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Migration and Social Preferences*

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Abstract

Anti-immigrant sentiment is frequently motivated by the idea that migrants are a threat to the host country's culture (Rapoport et al., 2020). We contribute to the discussion by investigating whether migrants adapt their social preferences (SPs) to those prevalent in their host country. For this, we rely on a global and experimentally validated survey to show that migrants' preferences strongly correlate with their host population's SPs and provide some evidence of a causal relationship.

JEL Code: F22, D01

Keywords: Migration, Assimilation, Social Preferences

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1 Introduction

Social preferences –such as altruism, trust, positive and negative reciprocity– shape individual behavior within societies, in particular, how individuals interact with each other. Hence, they represent an important factor in the culture of countries. Since anti-immigrant sentiment is frequently motivated by the idea that migrants are a threat to the host country’s culture (Rapoport et al., 2020), it is important to investigate whether migrants adapt their social preferences (SPs) to those prevalent in their host country. This is precisely what we do in this paper.

Due to the difficulty of studying migrants experimentally, the literature on migrants’ assimilation (particularly in terms of SPs) is scarce.¹ One exception is Barr (2014), which studies rural-urban migrants in Ghana and finds mixed results in other-regarding-preferences. Our contribution to that literature is to study how migrants assimilate to their host countries using a global and experimentally validated survey of various social preferences.

This paper extends Helliwell et al. (2016), which compares the relative importance of culture and experience in the new environment in three ways. First, our measures (of the SPs) were specifically selected so that they correlate the most with actual behavior in experimental settings (Falk et al., 2018, 2016). Second, we extend the number of SPs studied. Third, we provide suggestive evidence of a causal relationship by using a regression specification based on the epidemiological approach (Fernández and Fogli, 2006; Giuliano, 2007), using migrants before they migrate as a falsification test. We also exploit the within-host country variation to alleviate selection concerns stemming from the fact that individuals choose where to migrate based on unobserved determinants and explore the length of stay in the host country.

By showing that migrants assimilate their SPs to those SPs prevalent in their host country, we also contribute to a broader literature on the (in)stability of preferences. This literature has studied the change in preferences in diverse contexts, such as COVID-19 (Shachat et al., 2021; Bu et al., 2020), natural disasters (Kuroishi et al., 2019; Hanaoka et al., 2018; Cassar et al., 2017; Callen, 2015; Cameron and Shah, 2015; Eckel et al., 2009), exposure to violence (Callen et al., 2014; Gneezy and Fessler, 2012; Voors et al., 2012) and financial situations (Andersen et al., 2019; Carvalho et al., 2016; Malmendier and Nagel, 2011; Chetty and Szeidl, 2007).

2 Data

We combine two data sources. First, we use the World Gallup Poll (WGP), a continuous survey collecting data from a sample that is representative of 99% of the world’s adult population, using randomly selected, nationally representative samples². This data set contains rich information on demographics and opinions on diverse topics. Second, we use the Global Preferences Survey (GPS), which in 2012 interviewed a sub-set of the individuals in the WGP from 76 countries (1141 sub-national regions). It includes patience, risk aversion, altruism, trust, positive reciprocity, and negative reciprocity. The elicitation is based on questions that were previously experimentally validated (Falk et al., 2018, 2016), meaning that the questions asked in the survey were the ones that maximized the adjusted R-squared for behavior in an incentivized lab experiment ran in Germany. The results are also in line with evidence from the trust literature and validated against other similar surveys such as the World Values Survey.

It is common knowledge that there is a deficit in data regarding migration flows and decisions to migrate (Willekens et al., 2016). The WGP includes a module on migration decisions, con-

¹Regarding non-social preferences: Gibson et al. (2020) finds no effect in patience, and risk aversion and Jaeger et al. (2010) finds no effect in risk aversion.

²Gallup World Poll (2019). See <https://www.gallup.com/178667/gallup-world-poll-work.aspx>.

taining the country of origin and intentions to move abroad in the following 12 months (and to which country), providing a unique opportunity for our purposes. Tjaden et al. (2019) validates the questions regarding the intention to migrate using inflow and outflow data from the OECD International Migration Database, EUROSTAT and UN DESA³. The WGP data has been recently used to study the determinants of migration decisions (Smith and Floro, 2020; Migali and Scipioni, 2019; Ruyssen and Salomone, 2018; Bertoli and Ruyssen, 2018; Manchin and Orazbayev, 2018; Docquier et al., 2014; Dustmann and Okatenko, 2014). However, the reader should note that we only use future migrants as a falsification test, not as our primary identification strategy.

