



## “NEET” Generation in the Metropolitan Region of Salvador

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### Abstract

This study has as its main objective to trace the demographic and socioeconomic profile of the “NEET” generation residing in the Metropolitan Region of Salvador (RMS) and estimate the probability of this condition. As it is a recent theme, most studies were for Brazil, with few about the Brazilian metropolises, especially the RMS, marked by high population concentration, unemployment and underemployment, especially among young people. The main source of information is the microdata of National Household Sample Survey (PNAD) of 2015 whose were analyzed descriptively and through the application of the Probit model. The main results indicate that the “NEETs” represent about 22% of the contingent of young people aged 15 to 29 years old in the RMS, being the majority female, with a predominance of the brown and black race/color, approximately 50% have completed high school or incomplete higher education, who lives with their mothers and with low family income. Furthermore, the estimates obtained using the Probit model indicate per capita income below half a minimum wage as the variable with the greatest impact on the probability of being “NEET”, followed by the positive influence of female gender. On the other hand, the model reaffirmed the importance of schooling in reducing the probability of a young person belonging to the “NEET” generation.

**Keywords:** Youth. “NEET” Generation. Profile. Probit. RMS.

### Generación ‘Ni Ni’ en la Región Metropolitana de Salvador

#### Resumen

Este estudio tiene como principal objetivo rastrear el perfil demográfico y socioeconómico de la generación de jóvenes ‘ni ni’ residente en la Región Metropolitana de Salvador (RMS) y estimar la probabilidad de encontrarse en esta condición. Como es un tema reciente, la mayoría de los estudios fueron para Brasil, con pocos para las metrópolis brasileñas, especialmente la RMS, marcada por una alta concentración de población, desempleo y subempleo, especialmente entre los jóvenes. La principal fuente de información son los microdatos de la PNAD 2015, cuyos datos fueron analizados de forma descriptiva y mediante la aplicación del modelo Probit. Los principales resultados indican que los ni ni representan alrededor del 22% del contingente de jóvenes de 15 a 29 años en la RMS, siendo la mayoría mujeres, con predominio de raza/color mulata y negra, aproximadamente el 50%

tiene educación secundaria completa o educación superior incompleta, a pesar del alto porcentaje de personas con menos de este nivel de educación (alrededor del 45%), viven con su madre y tienen bajos ingresos familiares. Además, las estimaciones obtenidas mediante el modelo probit señalan el ingreso per cápita por debajo de la mitad del salario mínimo como la variable con mayor impacto en la probabilidad de ser ni ni, seguida de la influencia positiva de ser mujer. Por otro lado, el modelo reafirmó la importancia de la escolaridad en la reducción de la probabilidad de ser un joven perteneciente a la generación ni ni.

**Palabras clave:** Juventud. Generación 'Ni Ni'. Perfil. Probit. RMS.

## Geração 'Nem Nem' na Região Metropolitana de Salvador

### Resumo

Este estudo tem como principal objetivo traçar o perfil demográfico e socioeconômico da geração de jovens 'nem nem' residente na Região Metropolitana de Salvador (RMS) e estimar a probabilidade de estarem em tal condição. Por ser um tema recente, a maioria dos estudos foram para o Brasil, com poucos para as metrópoles brasileiras, em especial a RMS, marcada por elevada concentração populacional, desemprego e subemprego, notadamente entre os jovens. A principal fonte de informações são os microdados da PNAD de 2015, cujos dados foram analisados de forma descritiva e por meio da aplicação do modelo Probit. Os principais resultados indicam que os nem nem representam cerca de 22% do contingente de jovens de 15 a 29 anos na RMS, sendo a maioria do sexo feminino, com predominância da raça/cor parda e preta, tendo aproximadamente 50% o ensino médio completo ou superior incompleto, reside com a mãe e têm baixo rendimento familiar. Ademais, as estimativas obtidas através do modelo probit indicam o rendimento per capita abaixo de meio salário mínimo como a variável de maior impacto sobre a probabilidade de ser nem nem, seguido da influência positiva em ser do sexo feminino. Por outro lado, o modelo reafirmou a importância da escolaridade na redução da probabilidade de ser um jovem pertencente a geração nem nem.

**Palavras-chave:** Juventude. Geração Nem Nem. Perfil. Probit. RMS.

## 1 Introduction

In Brazil, from the 2000s onwards, the high number of young people aged 15 to 29 without studying and working, described in the literature as the "NEET" generation, draws the attention of researchers (Camarano *et al.*, 2006; Costa and Ulyssea, 2014), public policy makers and government officials. This phenomenon is not a national problem, but a global one, and it occurs in developing countries, such as Mexico (Montoya and Benjet, 2012), and developed countries, such as Japan and Australia (WONG, 2016).

Thus, global and national bodies are increasingly debating the importance of investing in education, as well as the creation of programs for professional qualification and first job, since young people, in general, have higher unemployment rates and high turnover in the business market.

