NEETs in Latin America and the Caribbean: Skills, Aspirations, and Information

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Abstract

This paper studies the role of cognitive skills, socioemotional skills, aspirations, and expectations on the likelihood of being NEET (not in education, training or employment) using a novel sample of 15 to 24 year old residents of seven Latin American and Caribbean countries. After controlling for sociodemographic household conditions, we find that numeracy and literacy skills, core self evaluation, extraversion and educational aspirations are robust correlates of being NEET. We also find cross country heterogeneity. That is, in some countries passion and perserverance for long term goals, neuroticism, and labor market information biases are additional factors associated with being NEET.

Keywords: cognitive skills, socioemotional skills, aspirations, expectations, information bias, youth

1. Introduction

About 20 million youths in Latin America and the Caribbean (LAC) are not in education, employment or training (NEET).[4] That is, 21% of the population between the ages of 15 and 24 is NEET in LAC, which falls between the rates of North America (14%) and Europe and Central Asia (14%) and those of Asia (30%) and the Middle East and North Africa (32%).[5] The NEET phenomenon is a global concern as it represents the underemployment of human

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[4] De Hoyos et al. (2016).

[5] World Bank (2019a).

capital and a loss of productive opportunities. It is also associated with the risk of social exclusion. It thus affects both individuals' welfare and national economic growth.

There is a wealth of research analyzing the educational and employment decisions of youths with a focus on their decisions to continue their educations or to enter the labor market (Edmonds, 2008; Baland and Robinson, 2000). A smaller but growing body of research has explored the correlates of simultaneous educational and labor market inactivity, that is the decision to neither study nor work nor engage in training.[6] Most of these studies focus on socioeconomic conditions such as gender, household income, having dropped out of school, and fertility. Only a small number of papers analyze the role played by aspirations and expectations, and socioemotional skills. Moreover, much of this latter research has been done in developed countries. Thus, it is important to expand the knowledge about the role of skills, aspirations, and expectations in the context of developing countries.

This paper explores the conditions associated with the likelihood of being a NEET youth in LAC, defined as young people who are not in education, employment, or training (ILO, 2015). More specifically, in addition to traditional socioeconomic conditions, we analyze the role of cognitive and non cognitive skills, aspirations, and expected educational returns on the likelihood of being NEET. Our emphasis on these variables is based on previous studies that show that they are important predictors of educational attainment and labor market outcomes (Heckman et al., 2006). Moreover, there is a mounting body of evidence that suggests that expectations, socioemotional skills and behavior can be modified during adolescence through low cost interventions (Novella and Repetto, 2019).

We use a new dataset, the Millennials in Latin America and the Caribbean survey, for our purpose (Novella et al., 2018). The survey contains in depth information on over 12,000 youths aged 15 to 24 who are residents of urban areas in seven LAC countries (Brazil, Chile, Colombia, El Salvador, Haiti, Mexico and Paraguay). According to official statistics, the proportion of youths aged 15 to 24 years who are NEETs in these countries is large, ranging from 16% in Paraguay in the past decade, to 27% in El Salvador (Figure 1). The unique database was designed to collect information on a wide range of topics associated with their schooling and working decisions, and allows us to do a cross country comparison of the relevance of different variables on the probability of being NEET.

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[6] See the literature review in Section 2 below.

In order to uncover their distinct correlations with being NEET, we add the variables of interest in sets, one by one, to our empirical model. To compare with the existing evidence, our basic model includes socioeconomic variables (age, gender, years of education, teenage parenthood, household income, and household composition indicators). We then progressively add cognitive skills, socioemotional skills, educational aspirations, and finally, expectations of educational returns.

As in the previous literature, we find relevant statistical associations with socioeconomic variables: being female, age, teenage parenthood and young children at home are positively correlated with the likelihood of being a NEET youth, while household income and years of education are significatively and negatively correlated. These results remain practically unchanged as additional covariates are added to the empirical model.

Our main contribution, however, is to show that cognitive and non cognitive skills are negatively correlated with the probability of being NEET even after correcting for socioeconomic characteristics. Specifically, better performance in cognitive tests and a higher score in a core self evaluation index — consisting of self esteem, self efficacy and locus of control — are all associated with a lower chance of being NEET. Similarly, the extraversion item of the Big Five Inventory (Rammstedt and John, 2007) is empirically associated with a lower likelihood of being NEET. We find no significant association with the other items of the Big Five Inventory or with an index measuring passion and perseverance for long term goals (the Grit scale; see Duckworth and Quinn, 2009).

Also important, our results show that educational aspirations are negatively correlated with the likelihood of being NEET. However, we find no association between being NEET with the expected return to higher education and with biases in labor market information.

Furthermore, we find cross country heterogeneity in our estimation results. That is, for some countries, passion and perserverance for long term goals, neuroticism, and labor market information biases are additional factors associated with being NEET.

Our results are robust to the set of included variables. This suggests that cognitive skills, socioemotional skills, and aspirations are independently correlated with educational and employment activities. That is, these factors are not mediated through socioeconomic conditions such as teenage pregnancy, educational attainment, or household income.

This result, in turn, has implications for the design of policies aiming to reduce the rates of NEET youths beyond programs that alleviate poverty and reduce the prevalence of teen parenthood. In particular, interventions that impact cognitive and non cognitive skills and aspirations also have potential to be effective in addressing the NEET phenomenom.

It is worth highlighting that our paper provides a cross sectional analysis aimed at examining conditional correlations between the probability of being NEET and the relevant variables. That is, the results in this paper should not be interpreted in a causal way because of the restrictions imposed by the cross sectional nature of the Millennials in LAC dataset. Even so, this paper provides novel evidence on the dimensions related to youths' decisions that have so far not received much attention in the academic and policy agendas in LAC.

The remainder of the paper is organised as follows. Section 2 briefly reviews the literature that studies the decision of being NEET. Section 3 describes the Millennials in LAC survey and our estimation strategy. Section 4 presents the results and discusses potential policy interventions. Finally, Section 5 concludes.

2. NEETs: conceptual framework and literature review

The analytical framework of schooling, work and time allocation by children and youths helps explain why youths may find themselves as NEET at some point in time (Skoufias and Parker, 2001; Edmonds, 2008; Berhman et al., 2015). According to this literature, the decision maker – the parents, the family, or the youths themselves– maximize welfare by allocating time to different activities according to the expected net marginal benefit of each. In the context of education and labor market activities, the factors theoretically affecting this relative expected net marginal benefit can be classified into three broad categories: (i) characteristics of the youths themselves, (ii) characteristics of their households, and (iii) characteristics of the educational environment and the local labor market.

Youths' characteristics
According to the analytical framework, the ability to learn and reap the benefits of education is an important factor in determining youths' NEET status. This ability affects the returns from and the opportunity cost of studying instead of working. Cognitive skills such as

numeracy and literacy skills allow youths to solve problems and understand information (OECD, 2015a). Non cognitive skills such as motivation, self esteem and self efficacy allow people to organize and plan, to relate to others, and to commit to a task, among others (Kautz et al., 2014; Behrman et al., 2015). Educational attainment also matters as it summarizes prior investments in human capital and as it serves as a signal about the youths' abilities (Pallais, 2014).

Also at the theoretical level, aspirations and subjective expectations of earnings also affect the time allocation decision as they describe how youths perceive the trade off between work and study when they are in the process of making human capital decisions (Dominitz and Manski, 1996; Wiswall and Zafar, 2015).

Age also plays a role (Edmonds, 2008). First, the cost of studying and not working increases with age, as the opportunity cost rises along with the limits to educational access. Second, additional decisions are taken jointly as youths age, including economic independence, fertility and engagement in risky behaviors (for example, smoking, drug consumption, and having unprotected sex). Finally, some social conventions become more important with age (for example, becoming a mother).

In the same line, gender also matters due to norms and stereotypes, as well as a due to gender differences in labor market outcomes that affect the net expected return to human capital investments (Attanasio and Kaufman, 2014).

Household characteristics

According to the analytical literature, household characteristics such as socioeconomic status also impact the work or study decision: in addition to any direct costs of schooling, staying in education entails the cost of forgone current earnings (Schultz, 1960; Basu and Van, 1998; Baland and Robinson, 2000). Also, the demographic composition of the household matters since fewer adults or a larger number of household members needing care may put pressure on youths to earn income or limit their study possibilities (Edmonds, 2008).

Educational environment and local labor markets

Finally, the theoretical literature stresses that access to educational establishments, the compulsory nature of education, the availability of educational financing, the quality of the

educational system, as well as labor market conditions, regulations and policies also affect the expected net marginal benefit of different activities and thus the time allocation decision among young people (OECD, 2014; Behrman et al., 2015; Jongbloed and Giret, 2019).

The existing empirical research on the factors associated to being in the NEET status has analysed the role of these three sets of variables.