Upon merging both datasets, we are left with 3255 migrants in 62 locations coming from 155 countries of origin. Of these migrants, 343 have moved within the past five years since the interview. The dataset also contains 1050 people in 51 countries that are about to move to one of 98 countries.

3 Migrants: before and after moving

In Table 1, we compare all migrants with people that plan to migrate in the following 12 months controlling for country of origin fixed effects (See Table A1 in the Appendix for the tests without controls). We find that migrants are older, more likely to be female, earn a higher income, be married, and more likely to have an elementary level of education. However, when we focus on recent migrants (i.e., those that migrated within the past five years), the characteristics are more balanced. Noticeably, observed characteristics that remain significantly different are mechanically related as older people are more likely to be married and earn more than their younger (before moving) counterparts.

	(1)		(2)		(2)-(1)	(3)		(3)-(1)
	Future Migrants (N=1050)		Migrants (N=3255)		Diff	Recent Migrants(N=343)		Diff
	Mean	SD	Mean	SD		Mean	SD	
Age	30.91	11.55	45.84	17.18	13.892***	34.87	14.27	3.614***
Female	0.47	0.50	0.57	0.50	0.095***	0.55	0.50	0.074
Income	11625	15493	34514	38190	10181 ***	24363	27366	7337***
Married	0.36	0.48	0.58	0.49	0.137***	0.44	0.50	0.102**
Elementary	0.22	0.42	0.16	0.36	0.037*	0.18	0.39	0.037
Secondary	0.63	0.48	0.56	0.50	-0.007	0.56	0.50	-0.006
Tertiary	0.15	0.36	0.28	0.45	-0.031	0.26	0.44	-0.031

Table 1: Summary statistics for Migrants, Future migrants and Recent migrants (with country of origin fixed effects). Income: Household annual income in US dollars. Elementary: Completed elementary education or less (up to 8 years of basic education). Secondary: Secondary to 3-year tertiary education and some education beyond secondary education (9-15 years of education). Tertiary: Completed four years of education beyond high school and/or received a 4-year college degree.

4 Regressions specifications

We study whether migrants assimilate to their destination countries using alternative specifications of the following equation based on the epidemiological approach:

$$Y_i = \alpha + \beta\bar{Y} + H_i + \gamma\mathbf{X}_i + \epsilon_i, \quad (1)$$

³Creighton (2013) and Van Dalen and Henkens (2013) also show that intention to migrate correlates with actual migrations in other datasets.

where Y_i is the trait of interest for individual i (i.e. trust), \bar{Y} is the average trait in the destination country, \mathbf{X}_i is a vector of individual-level demographic covariates (age, gender, log of income, marital status, and dummies for three education levels), H_i are country of origin fixed effects and ϵ_i is an individual specific error term. The rationale is to compare migrants coming from the same country of origin with similar characteristics who migrated to countries with different SPs. Our coefficient of interest, β , captures the average effect of the SPs prevailing in the destination country on those of immigrants. Standard errors are clustered by country of destination in all regressions.

First, we use the sample of migrants that have already migrated. Second, we add country of destination fixed effects, D_i , in the regression to exploit a different source of variation, i.e., the regional variation within countries. Hence, \bar{Y} becomes the sub-national average in the destination country. Third, we use the sample of future migrants (i.e., those that have not yet migrated but report to have intentions to do so in the following 12 months) and their reported destinations. These last regressions (i.e., using future migrants) work as falsification tests to check the selection of migrants into destination countries. If there is no selection, we should find no effect of the destination SPs on their individual preferences. Finally, we repeat the first specification but interact \bar{Y} with an indicator variable that takes the value 1 if the individual is a recent migrant (i.e., moved within five the past years) and 0 otherwise; this allows us to study whether the longer individuals spend abroad the greater their assimilation.

