Turning opposition into support to immigration. The role of social norms

Cristina Cattaneo

RFF-CMCC

Daniela Grieco

University of Milano[*]

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Abstract

We run a survey experiment to investigate the effectiveness of social norms in promoting the support to migrants. We design an intervention that presents different social norms regarding other's behaviour and attitude towards migrants and we test their influence on behavioural outcomes with respect to a control where social information is not provided. We explore the channel(s) through which a manipulation of social information is successful in affecting behaviour.

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[*]Cristina Cattaneo (cristina.cattaneo@eiee.org), RFF-CMCC European Institute on Economics and the Environment (EIEE) and Centro Euro-Mediterraneo sui Cambiamenti Climatici, via Bergognone 34, 20144 Milan. Daniela Grieco (daniela.grieco@unimi.it), Department of Law, University of Milano, Italy.

1 Introduction

The number of migrants moving from one country to another is bound to increase, and a considerable fraction of these flows will try to access the European countries. The demographic boom in Africa along with a warming world are two of the possible factors responsible for this imminent trend. At the same time, public opinion towards immigration is overall negative. A substantial majority of the public believe that the number of immigrants is too high and consequently wish to curtail the number of inflows. Given that public opinion on migration can shape and influence migration policies, turning opposition into a more favourable approach is crucial in light of the considerable advantages that migrants bring to the destination countries. Moreover, a supportive public approach can facilitate an efficient management of the migration flows.

But why such negative feelings are rooted in native's attitudes towards migration? The literature has largely debated what shapes public opinion and concluded that citizens barely form attitudes about immigration based on its effects on their personal economic situation (Hainmueller and Hopkins, 2014). Economic self-interest motivations have fared poorly compared to economic sociotropic considerations. Immigration-related attitudes are in fact largely influenced by symbolic concerns that affect the nation as a whole. At the same time, natives display striking misperceptions about key features of migrants (Alesina et al., 2018) and given this vacuum, attitudes are largely shaped by the media rhetoric, which mainly portrays migrants in a negative way (Brader et al., 2008). The majority of the existing studies however, analyze what drives the bitter feeling against migrants and only few consider which factors are able to positively influence attitudes and behaviour in favour of migrants. Given that the framing effect could be asymmetric, with information linked to threat producing sizeable effect on attitude, while favourable information having little effect on it (Brader et al., 2008), an important question remains on how to positively affect attitudes and subsequent behaviour.

The objective of this pre-analysis plan is to present a study design that aims to promote support to migrants through a mechanism based on social norms. We design an intervention that presents different social norms regarding favourable behaviour and attitude towards migrants and test their influence on behavioural outcomes.

The hypothesis is that the information on what other people do (or think) with respect to migrants, influences ones' behaviour. Moreover, through the comparison between the treatments, differing on the social norm conveyed, and a control where no social information is provided, we plan to introduce an exogenous variation in beliefs about what other people do and think with respect to migrants, which ultimately should affect actual behaviour.

2   Experimental design

We plan to conduct an incentivized survey and recruit British participants through the online platform Prolific Academic. This is an UK platform giving access to a primarily European sample of online workers. In the survey experiment, we will randomly allocate respondents to different treatments and one control groups.

Respondents in the treatment groups will receive information on the social norm, namely on what other respondents did before them in terms of donation to a charity operating in favour of migrants. Moreover, to understand to what extent the social norm is effective in changing donations *per se*, or due to its capability to convey information on the ingroup attitude towards the outgroup, we will also design a treatment where we directly provide information on the ingroup (favourable) attitude towards the outgroup.

There are different ways to convey a social norm. Croson et al. (2010) randomly assigned high social information (another donor in a previous pilot study contributing a large amount) versus low social information (another donor contributing a small amount). Then they assess beliefs about the descriptive social norm (participants are asked about their belief of the descriptive norm: "how much do you think an average person would contribute?"). High social information needs to be sufficiently high (the level of the other donor's contribution has to be higher than the 90th percentile), but not too extreme (lower than 99th percentile), otherwise it ceases to influence individual contributions (Shang and Croson, 2009).

