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## Does Migrants' Consumption of Cultural Goods Impact on Their Economic Integration? Disclosing the Culture-to-Market Pathway

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SEPTEMBER 2024

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## ABSTRACT

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# Does Migrants' Consumption of Cultural Goods Impact on Their Economic Integration? Disclosing the Culture-to-Market Pathway\*

The consumption of cultural goods can play a crucial role in the social and economic integration of immigrants into their destination country. In this paper, we investigate the effect of the cultural national program, IoStudio, designed to enhance the consumption of cultural goods among upper secondary students in Italy, on post-secondary investment in education and early labor market conditions among young immigrants. Using data from a unique survey conducted by the Institute for Multiethnic Studies (ISMU) on a representative sample of the entire immigrant population in the Italian Lombardy region and employing a difference-in-differences estimator, we find that the IoStudio policy has positive effects on investment in post-secondary education. Additionally, young foreigners exposed to the policy exhibit higher earnings, at least in the short run, when they enter the labour market. We claim that cultural consumption by immigrants is a relevant concern, deserving close attention in terms of increasing social capital and labour market inclusion.

**JEL Classification:** Z11, J61, J62, I26

**Keywords:** cultural participation, migrants, integration, Italy

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# 1 Introduction

There is an increasing concern in Europe over the economic integration of migrants. Higher unemployment rate and lower wages than those of natives with similar characteristics (Eurostat, 2023) fuel fear. In the short run, fear of higher use of the welfare state, in the long run, fear of poor cultural integration and consequent push for restrictive immigration policies. The debate on more efficient integration policies is very fragmented. Experiences are designed to the specific needs of the community treated and do not provide a structured vision. They focus on the creation of skills useful to match local labour market demand and in diffusing a basic linguistic knowledge, with very limited results. It is clear that social integration is also part of the picture (Dustmann 1996, De Palo et al. 2007, Laurentsyeva and Venturini 2017, Pichara et al 2023) and that cultural integration plays more than a marginal role both in the short and in the long run. Therefore, understanding the impact of policies that may influence cultural inclusion becomes crucial.

In this paper we investigate the effects of the introduction in Italy of a national cultural project “IoStudio-La carta dello studente” (“IStudy - The Student Card”), which aims at increasing the consumption of cultural goods among upper secondary students. We focus on the effect on early labour market conditions and post-secondary investment in education on a sample of young immigrants in the Italian Lombardy region.

By doing so we try to bridge two different strands of literature: on the one hand the traditional labour economics literature, which tries to understand the dynamics of the integration of migrants into the labour market; on the other hand, the cultural economics literature, which investigates the effect of the passive or active participation in the consumption of cultural goods on the behaviour of people who, as we try to show, play a role in the labour market.

Since the seminal papers of Barry Chiswick (1978, 1991), Chiswick and Miller (2005) and

Dustmann and Van Soet (2002), Dustmann and Fabbri (2003) on the importance of language competence in migrants' integration, policies have focused on linguistic training to favour migrant inclusion. The duration of stay in the destination country by the migrants is playing a positive role in economic integration because it contributes to the knowledge of the language which is crucial to define workers' productivity. The research on linguistic distance which groups countries according to different linguistic roots has been widely used also in other fields - trade (Adsera and Pytlikova,<sup>1</sup> 2005, Melitz and Toubal 2014)<sup>2</sup>; migration choice (Belot and Ederveen, 2012, Lanati and Venturini 2021, De Santis et al. 2021); prosperity (Alesina et al. 2016) - holding important results also in determining the economic integration of foreigners. Recent papers (in the Italian case Strom et al. 2018; Venturini and Villosio 2018; Ghio et al. 2023) have established that linguistic distance negatively affects immigrants who live in ethnic enclaves in the hosting countries. However, those papers cannot disentangle the effect of language skills from the pure cultural assimilation. The two are related but not necessarily correlated. Only recent papers (Rapoport et al. (2021), Piracha et al. (2023), Olcina et al. (2024)) try to fill this gap in the literature by looking closely at the relationship between cultural assimilation and linguistic distance.<sup>3</sup>

At the same time, the research on passive and active consumption of cultural goods has moved from the analyses of the motivation which push the consumption of cultural goods (Ateca-Amestoy 2008, and Ateca-Amestoy et al 2019, Hallmann et al. 2017) to the effects, namely well-being, produced by the consumption of cultural goods and activities on the behaviour of people (McCarthy et al. (2004), Wheatley and Bickerton (2019)). If the research on the positive effects on health is the more established body of this research extension - see

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<sup>1</sup>The linguistic index is elaborated using linguistic roots

<sup>2</sup>The linguistic distance index is based on the use of similar words

<sup>3</sup>Pichara et al. (2023) measure social integration using 3 parameters: ability in speaking the target language, happiness of living in the destination country and size of the ethnic community.

the WHO survey for example (Fancourt and Finn 2019)- many research projects and experiments analyse the physical and psychological effects of the consumption of cultural goods. The former discover the reduction of cortisol (reduction of stress) and increase in endorphins which increase the well-being of people with many positive effects on the abilities of persons attending the activity, and the latter disclose an increase in self-esteem, self-efficacy and social-relational capacity increasing the happiness of the participants, their ability to solve problems and their ability to connect with the “others” . This is becoming so relevant that both the European Commission and public institutions tend now to consider “cultural policies” part of the “welfare policies” and cultural investments as part of the welfare investments.

