1,119	618	282	

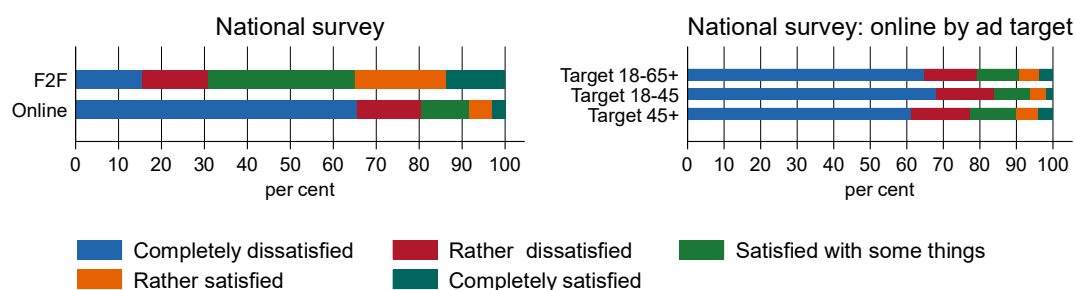
Note: Complete surveys only. Candidates' shares as percent of valid votes and answers.

For the 2020 presidential election, reported vote intention in the face-to-face sample is 87.7%, compared to 85.6% of the online sample reporting having voted in the election. This is again much higher than official turnout; 64.51% for round 1, and 68.18% round 2. Both samples seem biased towards voters, however as noted above voting is often overreported in surveys. Vote intention for the 2020 presidential election was not included in the 2019 migrant survey.

At the time of the face-to-face survey, it wasn't yet known which candidates would run in the presidential election. This makes it difficult to compare reported vote preference with the results from the first round of the election (see Table 11). The lack of knowledge on who the candidates will be may have contributed to the large share of undecided respondents. Trzaskowski belongs to the same party as Tusk. It is plausible that some of those who intended to vote Tusk ended up voting Trzaskowski. There appears to be a similar pattern as for the parliamentary election with this time a more modest overrepresentation of PIS voters in the face-to-face sample and a strong overrepresentation of left/liberal voters in the online survey.

#### *Government satisfaction and political trust*

Satisfaction with the Polish government is vastly higher among respondents of the face-to-face survey compared to the online survey (see Figure 17). It might be that political events between the face-to-face survey in late 2019 and the online survey in early 2021 played a role in this disparity —for example the handling of the COVID pandemic. However, the disparity fits a wider pattern of the online respondents being more often supporters of opposition parties rather than the ruling party.



**Figure 17. Government satisfaction by survey mode (national)**

*Note: Complete surveys only.*

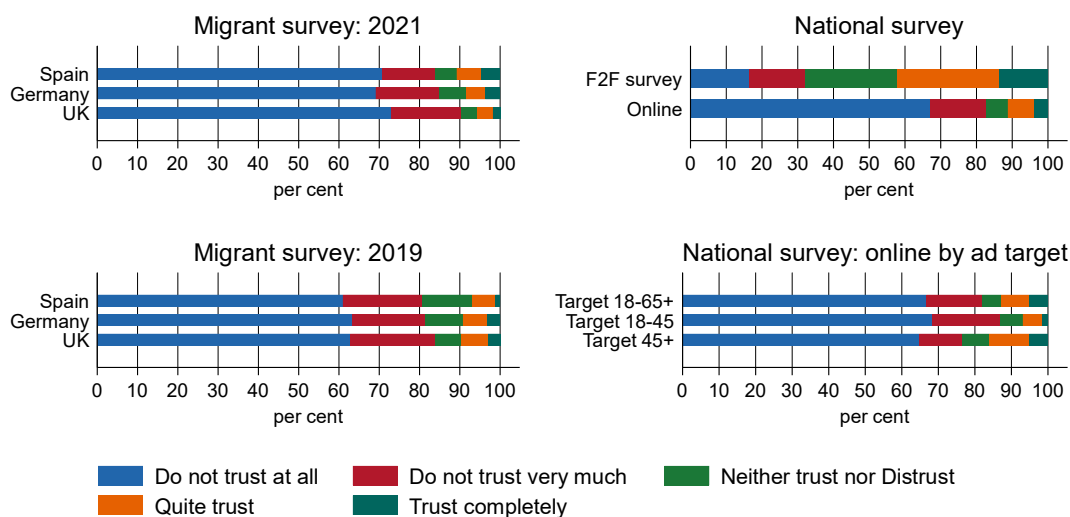
Respondents of the national online survey also have markedly lower trust in the Polish government than respondents of the face-to-face survey (Figure 18). Like satisfaction this may reflect changes in the political situation as well as the lower share of ruling parties voters in the online sample. For migrants, trust in the Polish government is somewhat lower in the 2021 round compared to the 2019 round.