Research focusing on individual socioeconomic conditions and family background shows that the NEET status is negatively correlated with the household's economic conditions (Mascherini et al., 2012; Baron et al., 2016; Noh et al., 2017, Alcázar et al., 2019), parental education (Mascherini et al., 2012; Alfieri, 2015), and the number of employed individuals in the household (Székely and Karver, 2015; Susanli, 2016). In addition being female (Yates et al., 2011; Baron et al., 2016; Wickremeratne and Dunusinghe, 2018; Alcázar et al., 2019), having low educational attainment and/or dropped out of school (Mascherini et al., 2012; OECD, 2015b; De Hoyos, et al. 2016; Salvà-Mut et al., 2018), marriage (Zudina, 2017; Favara and Sánchez, 2018), and having children (Alcázar et al., 2019) are all positively associated with being a NEET. Interestingly, these results hold for both developed and developing countries.

On the contrary, the literature about the effects of a wider set of individual level variables, especially cognitive, non cognitive skills and information, is scarce and, to the best of our knowledge, mostly limited to the context of developed countries. This research has found that the probability of being a NEET is negatively associated with cognitive skills (OECD, 2015b; Jongbloed and Giret, 2019), aspirations and expectations (Crawford et al., 2011; Yates et al., 2011; Noh and Lee, 2017), and with self esteem, external locus of control, and other psychological traits (Baggio et al., 2015; Cornaglia et al., 2015; Mendolia and Walker, 2015; Goldman-Mellor et al., 2016; Ng-Knight and Schoon, 2017; Bernal et al., 2018).

Finally, there is a wealth of research analyzing the relevance of the educational environment and labor market conditions on the probability of being a NEET in countries at different development stages. This research finds that the quality of the educational system, the features of employment regulations, labor market conditions and the macroeconomic environment, have an impact on the incidence of youth out of school and out of work

(Mascherini et al., 2012; OECD, 2015b; Székely and Karver, 2015; Jongbloed and Giret, 2019).

In sum, given the availability of data, most research has focused on the traditional determinants of the probability of being NEET (that is, socioeconomic and demographic variables). The richness of our database allows us to understand the role of less studied aspects such as cognitive and non cognitive skills and beliefs, and to extend this research to less developed countries.

3. Materials and Methods

3.1. The Millennials in Latin America and the Caribbean Survey

Our analysis is based on the Millennials in LAC survey, a cross-sectional survey conducted in Brazil, Chile, Colombia, El Salvador, Haiti, Mexico, and Paraguay.[7] The survey was designed to better understand the schooling and labor market decisions of youths. The survey was administered between 2017 and 2018 and includes information on youths aged 15 to 24 years living in urban areas. Using a stratified multistage sampling method, households were selected based on previous censuses in each country. The final stage of the sampling method consisted of randomly choosing a young person within the household. The main characteristics of the survey are summarised in Table 1.

The survey consists of two questionnaires. The first contains standard demographic and socioeconomic questions. It also gathers information on skills, expectations, and aspirations among other variables. The second questionnaire contains information about risky behaviors. To improve the response rate and the quality of the information, this second questionnaire was self administered (Tourangeau et al., 1997; Krumpal, 2013). Written consent was

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[7] The data used in this paper was collected as part of the "Millennials in Latin America and the Caribbean: to work or study?" project. The project, including the data collection, was funded by the International Development Research Centre (IDRC - Canada) and the Inter-American Development Bank (IDB). The seven countries in the study were selected with the aim of having a representative sample of similar countries within the sub-regions in Latin America and the Caribbean (that is, Andean countries, Southern Cone, Central America and the Caribbean). The final selection of countries is the result of combining the interests of the donors and the availability of local partners interested in doing research in youth's school and work decisions within the project's budget and time constraints. Unfortunately, due to budget constraints it was not possible to collect data in more countries in the region.

obtained, either from the participants themselves if they were 18 or older or their parents otherwise.

One novel factor is that the survey looks at socioemotional skills, which recent literature has found to be an important factor for labor market outcomes (Almlund et al., 2011). More specifically, it includes the Duckworth and Quinn (2009) Grit test that measures perseverance and passion for long term goals; the Big Five Inventory (BFI-10) test for personality traits that measures extraversion, emotional stability, agreeableness, conscientiousness, and openness to experience (Rammstedt and John, 2007); the Rosenberg self esteem test that measures the image that people have of themselves (Rosenberg, 1965); a test for self efficacy that measures people's beliefs about their own abilities to achieve goals (Schwarzer and Jerusalem, 1995); and a locus of control scale that measures the degree to which people believe they have control of their outcomes in life events compared to those events being controlled by outside forces (Rotter, 1966). The questionnaire also measures perceptions about wages.

Finally, the survey includes basic reading comprehension and numeracy tests. The reading comprehension test asks subjects to fill twelve blanks in a text using listed words. The numeracy test poses simple problems in which respondents need to divide and multiply to obtain the correct answers (for example, split a given amount of money between five individuals).

3.2.   Study measures

We include traditional sociodemographic control variables such age and gender. Education is measured by the number of years of schooling achieved. We also include a teenage parenthood dummy that equals one if the youth had a child when younger than 20 years old or is pregnant and younger than 20, and zero otherwise. Since household's monthly income per capita is measured in each country's currency, we deflate it using the national consumer price index and then convert it into 2011 PPP US dollars (World Bank, 2019b) for cross country comparability. Finally, we include measures of dependency in the household, that is, the number of household members below five and above 65 years of age, who are typically not in the labor force and may require care from other household members.

To evaluate cognitive achievement, we use the standardised percentage of correct answers such that each of these measures have a within country zero mean and unit variance (z-scores). We expect to find a negative correlation between cognitive skills and the likelihood of being NEET as cognitive abilities have been found to be positively correlated with academic and labor market performance (Heckman et al., 2006).

Non cognitive skills are measured by the psychological tests described previously. We follow the literature by using exploratory factor analysis (Krutikova and Lilleør, 2015; Mendolia and Walker, 2015; Schurer, 2017) to capture the latent variation underlying some of these measures. Previous studies have cast doubt on the independence of non cognitive measures like self esteem, locus of control, and self efficacy; that is, that they might be indicators of a common concept (Judge et al., 2002). Following this literature, we construct a core self evaluation index using factor analysis based on these three items as inputs (self esteem, locus of control, and self efficacy).[8] Our empirical model includes the standardised first loading factor estimated using iterated principal factor analysis. This variable reflects the individuals' evaluation of their own abilities and control (Judge et al., 1998). We thus expect to find a negative correlation with the probability of being NEET.

While some socioemotional skills might be influenced by short term events, there are other personality traits that seem to be stable throughout life. This is the case of those measured by the Big Five personality test (Costa and McCrae, 1995; Hampson et al., 2007; Cobb-Clark and Schurer, 2012). The effect of these traits on labor market outcomes such as career success (Gelissen and de Graaf, 2006), earnings (Nyhus and Pons, 2005; Mueller and Plug, 2006), job absenteeism (Judge et al., 1997), and unemployment (Uysal and Pohlmeier, 2011) have been documented extensively in the literature. Our model includes each of the Big Five items — extraversion, agreeableness, conscientiousness, neuroticism and openness — to evaluate whether they are independently correlated with the probability of being NEET, as some of these items have shown to be correlated with factors that are also correlated with being NEET such as academic performance, health habits, the quality of employment relationships, and wages (Furnham et al., 2005; Mueller and Plug, 2006; Hampson et al., 2007). Again, to ease interpretation, each measure was standardised.

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[8] In total, there were 30 items, 10 per test. These items show acceptable levels of internal consistency (Cronbach's alpha=0.77).

We also include the standardised results of the Grit test that measures the capability of individuals of achieving long term goals. We expect that individuals scoring high on the test are more likely to be enrolled in education and/or working (Mendolia and Walker, 2014; Light and Nencka, 2019).

To measure educational aspirations, the survey asks individuals about the highest educational degree they would like to complete assuming no constraints. Taking into account the legal structure of each country's educational system, our aspirational measure is the number of additional years of education the respondents would like to complete, beyond what they have completed so far. Having higher educational aspirations is expected to lead to a lower likelihood of beeing NEET (Noh and Lee, 2017).

Expected returns in the labor market also play a role in youths' educational and work decisions (Dominitz and Manski, 1996; Jensen, 2010; Zafar, 2011). To measure the perceived returns to schooling, we include the monthly wage that youths believe tertiary education graduates earn in their local area compared to secondary education graduates (in logs). Reported expected wages are converted to 2011 PPP US dollars after deflating by each country's consumer price index (World Bank, 2019b).