Alternative ways to convey social information are providing some statistics on the previous donations (e.g. "half of donations were equal or above 50%") or on the degree of participation of previous donors (e.g. "a certain percentage of previous respondents decided to donate") (Frey and Meier, 2004). A way to induce in subjects different descriptive norms on attitude is manipulating the consensus about the outgroup by giving information on whether peers consider "Definitely OK/not OK/maybe OK to have negative feelings about the outgroup".

Our interventions provide a random sample of respondents with information on others' behaviour towards migrants (donations to a charity working for migrants called "Migrants' Right Network"). To avoid possible demand effect deriving from respondent associating the experimenters with a specific view on immigration, we told that they would be given the possibility to make a donation to a randomly drawn organization that could either be pro-immigration (the charity "Migrants' Right Network" mentioned above) or anti-immigration (the think tank "Migration Watch UK" that aims at monitoring migration flows to and from UK) [1]. We thus convey information on peers' consensus by providing evidence of actual supportive behaviour. We will also add a treatment where peers' con-

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[1] To maximize power and avoid direct deception, we follow Bursztyn et al. (2017) in setting the randomization such as the 90 percent of participants would get assigned the organization we were interested in: ""Migrants' Right Network".

sensus is expressed in the terms of a favourable attitude. In particular, we will implement four treatments: Control, Positive Donation, Median Donation, and Positive Attitude.

In the Control treatment respondents make their donation without receiving any information on previous respondents' behaviour or attitude.

In the Positive Donation treatment, respondents are made aware of the *highest* donation level. Following Croson et al. (2010); Shang and Croson (2009), we chose the value corresponding to the 90th percentile of the distribution of donations made by the participants of the same nationality to a previous identical survey. In order to collect information on the distribution of donations, we conducted a pilot survey in July 2019. Conveying information on the highest donation of previous respondents belonging to the same ingroup is expected to induce an increase in respondents' donations by acting as a positive social norm. In fact, subjects learn that other respondents with a high degree of social similarity (i.e. sharing the same nationality, thus being part of the same ingroup) made a costly choice in favour of migrants and are likely to be influenced by their choice.

Positive Donation treatment:

"Before continuing, we wish to let you know that we have run the same study with other respondents. British respondents like you gave support to immigrants by donating 90 pence out of 1 pound to Migrants' Rights Network".

In the Median Donation treatment, respondents are made aware of the *median* donation level of the participants of the same nationality to a previous identical survey. This treatment has the aim of disentangling the effects of conveying information on previous respondents' donation *per se* from the effect of reporting that particular donation level (i.e. the highest). Since we administered the pilot and the survey to the same platform respondents within a very short period, respondents should not differ *ex ante* in terms of median donations. Thus, any possible significant difference between this treatment and the control should depend on providing information on previous respondents' donation *per se* and not on the specific donation level. On the contrary, any possible significant difference between this treatment and Positive Donation one can be simply ascribed to the specific donation level reported (the highest vs. the median).

Median Donation treatment:

"Before continuing, we wish to let you know that we have run the same study with other respondents. British respondents like you gave support to immigrants by donating 20 pence out of 1 pound to Migrants' Rights Network".

We will finally design a Positive Attitude Treatment, where respondents are made aware of a positive attitude towards migrants of participants of the same nationality to a previous identical survey. The objective of this treatment is to isolate the effect of learning about the ingroup (positive) attitude towards migrants. This information becomes available for respondents in the Positive Donation treatment too, but derives from the information on the donaton level. Therefore, subjects might be influenced by

the ingroup attitude or simply motivated by the need to conform to the ingroup behavior.

Positive Attitude Treatment:

"Before continuing, we wish to let you know that we have run the same study with other respondents. British respondents like you think that the number of immigrants to the U.K. should not be reduced."