The national survey respondents were also asked how much they trust the European Union. Interestingly the online survey respondents seem to have stronger views and are both more trusting and more distrusting of the European Union than the face-to-face survey respondents (see Figure 19).

#### *Migration aspirations*

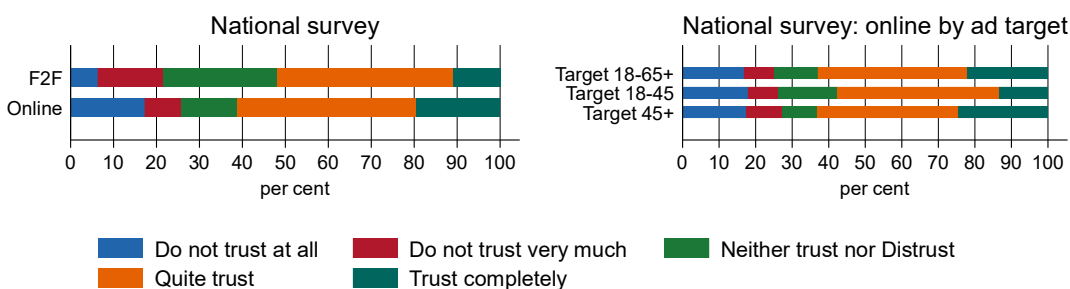
Finally we compared the migration aspirations in the two national sample. As can be seen in Figure 20, online sample respondents more often aspire to migrate than those in the face-to-face

sample. This contrasts the comparison of the Ukrainian online and face-to-face samples which have very similar levels of migration aspirations (Ersanilli & Van der Gaag, 2020).



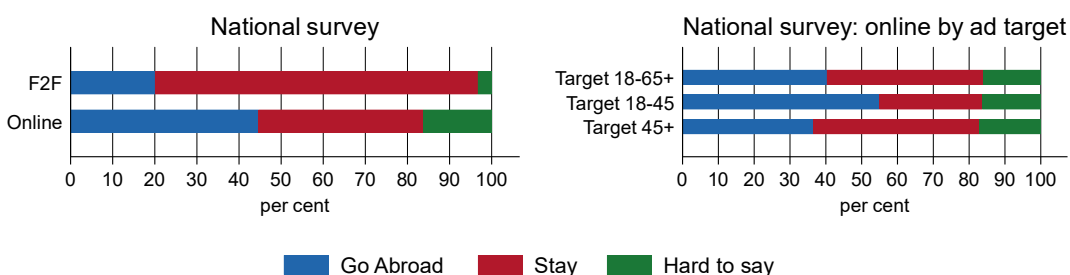
**Figure 18. Trust in the Polish government by residence country (migrant) and survey mode (national)**

Note: Complete surveys only.



**Figure 19. Trust in EU by survey mode (national)**

Note: Complete surveys only.



**Figure 20. Migration aspirations by survey mode (national)**

Note: Complete surveys only.

## Discussion and recommendations

The MOBILISE online survey experience shows FB ads are a cost-efficient way to recruit respondents, including those of hard-to-reach populations such as (recent) migrants. It also shows that a small though substantial share of respondents – ranging from 12-21 per cent across target groups – is willing to participate in a second survey wave. This is particularly striking given the absence of material incentives, interviewers to nudge participation and the large time gap between waves (Lynn, 2018). While face-to-face survey data collection generally results in the lowest attrition rate (Lynn, 2018), online surveys might be particularly suitable for panel surveys of groups with high mobility such as migrants; while people may change email address they are likely to do this less often than changing home address.

Analyses revealed attrition bias on several socio-demographic characteristics and attitudes, however the size of the bias was generally modest.

The MOBILISE project ran ads targeting Polish migrants in Spain, Germany and the UK in both 2019 and 2021. The ad budget in 2021 was substantially higher than in 2019. Analyses suggests the higher budget resulted in a higher cost per respondent, without leading to a substantially different sample composition. While the time gap between the two rounds means that results should be interpreted with care, they may imply that a higher budget may not reduce response bias; more expensive respondents are not necessarily more representative. Researchers considering using FB ads may want to experiment with different budgets to optimise the balance between sample cost and sample quality.