Finally, having imperfect information about educational returns may also affect youths' human capital investment and employment decisions. To measure information biases, we compare expected labor earnings by education level with actual income information obtained from a representative household survey for each country.[9] Actual income was estimated using a comparable population, that is, individuals sorted by education level living in the same city. According to our definition, an individual underestimates the income of any given educational level if the difference between their prediction and the actual income is negative and is equal to at least one standard deviation. The overestimation of labor income is constructed in a similar manner. We use two dummy variables to account for these biases;

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[9] We used the Pesquisa Nacional por Amostra de Domicílios Contínua 2017 in Brazil; the Encuesta de Caracterización Socioeconómica Nacional 2015 in Chile; the Gran Encuesta Integrada de Hogares 2016 in Colombia; the Encuesta de Hogares de Propósitos Múltiples 2016 in El Salvador; the, Enquête sur les Conditions de Vie des Ménages après Séisme 2012 in Haiti; the Encuesta Nacional de Ocupación y Empleo 2016-2017 in Mexico; and the Encuesta Permanente de Hogares 2016 in Paraguay.

each indicates whether the individual over- or under-estimates the labor earnings associated with the level of education directly above the one the individual currently has.[10]

3.3. *Descriptive statistics*

Table 2 contains the main statistics of the full sample and according to youth's NEET status at the time of the interview.[11] On average, youths in the sample are 19 years old and have completed 11 years of education. The sample is evenly distributed by gender. Thirteen percent had a child or were expecting one before 20 years old. Nearly 18% are neither studying nor working nor engaged in training activities.

NEETs and non NEETs differ in many aspects. NEETs tend to be older and are more likely to be female. They have also completed fewer years of education. Moreover, they belong to poorer households and ones where there are more young children. They are also more likely to have had or been expecting a child during adolescence.[12]

NEETs also show poorer performance in the numeracy and literacy tests and lower scores in the core self evaluation index. Furthermore, NEETs show less extroversion, agreeableness, and openness than other youths, but also less neuroticism. In addition, they have lower educational aspirations and lower wage expectations. Moreover, they are more likely to underestimate the returns to higher levels of education.

In addition, Table 2 shows that NEETs are not idle: they are more likely than non NEETs to engage in domestic chores and in the family business, and to take care of other family members. They are also more likely to be searching for a job. That is, most NEETs, although out of school and out of work, are actively involved in non paid labor and have goals to enter paid labor.

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[10] Beliefs about the returns from all levels of education were measured only in Brazil. The Colombian survey lacks information on the beliefs about primary education returns, while the remainder countries have no information on beliefs about graduate studies returns. We use the expected return in the nearest level when the exact information was not available.

[11] The descriptive statistics for men and women separately and for each individual country are shown in the Appendix.

[12] Forty percent of female NEETs had a child or were expecting one before 20 years old. In contrast, only 7% of male NEETs were in the same condition. See Tables A1 and A2 in the Appendix.

3.4. Statistical analysis

We estimate a probit model that relates the relevant observable variables with the NEET status as follows:

$$NEET_i = \beta_1 + \beta_2 X_{i1} + \beta_3 X_{i2} + \beta_4 X_{i3} + \beta_5 X_{i4} + \beta_6 X_{i5} + \beta_7 country_i + \varepsilon_i \qquad (1)$$

where $NEET_i$ is a dummy that equals one if youth i is a NEET and zero otherwise; X_{i1} is a vector of sociodemographic variables (gender, age, years of education, household's monthly income per capita, teenage parenthood, and number of household members younger than five and older than 65); X_{i2} is a vector of cognitive skills measures (literacy and numeracy); X_{i3} is a vector of non cognitive skill measures (core self evaluation, Grit, and the Big Five personality traits); X_{i4} is the measure of educational aspirations; and X_{i5} is a vector of measures of wage expectations and information biases. We progressively include these sets of variables to better understand any potential correlation among them. In addition, $country_i$ is a set of dummy variables that are equal to one for each country and zero otherwise. We include these dummies to account for cross country differences that affect the work/study decisions of youths, including labor market conditions, the educational environment and social preferences.

   We estimate this probit model for the full sample including both men and women, and for each country separately to allow for cross country heterogeneity.[13]

4. Results

4.1. The probability of being a NEET

Marginal effects of probit regressions are reported in Tables 3. Column (1) includes only the sociodemographic variables. Column (2) adds the cognitive skills measures, while column (3) adds the non cognitive skills measures. In turn, column (4) adds the educational

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[13] In the Appendix we report pooled cross country results by gender. See Tables A10 and A11. The results by country and gender are available upon request.

aspirations measure. Finally, column (5) adds the perceived returns to schooling and the information bias dummies.

Being female, years of age, years of education, teenage parenthood, household income, and young children in the household are all significatively associated with the probability of being a NEET (column (1)). For example, women are 5 percentage points (pp) more likely to be NEETs than men. Similarly, the likelihood of being in the NEET status rises 3 pp every year as the individuals age. In turn, each additional year of schooling is related to a 2 pp lower likelihood of being NEET, while having had a child in adolescence is associated with a 12 pp higher probability of currently being a NEET. Interestingly, all estimated marginal effects associated to these socioeconomic variables are practically invariant across models as more variables are included.

As expected, cognitive skills are negatively correlated with the NEET status (column (2)): a unit increase in the z-score of the numeracy and literacy tests are both statistically related to a statistically lower probability of being a NEET (2 pp).

The core self evaluation is also statistically significant and inversely related with the probability of being a NEET youth with a unit increase in the z-score associated with a 2 pp lower probability (column (3)). Among all the Big Five personality traits, only the coefficient on extraversion is always statistically significant and negatively correlated with the dependent variable (a unit increase in the respective z-score is related to a 1 pp lower probability of being a NEET).

Similarly, the educational aspiration variable shows a significant and relevant correlation with NEET status (column (4)). In fact, each additional year of schooling aspired to is related to a 2 pp lower probability of being NEET, a correlation that matches the estimated effect of the actual years of educational achievement.

The remainder of the variables added in column (5) — the return to higher education and the information dummies — show no statistically relevant correlation with the NEET status.

Interestingly, as shown in Tables A10 ad A11 in the Appendix, these correlatory patterns hold when the regression model is separately estimated for men and women.

Table 4 reports the estimated marginal effects of the probit regressions (full specification) in each LAC country.[14] Overall, large heterogeneity is found in the estimated marginal effects

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[14] Small sample sizes might explain why many variables display no statistical significance.

and their significance. For instance, while in Brazil and Paraguay women are 3 pp more likely to be NEETs than men —a non significant effect—, in Mexico they are 11 pp more likely. Similarly, the probability of being in the NEET status shows a larger association with individuals's age in Brazil, El Salvador and Haiti than in the other countries. In addition, in Haiti, years of schooling do not seem to be related to the NEET status while a negative and significant correlation is found in the other countries. Moreover, having had children at an early age in Chile, Mexico or Paraguay is related to a higher probability of being a NEET, however, no significant relationship is found in Brazil, Colombia, El Salvador and Haiti. In turn, once conditioning on all other variables, household income seems to be important in Brazil, Chile, Colombia and Paraguay, but not in El Salvador, Haiti and Mexico. Furthermore, only in Colombia and Mexico there seems to be a correlation with the number of young children in the household.

The marginal effects of cognitive and non cognitive skills on the probability of being a female NEET are heterogeneous across countries as well. Only in Mexico and Paraguay is a unit increase in the z-score of the numeracy test correlated with the NEET status. In turn, literacy skills are statistically significant only in Paraguay. The core self evaluation measure has a statistically significant, marginal negative effect in Chile, Colombia, Mexico and Paraguay. As for the Grit score, a unit increase in the z-score is related to a lower probability of being a NEET in Brazil and El Salvador. The Big Five personality traits are not clearly associated with the NEET condition. In particular, extraversion is important in Chile and Mexico, while neuroticism is in El Salvador and Haiti.

In turn, our educational aspirations variable has a statistically significant and negative correlation with the dependent variable among youths in all countries but El Salvador and Haiti.

Interestingly, we find no statistically significant correlation with expected wages, but we do find a relevant correlation with information biases in Mexico and Paraguay. That is, Mexican youths who overestimate the returns to further education are less likely to be NEETs, while their Paraguayan counterparts who underestimate it are also less likely to be NEETs.

4.2.   Discussion

The Millennials in LAC survey shows that NEET young men and women are not merely idle as often portrayed. As a matter of fact, most report allocating time to valuable activities for their households such as helping in domestic tasks and in family businesses. That is, being NEET seems to be much more about certain disadvantages rather than a simple lack of interest in a productive lifestyle.

   More specifically, our findings show that, in line with the previous literature, being NEET is correlated with low household income, young dependents in the household, and early parenthood. In addition, this paper shows novel evidence on its correlation with poorer literacy and numeracy skills, a lower evaluation of one's own abilities and control, and lower educational aspirations. These facts raise concerns that NEETs could become disengaged and socially excluded.

   This paper also shows that a number of factors that theoretically may affect the time allocation decisions of youths are not correlated with the NEET status in our sample. That is, the Grit test, the agreeableness, conscientiousness, neuroticism, and openness items of the Big Five, and the expected returns to tertiary education are not statistically correlated with being NEET in our estimation results.

   Our results have implications for the design of policies aiming to address these concerns. Although we observe cross country heterogeneity in the factors that correlate with the NEET status, all countries may benefit from a number of general policies. For example, programs that alleviate poverty, reduce the prevalence of teen parenthood, provide access to childcare facilities and expand the supply of high quality education and labor market opportunities for youth, all have the potential to reduce educational dropping out and to facilitate the transition into employment (De Hoyos et al., 2016). Since our research also finds impacts from factors other than demographic and socioeconomic conditions, interventions that have proven effective in altering youth's educational and employment trajectories by boosting their socioemotional skills, aspirations, and expectations also have potential to reduce rates of NEET youths. Some of these interventions can be implemented at a low cost.