Simultaneously with the growth in the number of "NEETs", in Dakar, Senegal, in 2000, an important milestone for the planning and development of education took place. This is the World Education Forum, where collective objectives were defined to be pursued by the governments of the countries that were present at the meeting (MEC, 2014). At the time (UNESCO, 2015, p. 3), "[...] 164 governments agreed to the Dakar Framework for Action, Education for All: Fulfilling

our Collective Commitments, which launched an ambitious agenda to achieve six broad educational goals reach by 2015”. The six goals generally involved early childhood education, teaching and literacy for young people and adults, gender parity and equality, and the quality of education offered.

Education is both a tool for continuous personal development and a determinant for national development. Combining the economic and political dimensions, education appears as the basis of policies to reduce inequalities, “so glaring in several developing countries” (PORTO; RÉGNIER, 2003).

It is indisputable that access to education at any level is not restricted to an economic requirement, serving as training for entry into the job market (PORTO; RÉGNIER, 2003). However, “in the Brazilian case, young people were one of the groups most affected by changes in the world of work and in the productive structure from the 1990s onwards” (WEYRICH, 2007, p. 45).

In this sense, this study intends to trace the demographic and socioeconomic profile of the “NEET” generation people residing in the Metropolitan Region of Salvador (RMS), given that most of the studies were for Brazil, with few about the Brazilian metropolises, especially the RMS, marked by high population concentration, unemployment and underemployment, especially among young people. In order to achieve the proposed objectives, the main source of information was the microdata from the National Household Sample Survey (PNAD) of 2015, made available by the IBGE. The extraction, manipulation of data and preparation of tables used the statistical software SPSS (Statistical Package for the Social Science), STATA 13 and the Excel program. The location map was made with the free software QGis (version 2.18.12).

The article is organized into six sections including this introduction. The second section describes the investments in education in Bahia during the recent years. The third summarizes the programs for the first job and/or insertion of the young population in the job market in Bahia. The fourth section presents the methodological procedures, while the fifth deals with the main objective, which is to trace the demographic and socioeconomic profile of the “NEET” generation residing in the RMS in 2015 and to estimate the probability of being in such condition (result and discussion). Finally, the sixth section comes up with the final considerations and the main findings of the study.

## 2 Education Investments in Bahia

In 2007, the Education Department (SEC), through the publication “Principles and Axes of Education in Bahia”, drew attention to “a series of deficiencies in education [...], evidencing the need for a lot of investment and a broad mobilization to trigger a sustainable process of social advances”, highlighting among these deficiencies the high rate of illiteracy in the state (BAHIA, 2007, p. 7).

To deal with these deficiencies, the pedagogical proposal “Uma Escola de Todos Nós” is developed, which brings principles and axes to guide the discussions about the role of the State in Bahian education from 2007 to 2010. Public policies would be structured, according to the proposal, in six main axes: access to education and permanence in school with dignity; literacy as a right; democratic

management, in a network, with social effectiveness; guarantee of the right to professional education; strengthening of public, free and socially referenced higher education; and recognition of education workers as subjects of rights and guarantee of these rights (BAHIA, 2007).

As for the first of these axes (access and permanence of students in the education network), it is noteworthy that access to education in elementary school is close to universalization, unlike high school education, and even more so in higher education. How does the SEC assess:

As for access, it appears that elementary school, which is mandatory for the population aged between 7 and 14, is already almost universal. In high school, less than 30% of young people of regular age (15 to 17 years old) are attending this level of education, which means that a large number of young people in this age group are out of school or, if enrolled, in a situation of age-grade lag. Access to higher education is even more restricted. Only 10.5% of Bahians have access to university, while in the Northeast this rate is 11.6% and in Brazil it reaches 18.6% (BAHIA, 2007, p. 9).

On the other hand, staying in school is a much greater challenge, with the high dropout rate related to the slow school flow, which also leads to the problem of age-grade distortion. In this sense, “strengthening students' bonds with learning spaces presupposes the creation of objective conditions that favor education with quality and dignity” (BAHIA, 2007, p. 23-24).

Another action that contributes to the permanence of students in school was carried out in 2009, with the State Program for School Transport in Bahia (PETE/BA), materialized in the transfer of resources to municipalities to enable the transport of students from rural areas (BAHIA, 2017a).

To deal with the problem of illiteracy, the program “*Todos pela Alfabetização*” (TOPA) was applied, to work with young people, adults and the elderly, and the State Literacy Program in the Right Age, which began in 2011, with children as its target audience of elementary school (BAHIA, 2017a).

As for educational management, the need for decentralization is evident, involving in decision-making from the education secretariat and regional directorates to schools, communities and all those involved in the educational space. According to the SEC, democratic and participatory management “means assuring them [students, teachers, parents and civil servants] to participate in decisions about educational processes and to hold them accountable for student performance” (BAHIA, 2007, p. 25).

From this perspective, the Municipal Education Support Program (PROAM) was launched in 2008, which derives from the materialization of the collaboration regime between the State and the municipality, and has the presupposition of support to municipalities by the State Government, helping to organize the aspects pedagogical and bureaucratic aspects of municipal education. The main objective of PROAM is to strengthen education systems, and the actions of the Program are related to: monitoring the Municipal Education Plans (PME), the Articulated Action Plan (PAR) and the School Development Plan (PDE), in addition to training school managers (“*Progestão e Gestar na Escola*”) and strengthening the program “*Mais Educação*” and the Municipal Education Councils (CME) (BAHIA, 2017a).

