Integrating Migrants: Experimental Evidence on Cross-Border Spillovers*

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August 2025

PRELIMINARY AND INCOMPLETE – PLEASE DO NOT CIRCULATE

Abstract

International migration can contribute to economic development in both countries of origin and destination. We hypothesize that the impact of migration depends on immigrant integration. A randomized controlled trial (RCT) was conducted to experimentally assess the effects of providing information to support integration of Cape Verdeans immigrants in Portugal. Providing immigrants with a low-cost, easily scalable information app improved integration outcomes such as job search, the quality of employment, and regular migrant status. Additionally, it affected those left behind. Addressing migrant integration barriers in the destination country promoted political participation and gender equality norms in the country of origin.

Keywords: International Migration, Immigrant Integration, Randomized Field Experiment, Employment, Immigrant Regularization, Social Remittances, Voting, Gender Norms.
JEL Codes: F22, J61, O15.

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* An earlier version of this article was circulated under the title "Integrating Immigrants as a Tool for Broad Development". We thank Laura Alpizar, Patrícia Caetano, Alessandro Capra, Vitor Cavalcante, Gonçalo Gameiro, Marta Luzes, Rita Neves, Dina Rodrigues, and especially Sara Queirós for excellent research assistance and coordination. We wish to acknowledge financial support from FCT Grant PTDC/EGE-ECO/32511/2017, FNR grant INTER/Mobility/LE/18952383/DEVMOB_CB, Alianza EFI-Colombia Científica grant code 60185 and FP44842-220-2018, and JILAEE. The opinions and conclusions expressed herein are solely those of the authors and should not be construed as representing the opinions or policies of the sponsoring agencies. This study is pre-registered with the AEA registry (#AEARCTR-0005188). IRB approval was provided by the Nova School of Business and Economics.
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1. Introduction

International migration has the potential to be a driver of economic development in both destination and origin countries. Our work hypothesizes and evaluates the extent to which these development impacts likely depend on the integration of immigrants in destination countries, a dimension that has not been examined in the previous literature.

Immigrant integration is essential for maximizing the opportunities available to immigrants themselves, as well as for the economy and society at their destination to make the most of migrants' full potential. And yet, even long after their arrival, immigrants are often not effectively integrated.[1] While there is some evidence on the effectiveness of social inclusion programs, rigorous evidence on the impact of integration programs focused on economic immigrants remains limited.

An additional point that is less obvious and has not been, to the best of our knowledge, directly examined in prior economics literature is the fact that immigrant integration can also be an important determinant of the consequences of emigration for the country of origin as emigrants influence those left behind.[2] For example, existing evidence has shown how improved political norms are transmitted to origin countries of migration only when emigrants are based in destinations with better political institutions.[3] A related prediction, that is yet to be tested, is that political and social norms will be better learned and transmitted by immigrants who are better integrated in the destination country.

In this paper, we present evidence from a randomized control trial assessing how alleviating immigrant integration constraints at destination affects those left behind in the country of origin. Our experimental design allows us to answer two related research questions. Is the cost of

[1] Early studies pointed towards language skills and education to explain most of the observed labor market gaps and immigrant assimilation (Chiswick 1978, 1991; Borjas 1985, 1994; Dustmann 1994). But in terms of education, significant "brain waste" (the skill underutilization of immigrants that results in persistent underemployment or unemployment) seems to remain over time in a variety of settings (Kiker et al.1997; Mattoo et al. 2008; Chiswick and Miller 2009; Bah 2018).

[2] Migration and financial remittances can foster firm creation and growth, serve as an important poverty alleviation tool, and improve health and education outcomes. Migrants also create business networks across borders, serve as information providers, and have the potential to change existing norms around e.g., democratic processes, gender equality and fertility norms. See Batista et al. (2025) for a review of literature on the impact of emigration in countries of migrant origin.

[3] Spilimbergo (2009), Batista and Vicente (2011), Barsbai et al (2017).

accessing formal information in the destination country a relevant barrier to immigrant integration? Can integrating immigrants serve as a tool for origin country development?

To examine the role of immigrant integration on the effects of international migration at both destination and origin, we conducted a randomized controlled trial evaluating an information intervention aimed at removing barriers to immigrant integration. We measure the effects of theis randomized policy intervention among both the targeted immigrants in the destination country and their closest contacts in the origin country over a period of 18 months.

Our experimental findings confirm the hypothesis that reducing integration barriers for immigrants in the destination country enhances their integration outcomes and also positively contributes to social remittances sent to those left behind at origin. We find that making an information phone application available to immigrants was effective in improving the quality of employment, as well as labor market aspirations and expectations. Migrants who received the information treatment reported increased job search efforts, as well as job changes to employment with more stability, closer to home and with a better work schedule. The information treatment also encouraged migrants to take more actions to try to obtain documentation, and treated migrants were more likely to obtain a residence permit.

In addition, we report that households at the origin linked to treated migrants received significantly more *immaterial remittances*. We find that immigrants transmitted norms to their closest contacts in the home country. This increased their participation in the elections that took place prior to the endline survey and improved their views on gender equality in intrahousehold decision making. These treatment effects are concentrated on male respondents, and on those who were younger than 30 years old, who presumably held more malleable gender norms. Voting effects plausibly happened after high-visibility elections in Portugal. Treatment effects on voting behavior are concentrated on Cape Verdean residents with treated immigrants living in neighborhoods with higher voting rates in the destination country, measured using official election data.

Our work provides novel evidence on the development benefits of emigration for countries of origin. A substantial body of literature shows that emigration, even of highly educated individuals, can have a positive impact on the economic development of their home countries. This impact goes beyond financial remittances and includes improved incentives for investment in education and health, adoption of enhanced norms for political participation and gender equality, as well as

increased entrepreneurship, international trade and foreign direct investment (FDI).[4] Little research measuring the development impact of emigration and remittances in the country of origin is, however, experimental or quasi-experimental. Notable exceptions are given by Yang (2008), Clemens and Tiongson (2017), and Khanna et al. (2025) which use quasi-experimental evidence for the Philippines, and Gibson et al. (2011), Mobarak et al (2023) and Batista and Vicente (2025) using randomized variation in Tonga, Bangladesh and Mozambique, respectively. We advance the literature by implementing a randomized field experiment among immigrants, directly enhancing their integration in the destination country, and also by assessing its impact on development outcomes in their country of origin - an approach that extends beyond existing studies on migration and development. Our findings show that reducing barriers to immigrant integration promotes political participation, consistent with Barsbai et al (2017) and Batista et al. (2019), and enhances gender equality norms in the immigrants' country of origin, in line with Clemens and Tiongson (2017) and Mobarak et al (2023).

Our results also contribute to the still limited body of experimental evidence on the effectiveness of policies aimed at integrating economic immigrants in destination countries – as reviewed by Behaghel et al (2018).[5] Alan et al. (2021) and Carlana et al. (2022) are exceptions in their use of experimental variation to assess the impact of polices promoting the educational success of immigrant children in countries of destination. Additionally, Barsbai et al (2024, 2025) also provided experimental evidence on the effectiveness of strategies for promoting Filipino immigrant integration in destination countries. Unlike previous studies, we evaluate the effectiveness of a novel, low-cost and easily replicable phone application providing a broad set of immigrant relevant information, including resources for job search, visa regularization and rights to access public services.

[4] Evidence of these positive impacts was provided, among others, by Gould (1994), Beine et al. (2001), Rauch and Trindade (2002), Yang (2008), Batista and Vicente (2011), Gibson et al. (2011), Javorcik et al. (2011), Batista et al. (2012), Gibson and McKenzie (2012), Bertoli and Marchetta (2015), Barsbai et al. (2017), Batista et al. (2017), Clemens and Tiongson (2017), Mobarak et al. (2023), Abarcar and Theoharides (2024), Melki et al. (2024) and Kanna et al. (2025). A summary of the evidence of the impact of highly educated immigrants in the economic development of countries of origin is provided by Batista et al. (2025).

[5] A rigorous body of literature has emerged in recent years evaluating the impact of policies aimed at improving the integration of refugees in destination countries – for example, Battisti et al (2019), Bahar et al. (2021), Aksoy et al. (2023), or Foged et al. (2024, 2025). Rozo and Grossman (2025) provide a comprehensive literature review on this topic.

Overall, our results contribute to broadening the understanding of the effects of international migration and the role of immigrant integration for the economic development of the countries of migrant origin, in addition to the effects of immigration policies in destination countries. This experimental evidence shows novel evidence of a causal impact of low-cost scalable migrant integration intervention on development outcomes in the country of origin.

2. Background and Context

Portugal is a country with a long history of migration with large immigration flows from Brazil and its former colonies in sub-Saharan Africa and, more recently, also from Eastern Europe.[6] As in other countries, immigrants in Portugal tend to perform worse than natives in the labor market in terms of unemployment rates, access to high-skilled employment, and wage levels. This is especially true for immigrants from African countries.[7]

Cape Verdeans are the second-largest group of immigrants in Portugal. The former Portuguese colony is a lower middle-income country off the West African coast with a population of 522,331 in 2023. It is estimated that the diaspora is almost double the size of the population living in Cape Verde. Financial remittances in 2023 constituted 12.5% of the Cape Verdean GDP.

Even though the official language and language of instruction in Cape Verde is Portuguese, which should decrease linguistic disadvantages relative to other immigrant groups, Cape Verdeans have experienced poor labor market integration outcomes. Cape Verdeans have one of the highest unemployment rates among non-Portuguese nationals: 27.8% according to the Census 2011, compared to 13.2% for the general population residing in Portugal. This figure is particularly pronounced for female Cape-Verdean immigrants: 36.6% of females were recorded as unemployed, relative to only 20.2% of men. The negative pattern of insufficient integration outcomes for Cape Verdean nationals when compared to native Portuguese is similar on other outcomes such as low-skilled jobs, job rotation, wages, and education results compared to native-born individuals.

[6] At the end of 2023, 1,044,606 individuals (or approximately 10% of the resident population) were immigrants in Portugal according to the Portuguese Agency for Integration, Migration and Asylum (AIMA). https://aima.gov.pt/media/pages/documents/92dd0f02ea-1726562672/rma-2023.pdf

[7] See, for example, Kiker et al. (1997), or Bah (2018).

3. Experimental Design

Immigrants in our sample were individually randomly assigned into one of the two different groups[8]:

- *Information Intervention:* individuals were offered a mobile phone app named *Morabeza*, a Cape Verdean creole term used to express hospitality and friendliness to newcomers. The app provided a mix of detailed information about strategies to access jobs, where to obtain further information regarding different integration matters and where to seek out personalized assistance, as well as migrant legal rights (including how to access public services, such as healthcare). This information was also conveyed by a complementary printed guide summarizing the same information.
- *Control/Placebo Intervention:* individuals were provided with information about things to do and see in Lisbon through a placebo version of the Morabeza mobile phone app and corresponding complementary summary printed guide.

The information intervention aimed at reducing the costs of access to information. Immigrants likely have low quality information about how to obtain better jobs and housing, as well as about residency regularization procedures, and their legal rights to access public health care, as migrants largely rely on their limited social network to acquire this type of information. Although the information provided is publicly available online, provided by official government institutions, there is currently no platform that centralizes all this information. Additionally, the available information is often written in legal terminology that might not be appropriate for our study population. The information provided by the intervention covered legalization processes to obtain residency and work permits, job and housing search strategies and platforms, as well as details on the right to access public health services.

The information intervention was hypothesized to improve integration outcomes as it significantly reduced the cost of accessing relevant information. This is likely to happen because other sources of information are often too complex (e.g., online information from legal authorities using legal language) or costly to obtain (e.g., from legal support services). Providing a platform containing

[8] The full intervention included three treatment arms: The information intervention, presented in this paper, a aspirations intervention, and a combined treatment of both the information and the aspirations intervention. Appendix D contains details on the full intervention.

easily accessible, consolidated information is expected to have a positive effect on immigrant integration outcomes through the reduction of information barriers to successful integration. The information treatment was delivered to migrants by trained enumerators at the end of the baseline survey through a mobile phone app and a printed booklet.

Appendix A provides a detailed description of the information intervention. The migrant integration intervention is aligned with the International Organization for Migration's approach for immigrant integration and tailored to the Portuguese context.[9] The precise design of the treatment was decided in collaboration with governmental officials, international organizations and local NGOs with experience working with our target population. The treatment was pre-tested and subject to focus groups and qualitative analysis before implementation. The intervention components were available in both Portuguese and Cape Verdean Creole and were all implemented by teams of Cape Verdean enumerators.