   Non cognitive skills such as self esteem, self efficacy and locus of control are malleable over the life cycle, even more than cognitive skills (Almlund et al., 2011). A number of low cost interventions have shown promising results in affecting these factors such as those aimed

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at changing the attitudes of young people towards effort. For instance, Good et al. (2003), Paunesku et al. (2015) and Outes et al. (2017) find a positive impact on the academic performance of randomly selected students who were exposed to scientific evidence proving that the brain is a plastic organ that responds to exercise, and that, therefore, intelligence can be developed through study and practice. Similarly, the evidence in Behncke (2012) and Martins (2010) shows that self efficacy and self esteem can be boosted through words of encouragement, leading to improved student achievement.

The literature provides evidence that aspirations can also be modified at a low cost. More specifically, a set of studies shows that the exposure to individuals who have similar family and social backgrounds and who have succeeded in life can change youths' educational aspirations and their beliefs about their own labor market possibilities. For instance, Nguyen (2010), in Madagscar, randomly assigned role models to students who provided information about his/her family background, educational experience and achievements. Similarly, Dinkelman and Martínez (2014) provided information to Chilean students on how to obtain financing for higher education through messages delivered by mentors of similar socioeconomic status who had already entered tertiary education. Carrell and Sacerdote (2017) randomly assigned college students to high school seniors students to encourage them to pursue higher education in the United States. Finally, Oreopoulos and Petronijevic (2018) randomly assigned mentoring by soon-to-graduate students to younger college students in Canada. All these studies find that fostering youths' knowledge and beliefs that 'people like me can be successful' by exposing them to role models of similar background improve effort and test scores.

In sum, according to our findings, non cognitive skills, aspirations and knowledge about wages, are relevant correlates of young people's educational and employment status even after controlling for various individual and household characteristics. The association of these factors with NEET status are as strong as those of cognitive skills. A promising body of experimental evidence shows that they can be modified through low cost interventions. Hence the economic issue of NEETs — who tend to have very low economic returns over their lifestyle — could be at least partially addressed by said novel low cost interventions along with the more traditional but more expensive ones of addressing teenage parenthood, dropout rates, and the like.

Our work has a number of shortcomings. First due to the cross sectional nature of our dataset, we cannot establish any causal relationship between the variables of interest and the probability of being NEET. In fact, most of the variables included in the analysis might potentially be either determinants or effects of the NEET condition. Future analyses should attempt to disentangle the causal effect of skills, aspirations and expectations on the likelihood of being NEET.

Second, the decision or outcome of being neither working nor studying is most likely a dynamic one. Our dataset allows us to capture the role of past outcomes, such as previous investments in human capital, and of future expectations. However, we are not able to analyze how these evolve over time jointly with education and employment decisions. Future work should rely on panel data sets to better understand these dynamics.[15] In addition, the availability of larger sample sizes might help obtain more precise estimates and understand whether some of our results are due to small sample sizes.

Finally, our paper has analysed the association of the NEET status with a limited set of measures of cognitive and non cognitive skills, and aspirations. However, the literature offers a much larger set of measures of cognitive abilities, personality traits and motivation (Kautz et al., 2014). Future work should further analyse which measures are best correlated with being out of work and study.

5. Conclusion

In this paper we take advantage of a novel dataset in order to examine the factors that correlate with young people who are neither involved in education, training, nor the labor market (NEETs). This rich dataset that covers a large sample of Latin American and Caribbean young men and women, allows us to focus on the role of cognitive and non cognitive skills, and of expectations and aspirations. The relevance of these factors in the context of developing countries remains unclear as most of the literature has emphasised the role of socioeconomic conditions in the educational and labor market context of richer countries.

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[15] Favara and Sánchez (2018) obtain similar results using longitudinal data from Peru.

Our paper thus is an attempt to fill this gap. We identify a number of additional factors that correlate with the NEET status in LAC. In our analysis, cognitive skills, core self evaluation, extraversion and educational aspirations are the most common correlates. We also discuss how to use these findings to inform the design of policies to address this problem in Latin America and the Caribbean.

In spite of these limitations, the richness of the Millennials in LAC survey has allowed us to offer a thorough description of this population in this paper and to identify factors that correlate with the NEET status. We believe that our findings are useful for the design of educational and labor market policies aimed at young people's social inclusion.

Acknowledgements

Data Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Insert Figure 1 here

Table 1. Millennials in LAC Survey

Country	Sample size (youths)	Area	Data collection period
Brazil	1488	Urban areas of Recife	April-May, 2018
Chile	3560	Urban areas of Santiago, Valparaíso, and Biobío	July-October, 2017
Colombia	1500	Urban areas of Bogotá	May-August, 2017
El Salvador	1442	Metropolitan area of San Salvador	February-March, 2017
Haiti	860	Metropolitan area of Port-au-Prince, Carrefour, and Pétion-ville	April-May, 2018
Mexico	2064[a]	Mexico City and its metropolitan area	May-September, 2017
Paraguay	1536	Asunción and urban areas of eight Central Department districts	May-June, 2017

[a] In addition, the survey in Mexico included 1,320 responsible adults in the household (the father, mother, or other adult in charge of the youth's care if he/she is 17 or younger).

Table 2. Descriptive statistics

Variables	All		NEET		Not NEET		Sig. Means test [d]
	Mean	(SE)	Mean	(SE)	Mean	(SE)	
Age	19.3	(0.03)	20.5	(0.06)	19.0	(0.03)	***
Male[a]	0.47	(0.01)	0.33	(0.01)	0.50	(0.01)	***
Years of education	11.10	(0.03)	10.8	(0.07)	11.2	(0.03)	***
Teenage parenthood[a]	0.13	(0.00)	0.29	(0.01)	0.09	(0.00)	***
Household monthly income per capita (log)[b]	238.9	(2.63)	184.9	(5.13)	250.4	(2.98)	***
Number of household members younger than 5 years old	0.31	(0.01)	0.54	(0.02)	0.26	(0.01)	***
Number of household members older than 65 years old	0.20	(0.01)	0.17	(0.01)	0.20	(0.01)	**
Numeracy skills (z-score)[c]	0.03	(0.01)	-0.17	(0.03)	0.07	(0.01)	***
Literacy skills (z-score)[c]	0.05	(0.01)	-0.14	(0.03)	0.09	(0.01)	***
Core self evaluation (z-score)[c]	0.04	(0.01)	-0.15	(0.03)	0.08	(0.01)	***
Grit test (z-score)[c]	0.04	(0.01)	-0.07	(0.03)	0.06	(0.01)	***
Big Five							
Extraversion (z-score)[c]	0.01	(0.01)	-0.10	(0.03)	0.03	(0.01)	***
Agreeableness (z-score)[c]	0.00	(0.01)	-0.06	(0.03)	0.02	(0.01)	**
Conscientiousness (z-score)[c]	0.02	(0.01)	0.03	(0.02)	0.02	(0.01)	
Neuroticism (z-score)[c]	0.02	(0.01)	-0.03	(0.03)	0.03	(0.01)	*
Openness (z-score)[c]	0.02	(0.01)	-0.05	(0.03)	0.04	(0.01)	***
Education aspirations (additional years)	5.43	(0.03)	4.84	(0.07)	5.55	(0.03)	***
Expected return to tertiary education (log)	0.94	(0.01)	0.91	(0.02)	0.94	(0.01)	**
Overestimates salary[a]	0.06	(0.00)	0.04	(0.01)	0.06	(0.00)	***
Underestimates salary[a]	0.09	(0.00)	0.11	(0.01)	0.09	(0.00)	***
Activities							
Looking for a job[a]	0.15	(0.00)	0.39	(0.01)	0.09	(0.00)	***
Family caregiver[a]	0.42	(0.01)	0.58	(0.01)	0.38	(0.01)	***
Domestic work/family business[a]	0.84	(0.00)	0.89	(0.01)	0.83	(0.00)	***
Person with disability[a]	0.02	(0.00)	0.02	(0.00)	0.02	(0.00)	
Number of observations	8276		1460		6816		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table 3. Marginal effects of probit regressions: probability of being NEET