Another axis of action refers to professional education, a field in which the fragility of state public policies is notable (BAHIA, 2007). The role of the government of Bahia in this type of education is a result of the initiative of the Federal Government from 2003, in an effort to restructure professional education, which defines the guiding principles of state initiatives (BRITO; OLIVEIRA, 2010).

According to the National Institute for Educational Studies and Research (INEP) data, the Basic Education Development Index (IDEB) of Bahia for Elementary I reached 4.0 in 2013, and in 2015 it reached 4.3, exceeding the target for the year and already reaching that of 2017. Elementary II, in turn, was not so well according to the Index. Since 2011, its results do not follow the projections, and only in 2015 was the first delayed goal reached. In high school, the observed IDEB showed growth, reaching the goals until 2011, but from that year onwards it started to decrease, returning in 2015 to the level of 2007 (INEP, 2017).

It can be seen, then, that despite the actions of government in the educational area, there are still no effective results. It is also noteworthy that this situation is not recent, because when writing about the orientation of educational policies for elementary education in Bahia in the 1990s, Silva (2007, p. 253-254) highlights the existing contradiction between the visibility that took the indication of alternatives for less onerous and supposedly more effective educational policies and the effective results that such interventions in the area of education actually achieved, referring to the period of government of Paulo Souto<sup>1</sup>.

More recently, the program “*Educar para Transformar*”, launched in 2015, stands out due to the persistence of problems such as failure, dropout, and distortion between age and school year, illiteracy and low schooling. With the mobilization of society as a pillar of support, the program “intends to involve the managers of education systems, establishing a public commitment to improve the quality of Elementary school, in its stages and modalities, in order to obtain a positive change in educational indicators”. With “*Educar para Transformar*”, other projects already underway in the state education network received new support, being indicated for adhesion by the municipalities (BAHIA, 2015, p. 9).

In relation to higher education, despite the construction of new Federal Universities and in the private sector, public higher education institutions in Bahia also stand out. Among the state ones are the State University of Bahia (UNEB), the State University of Feira de Santana (UEFS), the State University of Santa Cruz (UESC) and the State University of Southwest Bahia (UESB), which offer more than 200 courses in 23 of the 27 Regional Education Offices, providing around forty thousand places (BAHIA, 2017b). Among these universities, UNEB is the one that assumes the most popular character, due to the performance of its campuses in diversified territories, internalizing the academy through research or extensive actions. For the TOPA program, mentioned above, for example, the training of literacy teachers resulted from a partnership between UNEB and SEC (LIMA, 2009).

### 3 Programs for the first job in Bahia

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<sup>1</sup> Governor of the state of Bahia from 1995 to 1998.

This section presents and describes the programs for the first job and/or insertion of the young population in the labor market in Bahia, starting in the first decade of the 21st century.

The program "*Primeiro Emprego*" was established in February 2003, through Law 8,578, and aims to encourage the creation and maintenance of jobs for young people aged between 18 and 25 (BAHIA, 2003; WEYRICH, 2007). Such an incentive consists of the deduction of Tax over Circulation of Merchandise and Services (ICMS) due by the taxpayer state company that generates a new job, occupied by a person between 18 and 25 years old who has never had formal work and who has been referred by National Employment System (SINE) (BAHIA, 2003). The program is a new type of incentive that is characterized by "fostering job creation through the waiver of revenue", that is, the "State, instead of transferring resources, does not collect them" (WEYRICH, 2007, p. 30).

Regarding the operation of the program, new jobs are considered to be additional hirings made in relation to the number of jobs existing in the quarter prior to the company's qualification to participate in the program. The management of the program is the responsibility of the Secretary of Labor and Social Action (BAHIA, 2003).

In order to be eligible for the program, the candidate company is also required to "have obtained, in the twelve months immediately prior to the application for qualification, sales revenue of up to R\$ 12 million and not have debts corresponding to tax credits definitively constituted in the administrative sphere" (WEYRICH, 2007, p. 30). On the other hand, the young people hired were not required to be other than their age and not having had a formal job. It differs, therefore, from other programs that also look at aspects such as schooling or family income and, therefore, are more comprehensive (WEYRICH, 2007).

Another program developed by the State Government of Bahia was the "*Trilha*" or State Program for the Insertion of Young People into the World of Work, implemented in 2010, through the Secretary of Labor, Employment, Income and Sport (SETRE). The beneficiaries are young people aged between 16 and 29, in a situation of involuntary unemployment, who are from families registered in the program "*Bolsa Família*" and they are enrolled in the public school system, with regular attendance at high school, youth and adults education (EJA) or have completed high school (FUNDAL, 2017).

As for the objective of the program, it aims, in general, to qualify young people from Bahia to improve their quality of life, with more specific objectives being the insertion of young people from a socially vulnerable situation in the world of work, and the promotion of income generation and youth protagonism, acting through actions that value human rights and citizenship and professional qualification actions, aimed at helping to overcome inequalities and combating unemployment (BAHIA, 2017c).