In migration studies, a very disregarded subject is the study of migrants’ cultural consumption, their tastes and preferences and how they are associated to socio economic integration process. This is probably related to the different conceptual views in social science where for a long time the heart of the debate was on assimilation and multiculturalism, while cultural integration was considered a long term phenomenon with an intergenerational dynamic focusing on the differences between first and second generation migrants(Katz-Gerro et al 2009, Novak-Leonard 2015). A relevant exception is the research by Bertacchini et al. (2022) which explores the driver of cultural participation of foreigners in Italy using the Italian National Institute of Statistics (ISTAT) national survey in 2011-12. Their results point out that more integrated migrants consume more cultural goods and that the variability is only partially explained by differences in cultural traits peculiar to each migrant community. There is margin for “acculturation policies” (Berry 2005) to favour the leisure and culture participation and to push the effects obtained by the consumption of cultural goods which imply an increase in the knowledge of the culture of the destination society and the creation of social capital. The “acculturation process” favours the creation of soft skills which make the hard skills of the

foreigners more marketable <sup>4</sup>. “Acculturation” thus becomes an important driver not only of cultural integration but also of the economic integration. While many researchers find a positive link between consumption of cultural goods and physiological (Grossi et al. 2012), or/and psychological indicators (Zentner and Herola 2010) no research to our knowledge has studied the link with the labour market performance, even if they all suggest this possibility.

Our contribution thus aims to reverse the causal relationship between economic integration and cultural integration. While in the past the direction of research moved from economic integration to social integration, now we assess the effect of enhancing the cultural integration on economic integration. In this way we stress the role played by the knowledge of the culture prevailing in the destination country and the “cultural” soft skills for success in the labour market. Cultural integration may foster the economic integration and enrich the set of tools of policy makers to improve the economic well-being of immigrants. The “acculturation” thus becomes an important driver not only of cultural integration but also of the economic integration.

In our study, we consider the introduction of a cultural policy for students enrolled in upper secondary education to study the effect of the consumption of cultural goods on subsequent labor and post-secondary educational outcomes. Starting from the school year 2008/2009, the Italian Ministry of Education initiated the distribution of a student card to all upper secondary school students, as part of the *IoStudio-la carta dello studente* project (*IStudy - The Student Card*). The primary aim of this initiative was to provide easier access to cultural activities and services aimed at enhancing and expanding students’ cultural interests. Among its benefits, the card offered free access to national museums, libraries, as well as discount rates for cinemas, concerts, and theatres, thus encouraging the consumption of cultural goods.

In order to test the effect of this policy on our outcomes of interest, we use repeated cross-

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<sup>4</sup>From a different angle, this research is applying the approach by Guiso, et al. (2006) of “Does culture affect economic outcomes?”



sectional data from a unique survey run by the Institute for Multiethnic Studies (ISMU) on a representative sample of the immigrant population in the Lombardy region. Data include detailed information on labour market outcomes, educational status and several individual characteristics, like age and year of arrival in Italy. Exploiting the timing of the policy and the eligibility of immigrants to receive the *IoStudio* card, we apply a difference-in-differences (diff-in-diff) strategy to investigate whether foreign students who held the card during high-school experience show improved educational and labor market outcomes upon graduation.

Findings show that the *IoStudio* policy increased the probability of attending post-secondary education, and of earning higher wages for employed individuals (at least in the short run). Due to data limitations, we are unable to test for the direct effects of the introduction of the card on the consumption of cultural goods at the time of the distribution, nor do we have information on the actual utilization of the card that was delivered by the government to all students enrolled in an upper-secondary education program. To ensure that our findings are attributable to the implementation of the policy, we conduct placebo tests regarding the timing of the policy and the identification of the treated group. The tests provide reassurance and support our main results, which suggest that the consumption of cultural goods might have had important effects on the labour market integration of immigrants. We claim that through active participation in cultural events and passive consumption of cultural goods, migrants could have cultivated soft skills, subsequently leading to significant positive effects in the labor market.

The paper is structured as follows. In Section 2 we briefly discuss the policy background related to the introduction of the Student card. Then, we present the data used in our analysis. In Section 3 we describe our empirical strategy. In Section 4 we comment on the empirical baseline results and conduct various robustness checks. Section 5 presents our conclusions.

## 2 Background and Data

### 2.1 Policy Background

Starting with the school year 2008/2009, the Italian Ministry of Education (MIUR) launched the national project *IoStudio-La carta dello studente (IStudy - The Student Card)* under the High Patronage of the President of the Republic. With this project, the MIUR automatically assigned an identification card called the "student card" to all students attending upper secondary schools. Each school had to distribute to each student this card which certified the student's status and provided easier access to cultural activities and services that could be beneficial for student's life (the card provided, for example, free access to some museums, libraries, and discounts for cinema, concert, and theatre).<sup>5</sup>

After an experimental period, the 04/02/2010 decree (D.M. n.20) stated the requirements for associations, and private operators to become partners in the *IoStudio* initiative. A national list of suppliers and service providers offering benefits and discounts reserved for students in possession of the Student Card has been established. The list of suppliers should operate in the following areas: cinema, theatre, music and dance, circus performances, museums and art galleries, archaeological and naturalistic areas, architectural assets of cultural and artistic interest, bookstores, libraries, archives, video libraries, youth hostels, fair trade, foreign language courses and cultural exchanges abroad, transportation and mobility, information technology and telecommunications, sports facilities, educational materials and services of social interest. Beginning with the 2013/2014 school year, the student card was introduced with the added functionality of being utilized as a rechargeable prepaid card. Starting from the 2020/2021 school year, in compliance with the regulations concerning the protection of personal data, the student card is no longer automatic but is issued upon request by families. Overall, the card facilitates

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<sup>5</sup>The card had to be distributed to students by the end of October 2008.

access to cultural goods and services. Thanks to the *IoStudio* card, high-school students can benefit from Italy's first private-public partnership network which offers discounts and cultural advantages, including discounts for cinema, museums, books, school materials, audio-visual resources, telecommunications and internet services, technology, travel, study holidays. This might be particularly relevant to incentivize consumption of cultural goods and services for students of low socio-economic status.