Randomization into the treatment group was conducted at the individual level, stratified by residence neighborhood and gender of the migrant to ensure balance along those dimensions. Randomization was done by computer assignment before the baseline survey.

4. Sampling Strategy, Data Collection, Balance and Attrition Checks and App Usage

4.1 Sampling strategy and data collection

Our study focuses on migrants who recently arrived in Portugal and are likely to have lower economic integration indicators than migrants that reside in the country for longer. We built our sample in several steps and exploited different methodologies. In a first step, we recruited migrants and conducted a listing of recently arrived Cape Verdean immigrants in different neighborhoods of the Greater Lisbon area. Those areas were documented Cape Verdean diaspora clusters, and we expected them to have many recently arrived migrants. These neighborhoods were identified with the support of the Cape Verdean consulate and of Cape Verdean immigrant associations. Within those areas, enumerators of Cape Verdean descent approached individuals on the street and

[9] See https://www.iom.int/migrant-integration for further details.

recorded those that met our eligibility criteria. Eligible individuals were required to have Cape Verdean nationality, not to have Portuguese nationality, and to have arrived in Portugal within five years prior to the survey. They were asked if they would be willing to participate in a survey about migrants in Portugal and, if so, to share their contact details. In a second step, we re-contacted these migrants by phone, verified their sample inclusion characteristics, and scheduled a date to conduct the baseline survey in person.

The random listing described above included approximately 2.300 migrants in the greater Lisbon area. Our success rate in collecting baseline data with individuals from this listing exercise was about 35%, leading to a final sample size of around 800 immigrants. The success rate was due to the participants' availability for a face-to-face baseline survey with an enumerator who had flexible hours and days of the week. The migrants were also invited to participate in five rounds of follow-up phone interviews.

Figure A6 in the Appendix displays a timeline of the data collection in Portugal and Cape Verde. The baseline data collection in Portugal and the interventions were delivered by trained enumerators in-person. Follow-up surveys in Portugal and data for the experimental sample in Cape Verde were collected through phone surveys. All interviews in both countries were conducted by a team of Cape Verdean enumerators either in Cape Verdean Creole or in Portuguese, depending on the interviewees' preference.

4.2 Descriptive statistics, balance and attrition checks

Table A1 in Appendix shows the characteristics of the baseline survey sample in Portugal. Overall, 57% of respondents are female, with an average age of 28 years. 65% of the sample work for pay, but only 16% of the sample have a permanent work contract. The average monthly income was 510 EUR at baseline. 68% percent of the sample sent remittances at least once in the previous year, with an average amount of 597 EUR per year. The characteristics of individuals who took the baseline survey are well balanced across experimental arms. We detect no statistically significant differences between the treatment and the control group at baseline.

During the baseline interview, each migrant was asked to provide contact details of their closest family member in Cape Verde, i.e. the family member with whom they were in closest contact with. The relationship between the migrants in Portugal and the persons they identified as their closest contact in Cape Verde is shown in Appendix Table A2. Family members were contacted

and informed about the study while the enumerators were still with the migrant (during the baseline survey but before treatment implementation). Both the migrant and the family member in Cape Verde were informed about the confidentiality of their responses and assured that none of the information they provide will be passed on. The same individuals in Cape Verde were then contacted and interviewed via phone after the survey with the migrant was completed on a different day as soon as their availability allowed, and again about 18 months later for an endline survey.

Out of 405 contacts, 339 were successfully interviewed at baseline. Table A3 in Appendix shows balance checks for the different treatment arms for the sample in Cape Verde. 63% of respondents are female, with an average age of 37 years. The average years of education are 10 years, as opposed to 12 years for our migrant sample. The average respondent speaks to migrants more often than every other day. The average intrahousehold violence index is low,[10] indicating that the large majority of respondents indicated never finding intimate partner violence acceptable at baseline.[11] On average, respondents favor sharing responsibilities in the household equally between husband and wife, as can be seen by an average equality index of 0.8 on a scale from 0 to 1, where 1 reflects total equality in decision making. The characteristics of family members are well balanced across treatment arms. We do not detect any imbalances.

Tables A4 and A5 show attrition analysis for all follow-up surveys in Portugal and Cape Verde. We find no evidence of differential attrition for either the Portuguese or the Cape Verdean sample.

5. Econometric strategy and estimation results

5.1 Econometric strategy

Our identification strategy allows us to estimate ITT effects of our migrant integration interventions on our outcomes of interest. The empirical analysis uses an ANCOVA specification, following McKenzie (2012), including strata fixed effects and robust standard errors:

$$Y_{it} = \beta_0 + \beta_1 . MigrantTreatment_i + \beta_2 . Y_{i0} + \beta_3 . \gamma_i + \beta_4 . \delta_i + \varepsilon_{it}$$

[10] The intrahousehold violence index is an index composed of various questions about whether a respondent considers it acceptable for the husband to beat the wife. Responses of each component of the index are coded as 1 if the respondent considers violence acceptable in a certain situation, and 0 otherwise. The components are then added to form the index.

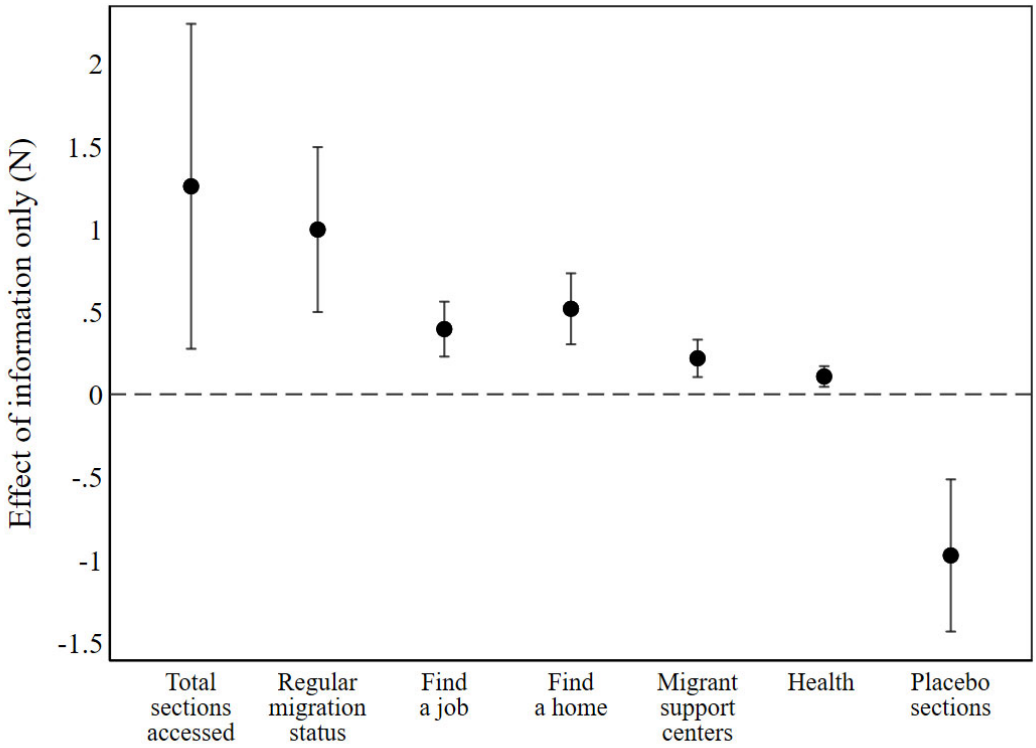
[11] We also find this pattern at endline, where all respondents indicate they never find intimate partner violence acceptable.

where Y_{it} denotes outcome of interest Y for individual i at post-baseline time t; $MigrantTreatment_i$ is the integration treatment that was randomly assigned to migrant i; Y_{i0} is the baseline value of outcome variable Y for individual i; γ_i corresponds to randomization strata fixed effects for individual i; and β_1 denotes the estimated ITT coefficient of interest. Regressions for the migrant sample in Portugal, for which several rounds of follow-up surveys were conducted, also include round fixed effects, δ_t, whenever more than one round of follow-up survey data is used. Apart from robust standard errors, all appendix tables include Q-values adjusted for multiple hypothesis testing following Romano and Wolf (2016).

5.2 Take-up of the Information App

Figure 1 shows treatment effects on the app usage for the information treatment group, relative to the control group. The most commonly accessed section provided information on the legal requirements and administrative procedures to request residency status, followed by the sections providing resources to search for jobs and to find housing. Appendix Table A6 further provides estimates for all sections.

Figure 1 – Treatment Effects on App Usage



Notes: This figure presents ITT estimates of the information treatment on the number of times a section was accessed (clicked on) on the *Morabeza information app*, relative to the control group. The estimates are from an OLS regression with strata dummies, round fixed effects and robust standard errors. Confidence intervals are for 95 percent level.

5.3 Empirical results

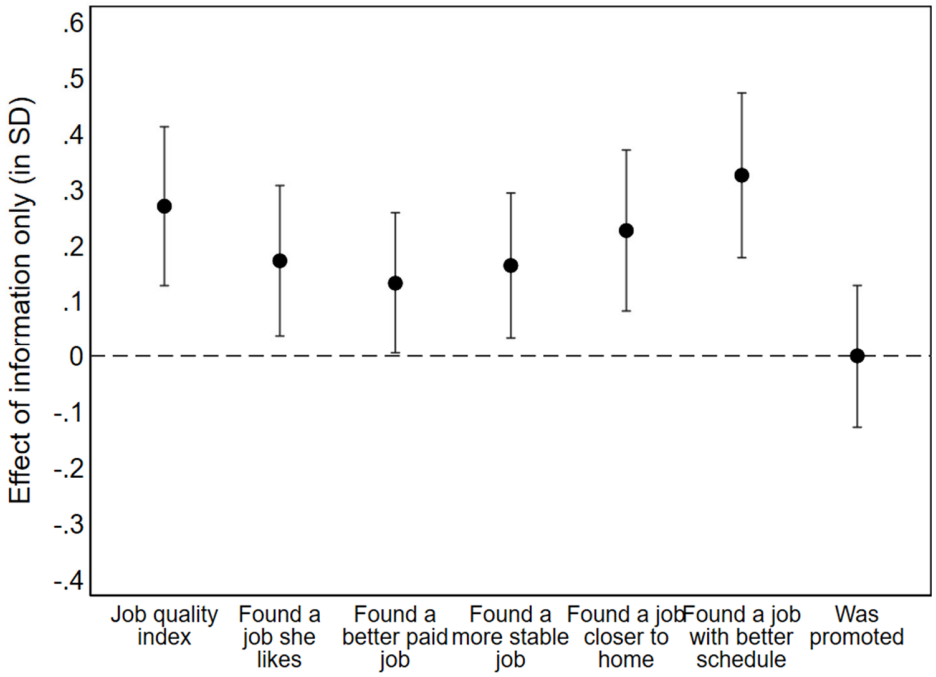
We summarize the results from our experiment in two stages. First , we examine how the randomized interventions affected the pre-registered outcomes related to immigrant integration in the destination country. Second, we analyze the pre-registered outcomes of the migrants' closest contacts in the country, and add exploratory analysis of underlying mechanisms. We finalize with a brief discussion summarizing the main findings and mechanisms.

Immigrant integration in the destination labor market

Figure 2 shows how the availability of the *Morabeza* information app improved an index of immigrant job quality by almost 0.3 Standard Deviations (SD) (p-value < 0.01) relative to the

control group. This index includes a variety of dimensions, namely finding a preferred job, securing better pay, achieving more stability, finding employment closer to home, obtaining a job with a better schedule, and being promoted. The effects were particularly large on increasing immigrants' ability to find a job with a better schedule and closer to home, but all other job quality dimensions were significantly improved by access to the information app (with p-values at least <0.05), except for promotions which would likely only happen for migrants that kept the same job. These results point to information access to improve immigrants' job quality by switching to jobs they prefer. Appendix Table A8 presents the estimates corresponding to these results in detail.

