

*Globalization, Transnational Human Capital, and Employment in the  
European Union*

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*Abstract*

The literature claims that the returns to transnational human capital (THC) are considerable and extend beyond firms that use it. This article critically appraises this claim and for the first time compares the employment returns to three types of THC: fluency in foreign languages, study abroad, and friendship ties abroad. The *Eurobarometer* 73.3 reveals that fluency in English alone is related to employment status, a relationship that based on the statistical evidence presented here may actually be spurious. The findings reflect that demand for THC is less strong and THC has less signaling and symbolic value than the literature assumes.

*Globalization, Transnational Human Capital, and Employment in the European Union*

The literature emphasizes that globalization has raised the economic value of familiarity and ease of interaction with foreign cultures. Some authors welcome this, because it may contribute to the diffusion of cosmopolitan practices and of a cosmopolitan outlook across society (e.g. Beck, 2006); others worry that transnational human capital (THC) may create new social inequalities (Kriesi et al., 2008; Weenink, 2007; Weiss, 2005; Calhoun, 2003; on the unequal distribution of transnational human capital: Gerhards, 2010; Fligstein, 2008; Mau, 2007).

This article evaluates the general labor market benefits that accrue to having THC. I borrow from the literature and define THC as social and cultural capital that individuals accumulate as they develop and acquire 1) familiarity with different cultures, 2) skills that allow them to move across national cultures, and 3) transnational/transcultural social networks (see below). Public discourse and the academic literature include exaggerated and often unsubstantiated claims about the extent of demand for THC and about the returns to it. There are few systematic and comparative studies, however. Moreover, whereas public discourse emphasizes the employment benefits of THC, the academic literature has privileged analysis of the association between THC and earnings (see below). This has moved governance institutions like the European Commission to lament the shortage of research on the demand for and employment returns to knowing foreign languages (Beadle et al., *Study on Foreign Language and Employability*, 2015, p. xiv). I focus on the European Union (EU) to contribute to filling this gap and answer two interrelated questions: How big are the overall employment returns to THC? How does the employment return to different types of THC compare? This is the first study that systematically compares the general returns to different types of THC.

I use data for a large number of countries and three different measures of THC to test the public sphere's and the literature's main claim, that these returns are *general* and *substantial*, against the alternative claim, to which I subscribe, that these returns do not extend to the labor market as a whole. To justify my position, I argue and demonstrate that demand for THC is not as high as assumed and that this demand is concentrated in particular sectors, occupations, and countries. I also draw on the sociological literature to challenge the assumption that contemporary firms generally treat THC as a sign of competence, which then enters hiring and rewarding decisions.

More specifically, the article relies on a *Eurobarometer* study conducted in 2010 to examine the impact of fluency in foreign languages, study abroad, and having friends abroad on employment status. It shows that there is no robust evidence in support of the claim that these types of THC increase the chances of being employed in the labor market as a whole. The article leaves out other relevant questions, such as the uneven distribution of returns to THC across branches of activity and occupations, for which adequate data for a representative number of countries are not available. Whereas some data sources include rich information on people's careers and the workplace but lack enough information on THC, other datasets include rich information on the latter but lack enough information on the former. *Eurobarometer* falls in this second category.

The article is organized as follows: I review the literature on the demand for and the returns to THC and theoretically and empirically challenge its main propositions. I then describe the *Eurobarometer* data and estimate statistical models to determine the returns to different types of THC. Finally, I synthesize and discuss the statistical results and outline new research paths that build on them.

### **Literature Review: Definitions and Research Strands**

The literature highlights that globalization has increased demand for knowledge and cognitive and non-cognitive skills that allow workers to interact, communicate, and

work effectively in different cultural environments (Koehn and Rosenau, 2002; Hunter, White, and Godbey, 2006). Demand appears to be particularly high among transnational corporations, firms oriented to foreign markets, and in the tourism industry (Gerhards, Hans, Carlson, and Drewski, 2015; Hall, 2012; Luo and Shenkar, 2006; Lenske and Werner, 2002; Davies, 2000; Grosse, 1998). Geographically, it tends to be highest in what are termed “global” or “world” cities (Beaverstock and Smith, 1996; Wee, 2005). Demand for “transnational” knowledge and skills relates to a general emphasis on worker flexibility and capacity to adapt that seemingly characterizes the 21<sup>st</sup> century firm (Sennett, 1998; Powell, 2001; Boltanski and Chiapello, 1999).

There is no consensus on how to label and define familiarity and ease of interaction with different national cultures. Gerhards, Hans, and Carlson, for instance, define *Transnational Human Capital* (THC) (2014) as a special form of human capital (i.e. knowledge, skills, and qualifications) that allows a person to act in a variety of fields located in national states other than their own (p. 10). Hunter synthesizes expert views from representatives of transnational corporations and international organizations into a working definition of *Global Competence* as “having an open mind while actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate, and work effectively outside one’s environment” (Hunter et al., 2006; see also Clark and Hammer, 1995; Süßmuth, 2007).

Vanhoonacker et al. define *Transnational Capital* as “the value-added to one’s human capital that accrues from time spent, networks established, and knowledge acquired, overseas” (2005, p. 1). Finally, Meinhof and Triandafyllidou define *Transnational Capital* as social and cultural capital that individuals accumulate because of their knowledge about different cultures, skills that allow them to move across national cultures, and transnational/transcultural social networks (see also Saxenian, 2005).

Although all the concepts and definitions above refer to broadly similar types of knowledge, skills and experiences, in what follows I use the term *Transnational Human Capital* because it is less confusing than the term *Transnational Capital*, which the political economy literature uses with a totally different meaning, and because, compared with the term *Global Competence*, it directs attention to the focus of the article, the examination of the potential benefits that accrue to having it. As the literature above conveys, *Transnational Human Capital* is both social (i.e. transnational social networks) and cultural, with the latter including knowledge about other national cultures, capacity to process information from other national cultures, and capacity to interact and communicate with people from other national cultures.