## 2.2 Data

The main source of data for our analysis is an annual survey carried by the Foundation for Initiatives and Studies on Multi-Ethnicity (ISMU) from 2001 to 2016. The aim of this survey is to document the living and working conditions of a representative sample of both documented and undocumented immigrants in the Lombardy region, which is one of largest, most populated, wealthiest Italian regions, and accounts for 23% of the entire migrant population legally residing in Italy in 2005 (Dustman et al., 2017).<sup>6</sup> The survey was administered to a minimum of 3500 and a maximum of 9000 individuals in each wave. It provides several information on migrants' socio-demographic characteristics, such as age, sex, civil status, country of origin, legal status, type of residence permit, year of arrival in Italy and in Lombardy, province of residence, religion, education status, and indicators of living conditions, such as housing. It also contains detailed information on labour market conditions such as employment status, types of contracts and a self-reported measure of personal net monthly labour income for employed respondents. The sampling scheme and the questionnaire has been considered particularly suited to survey immigrants to elicit truthful reporting of legal status along with other individual characteristics, including employment status and income.<sup>7</sup> For this reason, the ISMU survey has been

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<sup>6</sup>For a description of the migration phenomenon in Lombardia see Maiarino S., Terzara L., (eds) *Il fenomeno migratorio in Lombardia: uno sguardo di lungo periodo*, Rubbertino editore 2023

<sup>7</sup>For further information, please refer to Baio et al. (2011).

extensively used in previous studies on migration (see, for example, Dustmann et al. 2017; Adamopoulou and Kaya, 2020).

We use waves from 2004 to 2015 to obtain a data set which is balanced in terms of pre- and post-treatment periods and we select a sub-sample of individuals aged 19-23 with upper secondary education completed legally residing in Italy to evaluate the effect of the *IoStudio* policy on post-secondary education and early labour market conditions.<sup>8</sup>

In our analysis we define as the treatment group all individuals who have attended at least one year of upper secondary education in Italy, i.e. individuals who declare to have an high-school degree and arrived in Italy when they were at most 18 or 17 years old, depending on the typical age of completion of upper secondary school in their home country.<sup>9</sup> These are individuals who are eligible for the policy, i.e. individuals that could have been exposed for at least one year to the *Io studio* policy. In addition, to ensure more comparability between the treatment and control groups before the policy was implemented, we consider as treated only immigrants who arrived in Italy when they were older than 13 years old, i.e. the average age to be admitted to high-school in Italy. Conversely, we define as the control group all individuals with upper secondary education completed who arrived in Italy at the age of 19 and more, i.e. individuals who plausibly attended high school abroad and therefore not eligible for the policy.<sup>10</sup> In our identification strategy, we assume the policy is effective if individuals have been exposed to it for at least one year. Additionally, lacking information on the actual card usage, we assume a positive probability that individuals who received the card also use it.

Table 1 shows the summary statistics for some individual characteristics for the whole sam-

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<sup>8</sup>Note that we are considering students potentially enrolled in the first university cycle which is the equivalent of a Bachelor's degree (Laurea triennale) and lasts 3 years.

<sup>9</sup>In Italy, students finish high school at 19 years old. However, immigrants might finish high school at 18 years old in their home country since educational systems vary across countries. To avoid any mismatch in the assignment, we drop immigrants arrived at 18 years old from those countries.

<sup>10</sup>Data does not allow to know whether respondents have been awarded an high school degree in Italy or abroad. However, in case they earn a high school degree after 19 years old, our estimates will be biased towards zero.

ple and for the treated and control group both before and after the treatment.

### 3 Empirical Strategy

We estimate the following empirical model:

$$y_{it} = \alpha_i + \delta_t + \beta D_{it} + \varepsilon_{it} \quad (1)$$

$y_{it}$  is the outcome of interest of individual  $i$  at time  $t$ ,  $\alpha_i$  is a dummy equal to one if an immigrant has attended the high schools in Italy,  $\delta_t$  is a set of time dummies,  $D_{it}$  is a dummy equal to one if the individual  $i$  is in the eligible group and the policy has been implemented ( $t > 2009$ )<sup>11</sup> and  $\varepsilon_{it}$  is an idiosyncratic error<sup>12</sup>. Our parameter of interest  $\beta$  measures the effect of receiving the *Iostudio* card on labor market and educational outcomes. Equation (1) defines the benchmark empirical specification for the empirical analysis. We then include the following individuals controls: a gender dummy; a Muslim and a Catholic dummy to control for the religion of the respondent; area-of-origin dummies (Asia, North Africa, Sub-Saharan Africa, South America, and Europe as the reference group); age, age squared, visa-type dummies. Finally, we include province fixed effects to control for time invariant characteristics of the area of residence of the respondent.

To identify the effect of the policy in a diff-in-diff setting, we assume: i) stable unit treatment value assumption (SUTVA), i.e. there are no spillover effects of the policy from treated

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<sup>11</sup>The policy has been implemented since the school year 2008-2009. In Italy, students finish high school in July. So, in our sample, the first treated cohort of students with high school completed should be the one interviewed in 2010, since the ISMU survey has been completed between May and June 2009.

<sup>12</sup>In order to ensure that on average the older cohort of eligible individuals finished high school after the introduction of the policy in the post treatment period, we consider individuals aged 19-23 for the years 2013-2015; aged 19-22 for the year 2012; aged 19-21 for the year 2011, aged 19-20 for the year 2010. In a symmetric way, we consider individuals aged 19-23 for the years 2004-2006, aged 19-22 for the year 2017, aged 19-21 for the year 2008, aged 19-20 for the year 2009. We define in the same way the age of the individuals in the control group.

migrants to untreated migrants; ii) the selection bias between eligible and not-eligible foreigners is constant over time (parallel trend assumption). The SUTVA assumption allows us to identify the average treatment effect on treated. This assumption relies on the design of the experiment and cannot be tested. The parallel trend assumption allows to identify the change in the average outcomes of interest following the participation in the *IoStudio* program, and it is testable using a placebo approach. In sub-section 4.2.1, we will perform several placebo tests to validate our empirical strategy.