In December 2015, a new program was launched to reduce unemployment among young people in Bahia. Established through Law No. 13,459, the State Incentive Project for the Granting of Internship and First Professional Experience is intended for young people aged between 14 and 22, who are students or graduates

of the State Network of Vocational Education or who have been qualified by government programs in Bahia (BAHIA, 2015; BAHIA, 2017d).

The objectives of the Project are: to increase the possibilities of integration of teenagers and young people from Bahia to the job market; to enable students from the State Network of Vocational Education to have access to the mandatory curricular internship; offer an intermediation system to enable the conclusion of apprenticeship contracts; to stimulate the technical-professional training of the student for his/her development for the citizen's life and work; articulate with Professional Education to promote access to scientific, artistic, cultural and work knowledge; and contribute to the increase in schooling (BAHIA, 2015).

The selection of young people for placement in formal internships or occupations takes into account the professional training course developed or under development and the municipality or territory of residence, in addition to the descending classification of these, according to their academic performance during the course period (BAHIA, 2015).

In this sense, there is another advantage for the project, which would be to encourage permanence and dedication in school, since the ranking for classification and selection of those contemplated is based on school performance, with the information provided by the State Department of Education. On the other hand, for partner companies or bodies, the developed intermediation system dispenses with some selection processes, offering qualified professionals to them (BAHIA, 2017d).

As for the aforementioned intermediation, the Project provides for the availability of a database for access by contracting entities, to be maintained by SINE of BAHIA, which will include the ranking of participants with a breakdown by course, municipality or territory (BAHIA, 2015).

For the distribution of vacancies, a minimum of 5% and a maximum of 15% of apprentices must be observed in relation to the number of active civil servants in the state agency or entity. Of the vacancies offered, a minimum percentage of 5% is reserved for the training of young people with disabilities and 30% for those who are self-declared black or brown (BAHIA, 2015).

Contracted apprentices are guaranteed a minimum wage of one minimum wage, an eight-hour working day, including theoretical learning, and the right to a transport voucher. Those hired by the State Executive Branch can also benefit from the Health Care System for State Civil Servants. The work card is signed with a contract of up to 24 months, but there is the possibility of extension in the private sector (BAHIA, 2015; BAHIA, 2017d).

The goal is that by 2018, nine thousand young people from the capital and the countryside will have the opportunity to enter the job market through this initiative, with 4,500 between September 2016 and September 2017, and another 4,500 between September 2017 and September 2018. In addition to government departments and agencies, opportunities may arise in private companies and the third sector. At the beginning of the project, more than 40 private companies had expressed interest in participating (BAHIA, 2017d; BAHIA, 2017e).

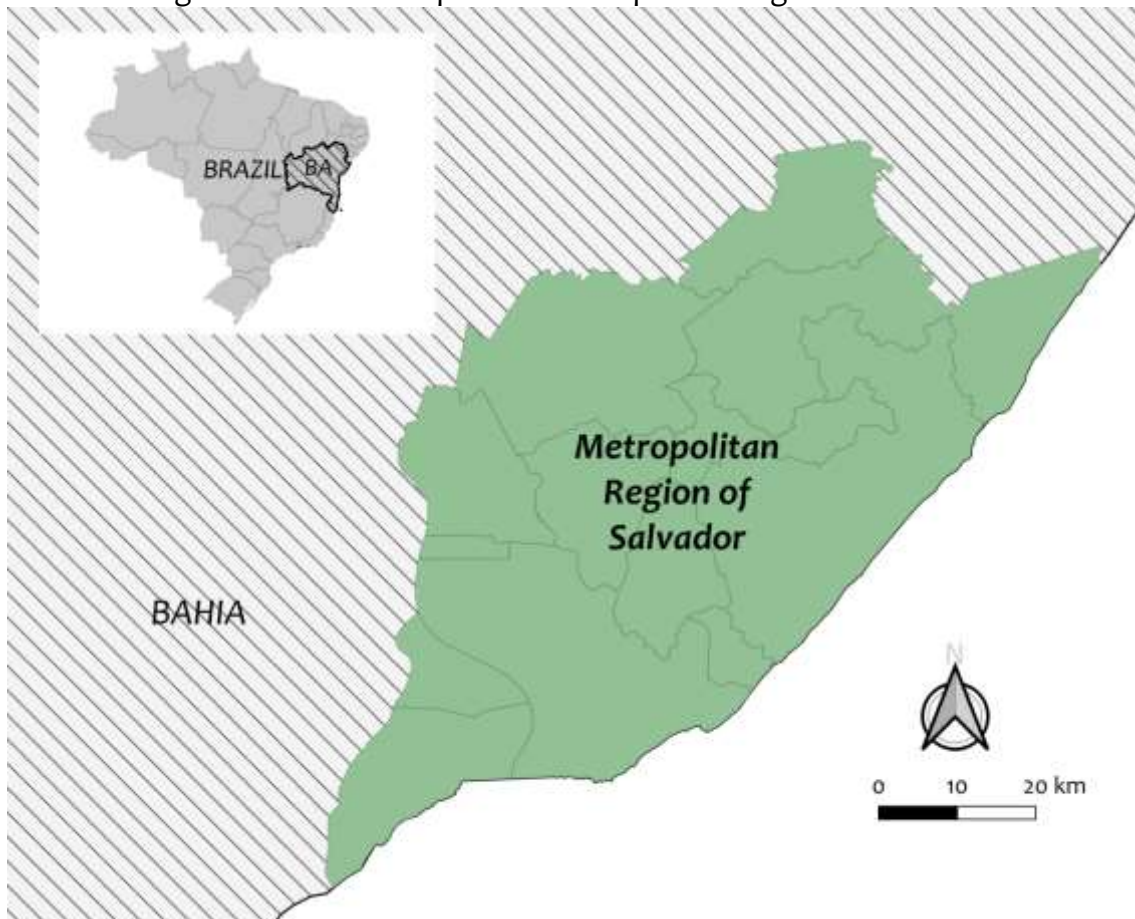
Derived from a state program “*Educar para Transformar*”, the State Project of Incentive to the Concession of Internship and First Professional Experience also announces the possibility of new programs in the area, focusing on the insertion of