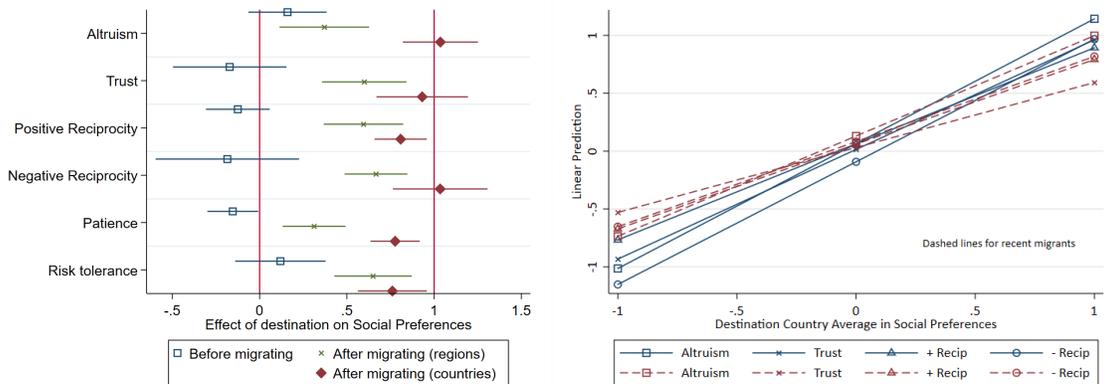


Figure 1: Effect of destination on individual Social Preferences

5 Results

Figure 1 summarizes the results. The left panel shows the β coefficients of the first three regressions with 95% confidence intervals. The vertical lines at 0 and 1 represent no assimilation (selection in the case of future migrants) or full assimilation. First, the red diamonds show strong assimilation in all preferences. In other words, an increase in one standard deviation in any of the destination country preferences is associated with an increase of 0.76 to 1.04 standard deviations in the migrant's preferences. It is noteworthy that non-social preferences have a smaller effect than SPs. Second, the green crosses show that even after controlling for destination fixed effects, the average preferences in the regions where migrants go has a strong and statistically significant effect on their preferences, though smaller than when using country variation. Third, as a falsification test, we repeat regression one using future migrants. If migrants are self selecting into destination countries based on SPs, we should observe a positive correlation between their preferences and the destinations preferences. We find no evidence of this kind of selection. The coefficients of these

regressions are shown in blue squares.

Finally, the right panel of the figure shows the linear prediction for the SPs separating recent and non-recent migrants. We can see that for each and all of the SPs, the slope is flatter (i.e., less assimilation) for the recent migrants, though these differences are imprecisely estimated. Table 2 presents the exact coefficients⁴.

Variables	Before moving	After moving (Countries)	After moving (Regions)	Recent migrants (Interaction term)
Altruism	0.16 (0.11)	1.04 (0.11)	0.29 (0.13)	-0.21 (0.27)
Trust	-0.17 (0.17)	0.93 (0.13)	0.60 (0.13)	-0.39 (0.27)
Positive Reciprocity	-0.12 (0.09)	0.81 (0.08)	0.56 (0.12)	-0.10 (0.21)
Negative Reciprocity	-0.19 (0.21)	1.03 (0.14)	0.62 (0.08)	-0.32 (0.25)
Patience	-0.15 (0.07)	0.78 (0.07)	0.27 (0.09)	-0.16 (0.16)
Risk tolerance	0.12 (0.13)	0.76 (0.10)	0.55 (0.10)	0.11 (0.11)

Table 2: β coefficients from equation 1 and its variants. The last column presents the coefficient of the interaction term with a dummy indicating recent migrants. All standard errors are clustered by country of destination.

6 Discussion

We show that migrants' preferences correlate strongly with the social preferences in the destination countries, but only after they migrate, which provides some evidence against selection. We further show that even after controlling for country of destination fixed effects, the effect of the average regional SPs remain strong and highly significant. Finally, we find that recent migrants seem to have adapted less than the migrants who spent a longer time in the destination country, though these results are imprecisely estimated. Our results are in line with Rapoport et al. (2020), which studies migration and cultural convergence and concludes that migrants do not seem to be a threat to the host country's culture.

These results, however, should not be taken as causal but as stylized facts that need further research to be confirmed or rejected. The most important source of potential bias comes from migrants selecting where to move by considering the SPs of these destinations. Similarly, selection can also occur with returning decisions, that is, if migrants who have not assimilated in their SPs are more likely to move again and hence drop out of the sample.