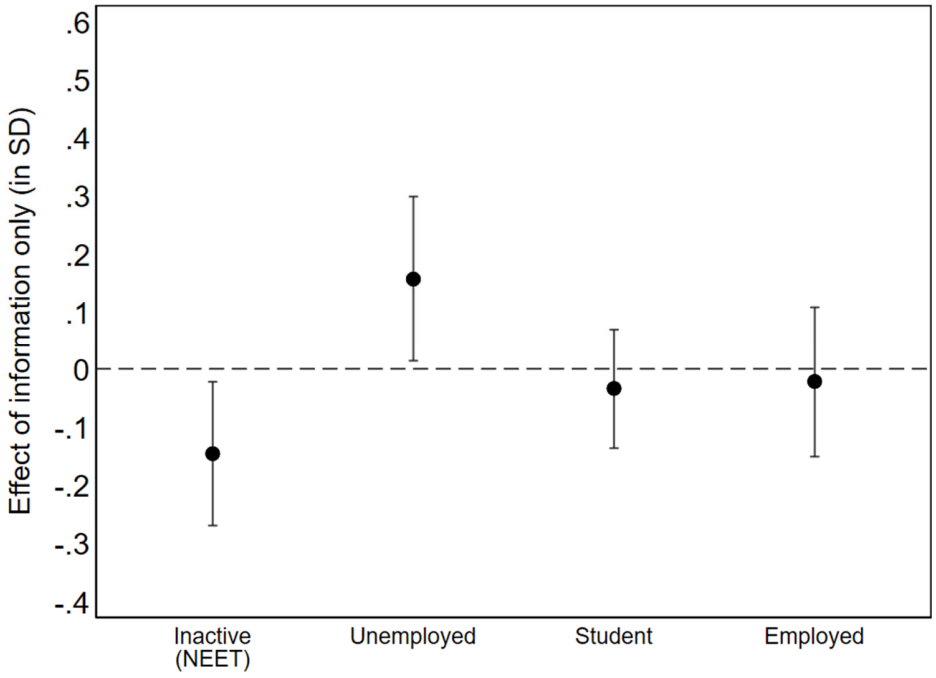
Figure 2 – Treatment effects of Information App on Immigrants' Job Quality



Notes: This figure presents ITT estimates of the *Morabeza* information app treatment in standard deviation units on the job quality of immigrants, relative to the control group. The *Job Quality Index* varies between 0 and 1 and averages six items related to job quality the respondent achieved in the labor market since baseline: finding a preferred job, securing better pay, achieving more stability, finding employment closer to home, obtaining a job with a better schedule, and being promoted. The estimates are from an OLS regression with strata dummies, round fixed effects and robust standard errors. Confidence intervals are for 95 percent level. For more details on variables and estimation, see Appendix Table A8.

Figure 3 shows how providing access to the Morabeza information app changed the immigrants' labor market status. Immigrants became 0.15 SD marginally less likely to be NEET (*Not in Education, Employment, or Training*) and 0.16 SD more likely to be unemployed. The probability that an immigrant becomes employed or a student after being given the intervention is not significantly affected. We interpret these results as evidence that treated immigrants become more active looking for jobs. Indeed, decreased inactivity is achieved without changes in the probability that immigrants are studying or in training (Appendix Table A9) implying that the information app intervention achieved a reduction in the probability that immigrants were NEET inactive. When examining the characteristics of immigrant employment, we do not find significant changes in the likelihood of holding a permanent contract, weekly hours worked, or monthly income earned. These estimates are also provided in Appendix Table A9.

Figure 3 – Treatment effects of Information App on Immigrants' Labor Market Outcomes



Notes: This figure presents ITT estimates of the *Morabeza* information app treatment in standard deviation units on labor market outcomes of immigrants, relative to the control group. Inactive NEET: A person who is not working and not actively seeking work, nor studying – it includes retirees and other individuals who are not currently looking for a job. Unemployed: A person who is not working but is actively looking for a job. This includes individuals who are looking for jobs, are available to work, and have taken specific steps to find employment. Employed: A person

who is currently working for pay or profit. This includes full-time and part-time workers, as well as those who are self-employed. Estimates are from ANCOVA regressions with strata dummies, round fixed effects, and robust standard errors. Confidence intervals are for 95 percent level. For more details on variables and estimation, see Appendix Table A9.

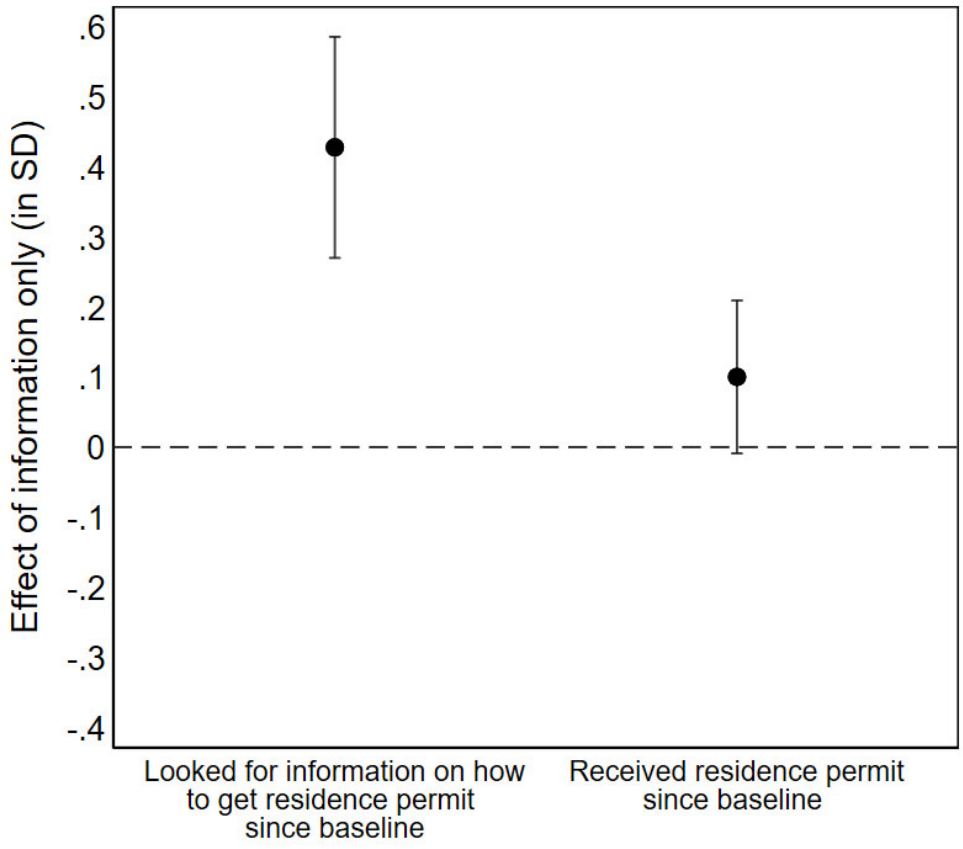
The estimated increase in immigrant job quality dimensions through job switching, as indicated in Figure 2, combined with the effects on decreased inactivity and increased job search by unemployed immigrants, indicates that the Morabeza information app facilitated both job search and actual job changes. This resulted in immigrants finding jobs that aligned more closely with their preferences.

Immigrant residency status and social networks

Figure 4 illustrates the impact of offering the Morabeza information app on immigrants' efforts to obtain a residence permit and actually holding it. The probability that treated migrants search for information on how to acquire a residence permit increased very significantly by 0.43 SD (p-value <0.001) relative to those in the control group. The probability of actually holding a residence permit also increased, although less strongly, by 0.1 SD (p-value <0.1).

These results indicate that the availability of an easy-to-use information application was very effective in facilitating migrants' search for immigration regulations. However, this only partially translated to migrants actually acquiring residence permits. This is likely due to capacity constraints faced by immigration services in processing applications.

Figure 4 – Treatment effects of Information App on Efforts to Obtain and Actual Migrant Residency Status



Notes: This figure presents ITT estimates of the *Morabeza* information app treatment in standard deviation units on efforts to obtain and actual migrant residency status, relative to the control group. In the baseline, respondents were asked whether they had looked for information on how to get a residence permit and whether they had received a permit since they arrived in Portugal. In the follow-up interviews, the reference time frame was the time between the baseline and the current interview. The estimates are from ANCOVA regressions with strata dummies, round fixed effects, and robust standard errors. Confidence intervals are for 95 percent level. For more details on variables and estimation, see Appendix Table A10.

The treatment effects of access to the information app on the probability of migrants' closest social networks (defined as up to 5 individuals) including more individuals born in Portugal is positive, but imprecisely measured: there is 3.8 percentage point (pp) increase in the probability of having a new individual born in Portugal in the closest network in Portugal at endline, which is not statistically significant. However, we obtain a 3.3 increase in the ratio of individuals born in Portugal relative to the total contacts. This estimate is statistically significant at the 5% level. Results are reported as in Appendix Table A11.

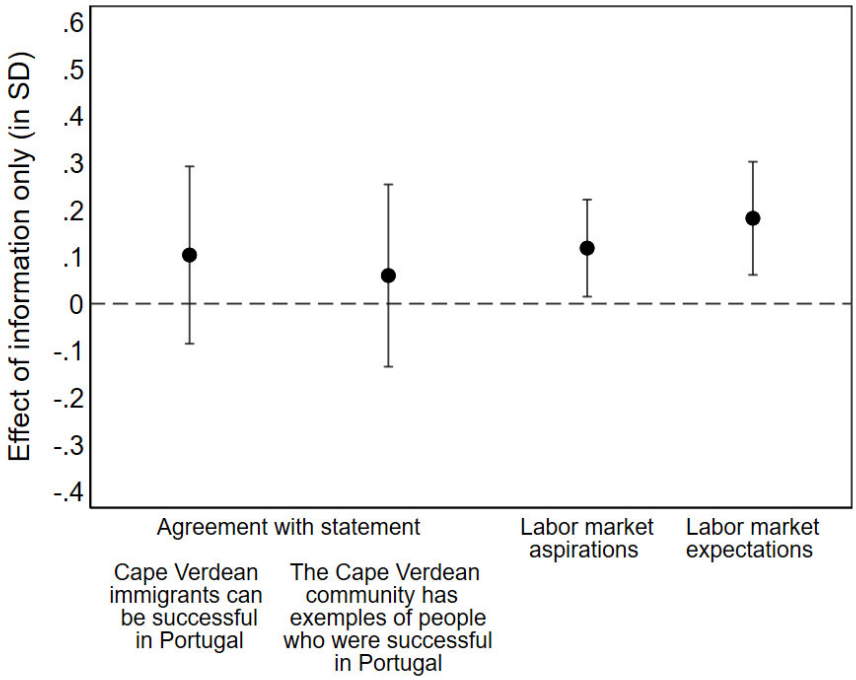
These results are suggestive that access to the information app may have promoted closer relationships of the migrants with individuals born in Portugal. While it did not clearly increase the probability of having *any* Portuguese contacts, it did shift the composition of migrants' social network towards a higher proportion of Portuguese contacts.

Psychological characteristics of migrants

Figure 5 displays the treatment effects of providing the Morabeza information app to immigrants on their aspirations and expectations. The simple availability of the information app did not lead to any significant short-run change in migrants' beliefs about how successful Cape Verdean immigrants can be in Portugal when those beliefs were measured later the same day. However, both aspirations and expectations on labor market occupation and job conditions were significantly improved in the 18 months after immigrants were provided with the Morabeza information app. In particular, aspirations improved by 0.1 SD and expectations increased by 0.18 SD.

This result is consistent with the idea that as migrants get easier access to relevant information in the destination country, they feel more empowered and motivated to improve their labor market situation and job quality – a result consistent with the estimated improvement in job switching and job quality. Appendix Table A12 reports the set of full results.

Figure 5 – Treatment effects of Information App on Aspirations and Expectations



Notes: This figure presents ITT estimates of the Morabeza information app treatment in standard deviation units on labor market aspirations and expectations, relative to the control group. The first two dependent variables were collected shortly after the delivery of the interventions. The corresponding estimates were obtained from OLS regressions with strata dummies and robust standard errors. The last two dependent variables are count variables indicating the number of achievements the respondent aspires or expects to achieve in the labor market, respectively. The corresponding estimates are from ANCOVA regressions with strata dummies, round fixed effects, and robust standard errors. Confidence intervals are for 95 percent level. For more details on variables and estimation, see Appendix Table A12.

The impact of the information app on measures of self-efficacy, grit or depression is negligible and not statistically significant, as shown in Appendix Table A13. The positive labor market and regularization improvements observed do not seem to be a consequence of the information treatment were not driven by changes in these psychological characteristics.