	(1)	(2)	(3)	(4)	(5)
Men=1	-0.05***	-0.05***	-0.05***	-0.06***	-0.06***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age	0.03***	0.03***	0.03***	0.03***	0.03***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of education	-0.02***	-0.01***	-0.01***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Teenage parenthood=1	0.12***	0.12***	0.12***	0.11***	0.11***
	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)
Household monthly income per capita (log)[a]	-0.04***	-0.03***	-0.03***	-0.03***	-0.03***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Number of household members younger than 5	0.02***	0.02***	0.02***	0.02***	0.02***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Number of household members older than 65	-0.01	-0.01	-0.01	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Numeracy skills (z-score)[b]		-0.02***	-0.01***	-0.01***	-0.01***
		(0.00)	(0.00)	(0.00)	(0.00)
Literacy skills (z-score)[b]		-0.02***	-0.01***	-0.01***	-0.01***
		(0.00)	(0.00)	(0.00)	(0.00)
Core self evaluation (z-score)[b]			-0.02***	-0.02***	-0.02***
			(0.00)	(0.00)	(0.00)
Grit test (z-score)[b]			-0.01	-0.01	-0.01
			(0.00)	(0.00)	(0.00)
Big Five					
Extraversion (z-score)[b]			-0.01***	-0.01***	-0.01***
			(0.00)	(0.00)	(0.00)
Agreeableness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Conscientiousness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Neuroticism (z-score)[b]			0.01	0.01	0.01
			(0.00)	(0.00)	(0.00)
Openness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Education aspirations (additional years)				-0.02***	-0.02***
				(0.00)	(0.00)
Expected return to tertiary education (log)					-0.00
					(0.01)
Overestimates salary=1					-0.02
					(0.02)
Underestimates salary=1					0.01

(0.01)

Country dummies (base=Brazil)

	(1)	(2)	(3)	(4)	(5)
Chile	-0.04**	-0.05**	-0.05**	-0.06***	-0.06***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Colombia	-0.02	-0.03	-0.03	-0.04*	-0.03
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
El Salvador	0.01	0.00	0.01	-0.00	-0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Haiti	-0.10***	-0.09***	-0.09***	-0.10***	-0.10***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Mexico	-0.00	-0.00	-0.00	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Paraguay	-0.00	-0.01	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Observations	8276	8276	8276	8276	8276
Pseudo R^2	0.12	0.12	0.13	0.14	0.14

Source: Millennials in LAC survey.

Note: Standard errors in parentheses. *Significant at 10%, ** significant at 5%, ***significant at 1%.

[a] Household monthly income per capita and expected wages were deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[b] Standardized measure.

Table 4. Marginal effects of probit regressions: probability of being NEET by country

	Brazil	Chile	Colombia	El Salvador	Haiti	Mexico	Paraguay
Men=1	-0.03	-0.04***	-0.06***	-0.05*	-0.06*	-0.11***	-0.03
	(0.04)	(0.01)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)
Age	0.04***	0.02***	0.02***	0.04***	0.04***	0.02***	0.02***
	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)
Years of education	-0.03***	-0.01***	-0.03***	-0.03***	-0.01	-0.03***	-0.01*
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
Teenage parenthood=1	0.06	0.12***	0.03	-0.01	0.17	0.13***	0.15***
	(0.07)	(0.03)	(0.03)	(0.05)	(0.11)	(0.03)	(0.04)
Household monthly income per capita (log)[a]	-0.04*	-0.04***	-0.04***	-0.03	-0.02	-0.02	-0.03*
	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)
Number of household members younger than 5	0.04	0.00	0.04**	-0.00	0.00	0.05***	0.02
	(0.03)	(0.01)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)
Number of household members older than 65	0.03	-0.02	-0.02	0.03	-0.02	0.00	-0.00
	(0.04)	(0.01)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)
Numeracy skills (z-score)[b]	-0.01	-0.00	-0.01	-0.01	-0.02	-0.02**	-0.02*
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Literacy skills (z-score)[b]	-0.00	-0.01	-0.01	-0.03	-0.01	-0.00	-0.02**
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Core self evaluation (z-score)[b]	0.02	-0.02***	-0.03**	-0.02	-0.00	-0.02**	-0.02*
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Grit test (z-score)[b]	-0.05**	-0.00	0.00	-0.03*	0.01	-0.00	-0.01
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Big Five							
Extraversion (z-score)[b]	0.00	-0.01**	-0.01	-0.02	-0.01	-0.02*	0.01
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Agreeableness (z-score)[b]	0.01	0.00	-0.00	-0.01	-0.02	-0.00	0.01
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Conscientiousness (z-score)[b]	-0.02	-0.01	-0.00	0.02	0.03	-0.01	-0.01
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Neuroticism (z-score)[b]	-0.03	0.01	0.01	0.03*	-0.05***	0.00	0.01
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Openness (z-score)[b]	0.01	-0.00	0.00	0.02	-0.02	-0.00	-0.01
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Education aspirations (additional years)	-0.02***	-0.02***	-0.02***	-0.01	-0.00	-0.01**	-0.01**
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
Expected return to tertiary education (log)	0.01	-0.01	-0.00	0.01	0.00	-0.01	0.01
	(0.04)	(0.01)	(0.02)	(0.04)	(0.02)	(0.02)	(0.02)
Overestimates salary=1	0.13	0.02	-0.01	0.00	0.00	-0.08**	-0.08

	(0.19)	(0.03)	(0.03)	(0.09)	(0.09)	(0.04)	(0.06)
Underestimates salary=1	-0.09	-0.07	-0.07	0.05	-0.02	0.03	-0.07**
	(0.08)	(0.05)	(0.05)	(0.07)	(0.10)	(0.02)	(0.04)
Observations	428	2738	1314	687	479	1498	1132
Pseudo R²	0.17	0.15	0.14	0.13	0.19	0.20	0.12

Source: Millennials in LAC survey.

Note: Standard errors in parentheses. *Significant at 10%, ** significant at 5%, ***significant at 1%.

[a] Household monthly income per capita and expected wages were deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[b] Standardized measure.

Table A1. Descriptive statistics – Women

Variables	All		NEET		No NEET		Sig.
	Mean	(SE)	Mean	(SE)	Mean	(SE)	Mean test [d]
Age	19.5	(0.04)	20.8	(0.08)	19.1	(0.05)	***
Male[a]	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	
Years of education	11.1	(0.04)	10.8	(0.08)	11.3	(0.04)	***
Teenage parenthood[a]	0.19	(0.01)	0.40	(0.02)	0.13	(0.01)	***
Household monthly income per capita (log)[b]	224.0	(3.47)	179.0	(6.54)	237.2	(4.03)	***
Number of household members younger than 5 years old	0.41	(0.01)	0.71	(0.03)	0.33	(0.01)	***
Number of household members older than 65 years old	0.18	(0.01)	0.15	(0.01)	0.19	(0.01)	**
Numeracy skills (z-score)[c]	-0.07	(0.02)	-0.20	(0.03)	-0.03	(0.02)	***
Literacy skills (z-score)[c]	0.05	(0.01)	-0.11	(0.03)	0.10	(0.02)	***
Core self evaluation (z-score)[c]	-0.01	(0.01)	-0.16	(0.03)	0.03	(0.02)	***
Grit test (z-score)[c]	0.06	(0.02)	-0.03	(0.03)	0.08	(0.02)	***
Big Five							
Extraversion (z-score)[c]	-0.04	(0.02)	-0.14	(0.03)	-0.01	(0.02)	***
Agreeableness (z-score)[c]	0.01	(0.02)	-0.06	(0.03)	0.04	(0.02)	***
Conscientiousness (z-score)[c]	0.07	(0.01)	0.07	(0.03)	0.07	(0.02)	
Neuroticism (z-score)[c]	-0.16	(0.02)	-0.11	(0.03)	-0.17	(0.02)	
Openness (z-score)[c]	0.05	(0.01)	-0.03	(0.03)	0.07	(0.02)	***
Education aspirations (additional years)	5.42	(0.04)	4.90	(0.09)	5.58	(0.05)	***
Expected return to tertiary education (log)	0.93	(0.01)	0.90	(0.02)	0.94	(0.01)	**
Overestimates salary[a]	0.05	(0.00)	0.03	(0.01)	0.05	(0.00)	***
Underestimates salary[a]	0.11	(0.00)	0.13	(0.01)	0.10	(0.01)	**
Activities							
Looking for a job[a]	0.16	(0.01)	0.35	(0.02)	0.10	(0.01)	***
Family caregiver[a]	0.51	(0.01)	0.70	(0.01)	0.45	(0.01)	***
Domestic work/family business[a]	0.88	(0.00)	0.94	(0.01)	0.86	(0.01)	***
Person with disability[a]	0.02	(0.00)	0.02	(0.01)	0.02	(0.00)	
Number of observations	4362		983		3379		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A2. Descriptive statistics – Men