Further research is also needed to understand the heterogeneity and mechanisms behind the assimilation. That is, who adapts better and under what conditions? Does it depend on the characteristics of the migrant, on the host population, on the institutions? Does it depend on the cultural distance between home and host countries? It is also possible that the mechanisms driving the assimilation differ by SP. Is assimilation a conscious decision? Does the effect stay even if migrants move again? We expect the current increase in data availability regarding social preferences and mobility of people to allow researchers to answer these questions.

⁴Table A2 and Table A3 in the Appendix include the number of observations in each regression and the regressions without covariates. Results are virtually unchanged.

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Appendix

	(1)		(2)		(2)-(1) Diff	(3)		(3)-(1) Diff
	Future Migrants (N=1050)		Migrants (N=3255)			Recent Migrants(N=343)		
	Mean	SD	Mean	SD		Mean	SD	
Age	30.91	11.55	45.84	17.18	14.928***	34.87	14.27	3.962***
Female	0.47	0.50	0.57	0.50	0.097***	0.55	0.50	0.078**
Income	11625	15493	34514	38190	22888***	24363	27366	12738***
Married	0.36	0.48	0.58	0.49	0.225***	0.44	0.50	0.082***
Elementary	0.22	0.42	0.16	0.36	-0.067***	0.18	0.39	-0.040
Secondary	0.63	0.48	0.56	0.50	-0.067***	0.56	0.50	-0.066**
Tertiary	0.15	0.36	0.28	0.45	0.134***	0.26	0.44	0.106***

Table A1: Summary statistics for Migrants, Future migrants and Recent migrants (no fixed effects). Income: Household annual income in US dollars. Elementary: Completed elementary education or less (up to 8 years of basic education). Secondary: Secondary to 3-year tertiary education and some education beyond secondary education (9-15 years of education). Tertiary: Completed four years of education beyond high school and/or received a 4-year college degree.

Variable	Before moving	After moving (Countries)	After moving (Regions)	Recent migrants	Before moving	After moving (Countries)	After moving (Regions)	Recent migrants
Altruism	0.16 (0.11)	1.04 (0.11)	0.29 (0.13)	-0.21 (0.27)	901	2448	2405	2371
Trust	-0.17 (0.17)	0.93 (0.13)	0.60 (0.13)	-0.39 (0.27)	892	2429	2386	2353
Positive Reciprocity	-0.12 (0.09)	0.81 (0.08)	0.56 (0.12)	-0.10 (0.21)	902	2460	2417	2383
Negative Reciprocity	-0.19 (0.21)	1.03 (0.14)	0.62 (0.08)	-0.32 (0.25)	893	2402	2360	2327
Patience	-0.15 (0.07)	0.78 (0.07)	0.27 (0.09)	-0.16 (0.16)	901	2443	2402	2368
Risk tolerance	0.12 (0.13)	0.76 (0.10)	0.55 (0.10)	0.11 (0.11)	898	2443	2399	2366

Table A2: β coefficients from equation 1 and its variants. The fourth column presents the coefficient of the interaction term with a dummy indicating recent migrants. The last four columns present the number of observations. All standard errors are clustered by country of destination.

Variable	Before moving	After moving (Countries)	After moving (Regions)	Recent migrants	Before moving	After moving (Countries)	After moving (Regions)	Recent migrants
Altruism	0.17 (0.11)	1.07 (0.10)	0.37 (0.13)	-0.14 (0.29)	1013	2493	2405	2413
Trust	-0.23 (0.17)	0.99 (0.13)	0.60 (0.12)	-0.34 (0.27)	1002	2472	2386	2393
Positive Reciprocity	-0.14 (0.09)	0.84 (0.07)	0.60 (0.12)	-0.08 (0.22)	1014	2505	2417	2425
Negative Reciprocity	-0.22 (0.19)	1.11 (0.15)	0.67 (0.09)	-0.25 (0.25)	1005	2445	2360	2367
Patience	-0.09 (0.07)	0.96 (0.09)	0.31 (0.09)	-0.13 (0.16)	1013	2488	2402	2410
Risk tolerance	0.11 (0.13)	0.81 (0.14)	0.65 (0.11)	0.05 (0.13)	1010	2487	2399	2407

Table A3: β coefficients from equation 1 (with no covariates) and its variants. The fourth column presents the coefficient of the interaction term with a dummy indicating recent migrants. The last four columns present the number of observations. All standard errors are clustered by country of destination.