## 4 Results

### 4.1 Baseline Results

Table 2 shows the effects of the *IoStudio* policy on labor market outcomes and education. The even and the odd columns display the effect of the policy with and without controlling for individual characteristics, respectively. The first and the last two columns show the estimates on the overall sample and on the younger than -21-years-old sub-sample, respectively, to analyze the effect of the policy both in the medium and in the short run, i.e. when individuals have just finished high-school. Panel A shows a negative but not statistically significant effect of the policy on the labor force participation. However, the lack of significance might stem from the small number of observations since point estimates do not vary a lot across specifications in the overall sample, while the effect is very noisy in below-21 sample.

Panel B shows that immigrants are less likely to be employed after sharing the policy. The negative effect may derive either from an increase in educational enrollment or in the reservation wage of immigrants following the policy. The consumption of cultural goods could increase the awareness of the average wage in the hosting local labor market and the aspirations of bet-

ter jobs leading immigrants to experience longer unemployment spells before accepting a job offer. Yet, Panel C displays a positive and meaningful effect of the policy on wages for employed immigrants younger than 21 years old, while there is no effect on the overall sample. The heterogeneity in the estimates between the overall sample and the below-21 sample might indicate that the card has short run effects on wages. Immigrants, in particular, benefit from the increased non-cognitive skills gained through card usage when they enter the labor market. However, when we consider the effect of the policy on investment in post-secondary education, we find a positive and statistically significant effect of the policy on the likelihood of being enrolled in tertiary education (Col. 1 and col. 2, Panel D). When we restrict the sample to individuals aged 19-20, coefficients are positive but close to zero. This could derive from the decision of delaying post-secondary educational investment after high school.<sup>13</sup>

Overall, our results suggest that the policy encourages educational investment. However, immigrants may delay their decision to enroll in tertiary education, opting to enter the labor market first and benefit from higher wages due to the "acculturation" policy.

## **4.2 Robustness Checks**

### **4.2.1 Placebo Tests**

In order to test the validity of our results, we perform several exercises. First, our results are based on the so-called parallel trend assumption, which assumes that the outcomes of treated and control groups do not diverge in the pre-treatment period. To be sure that the post treatment dummy for the eligible group is not capturing a divergent trend in the average outcomes between eligible and not-eligible group, which would have occurred anyway, regardless of the policy, we consider a placebo date (for instance, this could occur if the gap of the labor and

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<sup>13</sup>The 2011 AlmaLaurea report shows that around 37.4% of immigrants enroll at university two or more years after finishing the Italian high-school diploma (AlmaLaurea – Profilo dei Laureati 2020. Rapporto 2021).

educational outcomes between eligible and non-eligible groups would increase over time due to a widening disparity in educational quality between host and origin countries. This trend could occur independently of the introduction of the treatment). More specifically, we move the beginning of the policy in 2006 and select a time span from 2001 to 2008 to check whether the difference between group-specific labor market outcomes is not statistically significant before the true beginning of the policy. A non-significant effect confirms the parallel trends of labor market and education outcomes of eligible and non-eligible group before the beginning of the policy.

Another concern is that our treatment variable,  $D_{it}$ , proxies the 2009-2010 European debt crisis. Our estimates may show the effect of the 2009-2010 European debt crisis, contemporaneous to the beginning of the *IoStudio* program, if the crisis has had heterogeneous effects between the outcomes of the eligible group and the outcomes of the non-eligible group (for instance, the drop in the number of firms may push eligible migrants to enroll at university, while the number of non-eligible migrants with a student visa remain fixed following the crisis). To rule out this concern, we perform a placebo exercise that compares the outcomes of the never-treated eligible cohorts, immigrants arrived in high-school age but awarded the high school diploma before the beginning of the policy, with not-eligible immigrants of the same cohorts.<sup>14</sup> This exercise tests whether the post-2009 labor and educational outcomes of eligible immigrants are not meaningfully different from the post-2009 outcomes of not-eligible when eligible immigrants are not treated.

Table 3 and Table 4 show the placebo tests for the policy timing and the cohorts, respectively. The tests are performed on four outcomes: labor force participation, employment, wage

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<sup>14</sup>We consider individuals aged 24-28 for the years 2013-2015; aged 24-27 for the year 2012; aged 24-26 for the year 2011, aged 24-25 for the year 2010. In a symmetric way, we consider individuals aged 24-28 for the years 2004-2006, aged 24-27 for the year 2017, aged 24-26 for the year 2008, aged 24-25 for the year 2009. We define in the same way the age of the individuals in the control group.



and university enrollment. Column (1) and (2) show the estimates on the overall sample with and without controls, respectively. Column (3) and (4) show the estimates on the subsample of individuals younger than 21 years old with and without controls, respectively. Placebo tests display non-significant difference between outcomes of the two groups when the policy starts in 2006 and when we select older cohorts of eligible and not-eligible individuals.

Finally, our last concern is that the characteristics of individuals in both groups change over time and the potential effect may reflect the change of individual characteristics within groups rather than the effect of the policy. To test whether the average characteristics of the two groups do not vary before and after the treatment, we perform a pre-post analysis on the joint distribution of individual time-invariant characteristics.<sup>15</sup> First, we predict the labor market outcomes by regressing all the individual characteristics on the labor market outcomes. Then, since the predicted values proxy the joint distribution of individual characteristics of both eligible and not-eligible individuals, we regress the predicted values on a the post dummy for both the treatment and control group to evaluate whether the joint distribution of characteristics is different before and after the beginning of the program. Since time-invariant individual characteristics should proxy the selection bias of both groups, this exercise tests whether the selection bias varies over time.