The analyses in this paper offer additional insights into the quality of samples recruited through FB ad recruited for surveys of national populations. The online sample of the Polish national survey differs substantially from that of the national face-to-face survey; it has a higher share of women, higher educated and politically interested. This is in line with what we previously found for the Ukrainian and Argentinian national face-to-face vs online surveys (Ersanilli & Van der Gaag, 2020). Contrary to the surveys in Argentina and Ukraine, we did not find an oversample but an undersample of older people. Future studies are encouraged to look at data on the relation between age and Facebook use before deciding on whether and how to use age targeting in the Facebook ads.

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## Appendices

### ***Appendix 1. Invitation for wave 2***

#### MIGRANT SURVEY

Dear participant,

About a year ago you took part in the MOBILISE survey, which focused on people from [Poland/Ukraine/Argentina] living in Spain, Germany and the United Kingdom.

Because you expressed interest in taking part in the second wave of this project, we would like to invite you to fill out our next survey.

The survey asks questions about your life, politics and other important challenges facing [Poland/Ukraine/Argentina]. Your answers provide us valuable information about people from [Poland/Ukraine/Argentina] living abroad.

#### **Follow this link to the Survey:**

{Take the Survey}

Or copy and paste the URL below into your internet browser:

[URL to survey]

Your participation is greatly appreciated!

MOBILISE team

<https://mobiliseproject.com/>

To opt out of future emails:

Click here to unsubscribe

#### NATIONAL SURVEY

Dear participant,

About a year ago you took part in the MOBILISE survey, which focused on people living in [Ukraine/Argentina]. Because you expressed interest in taking part in the second wave of this project, we would like to invite you to fill out our next survey.

The survey asks questions about your life, politics and other important challenges facing [Ukraine/Argentina].

#### **Follow this link to the Survey:**

{Take the Survey}

Or copy and paste the URL below into your internet browser:

[URL to survey]

Your participation is greatly appreciated!

MOBILISE team

<https://mobiliseproject.com/>

To opt out of future emails:

Click here to unsubscribe



## Appendix 2. Logistic regressions models of attrition bias

**Table A2.1 Logistic regression results the relation between wave 2 completion and demographics**

	ARG mig	POL mig	UKR mig	ARG nat	UKR nat
University (completed)	Ref.	Ref.	Ref.	Ref.	Ref.
Tertiary non-uni (completed)	-0.03 (-0.11)	-0.34 (-1.08)	-0.44* (-2.12)	0.21 (1.14)	-0.57*** (-3.38)
Secondary school (completed)	-0.68** (-2.66)	-0.17 (-0.83)	-0.15 (-0.83)	-0.08 (-0.52)	-0.27 (-1.52)
Some secondary	-1.45† (-1.92)	-0.99** (-3.22)		-0.99** (-2.59)	-0.77 (-0.71)
No more than primary				-1.15† (-1.90)	0.18 (0.16)
Year of birth	-0.00 (-0.51)	0.01* (2.13)	0.02*** (4.46)	-0.01 (-0.97)	0.02*** (5.16)
Female (ref=male)	0.08 (0.39)	-0.19 (-0.97)	-0.22 (-1.63)	-0.32* (-2.43)	-0.44*** (-3.52)
Constant	6.68 (0.43)	-30.93* (-2.25)	-48.27*** (-4.56)	8.69 (0.83)	-47.65*** (-5.30)
<i>N</i>	605	1,179	1,421	1,948	2,122

Note: z-statistics in parentheses, \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , †  $p < 0.10$ . Respondents with no more than primary were dropped from the migrant surveys, because the model predicts failure to complete wave 2 perfectly.

**Table A2.2 Logistic regression results the relation between wave 2 completion and political interest, controlled for education, age and gender**