Individuals can acquire THC in many different ways. There is in fact no agreement as to the roles of education and stays abroad, with some authors disputing, in particular, the dominant assumption that higher education and international experience are necessary (on education, Hunter et al., 2006; on experience abroad, Deardorff, 2004) or sufficient conditions (on experience abroad, Nava, 2002; Beck, 2002) for the acquisition of THC. Among those who highlight the role of education, there is also debate about the specific curricular contents most conducive to the development of global competence (e.g. Hunter et al., 2006; ACIIEC, 1996). This lack of consensus, as well as data constraints, explain why I focus on just a limited number of variables for which there is some agreement and adequate data, aspects of THC that the empirical literature, those who demand THC, and workers and their families often mention. First, I focus on two types of transnational cultural capital, fluency in foreign languages and study abroad. They are institutionalized in the form of academic qualifications, which, according to Igarashi and Saito, is the type of THC most likely to generate profits for those who have it (2014, p. 223; on institutionalization and returns to cultural capital,

Lareau and Weininger, 2003). Then, I also focus on transnational social capital, as captured by friendship ties abroad (e.g. Igarashi and Saito, 2014; Saxenian, 2005; Meinhof and Triandafyllidou, 2006).

Research has assessed three main claims: 1) that demand for THC has increased, 2) that globalization underlies the increase in this demand, and 3) that the returns to THC are significant. Regarding the first and second claims, Gerhards et al. demonstrate that the number of job advertisements that mention transnational human capital as a requirement for employment has risen since 1960 (Gerhards et al., 2015). They also show that demand for these skills and credentials varies widely across the three countries that they examine (UK, Netherlands, Germany) and is greatest among companies that operate at the international level and in the legal, financial, and research fields. Finally, Gerhards et al. note that demand focuses almost exclusively on fluency in foreign languages.

This article joins a research tradition interested in the demand for and the economic returns to different types of THC<sup>1</sup>. It relates to work that examines the returns to fluency in the host language among immigrants (e.g. Chiswick and Miller, 1995, 2007, 2009; Bleakley and Chin, 2010; Berman, Lang, and Siniver, 2003; Dustmann and Van Soest, 2001, 2002; Shields and Price, 2002; Leslie and Lindley, 2001) and to work that examines the returns to fluency in the different languages of multilingual countries (e.g. Albouy, 2008; Shapiro and Stelener, 1997; Di Paolo and Raymond, 2012).

Central to this study's topic is research in the fields of labor economics, education, and sociology on the returns to THC among native individuals. This research primarily analyzes the impact of fluency in foreign languages on earnings and socio-economic status (e.g. Di Paolo and Tansel, 2015; Stöhr, 2015; Díez Medrano,

2014; Toomet, 2011; Williams, 2011; Ginsburgh and Prieto-Rodriguez, 2011; Coomer, 2011; Lang and Siniver, 2009; Saiz and Zoido, 2005). Work on other components of THC and on other economic returns is much less abundant and, with few exceptions, relies on qualitative case studies. Donado (2014) and Araújo et al. (2015) quantitatively examine the impact of fluency in foreign languages on employment. Others discuss and qualitatively analyze the economic returns associated with studying abroad (e.g. Igarashi and Saito, 2014; Van Mol, 2014; Weenink, 2014; Teichler and Janson, 2007; Taylor, Singh, and Booth, 2007; Zweig, Changui, and Rosen, 2004). Here, the empirical focus is on university graduates. In a rare quantitative study, for instance, Di Pietro analyzes an Italian survey to compare job opportunities for graduate students who enrolled and did not enroll in the ERASMUS program. Finally, researchers argue for the benefits that accrue to individuals who have developed transnational social networks (Igarashi and Saito, 2014; Weenink, 2007; Vanhoonacker, Zweig, and Siu Fung, 2005; Saxenian, 2005). But, to the author's knowledge, this claim has never been systematically tested with quantitative data.

I contribute to this strand in the literature 1) a focus on employment instead of earnings, 2) a more empirically-grounded and realistic analytical appraisal of the impact of globalization on the demand for and returns to THC, and 3) a systematic comparison of the returns to three types of THC (fluency in foreign languages, study abroad, and friendship ties abroad).

### **The Dominant View on the Returns to Transnational Human Capital**

The public sphere and the academic literature are filled with claims that expanding international trade, the proliferation of transnational corporations, and the growing importance of economic sectors like tourism benefit workers with THC in today's labor markets. In a typical piece entitled "Why it is important to learn foreign languages",



published by the *Economic Journal*, a British e-publication, one reads that “In an increasingly competitive job market, those who are fluent in other languages in addition to their mother tongues will have, without doubt, higher chances to succeed.” (2016). For understandable reasons, business schools and foreign language institutes are even more prone to overstate claims of this sort. Thus, a recent blog published by *Altissia*, an international e-learning company, recently stated that in this highly competitive world, where competition for jobs has drastically increased, “many people are left with a few options for increasing their chances of getting hired. Sometimes experience and motivation may not be enough in helping you get your dream job; being bilingual can be the only advantage you have over other candidates.” (2015). Academia followed in this wave of interest in the returns to THC and contributed to amplify the message. Gerhards et al., for instance, proclaim that “The increase in the actual use value, social desirability, and distinction function of transnational human capital has led to an increase in the significance of this form of capital in the course of time (translated from German, 2016, p. 28), whereas Meyer states that under globalization, “the individual needs to know a world language—almost certainly English...” (2007, p. 266). For Chiswick and Miller, foreign language skills are a form of human capital that can be expected to result in higher earnings (2007, 2009). It is a costly asset to acquire and one that is likely to lead to skill-based productivity increases (Stöhr, 2015). This is because it enhances efficiency in communication among coworkers, managers, buyers and sellers, among others (Di Paolo and Tansel, 2015). In the context of increasing international trade, fluency in foreign languages can facilitate trade links between firms in different countries (Melitz, 2008). Authors who focus on the demand and returns to study abroad emphasize that study abroad inculcates tolerance and cultural sensitivity, flexibility, confidence (Matherly, 2005), and interpersonal skills (Doorbar, 2003), work

qualities that employers allegedly value. Others highlight that study abroad often provides individuals with valued skills and information that cannot be acquired at home (Zweig et al., 2004). Finally, authors who focus on demand and returns to transnational social capital emphasize that individuals who have contacts in other countries have privileged access to valuable information, ideas, and resources that can benefit them as entrepreneurs and as employees (Saxenian, 2005; Zweig et al., 2004).

Beyond their claim that THC enhances workers' productivity in the firms that require it, authors also stress that THC works as a special sign of individual general competence and achievement motivation by firms who otherwise do not need THC (Gerhards et al., 2016; Stöhr, 2015; Gibbons and Katz, 1992) and therefore entails advantages in the labor market at large (Di Paolo and Tansel, 2015; Araújo et al., 2015; Donado, 2014). In discussing the expected returns to foreign languages, for instance, Di Paolo and Tansel (2015) and Stöhr (2015) refer to research that demonstrates the improved interpretive, analytical, and communicative skills of individuals who are bilingual or who have studied a foreign language (Olsen and Brown, 1992; Cooper, 1987). More generally, Igarashi and Saito speculate that if students, parents, university administrators, and employers believe that job opportunities accrue to people with THC, "their interactions can cause a self-fulfilling prophecy wherein cosmopolitanism will be progressively institutionalized to yield profits on labor markets" (2014, p. 232).