Table 5 and Table 6 show any change in the joint distribution of individual characteristics following the treatment for both treated (Panel A) and control (Panel B) group on the overall sample and the below-21-years-old subsample, respectively. Only the eligible in the below-21 subsample group shows a meaningful negative effect in the likelihood of enrolling at university. However, a negative selection between the pre- and post eligible group, if any, leads only to a lower bound of the effect of the *IoStudio* policy on the probability of being enrolled at college.

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<sup>15</sup>The time-invariant individual characteristics are the following: female dummy, catholic dummy, muslim dummy, Asian dummy, North African dummy, Sub-Saharan dummy, Latin American dummy, age, age squared and province fixed effects.

### 4.2.2 Year at Arrival

In our main analysis, we consider immigrants older than 13 years old and younger than 19 years old at arrival. However, the decision of both thresholds is arbitrary. To test whether the threshold selection affects the estimates, we replicate the same analysis using different thresholds.

Figure 1 and Figure 2 show estimates of the *IoStudio* policy on labor force participation, employment, wage, and enrollment in tertiary education for three different lower- and upper-bound thresholds, respectively. Sub figures (a) and (b) show the estimates without adjusting for covariates, for the overall sample and the below-21 sample, respectively. Sub figures (c) and (d) show the estimates adjusted for covariates, for the overall sample and of the below-21 sample, respectively. Point estimates are quite stable across specifications indicating that including or excluding individuals at margin does not affect the estimates. Only the wage and college effects are less precisely estimated when we narrow the sample only to immigrants arrived older than 15 years old and younger than 17 years old, respectively. However, point estimates for both effects are quite stable indicating that the small sample size leads to a lack of statistical power.

### 4.2.3 Linguistic Distance

Linguistic distance plays a key role in fostering the economic and social integration of immigrants in the destination country (e.g., Strom et al., 2018). Therefore, in this sub section, we test whether the inclusion as a control of the linguistic proximity between the mother-tongue language of immigrants and the Italian language affects our estimates.

We use data on the linguistic proximity between Italy and 194 countries from the *Centre*

*d'études prospectives et d'informations internationales* (CEPII) database (Melitz and Toubal, 2014). CEPII provides two separate measures of Linguistic Proximity, LP1 and LP2. LP1 calculation is based on the Ethnologue classification of language trees between trees, branches and sub-branches inspired (Fearon (2003), Laitin (2000)), while LP2 is provided by Automated Similarity Judgment Program (ASJP) project that analyzes lexical similarity between 40 words. We use LP2 as a measure of linguistic proximity since it fits better for worldwide linguistic comparisons (Swadesh, 1952). The sample size narrows to 892 and 335 for the full sample and the below-21 sample, respectively, since the CEPII dataset does not include the linguistic proximity for all the nationalities of individuals in the main sample.

Table 7 shows estimates of the *Iostudio* with and without the inclusion of the linguistic proximity. Column (1) and (3) shows the results using only the original set of covariates for the entire sample and the below-21-years-old immigrants sample, respectively, while Column (2) and (4) include also the linguistic proximity as a control, in the same selected samples. Looking at the effect on two main outcomes of interest, wage and tertiary education enrollment, findings are quite similar to the ones in the main specification. This suggests that our main results are robust to the inclusion of linguistic proximity as a control.

## 5 Conclusions

This paper investigates the effects of the introduction of a national cultural program which favours the consumption of cultural goods on post-secondary investment in education and on early labour market outcomes on a sample of young immigrants in the Italian Lombardy region. This research question is particularly relevant as the consumption of cultural goods might favour both the “acculturation of foreigners”, namely the knowledge of the culture of the destination country favouring the accumulation of soft skills which make foreigners’ hard skills

more marketable, and social interactions between immigrants and natives, with positive effects on social integration. This in turn could have positive effects on educational investment decisions and labour market outcomes. Using a diff-in-diff strategy, our results show that the *IoStudio* policy has positive effects on investment in post-secondary education in the large sample and a negative effect on employment. In addition, young foreigners exposed to student card display higher earnings, at least in the short run, when they enter the labour force. These results suggest that the policy could have a positive effect on educational investment, but immigrants might delay their decision to enroll in tertiary education.

*IoStudio* policy aims at increasing the consumption of country-specific cultural goods and so it has an indirect effect of increasing the probability of having social interactions between immigrants and natives. The increase in social interaction may improve the non-cognitive skills of immigrants in the host country, fostering both economic and social integration. The positive effect on wages (at least in the short run) and on investment in education (in the medium run) is a signal of the change in the set of potential earnings of immigrants following the treatment. Whether the change in earnings and in the probability of enrolling in tertiary education goes through both the increase in non-cognitive skills and social assimilation is an open question since we cannot disentangle the two. However, as far as we know, this paper provides the first set of results on the assimilation of young immigrants thanks to a national cultural program and provide an initial evidence that cultural policies not only should be considered welfare policies but also employment inclusion policies due to their positive effects on the acquisition of social capital.