	ARG mig	POL mig	UKR mig	ARG nat	UKR nat
Very interested	Ref.	Ref.	Ref.	Ref.	Ref.
Quite interested	-0.56* (-2.32)	-0.08 (-0.36)	-0.32* (-2.27)	-0.09 (-0.54)	-0.27* (-1.98)
Hardly interested	-0.90† (-1.94)	-0.53† (-1.96)	-1.19** (-3.03)	-0.52 (-1.44)	0.14 (0.36)
Not at all interested	-1.54 (-1.47)	-1.84* (-2.48)	-0.42 (-1.03)	-0.72 (-1.18)	-1.67 (-1.62)
University (completed)	Ref.	Ref.	Ref.	Ref.	Ref.
Tertiary non-uni (completed)	0.05 (0.17)	-0.28 (-0.90)	-0.37† (-1.76)	0.24 (1.31)	-0.52** (-3.08)
Secondary school (completed)	-0.62* (-2.41)	-0.10 (-0.48)	-0.14 (-0.75)	-0.05 (-0.34)	-0.24 (-1.33)
Some secondary	-1.27† (-1.67)	-0.84** (-2.70)		-0.91* (-2.35)	-0.72 (-0.66)
No more than primary				-1.11† (-1.83)	0.26 (0.23)
Year of birth	-0.00 (-0.03)	0.02* (2.59)	0.03*** (5.17)	-0.00 (-0.74)	0.03*** (5.37)
Female (ref=male)	0.16 (0.73)	-0.06 (-0.32)	-0.18 (-1.27)	-0.31* (-2.36)	-0.40** (-3.17)
Constant	-0.60 (-0.04)	-37.77** (-2.70)	-58.20*** (-5.26)	6.27 (0.60)	-50.83*** (-5.51)
<i>N</i>	603	1,172	1,410	1,942	2,102

Note: z-statistics in parentheses, \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , †  $p < 0.10$ . Respondents with no more than primary were dropped from the migrant surveys, because the model predicts failure to complete wave 2 perfectly.

### Appendix 3. Facebook ads Polish migrant and national online surveys



Figure A3.1. *MOBILISE Facebook ads targeting migrants in Spain, Germany and the UK.*



Figure A3.2. *MOBILISE Facebook ad Polish national survey.*

***Appendix 4. Targeting strategies for MOBILISE Facebook ads 2019 and 2021 compared***

	<b>Location</b>	<b>Age</b>	<b>People who match</b>
<b>2019</b>	Germany, UK, Spain	18 - 65+	Behaviours: Lived in Poland (formerly Expats – Poland)
	UK	18 - 65+	Behaviours: Lived in Poland (formerly Expats – Poland)
<b>2021</b>	Germany	18 - 65+	Behaviours: Lived in Poland (formerly Expats – Poland)
	UK	18 - 65+	Behaviours: Lived in Poland (formerly Expats – Poland)
	Spain	18 - 65+	Behaviours: Lived in Poland (formerly Expats – Poland)

## Appendix 5. Performance of Facebook ads targeting Polish migrants in 2019 and 2021

Ad target	Duration	Costs	Reach	Link clicks	Clicks/reach	Cost-per-click	Opened survey	Answered filter questions	Target group	Target/reach	Cost per target group respondent	Completed survey	Cost per completed survey
<u>2019</u>													
Spain/Germany/UK – lived in Poland	68 days	€ 1,700.00	167,401	10,368	6.2%	€ 0.16	4,390	3,860	3,521	2.1%	€ 0.53	1,264	€ 1.34
UK – lived in Poland	10 days	€ 150.00	10,568	627	5.9%	€ 0.24							
<b>Total</b>		<b>€ 1,850.00</b>	<b>177,969</b>	<b>10,995</b>	<b>6.2%</b>	<b>€ 0.17</b>	<b>4,390</b>	<b>3,860</b>	<b>3,521</b>	<b>2.0%</b>	<b>€ 0.53</b>	<b>1,264</b>	<b>€ 1.34</b>
<u>2021</u>													
Germany – lived in Poland	31 days	€ 780.80	61,918	3,416	5.5%	€ 0.23	889	782	751	1.2%	€ 1.04	403	€ 1.94
Spain– lived in Poland	31 days	€ 781.21	16,024	1,737	10.8%	€ 0.45	343	301	291	1.8%	€ 2.69	139	€ 5.62
UK – lived in Poland	31 days	€ 781.57	60,415	2,972	4.9%	€ 0.26	898	769	739	1.2%	€ 1.06	407	€ 1.92
<b>Total</b>		<b>€ 2,343.58</b>	<b>138,357</b>	<b>8,125</b>	<b>5.9%</b>	<b>€ 0.29</b>	<b>2,130</b>	<b>1,852</b>	<b>1,781</b>	<b>1.3%</b>	<b>€ 1.32</b>	<b>949</b>	<b>€ 2.47</b>

*Note: Target group is defined as born in Poland and living in Spain, Germany or the UK incl cross-country hits such as living in UK but entering survey through ad targeting Spain*