Scholars finally expect the employability and wage premiums associated with THC to diminish, the greater the prevalence of workers with THC in the population. In particular, they predict that, since the prevalence of THC tends to be lower in developing than in advanced economies, the returns to THC should be greater in the former than in the latter (Di Paolo and Tansel, 2015; Wang et al. 2015; Varghese, 2008).

The review above can be summarized by listing the literature's two main propositions: The first one is that employability and earnings benefits accrue to people who know foreign languages, to university graduates who studied abroad, and to people who developed transnational social networks. The second one is that the returns to THC diminish as the prevalence of THC in the population increases.

### **Demand for and Rewards to Transnational Human Capital in the General Labor Market: A Skeptical View**

Existing quantitative studies take the form of case studies of specific countries or comparative studies involving several European Union member states. In general, they focus on the earnings returns to fluency in foreign languages. Some studies approach the question indirectly, by using information on the average earnings in firms that differ in their use of foreign languages (e.g. Stöhr, 2015; Ginsburgh and Prieto-Rodriguez, 2011; Williams, 2011). The validity of these studies' findings is compromised by lack of information on the workers' foreign language skills (e.g. Stöhr, 2015) or by lack of information on the language skills of workers for firms that do not use foreign languages (e.g. Ginsburgh and Prieto-Rodríguez; 2011; Williams, 2011). The problem lies in the fact that, regardless of the role that foreign languages play in a firm's economic activity, its workplace is surely heterogeneous in terms of fluency in foreign languages. Without systematically comparing workers who are fluent in foreign languages to workers who are not fluent in foreign languages, controlling and conditional on a firm's use of foreign languages, one cannot draw solid conclusions as to the relative roles of the workers' foreign language skills or the firms' characteristics in determining the latter's average earnings. Other studies approach the relationship between fluency in foreign languages and earnings directly, by examining the relationship between individuals' self-reported fluency in foreign languages and their

self-reported individual or household earnings (e.g. Di Paolo and Tansel; 2015; Donado, 2014; Lang and Siniver, 2009). These studies' main challenge consists in demonstrating the causality involved in observed associations. Within the constraints imposed by available data sources, however, these studies conclude that THC leads to higher earnings. They also note that these returns are negligible in English-speaking countries (e.g. Saiz and Zoilo, 2005) and that in non-English speaking countries they accrue almost exclusively to individuals who know English.

As noted above, few quantitative studies focus on employment and on the role of study abroad and transnational social networks. Yet, as I show in the introduction above, in the European context, where unemployment runs high, institutions like the *European Commission* are particularly interested in the role that THC can play in enhancing the workers' employability. Donado (2014) and Araújo et al. (2015) find support for the hypothesis that fluency in foreign languages, especially English, improves the overall chances of being employed. Meanwhile, Di Pietro shows that studying abroad benefits Italian university graduates by giving them access to better jobs (2015). No quantitative study has evaluated the returns to having transnational networks, no quantitative study has compared the returns to different forms of THC, and no quantitative study has tested the proposition that the returns to THC decrease with the increase in the prevalence of THC in the population.

This article disputes the claim that individuals with THC should, and actually do, enjoy an overall advantage in the labor market. This is because 1) demand for THC is not as extensive as the literature claims, 2) globalization increases the demand for THC, particularly fluency in foreign languages in well-paying and secure jobs (e.g. transnational corporations) but also in low-pay, insecure jobs (e.g. waiters in tourist resorts), and 3) while employers are often aware of the hiring and remuneration

practices of dominant firms and may even seek legitimacy by claiming to follow them, environmental pressure is rarely so strong as to lead to actual adoption of these practices if they do not meet a firm's needs.

#### *Demand for Transnational Human Capital*

Demand for THC is not as prevalent and intense as the literature claims it is, even in the most advanced and open economies. Data for the European Union illustrate this. A *European Commission* report issued in 2010, based on a survey to companies with more than fifty employees in all EU member states, showed that when companies select among university graduate applicants, fluency in foreign languages only plays a minor role: While 67% of the companies agreed that it is important for them that applicants be fluent in foreign languages, in all but three European Union member states this was the lowest percentage obtained by any skill in a list that comprised eleven items (*Flash Eurobarometer Report* 304). Although 67% is a large percentage, this simply reflects desirability bias resulting from the way the question was asked in the survey: a close-ended list of positive qualities that a worker can bring to a firm. As a matter of fact, as many as 93% of the companies in the sample rated nine or more skills in the list as important or very important and 55% of them rated all eleven skills in the list as important or very important. How fluency in foreign languages ranks relative to other skills is therefore more meaningful than the percentage of employers who rate it as an important skill.

The *European Commission* report also showed that only 24% of the EU companies claim that study abroad is important, that only 29% agree that an internship abroad is important, and that only 40% value that university graduates have attended institutions with an international reputation. There are in fact considerable contrasts across countries. In France, for instance, only 42% of the companies rate foreign

language competence as important whereas in Turkey, where Di Paolo and Tansel find significant returns to fluency in English (2015), 78% do. More generally, at the top 25% of the countries that participated in the survey, and with percentages equal or above 52%, one finds Luxembourg, Croatia, Cyprus, Slovakia, Malta, the Czech Republic, Greece, and Latvia, whereas at the bottom 25%, with percentages equal or below to 29%, one finds the British Isles, France, Norway, Netherlands, Denmark, Germany, and Poland.