young people in the world of work, either through internship, apprenticeship or formal occupation contracts (BAHIA, 2015).

#### 4 Methodological procedures

The “NEET” generation, or rather, young people aged 15 to 29 who do not study and do not work, and in 2015 who reside in the Metropolitan Region of Salvador (RMS), are the target of this study. In this sense, the metropolis under study was created through Complementary Law No. 14 of June 8, 1973, which established a total of eight metropolises in Brazil. The RMS was established with 8 municipalities, with reference the PNAD adopted in 2015, this metropolis has 13 municipalities: Camaçari, Candeias, Dias D’Ávila, Itaparica, Lauro de Freitas, Madre de Deus, Mata of São João, Pouca, Salvador, São Francisco do Conde, São Sebastião do Passe, Simões Filho and Vera Cruz.

Figure 1: Location map of the Metropolitan Region of Salvador



Source: IBGE digital meshes (2010).

Microdata from the National Household Sample Survey (PNAD) of 2015 are the main source of information. Such data make it possible to evaluate the volume and profile of the “NEETs” in the RMS, but only in aggregate form. This is because the metropolis is the lowest level of disaggregation of this data source, and it is not possible to obtain information at the municipal level. Data extraction and



processing were performed using SPSS software (Statistical Package for the Social Science) and STATA 13 to obtain the results of the econometric model. The Excel program was used for the construction of tables and the QGIS (version 2.18.10) for the construction of the location map.

The sample was divided into three categories of analysis: (i) “NEET” (neither studies nor works), (ii) only works and (iii) only studies, trying to give the dimension of the contingent of these groups in relation to the total population of young. For the “NEET” profile, the variables selected in the sociodemographic and economic characterization were: age groups, gender, race/color, education level, living with the mother and per capita household income in minimum wages.

In order to obtain the meaning and degree of influence of the variables considered on the condition of the young person being or not “NEET” in the RMS, the Probit model was applied, which was also used by Figueiredo and Almeida (2017) when studying the “NEET” population from the PNAD of 2012. The dummy referring to being “NEET” (1) or not (0) was defined as a dependent variable, and age, education and gender dummies (0 for males and 1 for females) were defined as explanatory variables and per capita household income (0 for more than 1/2 MW and 1 for up to 1/2 MW). Missing variables in relation to descriptive statistics were removed from the model as they did not present statistical significance.

The chosen model is based on the use of a dependent variable  $l_i$  determined by one or more explanatory variables  $X_i$ . Through the dependent variable or observable utility index, the decision of the  $i$ -th observation of the model is determined, that is, the higher the value of the index  $l_i$ , the greater the probability of a positive decision for the observation. The index  $l_i$  can be defined as:

$$l_i = \beta_1 + \beta_2 X_i \quad (1)$$

So,  $Y = 1$  for individuals in the “NEET” condition and  $Y = 0$  for otherwise, considering that the index  $l_i$  has a critical level or threshold  $l_i^*$  that acts as a limit, such that if  $l_i^*$  is less than or equal to  $l_i$  the individual will belong to the “NEET” condition, and otherwise not, as explained in (2).

$$Y = \begin{cases} 1, & \text{if } l_i^* \leq l_i \\ 0, & \text{if } l_i^* > l_i \end{cases} \quad (2)$$

Following the assumption of normality, the probability that  $l_i^*$  is less than or equal to  $l_i$  can be calculated from the standardized normal cumulative probability density (SDA) distribution function, expressed in (3).

$$P_i = P(Y = 1|X) = P(l_i^* \leq l_i) = P(Z_i \leq \beta_1 + \beta_2 X_i) = F(\beta_1 + \beta_2 X_i) \quad (3)$$

where  $P(Y = 1|X)$  is the probability of the individual being in the “NEET” condition given one or more values of the explanatory variable  $X$ , and where  $Z_i$  is the standardized normal variable.  $F$  is the standard normal cumulative distribution function, which is explained in (4):

$$F(I_i) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{I_i} e^{-z^2/2} dz$$

$$= \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\beta_1 + \beta_2 X_i} e^{-z^2/2} dz$$
(4)

Unlike the parameters of common linear regression models, which provide information about the direction and magnitude of the influence of an explanatory variable, the parameters of the Probit model immediately indicate only the direction of the influence, since the values of the estimated parameters mean the individual contribution of variables to the utility index that is not observable but is related to the probability of the event occurring.