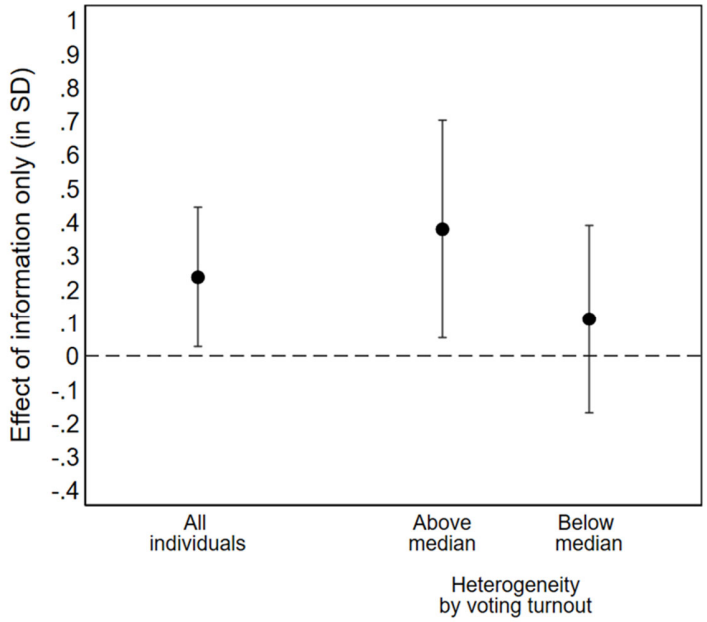
Effects on immaterial remittances sent to the country of origin

We investigate the impact of providing the Morabeza information application to immigrants at destination on the political attitudes and behavior in the country of origin. As shown in Figure 6, we find a significant increase in the probability of voting in the election held prior to the survey

in the country of origin, relative to the control group – a significant effect of 0.23 SD.[12] These findings are in line with the fact that voter turnout is generally higher in Portugal than in Cape Verde.[13]

The treatment effects on other more generic measures of political participation, namely a measure of demand for public service quality and a political participation index, were not statistically significant as shown in Appendix Table A14.

Figure 6 – Treatment effects of Information App on Voting Behavior in Origin Country



Notes: This figure presents ITT estimates of the Morabeza information app treatment in standard deviation units on voting behavior in Cape Verde, relative to the control group. The dependent variable is binary taking value 1 if the respondent voted in the election prior to the survey. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. Confidence intervals are for 95 percent level. For more details on variables and estimation, see Appendix Tables A14 and A15.

To shed light on the underlying mechanism, we explore whether the treatment effects are concentrated among subgroups of migrants who are plausibly more exposed to or influenced by

[12] The presidential election was held in Cape Verde on October 17, 2021. As shown in Figure A6, this is between 4-14 months between the baseline intervention in Portugal

[13] The percentage of the voting age population who cast a vote in the presidential election in Cape Verde was 56.98% in 2021, compared to 75.29% in Portugal in 2024.

political norms in Portugal. Specifically, we estimate the same regression on a subsample restricted to the closest contacts of migrants residing in areas with above median voter turnout in the elections prior to the endline survey, measured used administrative voting records at the parish council level. We find that treatment effects are particularly strong in this subsample reaching a magnitude of 0.3 SD (p-value < 0.05). These estimates are detailed in Appendix Table A15. Alternatively, Table A22 presents a specification with interaction effects rather than for the split sample to test for significant differences in above and below median voter turnout. We reject the hypothesis that the treatment had the same effect for migrants living in above and below median voter turnout counties.

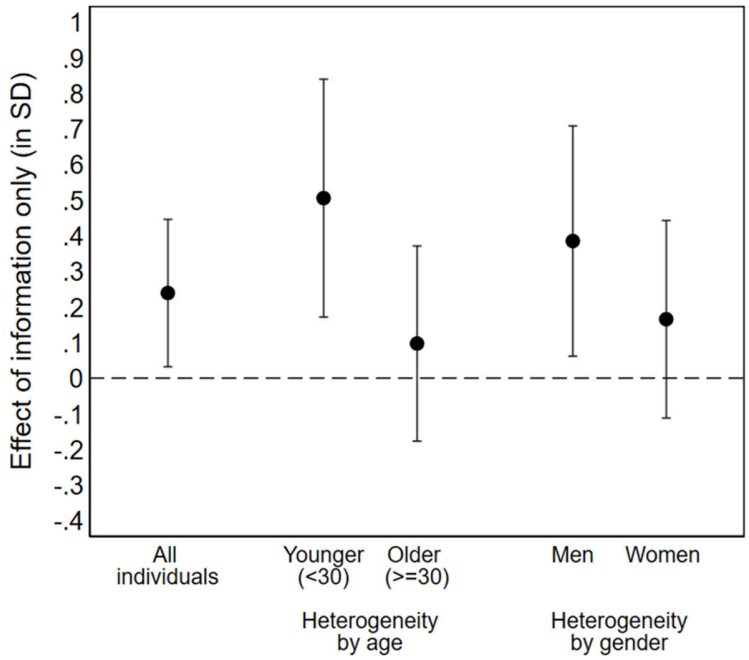
The finding that treated migrants who live in areas with more electoral participation are the ones transmitting more active voting behavior norms is consistent with the fact that a major election took place in the destination country between baseline and endline surveys, which are likely to have made the voting behavior among Portuguese salient to migrants.[14] This election took place about one month before the presidential election in Cape Verde, which served as the reference for voting behavior in the endline survey. In addition, the fact that Cape Verdeans abroad have the right to vote in the Cape Verdean presidential elections was also likely to enhance transmission of more intense political engagement and voting behavior from migrants to their closest contacts in Cape Verde.

We also examine the impact of providing the Morabeza information application to immigrants at destination on the gender norms relative to intra household decision making in the country of origin. Gender norms in Portugal are generally considered more egalitarian than in Cape Verde: In 2022, the female labor force participation in Portugal was at 87%, compared to 78% in Cape Verde. In 2018, 10.2% of women in Cape Verde report having been subject to intimate partner violence in the last 12 months, compared to 3.6% in Portugal. Treatment effects show more egalitarian gender norms, as shown in Figure 7: our gender equality index is significantly increased by 0.24 SD. This index includes a variety of dimensions including career decisions, financial spending and savings, social contacts and daily activities, as detailed in Appendix Table A16. The estimated result provides evidence that easing access to relevant information for

[14] This was the municipal elections held in Portugal on September 26, 2021.

migrants at the destination transmitted more egalitarian gender norms to their closest network members in the country of origin 18 months after.

Figure 7 – Treatment effects of Information App on Gender Equality Norms in Origin Country



Notes: This figure presents ITT estimates of the Morabeza information app treatment in standard deviation units on gender equality norms on household decision making, relative to the control group. The gender equality index dependent variable corresponds to an index ranging from 0 to 1, where 1 corresponds to respondents who think that husband and wife should share equal responsibility in household decision making and 0 corresponds to individuals who believe that only either one of the two is fully responsible over then different decision scenarios. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. Confidence intervals are for 95 percent level. For more details on variables and estimation, see Appendix Tables A16, A17 and A18.

To better understand the mechanism underlying this gender norm transmission effect, we explored whether these results are driven by households in the origin country whose norms we would expect to be more malleable. In particular, we run the same regression on a sample restricted to family members aged less than 30 years old, which are likely to be more prone to changing their beliefs as a result of transmission by migrants.

As illustrated by Figure 7, we find indeed stronger positive effects for the immigrants' closest contacts at home that were younger than 30 years of age, which amount to 0.49 SD statistically

significant at the 1% level. This treatment effect is not statistically significant when focusing only on contacts aged older than 30. Appendix Tables A16 provides detailed estimates of these effects. This evidence confirms our hypothesis that gender norms are only transmitted to the closest contacts whose beliefs are likely more malleable.

We also conducted a heterogeneity analysis on the gender of the closest contact in the country of origin, as shown in Figure 6. We find that treatment effects are concentrated among male respondents, who held slightly less egalitarian beliefs than females at baseline. Detailed results are provided in Appendix Tables A17 and A18.

Appendix Tables A23 and A24 present models with interaction effects for age and gender of the respondent in Cape Verde to test for statistically different coefficient between those groups. While the difference based on age is statistically significant, the difference in believes based on gender are imprecisely estimated.

Effects on financial remittances sent to the country of origin

Appendix Table A19 shows the estimated treatment effects induced by providing the information app to migrants on their financial remittances to the main contact person in the country of origin, as reported by this person. We find no effect on either the probability of sending remittances, nor the value of remittances sent. This result is consistent with the fact that we do not observe any significant change in the income earned by treated immigrants in the destination country.

Effects on frequency of contacts

We estimated the treatment effects of the availability of the Morabeza information app on the frequency of contact between migrants and their closest contacts in the home country. We do not find significant changes in the frequency of contact, as shown in Appendix Table A20. This is a plausible result since the baseline frequency of contact was almost daily - 206 contacts per year, on average, as shown in Appendix Table A3.

Given this high frequency of contacts between migrants and their counterparts in the home country was kept between baseline and endline, we conclude that social remittances are likely to

have been conveyed by a change in the contents of these communication, rather than a change in the frequency of communication.

Effects on migration decisions

We do not find any evidence that better integration of migrants in the destination country increases migration intention of contacts in the origin country. We explore three measures: We ask whether the respondent has the intention to emigrate to Portugal at any point in the future, whether the respondent has made plans to move to Portugal in the next 12 months, and whether the respondent has actually left Cape Verde. While about half of respondents in the control group has an intention to move to Portugal at some point, less than 30% have made concrete plans to move, and only 2% have left the country at endline. We do not find any effects of the information treatment on either of these outcomes, indicating that while information provision in the origin country can improve immaterial remittances, it does not seem to impact emigration decisions or actual emigration. Results are presented in Table A21.

Summary and discussion of main findings and mechanisms

Overall, we find that providing an information app to migrants in the destination country improved their labor market integration, namely by promoting job searching and job switches that increased the quality of jobs held by migrants – although it did not significantly change income earned.

In addition, we find evidence that immigrants who were offered the information app significantly increased their transmission of social norms relative to the migrants in the control group. Indeed, the main contacts in the country of origin improved their gender equality norms and their voting behavior. The mechanisms underlying this transmission of norms seem to be related to the plasticity of beliefs of individuals who are the immigrants' closest contacts in the home country and the salience of events such as elections for migrants that became more closely connected to natives in the country of destination. We exclude increased frequency of contact between migrants and their closest contacts, as well as income effects (given immigrants' labor income does not significantly change, and there is also no significant increase in remittances received by

the closest contacts in the home country) as the source of this transmission of social norms. We further find that the information treatment did not increase migration intentions or actual emigrations among contacts in the origin country.

6. Concluding Remarks

This study hypothesizes that immigrant integration in countries of destination is an important determinant of the development impact of emigration in countries of origin. We provide novel experimental evidence to support this hypothesis.

In particular, we find that providing immigrants with a low-cost, scalable information app in the destination country was a particularly effective tool to promote integration outcomes such as quality of employment, regular migrant status and contact with native residents. Additionally, it affected those left behind. Addressing migrant integration barriers in the destination country improved political participation and gender equality norms in the country of origin.

This evidence opens new avenues of impact that can be taken into account when designing immigrant integration policies.

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Appendix A - Policy Interventions

Information Intervention – *Morabeza* App Description

The name of the information app is Morabeza, a Cape Verdean creole word that expresses hospitality and friendliness to newcomers. Morabeza was the main platform for information intervention. Besides providing information for the immigrant's integration, conditional on each respondent's consent, it also allowed to collect data on the content migrants had accessed.

There were two levels of access in the app: the control group and the treatment group.

The information was divided into 7 categories. All users had access to the first two: A - Day-to-Day and B- Family in Cape Verde. The remaining categories formed the information treatment and were only visible for participants in the information treatment group. These categories were: C - Health in Portugal, D – Obtaining regular immigration status in Portugal, E- Finding a Job and F - Finding a House and G - Migration Support Centers.

Figure A1 – APP's welcome page.

The categories contain the following information:

A – Day-to-day

a.1. Important Contacts

This section includes important contacts such as emergency numbers, health support, police, support and advisory, and immigrant support lines.

a.2. Public Transports

The Public Transports section explains how to use both transports within and outside of Lisbon. Within Lisbon, it explains how to use the bus, metro, train, tram, and boat services, as well as the best ways to buy tickets for different uses and how to obtain discounts.

a.3. Money

The Money section has information about the euro, where to exchange and withdraw money (also mentioning some functionalities of ATMs), how to open a bank account (starting by referring to existing banks, informing them about their schedule and the existence of a bank app and lastly, describing the needed documentation).

a.4. Education

The Education section explains the education system in Portugal, how to enroll in schools (including timing and necessary documentation), and some support the government provides to students.

B – Family in Cape Verde

b.1. Family Reunification

In Portugal, foreign residents have the right to have their family with them. The Family Reunification section explains who is eligible for family reunification and describes the process.

b.2. Contact with Family

The Contact with Family section describes the easiest ways to keep in touch with family in Cape Verde. It advises on how to contact them with and without internet, and how to send remittances and goods.