*Average Pay and Employment Conditions in Firms that demand Transnational Human Capital*

Empirical evidence supporting the assumption that the jobs that demand THC pay better and are more secure than those that do not demand THC is ambiguous. We know, for instance, that transnational corporations and other internationalized firms employ people with THC (Gerhards et al., 2015; Flash Eurobarometer 304, 2010). Firms in the financial, legal, and scientific sectors are also disproportionately represented among those who advertise jobs that call for THC (Gerhards et al. 2015). In general, these firms pay better and offer better job conditions than other firms (on multinationals, see OECD, 2008). Other pieces of evidence, however, make the assumption of better average pay and work conditions in jobs that demand THC less than a foregone conclusion. The *Flash Eurobarometer 304* report shows, for instance, that demand for university graduates with THC is actually greater in middle-size companies (50-249 employees) than in the biggest ones (249+ employees) where the literature suggests that pay and employment conditions are better (Oi and Idson, 1999). The report also shows that demand for THC is high in the trade, food, and accommodation sectors, which do not stand out for their good pay and employment conditions (i.e. Thirty percent of the companies in this sector say that when they fill jobs targeted to university graduates

they treat the ability to speak foreign languages as a very important job qualification). This is particularly the case in the tourism sector, which needs people who are fluent in foreign languages, at all pay and job stability levels (from waiter at the hotel bar to CEO of a big hotel chain) (e.g. Honig and Brod, 2011; Leslie and Russell, 2006; McGettigan, 2001; Davies, 2000). On the other hand, demand for THC in public services, where job stability is high, is relatively low (i.e. Only sixteen percent of the companies in this sector say that when they fill jobs targeted to university graduates they treat the ability to speak foreign languages as a very important job qualification). One can thus assume that a country's economic structure determines whether workers with THC are concentrated in jobs that provide good pay and employment conditions.

#### *Transnational Human Capital and General Competence*

There is no source of data available that allows for a rigorous check of the validity of the assumption that a culture of treating THC as a sign of unobserved ability has developed. Undoubtedly, and along the lines of what the world polity paradigm describes for other organizational and policy domains (Meyer et al, 1997), the idea that individuals with THC benefit the economy has diffused worldwide: through scientific fora that highlight its positive impact on individual cognition (Adesope et al., 2010; Bialystok, 1999; Olsen and Brown, 1992; Cooper, 1987) and also through international organizations and internationally-oriented academic institutions (Drori et al. 2006). The World Bank and the OECD, for instance, recommend the transmission of cosmopolitan competences (Spring, 2009). The EU has pushed for curricular reform that promotes the learning of foreign languages from an early age (the EU's 1+2 language policy) and through programs like ERASMUS.

One can also follow DiMaggio and Powell (1983) and speculate that transnational corporations that vie for individuals with THC provide a model for

imitation by smaller firms as they struggle for legitimacy and to attract the best workers. Scholars point out, however, that diffusion and isomorphism often stop at the level of formal adoption of legitimate organizational structures and procedures (Meyer and Rowan, 1977), especially, as is the case here, in the absence of coercion or strong normative pressure. It is thus difficult to see how employers who do not need employees with THC would go beyond formally imitating legitimate procedures (e.g. advertise that they seek people fluent in English). Instead, it appears more likely that the majority of employers still rely primarily on established signs of competence like educational credentials, field of study, former job experience, and referrals when making salary decisions and when deciding on whom to hire and whom to retain.

### **Data and Methods**

The *Eurobarometer Study 73.3* (2010) helps test the dominant literature's claims about the returns to THC against the more skeptical view advocated here. *Eurobarometer* is one of a handful of studies that systematically inquire about THC (see also, Mau, 2010, and Recchi, 2015). It includes all EU member states. Although it is not suited for fine-grained analysis of the uneven returns to THC it allows for a test of the public sphere's and academic literature's more typical and general claim that on average workers fare better in terms of employment when they possess THC than when they do not possess THC.

#### *Geographical Scope and Unit of Analysis*

The article's emphasis on the returns to English as a foreign language requires that the statistical analysis be restricted to non-English-speaking countries (i.e. all EU states except for Britain, Northern Ireland, Ireland, and Malta). Because of its focus on the labor market, the statistical analysis also excludes students, retirees, and respondents who mention housework as their primary activity. Finally, I restrict the analysis to



individuals born in the country of residence (*Eurobarometer*). Separate analysis of foreign-born and natives is frequent in the literature, as I describe above. This is partly because foreigners face more and different obstacles in the labor market (i.e. discrimination) than do natives and nationals; also, as the literatures above show, the most important transnational skill for the foreign born is the host country's language, whereas fluency in English or other world languages is the most important transnational skill for natives.

### *Dependent Variables*

In line with previous studies of the impact of fluency in foreign languages on employment (e.g. Araújo et al., 2015; Donado, 2014) the main dependent variable measures whether the respondent is unemployed or employed (employed = 1). The article's main goal is to determine whether the productive, signaling, and symbolic value of different dimensions of THC is such that the probability of being employed is greater on average among individuals with THC than among individuals without THC. Just like in extant studies of earnings, causality can only be inferred after ruling out alternative explanations for observed associations between individual characteristics and outcomes. I know of no representative comparative study that documents the role that THC played in actual individual hiring, promotion, retention, dismissal, and pay decisions.

### *Independent Variables*

The main independent variables gauge people's THC: foreign language skills, study abroad, and transnational social capital. I measure foreign language skills through self-reports. Self-reports of language skills are known to be inaccurate and include systematic bias (Edele et al. 2015; Phinney and Ong, 2007), but they are the most cost efficient way of collecting this information in multi-thematic surveys. Respondents

checked what languages they can speak *well enough to have a conversation*. One dichotomous variable in the statistical models distinguishes speakers from non-speakers of English and a second one distinguishes speakers of a second language other than English from speakers of only one language. When simultaneously present in the statistical models, they reciprocally control for unmeasured variability in talent and class background that could bias estimates of the causal effect of fluency in foreign languages on employment status (Lang and Siniver, 2009, make this same argument; also, Di Paolo and Tansel, 2015). Also, if unmeasured class background accounts for the association between fluency in foreign languages and employment status, one would expect the association between fluency in English and employment status to be weaker than the association between fluency in foreign languages other than English and employment status. This is because English is the most frequently taught second language in schools across Europe (Education, Audiovisual, and Culture Executive Agency, 2012). Learning other languages generally requires extra-curricular investments, which affluent parents can afford more easily than less affluent ones.

Two questions gauge the depth of a person's transnational experience and social capital. The first question is whether people studied abroad. A dummy variable distinguishes those who studied abroad from those who have not (Studied abroad = 1). The second question is whether respondents have friends abroad. This indicator measures transnational social capital and simultaneously captures the depth of cultural immersion in foreign societies of individuals who have travelled or lived abroad. I use a dichotomous variable to distinguish between respondents who have friends in other countries and those who do not (Has friends = 1).