Thus, information about the magnitude of the influence is only obtained through additional calculations. As in the Probit model all regressors are related in calculating the probability change, the rate of this change, i.e. the magnitude of the influence will be given by  $\beta_j f(Z_i)$ , where  $f(Z_i)$  is the density function of the standard normal variable and  $Z_i = \beta_1 + \beta_2 X_{2i} + \dots + \beta_k X_{ki}$ , that is, it is the regression model used in the analysis.

According to Oliveira (1998), the pseudo-R<sup>2</sup> obtained in the Probit model, unlike the R<sup>2</sup> of classical regression, does not have an immediate intuitive interpretation, so that its value very close to 1 would indicate more a bad specification than a good fit. Thus, the command “statclass” was considered as an element of appreciation of the quality of the estimated results, as it informs the percentage of correct answers in the model. This command consists of a matrix in which the model's predictions are confronted, with the effective distribution of the sample's observations between the two groups, associated with 0 and 1. When calculating for each observation an estimate of the probability of  $Y = 1$  (for using the formulas presented above), it is predicted that  $Y_i = 1$  or  $Y_i = 0$  depending on whether or not this estimate exceeds 0.5. Then the information is organized in a table as follows:

	Y <sub>i</sub> predict = 1	Y <sub>i</sub> predict = 0	Totals
Y <sub>i</sub> observed = 1	A	B	n1
Y <sub>i</sub> observed = 0	C	D	no
Totals	E	F	n

A and D represent the numbers corresponding to the model's correct predictions, while B and C quantify the incorrect predictions. Thus, (A+D)/n shows the percentage of hits of the model, while the proportion of misclassified observations, (B+C)/n, is the so-called apparent error rate.

## 5 Results and discussion

This section responds to the objective of tracing the demographic and socioeconomic profile of the “NEET” people residing in the RMS, and estimating the

probability of such a condition. For this, descriptive statistics are analyzed about how many and who they are, in addition to the results of the econometric model.

In the early 2000s, the education scenario in Bahia was considered worrying by the State Government. As a result, the Bahia State Education Plan (PEE) was prepared and approved through Law No. 10,330, of 09/15/2006. The PEE provided a diagnosis for each level and type of education, and based on it, it defined guidelines and outlined objectives and goals to guide the actions of the State (BAHIA, 2006).

In general terms, the diagnosis of education levels was based on early childhood education, on the defense of more specific and adequate education for day care centers and preschools. For elementary school, it highlighted as a challenge the guarantee of student permanence and school success through quality of education, which has repercussions in high school, where the concern revolves around the high rates of failure and abandonment. Higher education, in turn, expanded greatly in Bahia from the 2000s onwards, although private institutions played a leading role (BAHIA, 2006).

In this sense, Table 1 shows the volume of young people who do not study, do not work or present both characteristics, as well as their respective relative shares in the total of young people in the Metropolitan Region of Salvador (RMS). Initially, it appears that the number of young people aged between 15 and 29 is 954,140 people, approximately 60% of them do not study (564,413) and about half do not work (485,133).

This shows that despite the investments in education made by the government of Bahia from the 2000s onwards, through educational programs and projects, as described in section 3, the results were not so efficient, given that almost 60% of the youth in the RMS, aged 15 to 29 years old, do not study, it is necessary to reassess the causes and reasons for this expressive number of young people without studying and where public educational policies should focus.

Table 1. Volume and participation of young people who neither study nor work (“NEET”) in the total of young people aged 15 to 29 years - RMS - 2015

Youth's Condition	Number of Young People	Part.(%) in Total RMS
“NEETs”	215,350	22.57
Do not study	564,413	59.15
Do not work	485,133	50.85
Population from 15 to 29 years old	954,140	-

Source: PNAD microdata - 2015.

When considering the young people who have both characteristics, that is, the “NEETs”, the target population of this study, these are more than 215 thousand, corresponding to 22.57% of the total number of young people in the metropolis of Bahia (954,140) aged 15 to 29 years. Despite the expressive number of young people in this condition, in a study for the Metropolitan Region of Recife, Pereira, Queiroz and Costa (2019), found, in 2015, absolute (259,6260) and relative (28.34%) higher numbers in the metropolis of Pernambuco. As a result, the relative values of RMS are close to the Brazilian average (22.54%).

The results in Table 2, disaggregated according to age groups from 15 to 19,

20 to 24 and 25 to 29 years old, show that the distribution according to the total population does not show much variation, since each age group corresponds to approximately one third of the total number of young people. However, those aged 15 to 19 are in first position in the total population (35.04%), as well as in the condition that do not work (52.63%), however, it is the group in which there are fewer young people in the "NEET" condition (23.09%). Therefore, it is evident that professional and technological education needs to be expanded in service, which is evidenced by the considerable population between 15 and 19 years of age who do not work, being considered potential demanders of the teaching modality (BAHIA, 2006).