C – Health in Portugal

The health section advises about the healthcare rights of foreigners in Portugal and describes the healthcare system, how to access it (including how to get vaccinated) and its cost in different situations.

D – Regular immigration status in Portugal

d.1. Obtaining the Documents

This section explains the two most important aspects of regularization in Portugal: the laws regarding immigration and how immigration services work.

d.2. Residence Permit

This section informs users about the different types of residence permits, how to obtain them, what is the needed documentation, and how to renew them.

d.3. NIF

This section is about the taxpayer's number, how to obtain it, and about how taxes work in Portugal.

d.4. Social Security

This section explains social security services, their importance, the benefits and costs of the system and how to register.

d.5. Document Authentications

This section explains where and how to obtain document authentications.

E – Finding a Job

This section teaches how to create a CV, provides a list of websites that post jobs and recruitment agencies. It explains how to get foreign degrees recognized in Portugal, and how to obtain support for starting a business.

F – Finding a House

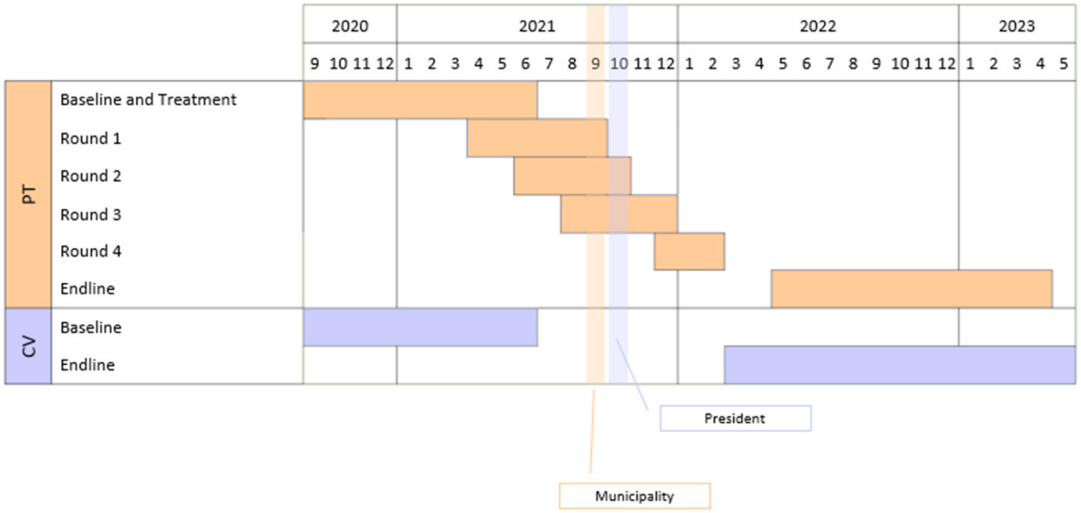
This section explains how to find a house in Portugal, starting with where to look and then explaining legal issues and how to acquire services like gas, water, and electricity.

G – Migration Support Centre

This section provides a description of different types of support centers for migrants in and around Lisbon, the kind of help they can provide, and how to contact them. The section could be personalized according to the residence of the immigrant, it was possible to restrict the search to local support centers.

Appendix B – Timeline

Figure A6: Timeline of the data collection and of elections in origin and destination countries



Appendix C - Empirical Results

Table A1: Balance Checks - Portugal

	(1) Full sample	(2) Control	(3) Information	(6) Joint Orthogonality F-test (RI p-value)
Individual characteristics				
Female	0.573	0.559	0.586	0.628
	(0.495)	(0.498)	(0.494)	
Age	27.664	28.069	27.261	0.268
	(7.088)	(7.087)	(7.083)	
Married	0.126	0.104	0.148	0.224
	(0.332)	(0.306)	(0.356)	
Years of schooling	11.937	11.884	11.99	0.741
	(3.17)	(3.211)	(3.136)	
Year of arrival in Portugal	2018.109	2018.069	2018.148	0.589
	(1.424)	(1.505)	(1.342)	
Speaks Creole at home	0.901	0.896	0.906	0.748
	(0.299)	(0.306)	(0.292)	
Works for pay	0.647	0.639	0.655	0.75
	(0.479)	(0.482)	(0.476)	
Has a permanent work contract	0.158	0.183	0.133	0.177
	(0.365)	(0.388)	(0.34)	
Is a student	0.151	0.163	0.138	0.478
	(0.358)	(0.371)	(0.346)	
Number of hours worked (last week)	24.18	24.094	24.266	0.933
	(21.215)	(21.576)	(20.901)	
Monthly income (in Euros)	500.731	525.426	476.158	0.124
	(326.179)	(338.827)	(311.982)	
Expected monthly income in 10 years (in Euros)	1960.014	2014.565	1906.048	0.476
	(1437.946)	(1442.8)	(1434.973)	
Aspired monthly income in 10 years (in Euros)	5197.692	5013.918	5379.592	0.595
	(6830.6)	(6133.984)	(7467.811)	
Received residence permit since arriving in Portugal	0.701	0.728	0.675	0.277
	(0.458)	(0.446)	(0.47)	
Share of individuals born in Portugal in 5 closest contacts	0.055	0.039	0.07	0.033
	(0.154)	(0.126)	(0.176)	
Plans to return to Cape Verde	0.454	0.436	0.473	0.454
	(0.499)	(0.497)	(0.5)	
Sent money to Cape Verde at least once in the previous year	0.681	0.688	0.675	0.813
	(0.466)	(0.464)	(0.47)	
Amount sent to Cape Verde in money in the previous year (in EUR)	596.902	647.131	546.921	0.198
	(768.615)	(790.265)	(745.036)	
Household characteristics				
Household size	3.136	3.109	3.163	0.757
	(1.645)	(1.675)	(1.619)	
Number of adults (18-60)	2.452	2.475	2.429	0.733
	(1.207)	(1.247)	(1.168)	
Number of children (<18)	0.578	0.55	0.606	0.521
	(0.834)	(0.798)	(0.869)	
Number of elders (>60)	0.106	0.084	0.128	0.259
	(766.034)	(793.911)	(739.18)	
Observations	405	202	203	405
Randomization inference p-value				0.229

Notes: Works for pay is set to 1 if the respondent reports being employed or self-employed or a working student with positive income. Remittances sent refer to remittances sent to anyone in Cape Verde in the previous year. Actual monthly income, remittances and number of hours worked are winsorized at the 99th percentile. Expected and aspired monthly income are winsorized at the 95th percentile. Share of individuals born in Portugal in 5 closest contacts is zero if the migrant reports having zero contacts. Column 6 reports the p-value from a multinomial logit specification that tests balance between each group using randomization inference. The last row of Column 6 reports the p-value from a multinomial logit specification that tests balance between each group across all variables using randomization inference (Kerwin et al., 2024). Standard deviations in parentheses.

Table A2: Relationship with contact person in Cape Verde

	All	
	N	Percent
Husband/Wife or Boyfriend/Girlfriend	32	7.9
Parent or Parent in Law	132	32.6
Sibling or Sibling in Law	129	31.9
Children	14	3.5
Friend	46	11.4
Cousin	25	6.2
Niece/ Nephew	8	2.0
Uncle/Aunt	8	2.0
Grandparent	5	1.2
Other	6	1.5
Total	405	100.0

Notes: The relationships are described from the point of view of the migrant, e.g. a relationship of parent means that the contact in Cape Verde is the migrant's parents.

Table A3: Balance Checks - Cape Verde

	(1)	(2)	(3)	(6)
	Full sample	Control	Information	Joint Orthogonality F-test (RI p-value)
Female	0.634	0.613	0.653	0.45
	(0.482)	(0.488)	(0.477)	
Age	37.174	37.217	37.16	0.826
	(13.155)	(12.571)	(13.813)	
Years of education	10.359	10.081	10.618	0.515
	(4.454)	(4.529)	(4.379)	
Married	0.198	0.19	0.206	0.71
	(0.399)	(0.394)	(0.405)	
Works for pay	0.557	0.578	0.602	0.27
	(0.497)	(0.495)	(0.491)	
Employee	0.383	0.398	0.369	0.26
	(0.487)	(0.491)	(0.484)	
Self-employed	0.205	0.205	0.205	0.35
	(0.404)	(0.405)	(0.405)	
Student	0.125	0.112	0.136	0.206
	(0.331)	(0.316)	(0.344)	
Unemployed	0.142	0.161	0.125	0.147
	(0.35)	(0.369)	(0.332)	
Has permanent contract	0.142	0.129	0.153	0.519
	(0.349)	(0.336)	(0.361)	
Hours worked (previous week)	26.343	26.722	26	0.679
	(23.268)	(23.336)	(23.271)	
After-tax monthly income (in CV Contos)	22.391	23.488	23.989	0.108
	(32.459)	(33.135)	(32.855)	
Number of times in contact with migrant (past year)	206.482	235.109	207.867	0.331
	(164.174)	(159.599)	(160.079)	
Infrequent contact with migrant (less than monthly)	0.011	0.012	0.011	0.864
	(0.105)	(0.11)	(0.106)	
Received remittances from migrant in previous year	0.429	0.472	0.438	0.506
	(0.496)	(0.501)	(0.497)	
Value of remittances received from migrant in previous year in EUR	139.455	138.635	156.233	0.638
	(334.918)	(326.87)	(357.936)	
Voted in 2016	0.698	0.75	0.732	0.335
	(0.46)	(0.434)	(0.444)	
Intrahousehold gender equality index (0-1 scale)	0.803	0.858	0.848	0.855
	(0.26)	(0.164)	(0.179)	
Wants to emigrate from CV	0.682	0.742	0.705	0.687
	(0.466)	(0.439)	(0.457)	
Wants to move to PT	0.511	0.535	0.549	0.839
	(0.501)	(0.5)	(0.499)	
Made specific plans to move to PT	0.372	0.403	0.399	0.524
	(0.484)	(0.493)	(0.491)	
Income expectations in PT (monthly salary in EUR)	239.829	274.699	239.731	0.352
	(549.262)	(749.118)	(327.435)	
Observations	339	163	176	339
Randomization inference p-value				0.759

Notes: Hours worked, after-tax income, and remittances received are winsorized at the 99th percentile. Value of remittances refers to remittances received from the migrant in Portugal. 1 CV Conto ≈ 9 EUR. Infrequent contact is defined as less than monthly contact. Column 6 reports the p-value from a multinomial logit specification that tests balance between each group using randomization inference. The last row of Column 6 reports the p-value from a multinomial logit specification that tests balance between each group across all variables using randomization inference (Kerwin et al., 2024). Standard deviations in parentheses.

Table A4: Attrition checks - Portugal

	(1) Full sample	(2) Control	(3) Information	(6) Differential attrition rate F-test (RI p-value)
All rounds	0.292	0.274	0.31	0.084
	(0.455)	(0.446)	(0.463)	
By survey round:				
Round 1	0.158	0.139	0.177	0.351
	(0.365)	(0.346)	(0.383)	
Round 2	0.257	0.262	0.251	0.827
	(0.437)	(0.441)	(0.435)	
Round 3	0.264	0.208	0.320	0.015
	(0.441)	(0.407)	(0.468)	
Round 4	0.326	0.287	0.365	0.124
	(0.469)	(0.454)	(0.482)	
Round 5	0.457	0.475	0.438	0.483
	(0.499)	(0.501)	(0.497)	
Observations	2025	1010	1015	2025

Notes: The first row (attrition, all rounds) displays the share of unsuccessful follow-up and endline interviews. If we had interviewed all 813 baseline participants for all 4 follow-up rounds and the endline, the number of interviews would have been 4,065 (813*5). The number in column (1) means that of these 4,065 potential interviews, 29.3% were not sucessfully completed. The remaining rows display this statistic for each survey round. For example, in the first round out of 813 potential interviews, 16.6% were not sucessfully completed. Column (6) displays the randomization inference p-value of an F-test for differential attrition by treatment group. Standard deviations are reported in parentheses.