3   A simple model for donation

We model an individual's decision to donate to an outgroup. Each subject donates an amount $x \geq 0$ out of her endowment e and maximizes the following utility function U:

$$U = u(e - x) + av(x, d) - \frac{\beta}{2}(N - x)^2 \tag{1}$$

The material utility of private consumption, u, is represented by the endowment e minus the donation to the outgroup x and satisfies standard properties: $u'(.) > 0$ and $u''(.) \leq 0$. Donating x to the outgroup determines an additional source of utility, v, that captures the warm glow of giving (Andreoni, 1990). The utility v is increasing in the contribution x but has decreasing returns: $v'_x(.,.) > 0$, $v''_{x,x}(.,.) < 0$.

The utility v also depends on d, that reflects the perceived distance between the ingroup the subject belongs to and the outgroup. We assume that the utility of giving decreases with the distance: $v'_d(.,.) < 0$. Furthermore $\lim_{d \to \infty} v(., d) = 0$, i.e. there is no warm glow of giving if the distance d is perceived as very high. We assume d to be determined by two elements: the first is the subject's own attitude towards the outgroup, and the latter is her belief on ingroup peers' attitude towards the outgroup. The parameter $\alpha \geq 0$ denotes the subject's trade-off between pursuing own material interest and enjoying the benefits of helping the outgroup, i.e. the intensity of warm glow.

The third term in the utility function is the loss the subject experiences if her donation departs from the social norm N, i.e. the amount donated by ingroup peers. The parameter β reflects the steepness of the tradeoff between material incentives and the desire to conform to the ingroup behaviour. The higher is β, the more the subject cares about following the norm. Note that a strictly positive donation may occur also in case of a subject perceiving a high distance to the outgroup: this happens when subjects derive large utility from conforming to the norm.

4   Outcome variables

The outcomes variables of the experiment are actual behaviours. We measure actual behaviour by measuring the willingness to donate part of the endowment to a non-profit organization operating pro-migrants. In particular, we ask respondents if they wish to

donate part of their fixed endowment to a non-profit organization, which works and campaigns for the rights of immigrants in the U.K..[2]

As a second measure of actual behaviour, we will check the respondents' willingness to sign a petition in favour of migrants and their actual signature, providing a link to the real petition. The order of the two outcome (petition and donation) will be randomized.

After collecting the amount of the personal donation, we elicit respondents' beliefs on the average donation level of other respondents in the same wave. We also plan to collect information on subjects' beliefs on peers' attitude towards migrants. Attitudes of peers are measured both pre and post treatments and we plan to present subjects with slightly different formulation of these questions before and after providing the social norm, as in Haaland and Roth (2017).

The pre-treatment question is: "In your opinion, what other U.K. citizens think about the number of immigrants in this country: that is should be increased a lot, increased a little, remain the same, decreased a little, or decreased a lot".

The post-treatment questions are: "I think British respondents to this study believe that the U.K. should accept more immigrants"; "I think British respondents to this study believe that immigration is beneficial for the U.K."; "I think British respondents to this study believe that the U.K. government should care equally about all the people legally living in the country, regardless of whether they are born in the U.K. or not". Answers to these questions vary from 1 to 7, with rating scale being 1 = totally disagree and 7 = totally agree.

We use different questions for measuring peers' attitudes because there is not an unique way to measure attitudes towards migration, being attitudes not specifically related to one single aspect of immigration.

5   Sample size and power

The novelty of this study makes it difficult to perform exact power calculations. We can, however, determine the minimum effect size that we will be able to detect with statistical precision given our sample size. We take as reference the data of the pilot (about 30 subjects per treatment) we run in July 2019. In our pilot, the average amount donated by respondents in the absence of any treatment is 33.23 pence, with a standard deviation of 40.53. We calculate that sample sizes of at least 258 subjects per treatment would allow us to detect a 10 percentage point increase in donations with 95 percent confidence level and 80 percent power. With 1032 subjects per treatment, we will be able to detect with the same statistical precision an increase as small as 5 percentage points, which is the one we observe in our pilot. On the other hand, the proportion of respondents who signed

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[2]The total respondents' endowment is made by a variable and a fixed part. The variable part depends on the average time estimated for answering the questionnaire, while the fixed one is set one pound.

the petition in favor of migrants in the absence of any treatment is about 45.16 percent of all respondents. Sample sizes of at least 412 subjects per treatment would allow us to detect a 10 percentage point increase in petition signatures with 95 percent confidence level and 80 percent power; with 643 subjects per treatment, we will be able to detect with the same statistical precision an increase of 8 percentage points, which is the one that emerges in the pilot. In sum, we propose a sample size of around 1100 subjects per treatment to detect meaningful, reasonable-sized effects, plus about 600 subjects allocated to the association against migrants.