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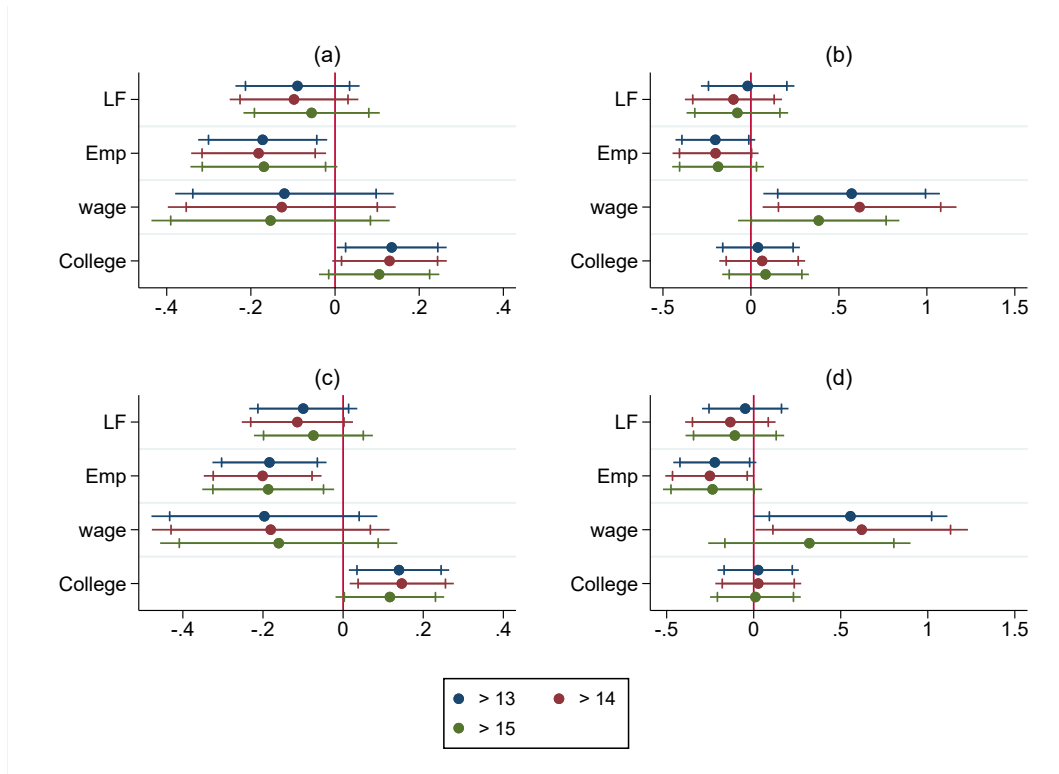
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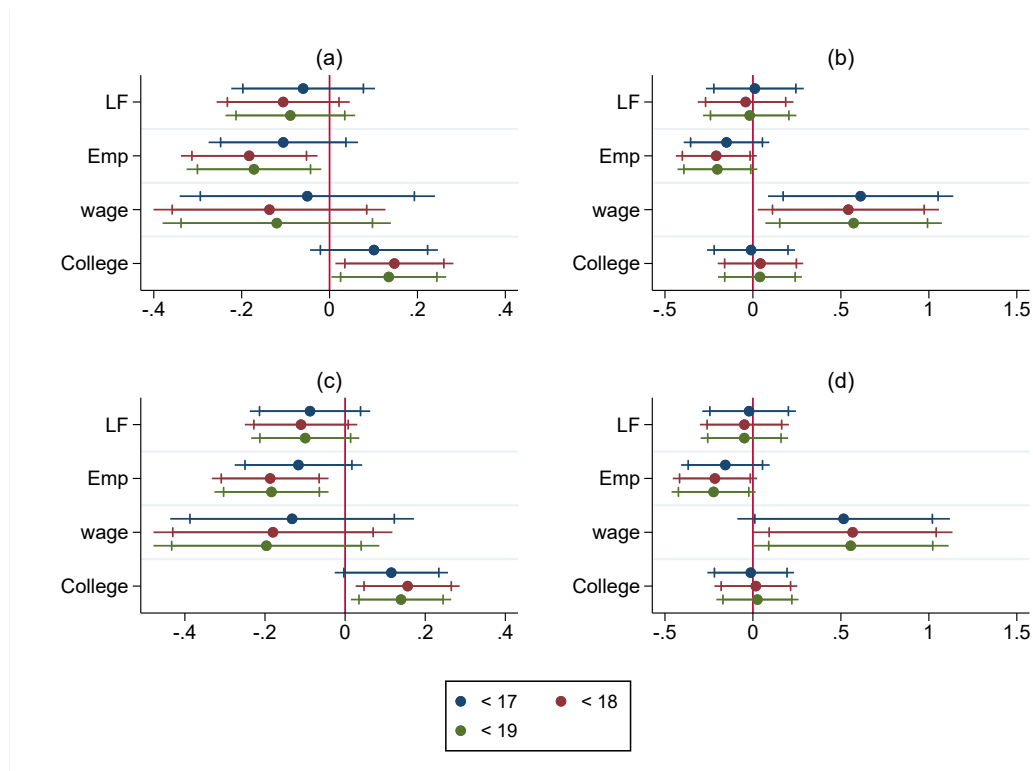
## 6 Tables and Figures

**Figure 1:** The effect of "Iostudio" policy by different age-at-arrival lower-bound thresholds



*Notes:* The Figure shows the estimates with a sample of older 13 (blue), 14 (red) and 15 (green) years-old immigrants at the arrival in Italy. Subfigure (a) shows the estimates of the overall sample without adjusting for covariates. Subfigure (b) shows the estimates of the below-21 sample without adjusting for covariates. Subfigure (c) shows the estimates of the overall sample adjusted for covariates. Subfigure (d) shows the estimates of the below-21 sample adjusted for covariates. Vertical coloured lines indicate a confidence interval at 90%, while lines indicate a confidence interval at 95%.

**Figure 2:** The effect of "Iostudio" policy y different age-at-arrival upper-bound thresholds



Notes: The Figure shows the estimates with a sample of older 13 (blue), 14 (red) and 15 (green) years-old immigrants at the arrival in Italy. Subfigure (a) shows the estimates of the overall sample without adjusting for covariates. Subfigure (b) shows the estimates of the below-21 sample without adjusting for covariates. Subfigure (c) shows the estimates of the overall sample adjusted for covariates. Subfigure (d) shows the estimates of the below-21 sample adjusted for covariates. Vertical coloured lines indicate a confidence interval at 90%, while lines indicate a confidence interval at 95%.