Table A5: Attrition Checks - Cape Verde

	(1) Full sample	(2) Control	(3) Information	(6) Differential attrition rate F-test (RI p-value)
Baseline	0.163	0.193	0.133	0.102
	(0.37)	(0.396)	(0.34)	
Endline	0.242	0.272	0.212	0.173
	(0.429)	(0.446)	(0.41)	
Observations	405	202	203	
Endline (if BL_attrition=0)	0.153	0.16	0.148	0.899
	(0.361)	(0.367)	(0.356)	
Observations	339	163	176	

Notes: The first row displays the share of unsuccessful baseline interviews. If we had interviewed all 813 baseline participants contact person for the baseline, the number of interviews would have been 813. The number in column (1) means that of these 813 potential interviews, 17.9% were not sucessfully completed. The remaining row displays this number for endline. Column (6) displays the p-value of an F-test for differential attrition by treatment group using randomization inference. Standard deviations are reported in parentheses.

Table A6: Treatment effects on usage data from the App

				Sections accessed:					
	(1) Downloaded the App	(2) Usage data available	(3) Number of sections accessed	(4) Regular migration status	(5) Find a job	(6) Find a home	(7) Migrant support centers	(8) Health	(9) Placebo sections
T1: Information	0.056	0.088*	1.228**	0.998***	0.390***	0.517***	0.210***	0.101***	-0.987***
	(0.044)	(0.05)	(0.509)	(0.26)	(0.085)	(0.111)	(0.056)	(0.03)	(0.236)
Control mean	0.703	0.490	1.748	0.000	0.000	0.000	0.000	0.000	1.748
Control SD	0.458	0.501	2.741	0.000	0.000	0.000	0.000	0.000	2.741
Observations	405	405	405	405	405	405	405	405	405

Notes: This table shows usage data from the App by treatment status. Individuals with no usage data are those who did not download the App, never used it, or had a device who did not allow sharing of usage data.

Table A7: Share of sample without documentation in Portugal

	(1) At baseline	(2) At endline
Share undocumented	0.394	0.231
N	376	220

Notes: The share of the sample who is undocumented is calculated through a listing experiment. Half of the sample was asked to pick how many of three statements about them are true, without a statement on residence permit. The other half was asked how many of four statements are true, including the former three statements and a statement about their residence permit. The rate of undocumented respondents is calculated as the difference in the mean number of statements people reported to be true in the case of three vs four statements.

Table A8: Treatment effects on Job Quality Index Components

	(1) Job Quality Index	(2) Found a job she likes	(3) Found a better paid job	(4) Found a more stable job	(5) Found a job closer to home	(6) Found a work with better schedule	(7) Was promoted
T1:Information	0.046***	0.048**	0.049**	0.053**	0.054***	0.076***	-0.003
	(0.013)	(0.021)	(0.024)	(0.021)	(0.017)	(0.018)	(0.015)
	[0.001]	[0.001]	[0.003]	[0.001]	[0.001]	[0.001]	[0.764]
Control mean	0.088	0.1	0.16	0.107	0.052	0.055	0.055
Control SD	0.17	0.3	0.367	0.309	0.222	0.228	0.228
Observations	1403	1403	1403	1403	1403	1403	1403
Number of individuals	380	380	380	380	380	380	380

Notes: Job Quality Index is an average of the binary items related to job quality achieved since the baseline survey. These items included: found a job better liked, found a better paid job, found a more stable job, found a job closer to home, found a job with a better schedule, was promoted. Columns (2)-(7) display as dependent variables the binary variables corresponding to these achievements. If respondents did not select an achievement, a zero is imputed unless the respondent aswered "Do not know/Do not respond" to the whole section, in which case both the index and the component is missing. The table displays coefficients from an OLS regression with strata dummies, round fixed effects, and robust standard errors. The control mean refers to the control mean in all rounds after the baseline. Standard errors clustered at the migrant level in parenthesis. Q-values adjusted for multiple hypothesis testing following Romano and Wolf (2016) are presented in brackets.* p<0.1, ** p<0.05, *** p<0.01

Table A9: Treatment effects on labor market outcomes

	(1) Inactive NEET	(2) Unemployed	(3) Student	(4) Employed	(5) Permanent contract	(6) Weekly hours worked	(7) Monthly income (EUR)
T1: Information	-0.018**	0.044**	-0.013	-0.008	-0.04	-2.094	0.008
	(0.009)	(0.02)	(0.018)	(0.028)	(0.028)	(1.327)	(0.037)
	[0.016]	[0.011]	[0.526]	[0.837]	[0.067]	[0.042]	[0.837]
Control mean	0.021	0.083	0.14	0.761	0.246	30.476	607.364
Control SD	0.142	0.277	0.347	0.427	0.431	18.867	328.255
Observations	1429	1429	1429	1429	1399	1323	1381
Number of individuals	381	381	381	381	380	362	373

Notes: Dependent variables are defined as follows. Inactive NEET: A person who is not working and not actively seeking work, nor a student or trainee. This includes retirees and other individuals not currently in training or looking for a job. Unemployed: A person who is not working but is actively looking for a job. This includes individuals who are looking for jobs, are available to work, and have taken specific steps to find employment. Student: A person who reports studying as their main occupation. Employed: A person who is currently working for pay or profit. This includes full-time and part-time workers, as well as those who are self-employed. Monthly income and Hours worked have been winsorized at the 99th percentile. Hours worked include zeroes. Job Quality Index is an average of the binary items related to job quality achieved since the baseline survey. These items included: found a job better liked, found a better paid job, found a more stable job, found a job closer to home, found a job with a better schedule, was promoted. Columns (1)-(6) display coefficients from ANCOVA regressions with strata dummies, round fixed effects, and robust standard errors. Column (7) displays coefficients from Poisson regressions with stata dummies, round fixed effects, and robust standard errors. Column (8) displays coefficients from an OLS regression with strata dummies, round fixed effects and robust standard errors. The control mean refers to the control mean in all rounds after the baseline. Standard errors clustered at the migrant level in parenthesis. Q-values adjusted for multiple hypothesis testing following Romano and Wolf (2016) are presented in brackets.* p<0.1, ** p<0.05, *** p<0.01

Table A10: Treatment effects on residency status

	(1) Looked for information on how to get residence permit since baseline	(2) Received residence permit since baseline
T1:Information	0.197***	0.043*
	(0.038)	(0.025)
	[0.001]	[0.007]
Control mean	0.302	0.291
Control SD	0.459	0.454
Observations	1433	1433
Number of individuals	381	381

Notes: In the baseline, respondents were asked whether they had looked for information on how to get a residence permit or whether they had received a permit since they arrived in Portugal. In the follow-up interviews, the reference time frame was the time between the baseline and the current interview. The table displays coefficients from ANCOVA regressions with strata dummies, round fixed effects, and robust standard errors. The control mean refers to the control mean in all rounds after the baseline. Standard errors clustered at the migrant level in parenthesis. Q-values adjusted for multiple hypothesis testing following Romano and Wolf (2016) are presented in brackets.* p<0.1, ** p<0.05, *** p<0.01

Table A11: Treatment effects on share of individuals born in Portugal as share of migrants' closest social network in Portugal

	(1) Dummy	(2) Ratio
T1:Information	0.038	0.033**
	(0.031)	(0.016)
	[0.092]	[0.02]
Control mean	0.075	0.027
Control SD	0.265	0.109
Observations	220	220

Notes: The dependent variables in columns (1) and (2) are measures of the migrants' network in Portugal at endline. The endline network is measured as the up to 5 closest members who were migrants' contacts in Portugal at baseline or are new contacts in Portugal, both reported at endline. Column (1) is a binary variable taking value 1 if this endline measure of migrants' network includes any individual born in Portugal. Column (2) is a ratio between the number of individuals born in Portugal and the total number of members in the endline network. Coefficients displayed are from OLS regressions with strata dummies, and robust standard errors. The baseline network is included as a control. A binary error variable taking value 1 whenever more than 5 contacts were recorded at endline by mistake was added to all regressions. The control mean refers to the control mean in all rounds after the baseline. Standard errors clustered at the migrant level in parenthesis. Q-values adjusted for multiple hypothesis testing following Romano and Wolf (2016) are presented in brackets.* p<0.1, ** p<0.05, *** p<0.01

Table A12: Treatment effects on aspirations and expectations

	(1)	(2)	(3)	(4)
	Do you agree with the following statements…			
	Cape Verdean immigrants can be successful in Portugal	The Cape Verdean community has examples of people who were successful in Portugal	Labor market aspirations	Labor market expectations
T1:Information	0.077	0.046	0.272**	0.411***
	(0.072)	(0.068)	(0.123)	(0.141)
	[0.236]	[0.379]	[0.004]	[0.001]
Control mean	4.094	4.104	2.622	2.303
Control SD	0.744	0.68	2.333	2.284
Observations	405	405	1367	1004
Number of individuals	405	405	373	333

Notes: Dependent variables in columns (1) and (2) use Likert scales (1: totally disagree; 5: totally agree). Data for these two variables was collected shortly after the delivery of the interventions at the end of the baseline survey. Dependent variables in columns (3) and (4) are count variables indicating the number of achievements (up to 10) the respondent aspires or expects to achieve in the labor market, respectively. Data for these two variables are from the follow-up surveys. The question on labor market expectations was not included in round 1, hence the smaller number of observations. Columns (1) and (2) display coefficients from OLS regressions with strata dummies and robust standard errors. Columns (3) and (4) display coefficients from ANCOVA regressions with strata dummies, round fixed effects, and robust standard errors. The control mean refers to the control mean in all rounds after the baseline. Standard errors clustered at the migrant level in parenthesis. Q-values adjusted for multiple hypothesis testing following Romano and Wolf (2016) are presented in brackets.* p<0.1, ** p<0.05, *** p<0.01

Table A13: Treatment effects on self-efficacy, grit, depression and job quality

	(1) Self-efficacy (Likert Scale)	(2) Self-efficacy (Dummy)	(3) Grit (Likert Scale)	(4) Depression (Likert Scale)	(5) Depression (Dummy)
T1:Information	-0.047	-0.157	0.101	0.166	0.257
	(0.142)	(0.169)	(0.142)	(0.134)	(0.215)
	[0.656]	[0.495]	[0.543]	[0.376]	[0.376]
Control mean	0.039	6.844	-0.024	-0.04	2.345
Control SD	1.046	1.911	0.991	0.986	2.111
Observations	219	492	206	189	456
Number of individuals	303	303	206	189	291

Notes: Questions on self-efficacy asked in round 4 (dummy) and 5 (Likert scale). Self-efficacy is a count variable composed of 8 items. Grit is a count variable composed of 12 items. Depression is a count variable composed of 8 items. Questions on grit asked in round 5 (Likert scale). Questions on depression asked in round 3 (dummy) and 5 (Likert scale). For outcomes using the Likert scale, the numbers on the scale were added across items. The scale is then normalized to have a mean of 0 and a standard deviation of 1. For outcomes using the dummies, the Likert scale outcomes were converted into a dummy and dummies were added across items. The table displays coefficients from an OLS regression with strata dummies, round fixed effects, and robust standard errors. The control mean refers to the control mean in all rounds after the baseline. Standard errors clustered at the migrant level in parenthesis. Q-values adjusted for multiple hypothesis testing following Romano and Wolf (2016) are presented

Table A14: Treatment effects on political outcomes in origin country

	(1) Voted in previous elections	(2) Demand for public service quality	(3) Political participation index
T1:Information	0.105**	0.083	0.007
	(0.05)	(0.12)	(0.119)
	[0.01]	[0.568]	[0.932]
Control mean	0.707	6.021	0.612
Control SD	0.456	1.048	0.996
Observations	297	301	306

Notes: Voted in previous elections is a binary variable equal to 1 if the respondent voted in the election prior to the survey. Demand for public service quality ranges from 1 to 7, where 1 corresponds to support of a completely passive role of the citizen with respect to government action and 7 corresponds to the citizen being as active as possible. If the individual component is missing (= NS/NR), it is assumed to be missing information. Political participation index ranges from 0 to 5, where 0 corresponds to no political involvement in actions that citizens take when they are unhappy with the government and 5 corresponds to great involvement. If the individual component is missing (= NS/NR), it is assumed to be zero. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. To keep the sample size when adding controls, missing controls were set to the median value of the control group. Dummies for whether the control was imputed were then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A15 - Treatment effects on political outcomes
Panel A: Migrant lives in above median voting turnout parish

	(1) Voted in previous elections	(2) Demand for public service quality	(3) Political Participation Index
T1:Information	0.177**	0.101	-0.159
	(0.083)	(0.21)	(0.186)
	[0.022]	[0.528]	[0.467]
Control mean	0.661	5.964	0.61
Control SD	0.477	1.206	0.965
Observations	128	126	131