Table 2. Volume and participation of young people who neither study nor work ("NEET") in the total of young people aged 15 to 29, according to age group - RMS - 2015

Age group	Total population		Do not study		Do not work		"NEETs"	
	Abs.	(%)	Abs.	(%)	Abs.	(%)	Abs.	(%)
15 to 29	334,290	35.04	87,351	15.48	255,335	52.63	49,723	23.09
20 to 24	307,066	32.18	214,000	37.92	133,714	27.56	87,686	40.72
25 to 29	312,784	32.78	263,062	46.61	96,084	19.81	77,941	36.19
15 to 39	954,140	100	564,413	100	485,133	100	215,350	100
Part.(%) RMS total	-		59.15		50.85		22.57	

Source: PNAD microdata - 2015.

In turn, as age increases, the percentage of young people who do not study increases and those who do not work decrease. Thus, the greater participation of the "NEETs" is in the intermediate age group, 20 to 24 (40.72%), at the time of transition between school and work.

These results must be related to the programs described in section 3, in which the "Primeiro Emprego" program can be considered the furthest from the educational scope, as it targets the age group from 18 to 25 years, without requiring that participants be students or have a certain level of education. As a result, it ends up having greater demand for young people, in addition to effectively seeking their insertion into the world of work, directly encouraging job creation through ICMS deductions.

The "Trilha" program and the State Incentive Project for the Granting of Internships and First Professional Experience, on the other hand, charge in addition to age, enrollment and/or schooling, walking alongside educational policies. The latter is the one with the most focused public, despite promoting intermediation for the entry of young participants into the labor market, unlike the "Trilha", which focuses more on professional training/qualification. Both also require participation in social programs or proof of social vulnerability, also showing alignment with social policies. The disadvantage, in this case, consists of closing in on a smaller target audience, when it is known that unemployment affects young people in general.

In relation to the young in the RMS, the demographic profile in terms of gender (Table 3) shows that the majority are women, with participation above 60% in all age groups considered, but especially high in the last two age groups. About

this result, Camarano *et al.* (2006) suggest that for women, the transition to adulthood does not necessarily go through the labor market, sometimes leaving the home of origin as a spouse or mother. The result is confirmed by Figueiredo and Almeida (2017) and Remy and Vaz (2017), who also point out a strong gender effect in the “NEET” phenomenon.

Table 3. Gender of “NEETs”, by age group - RMS - 2015

Gender	“NEETs”			15 to 29
	15 to 19	20 to 24	25 to 29	
Male	39.19	32.95	31.03	33.70
Female	60.81	67.05	68.97	66.30
Total	100.00	100.00	100.00	100.00

Source: PNAD microdata - 2015.

Regarding the division between age groups, the difference between men and women in the evolution of percentages is noteworthy. In the case of the former, older ages correspond to lower participation in the total of young people in the analyzed condition, possibly associated with the reason for work, while for women the opposite occurs.

Another characteristic that can interfere with student life and insertion in the job market is race/color. Table 4 shows that, regardless of age group, the vast majority of young people (over 85%) are of mixed race/color. Whites have a share of just over 10%, while that of yellows and indigenous people is almost always close to zero.

Table 4. Race/Color of “NEETs”, by age group - RMS - 2015

Race/color	“NEETs”			15 to 29
	15 to 19	20 to 24	25 to 29	
White	10.81	13.41	10.78	11.86
Black	38.51	39.85	39.65	39.47
Yellow	1.35	0.38	0.00	0.47
Brown	49.33	45.98	49.57	48.05
Indigenous	0.00	0.38	0.00	0.16
Total	100.00	100.00	100.00	100.00

Source: PNAD microdata - 2015.

It is possible that this result is related to the fact that Salvador was the first capital of Brazil, as well as one of the main markets for the importation of blacks, following, in general, the economic cycles of the Colony and the Empire, which made the predominantly mixed/black the Bahian population (IBGE, 2007).

As for the level of education, Table 5 shows that about half of the young people do not even have at least completed high school, which is not a good result,

as they are young people who are not studying and not working, and indicates difficulties in continuing to qualify or entering the job market.

Table 5. Education level of “NEETs”, by age group - RMS - 2015

Education level	“NEETs”			15 to 29
	15 to 19	20 to 24	25 to 29	
No instruction or incomplete Elementary	38.52	19.54	20.26	24.18
Completed Elementary or incomplete High School	14.86	25.29	18.96	20.59
Completed High School or incomplete Graduation	46.62	50.96	52.59	50.55
Completed Graduation	0.00	4.21	8.19	4.68
Total	100.00	100.00	100.00	100.00

Source: PNAD microdata - 2015.

According to the government of Bahia, other types of investment in education in addition to regular education are Youth and Adult Education (EJA), Distance Education (EAD), professional and technological education, special, indigenous and rural education. In EJA, the main problems are with regular high school, abandonment and failure, despite its consolidation being urgent and necessary in the public state network, due to the high illiteracy rate of the population over 15 years old. EAD, on the other hand, constitutes an important alternative tool for education and professional qualification, especially for teachers, also helping in the universalization of education (BAHIA, 2006).