**Table 1: Summary Statistics**

	Overall		Eligible		Not Eligible		Pre Diff
	Pre	Post	Pre	Post	Pre	Post	P-value
Employment	.566 (.496)	.345 (.476)	.629 (.484)	.376 (.485)	.483 (.501)	.294 (.457)	0.000***
wage	6.658 (.64)	6.69 (.49)	6.714 (.629)	6.714 (.477)	6.571 (.65)	6.638 (.519)	0.033**
Labor Force	.689 (.463)	.655 (.476)	.748 (.435)	.673 (.47)	.612 (.488)	.625 (.486)	0.001***
Not-Employed	.093 (.128)	.224 (.349)	.079 (.103)	.19 (.314)	.112 (.166)	.279 (.4)	0.263
Unemployment	.29 (.335)	.417 (.478)	.27 (.304)	.393 (.466)	.315 (.373)	.45 (.492)	0.114
Enrolled to College	.213 (.409)	.29 (.454)	.201 (.402)	.319 (.467)	.227 (.42)	.243 (.43)	0.476
Females	.48 (.5)	.503 (.501)	.456 (.499)	.465 (.5)	.512 (.501)	.566 (.497)	0.186
Muslims	.384 (.487)	.406 (.492)	.399 (.491)	.429 (.496)	.364 (.482)	.368 (.484)	0.392
Catholics	.38 (.486)	.227 (.419)	.358 (.48)	.252 (.435)	.409 (.493)	.184 (.389)	0.198
Europe	.360 (.481)	.442 (.497)	.422 (.495)	.453 (.500)	.315 (.465)	.436 (.497)	0.013**
Asia	.213 (.409)	.227 (.419)	.217 (.413)	.177 (.383)	.207 (.406)	.309 (.464)	0.768
North Africa	.168 (.374)	.163 (.37)	.182 (.387)	.186 (.39)	.149 (.357)	.125 (.332)	0.290
Sub-Saharan Africa	.139 (.347)	.149 (.357)	.173 (.379)	.155 (.363)	.095 (.294)	.14 (.348)	0.009***
South America	.168 (.374)	.16 (.367)	.167 (.373)	.199 (.4)	.169 (.376)	.096 (.295)	0.931
Age	21.134 (1.345)	20.898 (1.316)	20.72 (1.291)	20.712 (1.367)	21.678 (1.217)	21.206 (1.168)	0.000***
Age Squared	448.448 (56.758)	438.445 (55.302)	430.984 (53.909)	430.863 (57.353)	471.397 (52.137)	451.044 (49.395)	0.000***
Family Visa	.37 (.483)	.525 (.5)	.44 (.497)	.566 (.497)	.277 (.448)	.456 (.5)	0.000***
Work Visa	.42 (.494)	.146 (.354)	.44 (.497)	.15 (.358)	.393 (.489)	.14 (.348)	0.209
Student Visa	.152 (.359)	.094 (.292)	.069 (.254)	.071 (.257)	.26 (.44)	.132 (.34)	0.000***
Observations	560	362	318	226	242	136	560

*Notes:* The time span is between 2004 and 2015. The first two columns show the descriptive statistics for the overall sample. The second and the third columns show the descriptive statistics for the eligible migrants, respectively. The fourth and the fifth columns show the descriptive statistics for the not-eligible migrants, respectively. The last column shows the t-stat stemming from the difference between the characteristics of the two groups before the treatment. The "Pre" columns show the means before 2010, while the "Post" columns show the means following 2009. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

**Table 2:** The Effects of "Iostudio" Policy

	(1)	(2)	(3)	(4)
Panel A: Labor Force Participation				
D(Year>2009 & Age at Arrival <19)	-0.089 (0.075)	-0.099 (0.069)	-0.018 (0.135)	-0.049 (0.126)
N	922	922	363	363
Panel B: Employment				
D(Year>2009 & Age at Arrival <19)	-0.172** (0.078)	-0.184** (0.073)	-0.202* (0.115)	-0.223* (0.121)
N	922	922	363	363
Panel C: Wage				
D(Year>2009 & Age at Arrival <19)	-0.120 (0.132)	-0.196 (0.143)	0.572** (0.253)	0.556* (0.281)
N	442	442	134	134
Panel D: Tertiary Education Enrollment				
D(Year>2009 & Age at Arrival <19)	0.135** (0.067)	0.140** (0.064)	0.040 (0.121)	0.026 (0.119)
N	922	922	363	363
Covariates	X	✓	X	✓

*Notes:* The time span is between 2004 and 2015. All regressions include year and eligible fixed effects. A migrant is eligible if he or she has arrived in Italy before being 19 years old. Column (1) and (2) show the results using the entire sample, while column (3) and (4) show the results using only the below-21-years-old immigrants. The specification in columns (2) and (4) include the following covariates: gender dummy, muslim dummy, catholic dummy, area-of-origin dummies, age, age squared, province dummies, visa-type dummies. The reported standard errors are robust to heteroskedasticity. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

**Table 3:** The Placebo Effect of "Iostudio" Policy using a Different Time Span

	(1)	(2)	(3)	(4)
Panel A: Labor Force Participation				
D(Year>2006 & Age at Arrival <19)	-0.095 (0.158)	-0.082 (0.160)	-0.385 (0.294)	-0.555** (0.237)
N	204	204	103	103
Panel B: Employment				
D(Year>2006 & Age at Arrival <19)	0.220 (0.153)	0.190 (0.149)	0.031 (0.194)	-0.197 (0.154)
N	204	204	103	103
Panel C: Wage				
D(Year>2006 & Age at Arrival <19)	-0.162 (0.195)	0.006 (0.221)	-0.147 (0.251)	-0.120 (0.651)
N	115	115	56	56
Panel D: Tertiary Education Enrollment				
D(Year>2006 & Age at Arrival <19)	-0.017 (0.154)	-0.027 (0.156)	0.323 (0.293)	0.457* (0.241)
N	204	204	103	103
Covariates	X	✓	X	✓