Variables	All Mean	(SE)	NEET Mean	(SE)	No NEET Mean	(SE)	Sig. Mean test [d]
Age	19.1	(0.04)	19.9	(0.11)	19.0	(0.05)	***
Male[a]	1.00	(0.00)	1.00	(0.00)	1.00	(0.00)	
Years of education	11.0	(0.04)	10.9	(0.11)	11.1	(0.04)	*
Teenage parenthood[a]	0.05	(0.00)	0.07	(0.01)	0.05	(0.00)	*
Household monthly income per capita (log)[b]	255.4	(3.98)	197.1	(8.03)	263.5	(4.37)	***
Number of household members younger than 5 years old	0.19	(0.01)	0.20	(0.02)	0.19	(0.01)	
Number of household members older than 65 years old	0.22	(0.01)	0.22	(0.02)	0.22	(0.01)	
Numeracy skills (z-score)[c]	0.13	(0.02)	-0.11	(0.05)	0.17	(0.02)	***
Literacy skills (z-score)[c]	0.05	(0.02)	-0.21	(0.05)	0.08	(0.02)	***
Core self evaluation (z-score)[c]	0.09	(0.02)	-0.15	(0.05)	0.12	(0.02)	***
Grit test (z-score)[c]	0.01	(0.02)	-0.14	(0.04)	0.04	(0.02)	***
Big Five							
Extraversion (z-score)[c]	0.06	(0.02)	-0.02	(0.04)	0.07	(0.02)	*
Agreeableness (z-score)[c]	-0.01	(0.02)	-0.05	(0.05)	-0.01	(0.02)	
Conscientiousness (z-score)[c]	-0.03	(0.02)	-0.06	(0.04)	-0.03	(0.02)	
Neuroticism (z-score)[c]	0.21	(0.02)	0.16	(0.04)	0.22	(0.02)	
Openness (z-score)[c]	0.00	(0.02)	-0.09	(0.04)	0.01	(0.02)	*
Education aspirations (additional years)	5.43	(0.04)	4.71	(0.12)	5.53	(0.05)	***
Expected return to tertiary education (log)	0.94	(0.01)	0.92	(0.03)	0.95	(0.01)	
Overestimates salary[a]	0.07	(0.00)	0.07	(0.01)	0.07	(0.00)	
Underestimates salary[a]	0.08	(0.00)	0.08	(0.01)	0.08	(0.00)	
Activities							
Looking for a job[a]	0.13	(0.01)	0.48	(0.02)	0.08	(0.00)	***
Family caregiver[a]	0.31	(0.01)	0.33	(0.02)	0.31	(0.01)	
Domestic work/family business[a]	0.79	(0.01)	0.80	(0.02)	0.79	(0.01)	
Person with disability[a]	0.02	(0.00)	0.02	(0.01)	0.03	(0.00)	
Number of observations	3914		477		3437		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A3. Descriptive statistics – Brazil

Variables	All		NEET		No NEET		Sig. Mean test [d]
	Mean	(SE)	Mean	(SE)	Mean	(SE)	
Age	19.4	(0.14)	20.9	(0.23)	19.0	(0.16)	***
Male[a]	0.53	(0.02)	0.47	(0.05)	0.55	(0.03)	
Years of education	10.4	(0.13)	10.1	(0.29)	10.5	(0.14)	
Teenage parenthood[a]	0.11	(0.01)	0.22	(0.04)	0.07	(0.01)	***
Household monthly income per capita (log)[b]	211.6	(9.97)	178.2	(19.87)	220.6	(11.43)	*
Number of household members younger than 5 years old	0.23	(0.03)	0.40	(0.08)	0.19	(0.02)	**
Number of household members older than 65 years old	0.21	(0.02)	0.22	(0.05)	0.20	(0.03)	
Numeracy skills (z-score)[c]	0.05	(0.05)	-0.21	(0.11)	0.12	(0.06)	***
Literacy skills (z-score)[c]	0.04	(0.04)	-0.07	(0.10)	0.07	(0.05)	
Core self evaluation (z-score)[c]	0.00	(0.05)	-0.14	(0.10)	0.04	(0.05)	
Grit test (z-score)[c]	0.00	(0.05)	-0.24	(0.09)	0.06	(0.06)	***
Big Five							
Extraversion (z-score)[c]	-0.05	(0.05)	-0.08	(0.10)	-0.04	(0.05)	
Agreeableness (z-score)[c]	-0.01	(0.05)	-0.08	(0.10)	0.00	(0.06)	
Conscientiousness (z-score)[c]	-0.04	(0.05)	-0.18	(0.09)	0.00	(0.06)	*
Neuroticism (z-score)[c]	-0.07	(0.05)	-0.08	(0.09)	-0.07	(0.06)	
Openness (z-score)[c]	-0.03	(0.05)	-0.11	(0.10)	-0.01	(0.06)	
Education aspirations (additional years)	6.38	(0.15)	5.31	(0.36)	6.67	(0.16)	***
Expected return to tertiary education (log)	0.72	(0.02)	0.64	(0.04)	0.74	(0.02)	*
Overestimates salary[a]	0.01	(0.01)	0.02	(0.02)	0.01	(0.01)	
Underestimates salary[a]	0.02	(0.01)	0.01	(0.01)	0.02	(0.01)	
Activities							
Looking for a job[a]	0.23	(0.02)	0.44	(0.05)	0.18	(0.02)	***
Family caregiver[a]	0.29	(0.02)	0.40	(0.05)	0.26	(0.02)	**
Domestic work/family business[a]	0.75	(0.02)	0.72	(0.05)	0.76	(0.02)	
Person with disability[a]	0.02	(0.01)	0.05	(0.02)	0.01	(0.01)	*
Number of observations	428		91		337		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A4. Descriptive statistics – Chile

Variables	All Mean	(SE)	NEET Mean	(SE)	No NEET Mean	(SE)	Sig. Mean test [d]
Age	19.4	(0.05)	20.8	(0.11)	19.2	(0.06)	***
Male[a]	0.48	(0.01)	0.34	(0.02)	0.50	(0.01)	***
Years of education	11.3	(0.05)	11.5	(0.11)	11.3	(0.05)	**
Teenage parenthood[a]	0.12	(0.01)	0.31	(0.02)	0.08	(0.01)	***
Household monthly income per capita (log)[b]	274.4	(4.13)	217.6	(7.20)	283.9	(4.64)	***
Number of household members younger than 5 years old	0.29	(0.01)	0.50	(0.04)	0.25	(0.01)	***
Number of household members older than 65 years old	0.22	(0.01)	0.18	(0.02)	0.23	(0.01)	*
Numeracy skills (z-score)[c]	0.04	(0.02)	-0.07	(0.05)	0.06	(0.02)	**
Literacy skills (z-score)[c]	0.02	(0.02)	-0.16	(0.05)	0.06	(0.02)	***
Core self evaluation (z-score)[c]	0.03	(0.02)	-0.18	(0.05)	0.06	(0.02)	***
Grit test (z-score)[c]	0.03	(0.02)	-0.02	(0.05)	0.04	(0.02)	
Big Five							
Extraversion (z-score)[c]	0.01	(0.02)	-0.11	(0.05)	0.04	(0.02)	***
Agreeableness (z-score)[c]	-0.01	(0.02)	-0.01	(0.05)	0.00	(0.02)	
Conscientiousness (z-score)[c]	0.04	(0.02)	0.10	(0.05)	0.02	(0.02)	
Neuroticism (z-score)[c]	0.00	(0.02)	-0.02	(0.05)	0.00	(0.02)	
Openness (z-score)[c]	0.01	(0.02)	-0.04	(0.05)	0.02	(0.02)	
Education aspirations (additional years)	5.24	(0.05)	3.93	(0.12)	5.46	(0.06)	***
Expected return to tertiary education (log)	1.00	(0.01)	0.98	(0.03)	1.00	(0.01)	
Overestimates salary[a]	0.05	(0.00)	0.04	(0.01)	0.05	(0.00)	
Underestimates salary[a]	0.01	(0.00)	0.01	(0.00)	0.01	(0.00)	**
Activities							
Looking for a job[a]	0.11	(0.01)	0.39	(0.02)	0.07	(0.01)	***
Family caregiver[a]	0.36	(0.01)	0.54	(0.03)	0.33	(0.01)	***
Domestic work/family business[a]	0.73	(0.01)	0.81	(0.02)	0.71	(0.01)	***
Person with disability[a]	0.02	(0.00)	0.02	(0.01)	0.02	(0.00)	
Number of observations	2738		392		2346		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A5. Descriptive statistics – Colombia

Variables	All		NEET		No NEET		Sig.
	Mean	(SE)	Mean	(SE)	Mean	(SE)	Mean test [d]
Age	19.2	(0.08)	20.0	(0.17)	19.0	(0.09)	***
Male[a]	0.48	(0.01)	0.34	(0.03)	0.51	(0.02)	***
Years of education	11.3	(0.07)	10.9	(0.17)	11.4	(0.08)	**
Teenage parenthood[a]	0.16	(0.01)	0.32	(0.03)	0.13	(0.01)	***
Household monthly income per capita (log)[b]	325.8	(8.88)	218.2	(14.84)	346.0	(10.06)	***
Number of household members younger than 5 years old	0.27	(0.02)	0.55	(0.05)	0.21	(0.01)	***
Number of household members older than 65 years old	0.18	(0.01)	0.15	(0.03)	0.19	(0.01)	
Numeracy skills (z-score)[c]	0.00	(0.03)	-0.24	(0.07)	0.04	(0.03)	***
Literacy skills (z-score)[c]	0.02	(0.03)	-0.22	(0.08)	0.06	(0.03)	***
Core self evaluation (z-score)[c]	0.04	(0.03)	-0.22	(0.07)	0.09	(0.03)	***
Grit test (z-score)[c]	0.03	(0.03)	-0.06	(0.07)	0.04	(0.03)	
Big Five							
Extraversion (z-score)[c]	0.00	(0.03)	-0.12	(0.07)	0.03	(0.03)	*
Agreeableness (z-score)[c]	0.01	(0.03)	-0.09	(0.08)	0.03	(0.03)	
Conscientiousness (z-score)[c]	0.00	(0.03)	0.02	(0.07)	0.00	(0.03)	
Neuroticism (z-score)[c]	0.01	(0.03)	-0.06	(0.07)	0.02	(0.03)	
Openness (z-score)[c]	0.02	(0.03)	-0.03	(0.07)	0.03	(0.03)	
Education aspirations (additional years)	5.16	(0.07)	4.63	(0.15)	5.26	(0.08)	***
Expected return to tertiary education (log)	1.07	(0.02)	1.04	(0.04)	1.07	(0.02)	
Overestimates salary[a]	0.16	(0.01)	0.15	(0.02)	0.16	(0.01)	
Underestimates salary[a]	0.03	(0.00)	0.01	(0.01)	0.03	(0.01)	
Activities							
Looking for a job[a]	0.21	(0.01)	0.58	(0.03)	0.14	(0.01)	***
Family caregiver[a]	0.39	(0.01)	0.51	(0.03)	0.37	(0.01)	***
Domestic work/family business[a]	0.90	(0.01)	0.92	(0.02)	0.90	(0.01)	
Person with disability[a]	0.01	(0.00)	0.01	(0.01)	0.01	(0.00)	
Number of observations	1314		208		1106		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A6. Descriptive statistics – El Salvador