Notes: All regressions are run on a subsample of the original sample, i.e. only one those whose migrant in Portugal lives in a parish with above median voting turnout. The median is defined as the median parish in the 45 parishes we observe migrants in. Voted in previous elections is a binary variable equal to 1 if the respondent voted in the election prior to the survey. Demand for public service quality ranges from 1 to 7, where 1 corresponds to support of a completely passive role of the citizen with respect to government action and 7 corresponds to the citizen being as active as possible. If the individual component is missing (= NS/NR), it is assumed to be missing information. Political participation index ranges from 0 to 5, where 0 corresponds to no political involvement in actions that citizens take when they are unhappy with the government and 5 corresponds to great involvement. If the individual component is missing (= NS/NR), it is assumed to be zero. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. To keep the sample size when adding controls, missing controls were set to the median value of the control group. Dummies for whether the control was imputed were then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A15 - Treatment effects on political outcomes
Panel B: Migrant lives in below median voting turnout parish

	(1) Voted in previous elections	(2) Demand for public service quality	(3) Political Participation Index
T1:Information	0.058	0.02	0.131
	(0.064)	(0.154)	(0.158)
	[0.534]	[0.874]	[0.534]
Control mean	0.739	6.057	0.614
Control SD	0.442	0.939	1.022
Observations	169	175	175

Notes: All regressions are run on a subsample of the original sample, i.e. only one those whose contact in Portugal lives in a parish with below (or at) median voter turnout. The median is defined as the median parish in the 45 parishes we observe migrants in. Voted in previous elections is a binary variable equal to 1 if the respondent voted in the election prior to the survey. Demand for public service quality ranges from 1 to 7, where 1 corresponds to support of a completely passive role of the citizen with respect to government action and 7 corresponds to the citizen being as active as possible. If the individual component is missing (= NS/NR), it is assumed to be missing information. Political participation index ranges from 0 to 5, where 0 corresponds to no political involvement in actions that citizens take when they are unhappy with the government and 5 corresponds to great involvement. If the individual component is missing (= NS/NR), it is assumed to be zero. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. To keep the sample size when adding controls, missing controls were set to the median value of the control group. Dummies for whether the control was imputed were then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A16: Treatment effects on preferences on intrahousehold equality

	In a family who do you think should….										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Intrahousehold Decision Making Gender Equality Index	Have the most important job/occupation	Take the initiative in resolving conflicts or arguments	Provide emotional support to family members	Have the responsibility of earning money to support the family	Make decisions about major purchases for the house or family	Make decisions about daily purchases for the house or family	Make decisions about visits to family and friends	Make decisions about the healthcare of the wife	Make decisions about what food is cooked every day	Make decisions about the family savings
T1:Information	0.037**	0.044*	0.041*	0.034	0.036	0.062*	0.024	0.052***	0.021	0.062	0.003
	(0.018)	(0.023)	(0.024)	(0.023)	(0.023)	(0.032)	(0.037)	(0.02)	(0.048)	(0.04)	(0.019)
	[0.074]	[0.957]	[0.486]	[0.572]	[0.505]	[0.031]	[0.964]	[0.874]	[0.505]	[0.571]	[0.163]
Control mean	0.852	0.905	0.897	0.904	0.898	0.83	0.796	0.932	0.664	0.724	0.952
Control SD	0.17	0.222	0.227	0.222	0.234	0.284	0.319	0.2	0.394	0.347	0.158
Observations	292	305	301	303	306	306	306	305	304	303	306

Notes: Equality Index (1) corresponds to an index ranging from 0 to 1, where 1 corresponds to respondents who think that husband and wife share equal responsibility for all the scenarios proposed and 0 corresponds to individuals who believe that only either one of the two is fully responsible in each scenario. If the individual component is missing (= NS/NR), it is assumed to be missing information and the observation has no overall index associated. The outcomes from (2) to (11) are the individual components of the index. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A17 - Panel A: Treatment effects on preferences on intrahousehold equality, respondent is male

	In a family who do you think should….										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Intrahousehold Decision Making Gender Equality Index	Have the most important job/occupation	Take the initiative in resolving conflicts or arguments	Provide emotional support to family members	Have the responsibility of earning money to support the family	Make decisions about major purchases for the house or family	Make decisions about daily purchases for the house or family	Make decisions about visits to family and friends	Make decisions about the healthcare of the wife	Make decisions about what food is cooked every day	Make decisions about the family savings
T1:Information	0.063**	0.031	0.069	0.049	0.069	0.117***	0.059	0.022	0.121	0.074	0.052**
	(0.028)	(0.043)	(0.047)	(0.034)	(0.046)	(0.042)	(0.052)	(0.019)	(0.08)	(0.06)	(0.024)
	[0.074]	[0.957]	[0.486]	[0.572]	[0.505]	[0.031]	[0.964]	[0.874]	[0.505]	[0.571]	[0.163]
Control mean	0.84	0.877	0.86	0.904	0.851	0.825	0.816	0.956	0.632	0.754	0.93
Control SD	0.175	0.272	0.28	0.24	0.283	0.275	0.308	0.171	0.396	0.329	0.199
Observations	105	111	109	112	112	112	112	112	111	110	112

Notes: All regressions are run with only male respondents in the sample. Equality Index (1) corresponds to an index ranging from 0 to 1, where 1 corresponds to respondents who think that husband and wife share equal responsibility for all the scenarios proposed and 0 corresponds to individuals who believe that only either one of the two is fully responsible in each scenario. If the individual component is missing (= NS/NR), it is assumed to be missing information and the observation has no overall index associated. The outcomes from (2) to (11) are the individual components of the index. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A17 - Panel B: Treatment effects on preferences on intrahousehold equality, respondent is female

	In a family who do you think should….										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Intrahousehold Decision Making Gender Equality Index	Have the most important job/occupation	Take the initiative in resolving conflicts or arguments	Provide emotional support to family members	Have the responsibility of earning money to support the family	Make decisions about major purchases for the house or family	Make decisions about daily purchases for the house or family	Make decisions about visits to family and friends	Make decisions about the healthcare of the wife	Make decisions about what food is cooked every day	Make decisions about the family savings
T1:Information	0.031	0.034	0.022	0.025	0.014	0.036	0.029	0.080***	0.001	0.072	-0.023
	(0.025)	(0.024)	(0.028)	(0.031)	(0.028)	(0.045)	(0.049)	(0.029)	(0.063)	(0.054)	(0.025)
	[0.814]	[0.622]	[0.873]	[0.827]	[0.994]	[0.975]	[0.998]	[0.011]	[0.998]	[0.631]	[0.994]
Control mean	0.859	0.922	0.921	0.904	0.928	0.833	0.783	0.916	0.685	0.706	0.967
Control SD	0.168	0.182	0.183	0.212	0.192	0.29	0.327	0.216	0.394	0.359	0.125
Observations	187	194	192	191	194	194	194	193	193	193	194

Notes: All regressions are run with only female respondents in the sample. Equality Index (1) corresponds to an index ranging from 0 to 1, where 1 corresponds to respondents who think that husband and wife share equal responsibility for all the scenarios proposed and 0 corresponds to individuals who believe that only either one of the two is fully responsible in each scenario. If the individual component is missing (= NS/NR), it is assumed to be missing information and the observation has no overall index associated. The outcomes from (2) to (11) are the individual components of the index. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A18 - Panel A: Treatment effects on preferences on intrahousehold equality, respondent is young

		In a family who do you think should….									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Intrahousehold Decision Making Gender Equality Index	Have the most important job/occupation	Take the initiative in resolving conflicts or arguments	Provide emotional support to family members	Have the responsibility of earning money to support the family	Make decisions about major purchases for the house or family	Make decisions about daily purchases for the house or family	Make decisions about visits to family and friends	Make decisions about the healthcare of the wife	Make decisions about what food is cooked every day	Make decisions about the family savings
T1:Information	0.090***	0.04	0.077*	0.068	0.090**	0.149**	0.111	0.029	0.144*	0.166**	0.036
	(0.032)	(0.033)	(0.044)	(0.049)	(0.045)	(0.057)	(0.07)	(0.023)	(0.083)	(0.066)	(0.031)
	[0.047]	[0.672]	[0.361]	[0.447]	[0.22]	[0.098]	[0.662]	[0.447]	[0.367]	[0.073]	[0.447]
Control mean	0.833	0.902	0.891	0.87	0.859	0.783	0.761	0.957	0.663	0.696	0.946
Control SD	0.184	0.271	0.277	0.267	0.292	0.327	0.361	0.177	0.395	0.341	0.189
Observations	108	109	108	109	109	109	109	109	109	109	109

Notes: All regressions are run for respondents below the age of 30. Equality Index (1) corresponds to an index ranging from 0 to 1, where 1 corresponds to respondents who think that husband and wife share equal responsibility for all the scenarios proposed and 0 corresponds to individuals who believe that only either one of the two is fully responsible in each scenario. If the individual component is missing (= NS/NR), it is assumed to be missing information and the observation has no overall index associated. The outcomes from (2) to (11) are the individual components of the index. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression.Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A18 - Panel B: Treatment effects on preferences on intrahousehold equality, respondent is not young

		In a family who do you think should….									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Intrahousehold Decision Making Gender Equality Index	Have the most important job/occupation	Take the initiative in resolving conflicts or arguments	Provide emotional support to family members	Have the responsibility of earning money to support the family	Make decisions about major purchases for the house or family	Make decisions about daily purchases for the house or family	Make decisions about visits to family and friends	Make decisions about the healthcare of the wife	Make decisions about what food is cooked every day	Make decisions about the family savings
T1:Information	0.013	0.03	0.027	0.02	0.005	0.022	-0.016	0.064**	-0.037	0.007	-0.015
	(0.024)	(0.029)	(0.031)	(0.025)	(0.028)	(0.04)	(0.047)	(0.028)	(0.061)	(0.054)	(0.027)
	[0.984]	[0.759]	[0.855]	[0.759]	[1]	[0.993]	[0.999]	[0.043]	[0.97]	[0.999]	[1]
Control mean	0.86	0.905	0.899	0.919	0.915	0.85	0.81	0.919	0.672	0.735	0.955
Control SD	0.164	0.197	0.202	0.198	0.202	0.261	0.3	0.211	0.392	0.351	0.144
Observations	182	194	191	192	195	195	195	194	193	192	195

Notes: All regressions are run for respondents above the age of 30. Equality Index (1) corresponds to an index ranging from 0 to 1, where 1 corresponds to respondents who think that husband and wife share equal responsibility for all the scenarios proposed and 0 corresponds to individuals who believe that only either one of the two is fully responsible in each scenario. If the individual component is missing (= NS/NR), it is assumed to be missing information and the observation has no overall index associated. The outcomes from (2) to (11) are the individual components of the index. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A19: Treatment effects on remittances

	(1) Probability of receiving remittances	(2) Value of remittances received
T1:Information	-0.065	-65.488
	(0.054)	(41.937)
	[0.5]	[0.5]
Control mean	0.476	222.622
Control SD	0.501	411.716
Observations	307	293

Notes: Received remittances (1) is a binary variable which is equal to 1 if the respondent received remittances from the migrant in Portugal over the previous year. Value of remittances (2) corresponds to the value of remittances received from the migrant over the previous year in euros. This variable was winsorized at the 99th percentile. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A20: Treatment effects on contact with migrant

	(1) Contacts per year	(2) Infrequent Contact
T1:Information	-11.189	-0.008
	(16.597)	(0.01)
Control mean	181.095	0.014
Control SD	160.329	0.116
Observations	307	307

Notes: Number of contacts in last year (1) is equal to the number of times the migrant had contact with the respondent in Cape Verde in the last year. Infrequent contact (2) is a binary variable which is equal to 1 if respondent and migrant contact each other less frequenly than monthly. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A21: Treatment effects on migration decisions

	(1) Intention to Emigrate to PT	(2) Made plans to move to PT	(3) Actual emigration
T1:Information	0.04	0.081	0.000
	(0.057)	(0.057)	(0.018)
Control mean	0.538	0.285	0.02
Control SD	0.5	0.453	0.142
Observations	293	240	307

Notes: Intention to Emigrate to PT in column (1) is a binary variable taking value 1 if the respondent intends to move to Portugal. No time horizon was given in the question. Value 1 is imputed for those who had already moved to Portugal and value 0 if the person already migrated to somewhere else. Made plans to move to PT in column (2) is a binary variable taking value 1 if the respondent has made plans to move to Portugal in the next 12 months. This question was only asked to those not yet living in Portugal at endline who expressed an intention to emigrate. Value 0 was imputed to those who do not express an intention to emigrate. Actual emigration in column (3) is a binary variable taking value 1 if the respondent was living outside of Cape Verde at the time of the endline survey. The regression specification is ANCOVA and it is run with strata dummies and robust standard errors. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * $p<0.1$, ** $p<0.05$, *** $p<0.01$