In addition to the main variables, the statistical models include socio-demographic controls. Education is the main one. The *Eurobarometer* asks

respondents at what age they completed their full-time education. The variable's range is from 1 to 23, with 23 also including those who stopped beyond their 23<sup>rd</sup> birthday. Education informs about a person's work qualifications as well as his or her social background and talent. It thus impacts on people's employment status and is correlated with people's THC. As a control variable, educational attainment helps assess the independent causal impact of THC on employment status. Since preliminary exploration of the data showed a non-linear association between education and employment status, the statistical analysis includes a variable for the product of education by itself.

The remaining socio-demographic control variables in the statistical models are age, gender, household size, type of place of residence (rural community, small town, and large town), and country of residence. Preliminary exploration of the data suggested a non-linear association between age and employment status. The statistical analysis therefore includes a variable for the product of age by itself.

The article aspires to verify the existence of associations between THC and employment status and also to establish whether these associations are causal. The main concern is that omitted variables related to the respondents' social background and cognitive abilities and unmeasured sources of measurement error in key variables like fluency in foreign languages may be correlated with measures of THC and thus bias the estimates of the causal effect of THC on employment status (endogeneity bias). I approach the problem of endogeneity 1) by checking that observed associations conform to theoretical expectations and 2) through statistical models with instrumental variables. For reasons that become clear below, I focus on the role of fluency in English only.

A test of the literature's claim that the association between fluency in English and employment status varies with the prevalence of English speakers illustrates the first approach. I measure prevalence by aggregating the individual-level information contained in the *Eurobarometer* into an estimate of the percentage of English speakers for every country. When testing this hypothesis, I control for the effects of other aggregate measures: the unemployment rate, GDP per capita ( $\ln\text{GDP/Cap}$ ), and the country's degree of insertion in global flows and networks, as captured by the KOF index (Dreher, 2006). The KOF index adds indicators corresponding to three dimensions: 1) Economic Globalization, 2) Social Globalization, and 3) Political Globalization, with the former two weighing more in the index (36% and 38% respectively) than the latter (26%).

The second strategy I follow to check whether the association between THC and employment status is causal is to re-estimate statistical models with instrumental variables. An IV model uses variables that are called "instruments" to predict the value of potentially endogenous regressors. The predicted values are then included as a regressor in the model that one wants to estimate. The literature features different instruments for the variable "fluency in foreign languages". The instrument that Di Paolo and Tansel use measures how often respondents communicate in English during their leisure hours (2015). The problem with this measure is that it is itself endogenous to fluency in English: while communicating in English during one's leisure hours contributes to increase competence in English, pre-existing competence in English also determines how often individuals communicate in English during their leisure hours. Donado uses two alternative instruments, which gauge the difficulty and geographic proximity of different foreign languages (Donado, 2015). Although these variables probably play some role in explaining what foreign languages people learn and speak,

they are less valid than an instrument that takes into account the institutional setting in which the learning of foreign languages takes place. All authors actually overlook the fact that most people in Europe and elsewhere learn foreign languages as part of their formal education process and that, consequently, what foreign languages they speak and how well they know them depends mainly on public requirements and resources available for instruction in various languages and on the stage at which foreign language instruction is made compulsory. *European Commission* reports show, in particular, that the majority of pupils in European schools nowadays learn English as the first foreign language (Education, Audiovisual, and Culture Executive Agency, 2012). To take these facts into consideration, I instrument *Fluency in English* with a dichotomous variable that measures whether primary school instruction of a foreign language was compulsory when respondents were six years old. To create this variable, I combined information on the respondents' age with information on education policy from a European Commission study (Eurydice, 2001). The *Eurydice* study shows that Scandinavian countries were forerunners in making foreign language instruction in primary school compulsory, whereas countries like France and Germany had not made it compulsory at the time the youngest respondents in the *Eurobarometer* study started primary school.

Table 1 provides the mean and standard deviations for all the variables in the *Eurobarometer* study described above. In the statistical analysis that follows I use logistic regression, hierarchical logistic regression, and bivariate probit models.

[Table 1 about here]

## Results

### *The Employment Returns to THC*

Table 2 displays three statistical models that estimate the odds ratios of being employed for different categories of respondents. Columns 1 and 2 report the results of fixed-

effects logistic regression models. Although both control for country of residence, the table does not report the country coefficients. I first examine the pseudo-R square coefficient in order to assess the relative contribution of different sets of variables to the explanation of employment status. I use the pseudo-R square coefficient corresponding to a baseline model that includes the country fixed-effects only as the value of reference (pseudo-R square = 0.07; model not displayed in Table 2). Table 2 shows that the pseudo-R square coefficient for the model that includes the country-fixed effects and the socio-demographic individual variables is equal to 0.10 (column 1) whereas the pseudo-R square for the model that includes the country-fixed effects, the socio-demographic individual variables, and the THC variables is equal to 0.11 (column 2). The contribution of THC to the explanation of employment status, compared to that a person's country of residence and his or her socio-demographic characteristics, is clearly very small.

[Table 2 about here]

Column 2 shows that fluency in English increases the odds of being employed. To clarify the meaning and magnitude of this non-linear relationship I transform the odds-ratio coefficient for fluency in English into probabilities computed at the average and mode values of the control variables (41-years old, male, in the labor force, stopped studying at age 19, lives in a three-person household, resident in a large town, did not study abroad, has no friends in another country). The probability of being employed at these values of the control variables is 88% for individuals who cannot speak English and 90% for those who can speak English. This finding is consistent with the literature's claim. Further analysis not reported here, however, reveals that fluency in English is associated to a higher probability of being employed in only four countries (Belgium, West Germany, Spain, and Estonia).

Column 3 displays odds ratio estimates for a random-slope multi-level logistic model that tests the hypothesis that the returns to fluency in English decline as the prevalence of fluency in English in the population increases. A statistically significant odds ratio coefficient below one (0.34) is consistent with this hypothesis. Figure 1 helps in the interpretation of the interaction coefficient. It displays variation in the marginal effects of fluency in English, conditional on the prevalence of English speakers in the population. As above, I estimate these marginal effects at the mode values of the categorical control variables and the mean values of the remaining covariates (see paragraph above for the actual mode and mean values). The downward curve shows that the returns to fluency in English decline as the prevalence of English speakers increases. More specifically, the graph in Figure 1 shows that the fluency in English increases the probability of being employed but only when the prevalence of English speakers in the population is around 45% or lower. When the prevalence of English speakers is 17%, which corresponds to the 10% lowest percentile of the distribution of EU member states in the sample, the probability of being employed is four percentage points higher for English speakers than for non-English speakers. When the prevalence reaches 35%, which corresponds to the median of this distribution, the probability of being employed is still three percentage points higher for English speakers than for non-English speakers. When the prevalence reaches 38%, the average of the distribution, the employment returns to fluency in English are down to only two percentage points.