*Notes:* The time span is between 2004 and 2015. All regressions include year and eligible fixed effects. A migrant is eligible if he or she has arrived in Italy before being 19 years old. Column (1) and (2) show the results using the entire sample, while column (3) and (4) show the results using only the below-21-years-old immigrants. The specification in columns (2) and (4) include the following covariates: gender dummy, muslim dummy, catholic dummy, area-of-origin dummies, age, age squared, province dummies, visa-type dummies. The reported standard errors are robust to heteroskedasticity. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

**Table 4:** The Placebo Effect of "Iostudio" Policy using the not-treated cohorts

	(1)	(2)	(3)	(4)
Panel A: Labor Force Participation				
D(Year>2009 & Age at Arrival <19)	-0.036 (0.042)	0.000 (0.042)	-0.084 (0.064)	-0.014 (0.064)
N	2709	2705	1160	1158
Panel B: Employment				
D(Year>2009 & Age at Arrival <19)	-0.035 (0.055)	0.014 (0.052)	-0.129* (0.077)	-0.032 (0.071)
N	2709	2705	1160	1158
Panel C: Wage				
D(Year>2009 & Age at Arrival <19)	0.018 (0.083)	0.027 (0.087)	0.029 (0.113)	0.146 (0.120)
N	1839	1835	725	723
Panel D: Tertiary Education Enrollment				
D(Year>2009 & Age at Arrival <19)	0.029 (0.035)	0.035 (0.034)	0.011 (0.051)	0.025 (0.054)
N	2709	2705	1160	1158
Covariates	X	✓	X	✓

*Notes:* The time span is between 2004 and 2015. All regressions include year and eligible fixed effects. A migrant is eligible if he or she has arrived in Italy before being 19 years old. Column (1) and (2) show the results using the entire sample, while column (3) and (4) show the results using only the below-21-years-old immigrants. The specification in columns (2) and (4) include the following covariates: gender dummy, muslim dummy, catholic dummy, area-of-origin dummies, age, age squared, province dummies, visa-type dummies. The reported standard errors are robust to heteroskedasticity. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

**Table 5:** Test on the joint distribution of individual characteristics

	Pr(E)	wage	Pr(LF)	Pr(College)
Panel A: Not-Eligible Group				
D(Year>2009)	-0.005 (0.026)	0.010 (0.040)	0.010 (0.023)	0.006 (0.012)
N	378	172	378	378
Panel B: Eligible Group				
D(Year>2009)	-0.004 (0.018)	-0.008 (0.033)	0.008 (0.017)	-0.000 (0.011)
N	544	290	544	544

*Notes:* The dependent variables are the fitted value of the following outcome: employment, wage, labour force, not employed, unemployment, college enrollment, respectively. The control variables are: female dummy, catholic dummy, muslim dummy, Asian dummy, North African dummy, Sub-Saharan dummy, Latin American dummy, age, age squared and province fixed effects. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 6:** Test on the joint distribution of individual characteristics on the Below-21 years old subsample

	Pr(E)	wage	Pr(LF)	Pr(College)
Panel A: Not-Eligible Group				
D(Year>2009)	0.000 (0.054)	-0.217 (0.127)	-0.012 (0.061)	-0.022 (0.051)
N	94	22	94	94
Panel B: Eligible Group				
D(Year>2009)	0.016 (0.027)	0.058 (0.059)	0.052* (0.027)	-0.042** (0.018)
N	269	114	269	269

*Notes:* The subsample considers only the immigrants younger than 21 years old. The dependent variables are the fitted value of the following outcome: employment, wage, labour force, not employed, unemployment, college enrollment, respectively. The control variables are: female dummy, catholic dummy, muslim dummy, Asian dummy, North African dummy, Sub-Saharan dummy, Latin American dummy, age, age squared and province fixed effects. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 7:** The Effects of "Iostudio" Policy Including Linguistic Proximity as a Control

	(1)	(2)	(3)	(4)
Panel A: Labor Force Participation				
D(Year>2009 & Age at Arrival <19)	-0.071 (0.069)	-0.069 (0.066)	-0.052 (0.126)	-0.056 (0.119)
N	898	898	355	355
Panel B: Employment				
D(Year>2009 & Age at Arrival <19)	-0.159** (0.073)	-0.158** (0.072)	-0.217* (0.122)	-0.219* (0.121)
N	898	898	355	355
Panel C: Wage				
D(Year>2009 & Age at Arrival <19)	-0.191 (0.147)	-0.187 (0.144)	0.560** (0.282)	0.562** (0.283)
N	435	435	133	133
Panel D: Tertiary Education Enrollment				
D(Year>2009 & Age at Arrival <19)	0.112* (0.063)	0.110* (0.062)	0.025 (0.119)	0.028 (0.114)
N	898	898	355	355
Covariates	✓	✓	✓	✓
Linguistic Proximity	X	✓	X	✓

*Notes:* The time span is between 2004 and 2015. All regressions include year and eligible fixed effects. A migrant is eligible if he or she has arrived in Italy before being 19 years old. Column (1) and (2) show the results using the entire sample, while column (3) and (4) show the results using only the below-21-years-old immigrants. All specifications include the following covariates: gender dummy, muslim dummy, catholic dummy, area-of-origin dummies, age, age squared, province dummies, visa-type dummies. The specification in columns (2) and (4) include also linguistic proximity. The reported standard errors are robust to heteroskedasticity. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01