6 Analysis

The objective of the present study is two-fold. First we aim to test the effect of providing social information on incentivized pro-migration behaviour. The different social information treatments convey a real support measure of the reference group towards migrants (terms of a large donation to a charity that works in favour of migrants) and peers' favourable attitude measure. We will estimate the following equation:

$$y_i = \beta_0 + \sum_{a=1}^{A} \beta_a T_i^n + \beta_2 Z_i + \varepsilon_i \tag{2}$$

where y_i is own donation, T_i^n is a matrix of treatment variables. The treatment variable is equal to one if respondent i receives Treatment n and 0 otherwise. Z_i is a matrix of individual characteristics, which include standard socio-demographic controls, a proxy for warm-glow, altruism, and own's and peers' attitudes towards migrants.

Moreover, if we successfully influence behaviour, our second objective is to test the channel(s) through which the treatments positively influence behaviour. Our hypothesis is that the social information introduces an exogenous variation in subjects' beliefs on peers' (favourable) attitude towards migrants. Large peers' donation to a charity that strive in favour of migrant should deliver a clear sign that peers are not against migrants, and therefore exhibit a favourable attitude towards them.

To test the effect of the social norm and the possible channel, after we study the effect of the treatments on the amount of money donated to an organization operating in favor of migrants, we will test whether our treatments affect subjects' beliefs on average donation of other respondents and beliefs on peers' attitude. These sequential tests can provide an indirect evidence that the treatment leverages the channel we have in mind.

Another way to test the channel is by conducting heterogeneous effects of treatments with respect to pre-treatment beliefs on peers' attitude. Some people may start with very negative baseline beliefs on peers' attitude. If our treatments have stronger effects on respondents' behaviour for this sub-group of people, we can infer that the treatment was successfully able to change beliefs on peers' attitudes in the expected direction.

We are aware that our treatments may influence behaviour through other channels than change in believes of peers' attitudes. Namely, subjects might react to the social norm on other respondents' donations by donating a similar amount of money just because they need a clue on how to behave (and imitate peers), without changing their believes on peers' attitude. To disentangle this alternative mechanism from the one we have in mind, we will test if the social norm impacts our second behaviour outcome, namely whether subjects intend to sign and actually signed the pro-migrants petition. If we detect any significant effect of the social norm on the signature of a real petition we can provide evidence in favour of the mechanism we have in mind. The effectiveness of the norm is likely due to changes in believes of other attitudes, and not to an imitative behaviour.

7   Socio-demographic questions

The survey will allow us to collect information on respondents' socio-demographic characteristics, such as gender, age, political orientation, own attitude towards migrants, opinion on the relevance on major issues, self-perceived position in the social ladder, self-perceived degree of altruism and well-being from helping others, importance of reputation, marital status, number of children, religion, place of residence, monthly income, highest level of education achieved, sector of occupation, employment status, vote in the Brexit referendum, own and parents' ethnic origin, degree of interaction ("close acquaintance or friend who is an immigrant", as in Alesina et al. (2018)) with immigrants, attention paid to news on migrants, opinion on media approach on migrants, perception of own skill level. The majority of socio-demographic questions will be asked at the end of the survey. However, to conduct some heterogeneous analysis some of these variable will be collected before the treatment. In particular we plan to collect some pre-treatment information on political orientation, opinion on the relevance of major issues, own attitudes towards migrants (about the number of migrants in UK, the impact of migrants on UK, and beliefs on other UK citizens' opinion about the number of migrants in UK) and self-perceived position in the social ladder.

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