Table A22: Treatment effects on politics - heterogeneity by voter turnout in Portugal

	(1)	(2)	(3)
	Voted	Demand for public service quality	Political Participation Index
T1:Information * Above median turnout in PT	0.123	0.033	-0.316
	(0.102)	(0.256)	(0.234)
	[0.387]	[0.848]	[0.148]
T1:Information	0.055	0.07	0.146
	(0.063)	(0.151)	(0.156)
	[0.513]	[0.513]	[0.474]
Above median voter turnout	-0.03	-0.035	0.123
	(0.145)	(0.873)	(0.244)
p-values:			
T1+T1*turnout+turnout=0	0.266	0.939	0.837
T1+T1*turnout=0	0.028	0.618	0.339
Control mean if positive share	0.661	5.964	0.61
Control mean if zero share	0.739	6.057	0.614
Observations	297	301	306

Notes: Voted (1) is a binary variable equal to 1 if respondent has voted in last election. Outcome (2) is equal to a question ranging from 1 to 7, where 1 corresponds to support of a completely passive role of the citizen with respect to government action and 7 corresponds to the citizen being as active as possible. If the individual component is missing (= NS/NR), it is assumed to be missing information. Political participation (3) is equal to an index ranging from 0 to 5, where 0 corresponds to no political involvement in the form of actions that citizens take when they are unhappy with the government and 5 corresponds to great involvement. If the individual component is missing (= NS/NR), it is assumed to be zero. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The regressions contain a dummy that is equal to 1 in if the migrant in Portugal lives in a parish with above median voter turnout and 0 otherwise. This dummy is interacted with the treatment dummies, and all controls. The median is defined as the median parish in the parishes we observe migrant's in (45 parishes). The (Cape Verde) baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. To maintain the sample size when adding controls, missing controls were set to the median value of the control group. Dummies for whether the control was imputed were then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A23: Treatment effects on preferences on intrahousehold equality - heterogeneity

	In a family who do you think should….										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Equality Index	Have the most important job/occupation	Take the initiative in resolving conflicts or arguments	Provide emotional support to family members	Have the responsibility of earning money to support the family	Make decisions about major purchases for the house or family	Make decisions about daily purchases for the house or family	Make decisions about visits to family and friends	Make decisions about the healthcare of the wife	Make decisions about what food is cooked every day	Make decisions about the family savings
T1:Information * Respondent is young	0.072*	0.001	0.055	0.036	0.088	0.107	0.11	-0.029	0.151	0.170**	0.052
	(0.039)	(0.042)	(0.055)	(0.054)	(0.056)	(0.069)	(0.081)	(0.035)	(0.099)	(0.08)	(0.04)
	[0.22]	[0.998]	[0.864]	[0.959]	[0.401]	[0.401]	[0.572]	[0.949]	[0.426]	[0.113]	[0.624]
T1:Information	0.011	0.031	0.021	0.02	0.005	0.025	-0.013	0.060**	-0.033	-0.002	-0.019
	(0.023)	(0.028)	(0.031)	(0.025)	(0.028)	(0.039)	(0.046)	(0.027)	(0.06)	(0.052)	(0.026)
	[0.959]	[0.785]	[0.959]	[0.949]	[0.993]	[0.959]	[0.99]	[0.086]	[0.959]	[0.998]	[0.959]
Young	0.066	-0.407*	0.341***	-0.243	0.076	-0.059	-0.083	0.212**	0.122	-0.037	-0.075
	(0.136)	(0.209)	(0.108)	(0.239)	(0.18)	(0.143)	(0.134)	(0.097)	(0.122)	(0.114)	(0.11)
p-values:											
T1+T1*young+young=0	0.285	0.063	0.001	0.463	0.354	0.604	0.928	0.012	0.04	0.217	0.73
T1+T1*young=0	0.009	0.326	0.096	0.249	0.048	0.021	0.149	0.202	0.142	0.007	0.287
Control mean for young (under 30)	0.833	0.902	0.891	0.87	0.859	0.783	0.761	0.957	0.663	0.696	0.946
Control mean for over 30	0.86	0.905	0.899	0.919	0.915	0.85	0.81	0.919	0.672	0.735	0.955
Observations	290	303	299	301	304	304	304	303	302	301	304

Notes: Equality Index (1) corresponds to an index ranging from 0 to 1, where 1 corresponds to respondents who think that husband and wife share equal responsibility for all the scenarios proposed and 0 corresponds to individuals who believe that only either one of the two is fully responsible in each scenario. If the individual component is missing (= NS/NR), it is assumed to be missing information and the observation has no overall index associated. The outcomes from (2) to (11) are the individual components of the index. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The regressions furthermore contain a dummy for young (below 30), and the dummy interacted with the treatment and the baseline control. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Table A24: Treatment effects on preferences on intrahousehold equality - heterogeneity

	In a family who do you think should….										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Equality Index	Have the most important job/occupation	Take the initiative in resolving conflicts or arguments	Provide emotional support to family members	Have the responsibility of earning money to support the family	Make decisions about major purchases for the house or family	Make decisions about daily purchases for the house or family	Make decisions about visits to family and friends	Make decisions about the healthcare of the wife	Make decisions about what food is cooked every day	Make decisions about the family savings
T1:Information * Respondent is female	-0.034	-0.002	-0.051	-0.034	-0.061	-0.084	-0.027	0.054	-0.105	-0.006	-0.076**
	(0.038)	(0.047)	(0.054)	(0.049)	(0.056)	(0.062)	(0.073)	(0.038)	(0.097)	(0.079)	(0.038)
	[0.733]	[0.994]	[0.733]	[0.768]	[0.706]	[0.499]	[0.933]	[0.451]	[0.706]	[0.994]	[0.161]
T1:Information	0.060**	0.039	0.068	0.056	0.073	0.116***	0.053	0.021	0.088	0.069	0.050*
	(0.028)	(0.04)	(0.046)	(0.035)	(0.046)	(0.042)	(0.053)	(0.023)	(0.075)	(0.058)	(0.027)
	[0.108]	[0.733]	[0.427]	[0.368]	[0.368]	[0.02]	[0.709]	[0.733]	[0.655]	[0.655]	[0.231]
Female	-0.053	0.102	0.135	-0.017	-0.044	0.037	-0.196*	-0.157	0.065	-0.085	0.022
	(0.116)	(0.172)	(0.171)	(0.118)	(0.14)	(0.131)	(0.112)	(0.119)	(0.127)	(0.109)	(0.072)
p-values:											
T1+T1*fem+fem=0	0.811	0.415	0.373	0.969	0.814	0.599	0.135	0.478	0.697	0.831	0.951
T1+T1*fem=0	0.291	0.13	0.539	0.483	0.661	0.478	0.599	0.01	0.784	0.246	0.307
Control mean for women	0.859	0.922	0.921	0.904	0.928	0.833	0.783	0.916	0.685	0.706	0.967
Control mean for men	0.84	0.877	0.86	0.904	0.851	0.825	0.816	0.956	0.632	0.754	0.93
Observations	292	305	301	303	306	306	306	305	304	303	306

Notes: Equality Index (1) corresponds to an index ranging from 0 to 2, where 2 corresponds to respondents who think that husband and wife share equal responsibility for all the scenarios proposed and 0 corresponds to individuals who believe that only either one of the two is fully responsible in each scenario. If the individual component is missing (= NS/NR), it is assumed to be missing information and the observation has no overall index associated. The outcomes from (2) to (11) are the individual components of the index. The table displays coefficients from an ANCOVA regression with strata dummies and robust standard errors. The regressions furthermore contain a dummy for female, and the dummy interacted with the treatment and the baseline control. The baseline outcomes of respondents who were interviewed at endline but not at baseline were set to zero. A dummy for whether the baseline value of the outcome was set to zero was then added to the RHS of the regression. Robust standard errors in parenthesis. Q-values adjusted for multiple hyothesis testing following Romano and Wolf (2016) are presented in brackets. * p<0.1, ** p<0.05, *** p<0.01

Appendix D – Full Intervention

Besides the information and the control group, the full experiment contained two additional groups.

- *Aspirational Intervention:* individuals were individually shown a short video documentary on a tablet, telling the story of three Cape Verdean immigrants that successfully built their life in Portugal. These success stories of immigrants were expected to potentially reduce immigrants' psychological barriers to successful integration - namely barriers created by an experience of immigrant segregation and discrimination. Individuals in this treatment group were also provided with a placebo mobile phone app and complementary printed guide.
- *Joint Intervention:* individuals were given both the informational and inspirational interventions. The order of the two interventions within this group was randomized.

Description of the Video "Three Stories of Hope and Inspiration from Cape Verde to Portugal"

Figure A2 – Three Stories of Hope and Inspiration from Cape Verde to Portugal

Figure A3 - Adilson

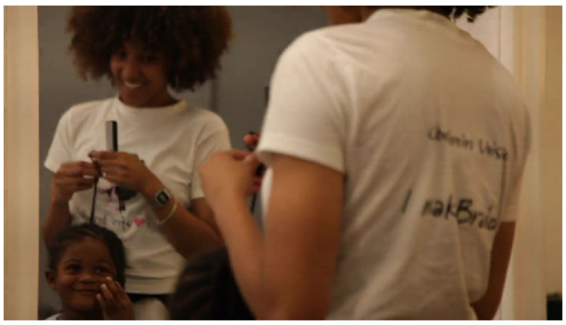


Figure A4 - Nádia

Figure A5 - Fernandinho

The video takes the listeners through the experiences of Adilson, Fernandinho, and Nádia, three immigrants from Cape Verde who arrived in Portugal with few resources but a steady determination to build a better future.

First, the narrator introduces Adilson, a team coordinator at a shopping center which has been living in Portugal for 14 years. Adilson arrived in Portugal in 2005, when he was 19 years old. He had few resources and little support from his family. He immigrated with the goal of studying and ended up building a life that he is proud of. Adilson is now a Portuguese citizen, married with two children, and happy at his job. He faced challenges such as not finding a job in his area of study, discrimination and language barriers. With time, perseverance, hard work, and a positive perspective about the challenges at hand, he surpassed these obstacles. Currently, he helps immigrants from Cape Verde in Portugal to pursue their dreams and he is considered an example to follow by his friends, family and colleagues.

The second story is about Nádia, an entrepreneur who owns afro hair salons in the Portuguese cities of Lisbon and Porto. When Nádia arrived in Portugal in 2008, 11 years ago, she was 18 years old, alone and facing health problems. Regardless, she came with the intention of studying and pursuing a better future. Initially, she worked as a domestic helper in the mornings, studied in the afternoons, and worked at a hair salon on weekends. Alongside managing the high workload and financial constraints, Nádia also struggled with being far from her family. During her weekend job, she found her passion for hairstyling and recognized the lack of salons specializing in Afro hair. In 2017, she successfully opened her first salon, Afrobraids, in Lisbon. She had to independently seek for information about how to start a business in Portugal. Her employees attest to her aptitude and patience for entrepreneurship. Nádia is another example which highlights the importance of determination, patience and hard work. Nowadays, she contributes to the community through initiatives that empower children to embrace their natural Afro hair. As a Portuguese citizen, she considers Portugal her home.

Lastly, Fernandinho is introduced. He arrived in Portugal in 1998, 21 years ago, at the age of 39, accompanied by his wife and three children. They came from Guinea-Bissau which was at war at the time. Fernandinho faced complications in regularizing his legal status, but he did not give up on finding a solution with the migration services. After 7 years he gained a residence permit and is now on track to obtain Portuguese citizenship. Using his previous experience in commerce and baking, Fernandinho balanced his daytime construction job with nighttime baking experiences in a small home oven. His homemade Cape Verdean biscuits quickly gained popularity. Fernandinho became the owner of a factory producing traditional Cape Verdean biscuits. This allowed him to ensure both a stable future for his family and to contribute to his community. Employees underline his strong work ethic and leadership. Ultimately, Fernandinho and his family have found happiness and success in Portugal, grateful for the opportunities the country has provided them.

In sum, the video highlights the importance of persistence, initiative, and community support in the success of Cape Verdean immigrants, with personal stories and words from acquaintances. It illustrates that despite facing discrimination, loneliness, and legal challenges, they had the power to transform their lives.

Music: "Vapor di Imigrason" - Mayra Andrade
Duration: around 11 minutes
Language: Portuguese and Cape Verdean Creole
Production: NOVAFRICA, 2019