[Figure 1 about here]

Columns 2 and 3 in Table 2 also allow for an assessment of the returns to other types of THC highlighted in the literature. They reveal that having friends abroad has no impact on employment status and that there is an interaction between *Education* and

*Study Abroad*: the odds of being employed for individuals who studied abroad relative to those for individuals who did not study abroad are greater the older the age at which they stopped studying. Figure 2 facilitates the interpretation of the interaction between *Education* and *Study Abroad*. It displays marginal effects of studying abroad computed at the modal and average values of the control variables, conditional on the respondents' age when they stopped studying. The figure shows that for those who stopped studying before their eighteenth birthday, which is the median age at which respondents in the sample stopped studying, estimated probabilities of being employed are slightly lower among those who studied abroad than among those who did not study abroad. For people who stopped studying at older ages studying abroad no longer affects the chances of being employed. The estimation of a separate statistical model only for respondents who stopped studying at or beyond their 23<sup>rd</sup> birthday confirmed these results. This finding does not conform to the literature's expectations, which predicts that among people with university education or more, the probability of having a job is greater for those who studied abroad than for those who have not.

[Figure 2 about here]

The results displayed in Table 2 and Figures 1 and 2 convey that *Fluency in English* is the only form of transnational human capital that increases the probability of having a job, and only in countries where the prevalence of English speakers lies below a certain level<sup>2</sup>. Because of this, the rest of the analysis focuses on this variable only.

In order to ascertain how confident we can be that the effect is causal I have estimated a bivariate probit model with instrumental variables (see Table 3). I instrument the variable *Fluency in English* with a dichotomous variable that indicates for each respondent whether the teaching of foreign languages was compulsory in primary school when they were six years old. The statistical literature notes that a valid



instrument must be at least moderately correlated to the endogenous variable and that it must be uncorrelated with the outcome variable. In this case, the two pre-requisites are met: the correlation between the instrument and *Fluency in English* is equal to 0.26 whereas the correlation between the instrument and *Employment Status* is equal to 0.04. Valid instruments must also be related to the endogenous variable, net of the effects of other exogenous variables in the model. Column 1 of Table 3 shows that the net association between the instrument and *Fluency in English*, controlling for the rest of the exogenous variables is positive and statistically significant (probit coefficient = 0.35): Respondents who live in a country where the teaching of foreign languages in primary school was already compulsory when they were six years old are more likely to speak English than those who lived in a country where it was not compulsory. Finally, the use of an instrumental variable is only justified if one can reject the null hypothesis that the “endogenous” variable is in fact exogenous. A statistically significant Wald test for Rho displayed at the bottom of Table 3 means that one can reject the null hypothesis that *Fluency in English* is exogenous. In all, the compulsory instruction dichotomous variable meets the criteria of a valid instrument for the endogenous variable *Fluency in English*.

Column 2 of Table 3 displays the IV probit coefficient for *Fluency in English*. A value for this coefficient of -0.84 contradicts world polity and human capital theoretical expectations regarding the existence of a causal relationship between *Fluency in English* and *Employment Status* in the era of globalization (e.g Meyer, 2007; Chiswick and Miller, 2007, 2009). It says that, holding other variables constant, speaking English is associated with lower, rather than higher, chances of having a job. An identical statistical model restricted to respondents who live in countries with a prevalence of English lower than 45%, that is, where the returns to fluency in English are the highest,

confirms these findings (results available upon request). Other statistical models not shown here, based on different methods (treatment regression, instrumental variable probit) and alternative instrumental variables (linguistic distance between the national language/s and English [Miller and Chiswick, 2004] and a national language/s communicative power [De Swaan, 2001]), also confirm this result. This finding casts legitimate doubts on the causal character of the association between *Fluency in English* and *Employment Status*.

[Table 3 about here]

### *Other Results*

The article's focus on THC and lack of space preclude a systematic description of the results displayed in Tables 2 and 3. Suffice to say, however, that by and large they conform to expectations. One observes higher probabilities of being employed among men than among women. Also, the probability of having a job increases with age, household size, education, and the GDP/capita in the country where one lives. Finally, the probability of having a job decreases as the unemployment rate in the country where one lives increases. Other variables, like the *Globalization Index* or the type of community where one lives (Rural Community, Small Town, Large Town), have no impact on the probability of employment<sup>3</sup>.

### **Discussion**

The results above provide little support to the literature's claim of general employment returns to THC. While the probability of being employed is greater among people who can speak English than among people who cannot, neither studying abroad nor having friends who reside abroad has the expected impact on employment status. In the face of these contradictory findings, one is forced to question the analytical value of the concept THC for a contemporary understanding of the stratification process. It makes little

sense to emphasize the significance of THC in contemporary labor markets when, of all its dimensions, fluency in English is the only one that relates to employment status in predicted ways, and in only four European Union countries.

There are also good reasons to be cautious when treating observed associations between THC and employment status in causal terms. The rationale for expecting a causal association between THC, including fluency in English, and employment status is weak. Demand for THC is not as widespread and as concentrated in well-paying, stable jobs as the literature often implies, the distribution of THC across classes is unequal, and credentials get priority over other considerations at the point of hiring. It is also well known that there are considerable social inequalities in the distribution of THC (Gerhards, 2010; Fligstein, 2008; Mau, 2007). Some even argue that these inequalities underlie the social construction of which transnational traits count as THC (e.g. spend a semester abroad as an Erasmus student) and which do not count (e.g. having grown up in a multicultural lower class neighborhood) (Lamont and Aksartova, 2002). It is thus conceivable that the statistical controls do not fully capture class and talent effects (e.g. graduating from an elite university instead of graduating from an average one, see Rivera, 2015) and that the observed association between *Fluency in English* and *Employment Status* is spurious. This is certainly the message that the instrumental variable bivariate probit model conveys (Table 3).