Variables	All		NEET		No NEET		Sig. Mean test [d]
	Mean	(SE)	Mean	(SE)	Mean	(SE)	
Age	19.4	(0.10)	20.5	(0.19)	19.2	(0.12)	***
Male[a]	0.51	(0.02)	0.41	(0.04)	0.53	(0.02)	**
Years of education	11.3	(0.10)	10.8	(0.19)	11.4	(0.12)	***
Teenage parenthood[a]	0.09	(0.01)	0.15	(0.03)	0.07	(0.01)	**
Household monthly income per capita (log)[b]	229.5	(7.94)	192.5	(13.31)	238.6	(9.30)	***
Number of household members younger than 5 years old	0.25	(0.02)	0.38	(0.05)	0.22	(0.02)	***
Number of household members older than 65 years old	0.22	(0.02)	0.24	(0.05)	0.22	(0.02)	
Numeracy skills (z-score)[c]	0.01	(0.04)	-0.19	(0.08)	0.06	(0.04)	***
Literacy skills (z-score)[c]	0.07	(0.04)	-0.21	(0.09)	0.14	(0.04)	***
Core self evaluation (z-score)[c]	0.12	(0.04)	-0.05	(0.08)	0.16	(0.04)	**
Grit test (z-score)[c]	0.09	(0.04)	-0.09	(0.09)	0.13	(0.04)	**
Big Five							
Extraversion (z-score)[c]	0.05	(0.04)	-0.11	(0.09)	0.09	(0.04)	*
Agreeableness (z-score)[c]	0.10	(0.04)	0.03	(0.08)	0.11	(0.04)	
Conscientiousness (z-score)[c]	0.01	(0.04)	0.10	(0.08)	-0.01	(0.04)	
Neuroticism (z-score)[c]	0.11	(0.04)	0.16	(0.09)	0.10	(0.04)	
Openness (z-score)[c]	0.06	(0.04)	0.07	(0.09)	0.06	(0.04)	
Education aspirations (additional years)	5.31	(0.09)	5.15	(0.19)	5.35	(0.11)	
Expected return to tertiary education (log)	0.81	(0.01)	0.79	(0.03)	0.81	(0.02)	
Overestimates salary[a]	0.03	(0.01)	0.03	(0.01)	0.03	(0.01)	
Underestimates salary[a]	0.06	(0.01)	0.06	(0.02)	0.05	(0.01)	
Activities							
Looking for a job[a]	0.19	(0.01)	0.57	(0.04)	0.10	(0.01)	***
Family caregiver[a]	0.35	(0.02)	0.52	(0.04)	0.31	(0.02)	***
Domestic work/family business[a]	0.89	(0.01)	0.94	(0.02)	0.87	(0.01)	***
Person with disability[a]	0.01	(0.00)	0.01	(0.01)	0.01	(0.01)	
Number of observations	687		136		551		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A7. Descriptive statistics – Haiti

Variables	All Mean	(SE)	NEET Mean	(SE)	No NEET Mean	(SE)	Sig. Mean test [d]
Age	19.9	(0.13)	21.7	(0.24)	19.5	(0.14)	***
Male[a]	0.46	(0.02)	0.30	(0.05)	0.49	(0.03)	***
Years of education	10.4	(0.15)	10.7	(0.33)	10.4	(0.16)	
Teenage parenthood[a]	0.03	(0.01)	0.09	(0.03)	0.02	(0.01)	**
Household monthly income per capita (log)[b]	45.2	(3.10)	39.6	(7.01)	46.5	(3.46)	
Number of household members younger than 5 years old	0.31	(0.03)	0.39	(0.07)	0.29	(0.03)	
Number of household members older than 65 years old	0.29	(0.03)	0.25	(0.06)	0.30	(0.03)	
Numeracy skills (z-score)[c]	-0.09	(0.05)	-0.25	(0.11)	-0.05	(0.05)	*
Literacy skills (z-score)[c]	0.14	(0.04)	0.02	(0.10)	0.17	(0.05)	
Core self evaluation (z-score)[c]	-0.02	(0.04)	-0.02	(0.10)	-0.01	(0.05)	
Grit test (z-score)[c]	0.07	(0.05)	-0.03	(0.12)	0.09	(0.05)	
Big Five							
Extraversion (z-score)[c]	0.02	(0.04)	-0.10	(0.10)	0.05	(0.05)	
Agreeableness (z-score)[c]	-0.04	(0.04)	-0.15	(0.10)	-0.02	(0.05)	
Conscientiousness (z-score)[c]	-0.02	(0.04)	0.10	(0.09)	-0.05	(0.05)	
Neuroticism (z-score)[c]	0.02	(0.04)	-0.28	(0.11)	0.09	(0.05)	***
Openness (z-score)[c]	-0.04	(0.05)	-0.18	(0.10)	-0.01	(0.05)	
Education aspirations (additional years)	5.31	(0.14)	4.95	(0.33)	5.39	(0.16)	
Expected return to tertiary education (log)	1.09	(0.04)	1.11	(0.08)	1.08	(0.05)	
Overestimates salary[a]	0.04	(0.01)	0.02	(0.02)	0.04	(0.01)	
Underestimates salary[a]	0.04	(0.01)	0.03	(0.02)	0.04	(0.01)	
Activities							
Looking for a job[a]	0.20	(0.02)	0.41	(0.05)	0.15	(0.02)	***
Family caregiver[a]	0.65	(0.02)	0.70	(0.05)	0.64	(0.02)	
Domestic work/family business[a]	0.85	(0.02)	0.92	(0.03)	0.84	(0.02)	**
Person with disability[a]	0.09	(0.01)	0.08	(0.03)	0.09	(0.01)	
Number of observations	479		88		391		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A8. Descriptive statistics – Mexico

Variables	All Mean	(SE)	NEET Mean	(SE)	No NEET Mean	(SE)	Sig. Mean test [d]
Age	19.1	(0.07)	20.2	(0.15)	18.8	(0.08)	***
Male[a]	0.45	(0.01)	0.23	(0.02)	0.51	(0.01)	***
Years of education	10.9	(0.07)	10.0	(0.15)	11.1	(0.08)	***
Teenage parenthood[a]	0.17	(0.01)	0.39	(0.03)	0.11	(0.01)	***
Household monthly income per capita (log)[b]	188.1	(5.69)	164.5	(13.86)	194.7	(6.16)	**
Number of household members younger than 5 years old	0.30	(0.02)	0.63	(0.04)	0.21	(0.01)	***
Number of household members older than 65 years old	0.10	(0.01)	0.10	(0.02)	0.10	(0.01)	
Numeracy skills (z-score)[c]	0.05	(0.03)	-0.19	(0.06)	0.11	(0.03)	***
Literacy skills (z-score)[c]	0.07	(0.02)	-0.08	(0.06)	0.11	(0.03)	***
Core self evaluation (z-score)[c]	0.04	(0.03)	-0.17	(0.06)	0.10	(0.03)	***
Grit test (z-score)[c]	0.05	(0.03)	-0.05	(0.05)	0.08	(0.03)	**
Big Five							
Extraversion (z-score)[c]	-0.02	(0.03)	-0.17	(0.06)	0.02	(0.03)	***
Agreeableness (z-score)[c]	0.00	(0.03)	-0.10	(0.06)	0.03	(0.03)	**
Conscientiousness (z-score)[c]	0.04	(0.02)	0.00	(0.05)	0.05	(0.03)	
Neuroticism (z-score)[c]	0.06	(0.03)	0.01	(0.05)	0.07	(0.03)	
Openness (z-score)[c]	0.05	(0.03)	-0.02	(0.05)	0.07	(0.03)	
Education aspirations (additional years)	5.77	(0.07)	5.64	(0.18)	5.80	(0.08)	
Expected return to tertiary education (log)	0.98	(0.02)	0.96	(0.03)	0.98	(0.02)	
Overestimates salary[a]	0.05	(0.01)	0.02	(0.01)	0.05	(0.01)	***
Underestimates salary[a]	0.37	(0.01)	0.43	(0.03)	0.35	(0.01)	***
Activities							
Looking for a job[a]	0.08	(0.01)	0.19	(0.02)	0.04	(0.01)	***
Family caregiver[a]	0.54	(0.01)	0.73	(0.02)	0.49	(0.01)	***
Domestic work/family business[a]	0.92	(0.01)	0.96	(0.01)	0.91	(0.01)	***
Person with disability[a]	0.03	(0.01)	0.02	(0.01)	0.03	(0.01)	
Number of observations	1498		324		1174		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A9. Descriptive statistics – Paraguay