In light of the discussion and the empirical findings above one can thus re-interpret the observed interaction effect of *Fluency in English* and the prevalence of English speakers in the population on *Employment Status*. Although the finding is consistent with the literature's expectations, an alternative reading consistent with the spurious character of the association between *Fluency in English* and *Employment Status* is that as the prevalence of English in the population increases, the distribution of

fluency in English across the population becomes less correlated to class origins, talent, and achievement motivation, which in turn leads to a weaker association between *Fluency in English* and *Employment Status*. A strong correlation of 0.57 between the number of years since compulsory instruction in foreign languages was introduced in primary education and the prevalence of fluency in English in the population supports this alternative interpretation of the observed interaction. It is also possible that other variables that further de-couple fluency in English from other kinds of cultural capital that are connected to a person's class origins, including transnational experiences and practices (e.g. spending holidays abroad, buying property abroad; see Delhey et al., 2015), explain why the correlation between fluency in English and employment status becomes smaller as the proportion of English speakers in the population becomes higher. This reading of the statistical findings brings us close to a *Bourdieuian* understanding of the relational value of capital in a field while moving us away from standard economic approaches to human capital (Bourdieu, 1986)

We need more research and different data to strengthen the conclusions above. The intensification of workers' cross-border mobility would recommend a focus on the *transnational (or global) economic field*, a single world or at the very least partly autonomous regional labor markets (i.e. the EU) where geographically mobile and non-mobile workers deploy different forms of capital, including THC, in an increasingly homogeneous institutional setting, as they compete with other workers for scarce economic rewards (Bourdieu, 1984, 2005, pp. 223-232). Unfortunately, data limitations mean that quantitative studies--and this article is no exception--still measure and analyze these competitive outcomes within compartmentalized national settings, which may bias statistical findings by excluding nationals who moved permanently to other countries.

The statistical results above may also be influenced by the fact that employment status is less elastic an indicator than earnings, which is the typical dependent variable in analyses of the returns to THC. The survey samples are very large, however. Therefore, if the general association between THC and employment status were substantial, and if it were causal, this should certainly emerge in the statistical findings. One should also be aware that available measures of THC do not capture fine qualitative distinctions between individuals, which may have an impact on the returns to THC (on the related problem of how to measure the impact of cultural capital on stratification, see Lareau and Weininger, 2003). Last but not least, if, as some authors claim (see Igarashi and Saito, 2014), the course contents of the school curricula of many countries already teach the transnational skills and knowledge that the global economy demands, then the effect of THC is inextricably embedded in the effect of education. Contemporary school curricula, for instance, include instruction in the economy, history, and geography of different parts of the world.

## **Conclusion**

Demand for THC has increased in recent decades. This article allows us to calibrate the significance of these changes and to differentiate between public discourse on the demand and rewards to THC and actual practices. In contrast to the claims and expectations found in public and academic discourse, this article shows that THC plays little or no role in determining who is employed and who is unemployed in the European Union's labor markets. This is not because of an oversupply of workers with THC, for as I show above the mean value for the percentage of respondents who are fluent in English across the European Union's member states is only 38%. Instead, the statistical findings reported above suggest that benefits to THC are still contained within a relatively narrow labor market segment and concern very specific traits, such as being

fluent in English. The relatively big size of the public sector, especially in Europe, where demand for THC is low (see *Flash Eurobarometer* 304), and the relatively big share of economic transactions that still occur within national boundaries and in locations that are not necessarily multicultural mean that, *ceteris paribus*, workers without THC can still expect economic opportunities that are as good as those found by workers with THC.

In fact, the main lesson one learns from this preliminary study is that grand claims about the general returns to THC at the current stage of globalization must be abandoned in favor of more nuanced statements about the unevenly distributed value of specific types of THC across types of returns (e.g. earnings, hiring chances, job stability, job conditions), institutional settings, countries, branches of the economy, and occupations. The examination of this uneven distribution of returns is not this article's goal. As discussed in the literature review section, however, demand for THC appears to be higher in some economic sectors than in others, which suggests that returns to THC for individuals looking for work or employed in those sectors are also higher. One can also move beyond a consideration of differential returns by sector and focus on the role of institutions. I would speculate, for instance, that the relevance of THC varies across hiring cultures and labor relations regimes, that THC matters more in meritocratic than in clientelistic hiring cultures and more in hiring cultures that allow for creativity in the way a potential employee presents his or her credentials than in hiring cultures that emphasize standardized application procedures. Similarly, I would speculate that the returns to THC are higher in less regulated labor markets than in highly regulated labor markets, where sectoral or national collective agreements provide for standardized hiring and wage or salary conditions (for other potential sources of regional and national variation, Igarashi and Saito, 2014, Pp. 232-233).

Extant case studies and previous quantitative work already provide useful hints as to where the returns are highest, but in order to develop more rigorous and generalizable statements one would need good cross-national data, with precise information on the THC that individuals bring to the market and on the criteria that employers actually use when making specific hiring, retention, firing, and pay decisions. Such precise data is currently not available and one of the challenges ahead will precisely consist in designing studies specifically tailored to assessing the returns to THC.

### Notes

1. I omit the related literatures on cosmopolitanism, the acquisition of THC, and the impact of THC on identity. Key references are: Favell and Guiraudon, 2011; Favell, 2008, Fligstein, 2008, Mau, 2007, Gerhards, 2010, Recchi, 2015; Risse, 2010, Weenink, 2008; Beck, 2006.
2. I estimated a model that also included the respondents' occupation. While occupation can act as a proxy for exogenous factors that impact on both THC and employment status and that education does not capture (e.g. the type of degree obtained, family background), it can also mediate the effect of THC on employment status (see Di Paolo and Tansel, 2015). When one includes occupation in the model, the effect of *Fluency in English* disappears (as does the effect of *Education*). Since one cannot objectively establish, however, whether the change is spurious or that occupation intervenes between THC and employment status, I do not report this result in the text.
3. In separate models, I checked whether the returns to THC are bigger in "global" cities than elsewhere. I used information that ranks European cities on various measures of global city status (Alderson and Beckfield, 2004). The statistical results show that the effect of THC on employment status is actually less among residents in global cities than among residents in other places. Although this is so partly because of lower unemployment, higher education levels, and higher percentages of English speakers in global cities, the contrast remains after taking these variables into account.