Variables	All		NEET		No NEET		Sig.
	Mean	(SE)	Mean	(SE)	Mean	(SE)	Mean test [d]
Age	19.1	(0.08)	20.0	(0.15)	18.9	(0.09)	***
Male[a]	0.44	(0.01)	0.34	(0.03)	0.46	(0.02)	***
Years of education	11.1	(0.07)	10.8	(0.16)	11.2	(0.07)	**
Teenage parenthood[a]	0.12	(0.01)	0.29	(0.03)	0.08	(0.01)	***
Household monthly income per capita (log)[b]	217.0	(6.31)	181.5	(13.63)	225.6	(7.08)	***
Number of household members younger than 5 years old	0.47	(0.02)	0.72	(0.06)	0.41	(0.02)	***
Number of household members older than 65 years old	0.22	(0.01)	0.19	(0.03)	0.23	(0.02)	
Numeracy skills (z-score)[c]	0.04	(0.03)	-0.21	(0.07)	0.10	(0.03)	***
Literacy skills (z-score)[c]	0.07	(0.03)	-0.16	(0.06)	0.13	(0.03)	***
Core self evaluation (z-score)[c]	0.04	(0.03)	-0.15	(0.06)	0.09	(0.03)	***
Grit test (z-score)[c]	0.01	(0.03)	-0.10	(0.06)	0.04	(0.03)	**
Big Five							
Extraversion (z-score)[c]	0.02	(0.03)	0.05	(0.06)	0.01	(0.03)	
Agreeableness (z-score)[c]	-0.01	(0.03)	-0.05	(0.07)	-0.01	(0.03)	
Conscientiousness (z-score)[c]	0.03	(0.03)	-0.04	(0.07)	0.05	(0.03)	
Neuroticism (z-score)[c]	0.00	(0.03)	-0.04	(0.06)	0.00	(0.03)	
Openness (z-score)[c]	0.03	(0.03)	-0.12	(0.06)	0.07	(0.03)	**
Education aspirations (additional years)	5.50	(0.07)	5.05	(0.15)	5.60	(0.08)	***
Expected return to tertiary education (log)	0.69	(0.02)	0.68	(0.03)	0.69	(0.02)	
Overestimates salary[a]	0.03	(0.01)	0.01	(0.01)	0.03	(0.01)	**
Underestimates salary[a]	0.08	(0.01)	0.05	(0.01)	0.09	(0.01)	**
Activities							
Looking for a job[a]	0.16	(0.01)	0.38	(0.03)	0.11	(0.01)	***
Family caregiver[a]	0.38	(0.01)	0.56	(0.03)	0.34	(0.02)	***
Domestic work/family business[a]	0.92	(0.01)	0.96	(0.01)	0.91	(0.01)	***
Person with disability[a]	0.02	(0.00)	0.02	(0.01)	0.02	(0.00)	
Number of observations	1132		221		911		

Source: Millennials in LAC survey.

Note: Standard errors in parentheses.

[a] The fraction of the corresponding group is shown.

[b] Household monthly income per capita and expected higher education wage are deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[c] Standardised measure.

[d] Significance for mean tests between NEETs and non-NEETs: *significant at 10%, **significant at 5%, ***significant at 1%.

Table A10. Marginal effects of Probit regressions: probability of being NEET - Women

	(1)	(2)	(3)	(4)	(5)
Age	0.03***	0.03***	0.03***	0.03***	0.03***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of education	-0.02***	-0.01***	-0.01***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Teenage parenthood=1	0.14***	0.14***	0.14***	0.13***	0.13***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Household monthly income per capita (log)[a]	-0.04***	-0.04***	-0.04***	-0.03***	-0.03***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Number of household members below 5 years	0.03***	0.03***	0.03***	0.03***	0.03***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Number of household members above 65 years	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Numeracy skills (z-score)[b]		-0.02***	-0.02***	-0.02***	-0.02***
		(0.00)	(0.00)	(0.00)	(0.00)
Literacy skills (z-score)[b]		-0.02***	-0.01***	-0.01**	-0.01**
		(0.00)	(0.00)	(0.00)	(0.00)
Core self evaluation (z-score)[b]			-0.02***	-0.02***	-0.02***
			(0.00)	(0.00)	(0.00)
Grit test (z-score)[b]			-0.01	-0.01	-0.01
			(0.00)	(0.00)	(0.00)
Big Five					
Extraversion (z-score)[b]			-0.01***	-0.01***	-0.01***
			(0.00)	(0.00)	(0.00)
Agreeableness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Conscientiousness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Neuroticism (z-score)[b]			0.00	0.00	0.00
			(0.00)	(0.00)	(0.00)
Openness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Education aspirations (additional years)				-0.02***	-0.02***
				(0.00)	(0.00)
Expected return to tertiary education (log)					-0.00
					(0.01)
Overestimates salary=1					-0.02
					(0.02)
Underestimates salary=1					0.02
					(0.02)

Country dummies (base=Brazil)					
Chile	-0.04**	-0.05**	-0.05**	-0.06***	-0.06***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Colombia	-0.02	-0.03	-0.03	-0.04*	-0.03
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
El Salvador	0.01	0.01	0.01	0.00	0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Haiti	-0.10***	-0.10***	-0.09***	-0.10***	-0.10***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Mexico	0.00	0.00	0.00	-0.00	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Paraguay	-0.00	-0.00	-0.00	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Observations	4362	4362	4362	4362	4362
Pseudo R^2	0.11	0.12	0.12	0.13	0.13

Source: Millennials in LAC survey.

Note: Standard errors in parentheses. *Significant at 10%, ** significant at 5%, ***significant at 1%.

[a] Household monthly income per capita and expected wages were deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[b] Standardized measure.

Table A11. Marginal effects of Probit regressions: probability of being NEET - Men

	(1)	(2)	(3)	(4)	(5)
Age	0.03***	0.03***	0.03***	0.03***	0.03***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of education	-0.01***	-0.01***	-0.01***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Teenage parenthood=1	0.13***	0.13***	0.13***	0.12***	0.12***
	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)
Household monthly income per capita (log)[a]	-0.04***	-0.03***	-0.03***	-0.03***	-0.03***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Number of household members below 5 years	0.02***	0.02***	0.02***	0.02***	0.02***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Number of household members above 65 years	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Numeracy skills (z-score)[b]		-0.02***	-0.01***	-0.01***	-0.01***
		(0.00)	(0.00)	(0.00)	(0.00)
Literacy skills (z-score)[b]		-0.01***	-0.01***	-0.01**	-0.01**
		(0.00)	(0.00)	(0.00)	(0.00)
Core self evaluation (z-score)[b]			-0.02***	-0.02***	-0.02***
			(0.00)	(0.00)	(0.00)
Grit test (z-score)[b]			-0.01	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Big Five					
Extraversion (z-score)[b]			-0.01***	-0.01***	-0.01***
			(0.00)	(0.00)	(0.00)
Agreeableness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Conscientiousness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Neuroticism (z-score)[b]			0.00	0.00	0.00
			(0.00)	(0.00)	(0.00)
Openness (z-score)[b]			-0.00	-0.00	-0.00
			(0.00)	(0.00)	(0.00)
Education aspirations (additional years)				-0.01***	-0.01***
				(0.00)	(0.00)
Expected return to tertiary education (log)					-0.00
					(0.01)
Overestimates salary=1					-0.02
					(0.02)
Underestimates salary=1					0.02
					(0.01)

Country dummies (base=Brazil)					
Chile	-0.04**	-0.04**	-0.04**	-0.05***	-0.05***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Colombia	-0.02	-0.02	-0.02	-0.03	-0.03
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
El Salvador	0.01	0.01	0.01	0.00	0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Haiti	-0.09***	-0.08***	-0.08***	-0.09***	-0.09***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Mexico	0.00	0.00	0.00	-0.00	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Paraguay	-0.00	-0.00	-0.00	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Observations	3914	3914	3914	3914	3914
Pseudo R²	0.11	0.12	0.12	0.13	0.13

Source: Millennials in LAC survey.

Note: Standard errors in parentheses. *Significant at 10%, ** significant at 5%, ***significant at 1%.

[a] Household monthly income per capita and expected wages were deflated by each country's CPI and converted to 2011 PPP US dollars (World Bank, 2019b).

[b] Standardized measure.