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## Tables

Table 1. Means and Standard Deviations (*Eurobarometer*)

Variables	European Union States, except UK, Ireland, and Malta	
	Mean	S.D
Employed	86.1%	34.6%
English	43.3%	49.6%
Languages other than English	4.4%	20.6%
Gender (1= Male)	51.4%	50.0%
Age	41.8	11.6
Household Size	2.7	1.1
Education (years)	19.1	3.1
Studied Abroad	5.1%	22.0%
Friends Abroad	46.2%	49.9%
Lives in Rural Area	36.0%	48.0%
Lives in Large Town	28.2%	45.0%
Unemployment Rate (Respondents who are currently in the labor force)	10.4%	4.4%
GDP/Capita (\$)	31880	19837
Globalization Index	82.2	6.9
% Speaks English	38.2%	21.8%
N	12174	

Source: *Eurobarometer* 73.3 (2010)

Note: Only respondents born in the country and who are employed or unemployed are included in the analysis

Table 2. THC and employment status (*Eurobarometer*) (odds ratios of being employed)

	(1)	(2)	(3)
English		1.39***	2.08
Languages other than English		0.86	0.86
Studied Abroad		0.73	0.13*
Education*Study Abroad		1.10*	1.10*
Friends Abroad		1.07	1.07
Gender (1= Male)	1.14 *	1.13*	1.13*
Age	1.04 *	1.05***	1.05***
Age*Age	9.9E-1	9.99E-1 *	9.99E-1 *
Household Size	1.12 ***	1.13***	1.13***
Education	1.17 ***	0.91*	0.91*
Education*Education		1.01***	1.01***
Lives in Rural Area	1.10	1.11	1.11
Lives in Large Town	1.09	1.04	1.03
Unemployment Rate			0.93**
Ln(GDP/cap)			1.71*
Globalization Index			1.00
Globalization Index*English			9.99E-1
% Speaks English			0.92
% Speaks English*English			0.34*
Intercept			3.13E-3
Variance (Intercept)			0.461*
Variance (English)			0.131
Covariance (Intercept, English)			-0.665
Pseudo R-Square	0.10	0.11	
N	12174	12174	12174

Source: *Eurobarometer* 73.3 (2010)

Note: Columns 1-7 control for Country of Residence; Two-tailed tests: \* Sig. at 0.05 level; \*\*: Sig. at 0.01 level; \*\*\*: Sig. at 0.001 level.

Figure 1. Conditional marginal effects of fluency in English on the probability of having a job, by % who speaks English in the population (95% confidence intervals for 10<sup>th</sup>, 30<sup>th</sup>, 50<sup>th</sup>, 70<sup>th</sup>, and 90<sup>th</sup> percentile of cumulative distribution)

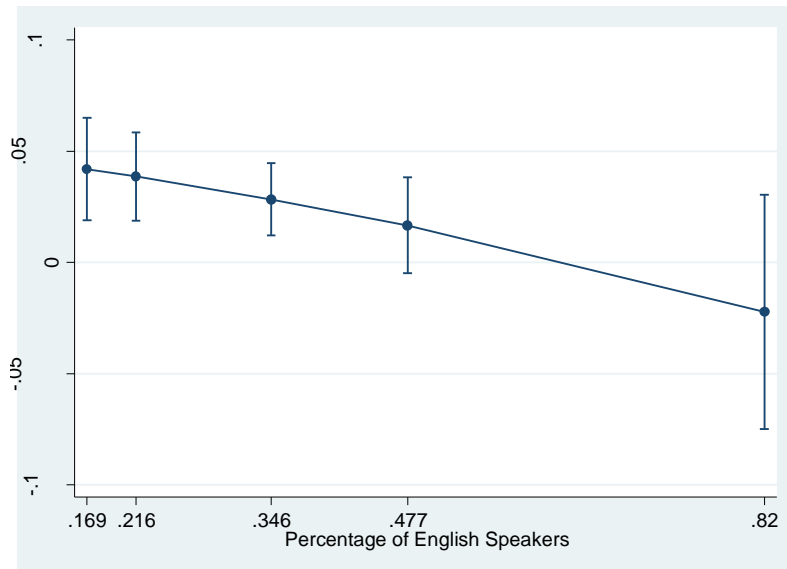


Figure 2. Conditional marginal effects of study abroad on the probability of having a job, by age at completion of education (95% confidence intervals for 10<sup>th</sup>, 30<sup>th</sup>, 50<sup>th</sup>, 70<sup>th</sup>, and 90<sup>th</sup> percentile of cumulative distribution)

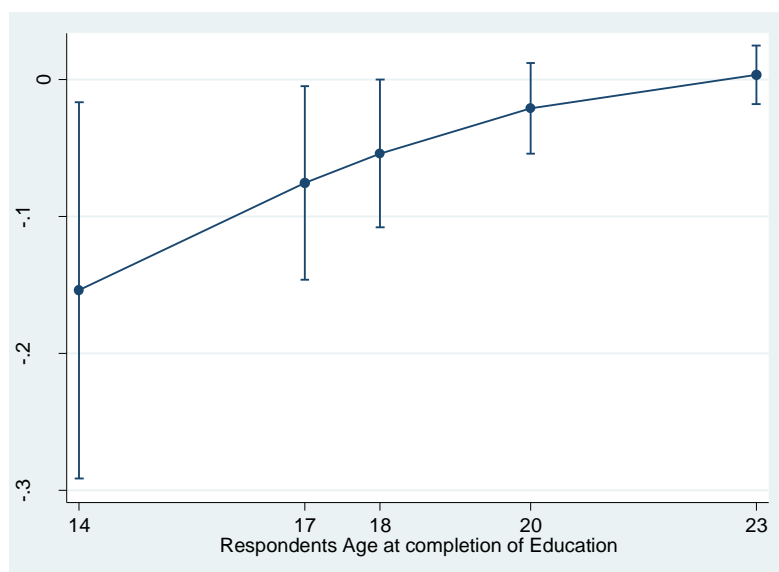


Table 3. Transnational human capital and employment status (*Eurobarometer*)  
(bivariate probit coefficients)

	Speaks English	Employed
English		-0.84***
Studied Abroad	0.34	-0.95*
Education*Study Abroad	-0.01	0.05*
Friends Abroad	0.40	0.12**
Gender	0.07 *	0.09
Age	-0.05 **	0.01
Age*Age	3.4E-4 *	-1.2E-4
Household Size	-4.5E-4	0.07***
Education	-0.02	-0.06
Education*Education	5.0E-3 *	4.9E-3***
Lives in Rural Area	-0.14 *	0.04
Lives in Large Town	0.23 ***	0.09
Unemployment Rate	-0.02	-0.04***
Ln(GDP/cap)	0.86 ***	0.43***
Globalization Index	-0.01	4.0E-3
Compulsory Foreign language	0.35 *	
Education in Primary School when R was 6 years old		
Intercept	-8.74 ***	-4.13***
Rho	0.58	
Chi-Square for Wald Test of Rho(1df)	15.33 ***	
N	12174	12174

Source: *Eurobarometer* 73.3 (2010)

Two-tailed tests: \* Significant at 0.05 level; \*\*: Significant at 0.01 level; \*\*\*:  
Significant at 0.001 level (Robust standard errors)