Also, a higher level of education can mean idle human capital and, in turn, a lower level of education can contribute even more to the difficulty of insertion, since it indicates the termination or abandonment of studies very early. Thus, when vacancies are occupied by these young people, they are generally precarious or in short-term activities (contracts and internships), leading to high rates of turnover and unemployment in the labor market (MONTEIRO, 2013).

As for young people who either live with their mother or not, the data in Table 6 show more expressive percentages for those who live with their mothers, especially in the first two age groups (74.31% and 67.06%). Thus, there is a clear relationship between increasing age and leaving the parents' house, since between the ages of 25 and 29, the majority (54.86%) do not live with their mothers. 60% of “NEETs” in the RMS live with their mothers, against less than 40% who “do not live”. The result is expected, in the case “NEET” people, because due to not working, they would not be able to establish/maintain a domicile. These results are in line with the study by Figueiredo and Almeida (2017), but differ from the research

by Shirasu and Arraes (2019), who show that living with the mother reduces the chance of the young person being “NEET”.

Table 6. “NEET” people who live with their mother or not, by age group - RMS - 2015

Live with mother	“NEETs”			15 to 29
	15 to 19	20 to 24	25 to 29	
Live	74.31	67.06	45.14	61.30
Do not live	25.69	32.94	54.86	38.70
Total	100.00	100.00	100.00	100.00

Source: PNAD microdata - 2015.

Table 7 shows the profile of the “NEET” in terms of per capita household income. It can be seen that the lower income bracket predominates, with a general percentage (15 to 29 years old) of 50.48%, earning up to ½ minimum wage. In addition, 33.49% live in a household with a per capita income of half to 1 salary. The participation of young people with a per capita household income above 2 salaries does not reach 5%. This concentration in the smallest ranges is observed especially in the intermediate age group (20 to 24 years old), where most of the “NEETs” are found.

Table 7. Per capita household income ranges of “NEET” people, in minimum wages, by age group - RMS – 2015

Household Income Per Capita	“NEETs”			15 to 29
	15 to 19	20 to 24	25 to 29	
Up to 1/2 MW	46.90	53.28	49.56	50.48
More than 1/2 MW to 1 MW	35.86	32.82	32.74	33.49
More than 1 MW to 2 MW	10.34	10.42	12.83	11.27
More than 2 MW to 3 MW	2.76	0.39	2.21	1.59
More than 3 MW to 5 MW	2.07	1.93	0.89	1.59
More than 5 MW	2.07	1.16	1.77	1.59
Total	100.00	100.00	100.00	100.00

Source: PNAD microdata - 2015.

Another explanation for the concentration of “NEET” generation in households with low per capita income is related to the economic crisis that the country has been experiencing since 2014, with a slowdown in the Gross Domestic Product (GDP) and job opportunities (SIMÕES, ALVES and SILVA, 2016). Historically, the job market in the RMS is known for its high informality and unemployment. Thus, in July - 2015, according to PME data, analyzed by Pochmann (2015), among the cities selected in the study, the unemployment rate in the RMS (12.3%) is the highest and surpasses the national average (7.5%)

Considering the results of the econometric model, the estimate (for the midpoint of the sample) of the probability of being “NEET” in the RMS was 20.93%. Table 8 shows the estimates for the marginal effect of each variable/characteristic on this probability. It is observed that being female increases the probability of being neither by 13.10%, and that each year of age, considering the range of 15 to 29 years, increases the probability of being “NEET” by 1.53 %.

Table 8. Marginal effect of variables - RMS - 2015

Variable	dy/dx	Standard error	z	P >  z	X
Female*	0.1310713	0.0158	8.29	0.000	0.51094
Age	0.0152775	0.0019	7.92	0.000	21.8759
Education	-0.0104766	0.0027	-3.84	0.000	9.54647
Until 1/2 MW	0.1932222	0.0192	10.06	0.000	0.31934

$y = \text{Pr}(\text{"NEETs"}) (\text{predict}) = 0.2093328$

(\*) dy/dx is for the discrete change of the dummy variable from 0 to 1

Source: PNAD microdata - 2015.

For education, the only variable to have a negative influence, it was observed that each additional year of education reduces the probability of being in the "NEET" condition by 1.05%. Hence, one of the numerous justifications for investing in education, because education is personal development and for the country, by enabling the chance of social and occupational mobility and, with that, improving the lives of young people and their families, especially those from families with less purchasing power.

The dummy associated with family income indicated that having a per capita income below half the minimum wage increases the probability of being "NEET" by almost 20%, being, therefore, the explanatory variable with the greatest impact. Thus, the RMS follows the trend of studies on the "NEET" in the Metropolitan Region of Recife (Pereira, Queiroz and Costa, 2019), which point to economic vulnerability or low income at home as the variable that most impacts the probability of being "NEET".

## 6 Final considerations

The objective of this study was to find out how many and who are the "NEETs" resident of the Metropolitan Region of Salvador. The proposed theme is debated worldwide, but for the metropolis of Bahia, characterized by high population concentration, unemployment and informality, especially among young people aged 15 to 29, there is no known study for this metropolitan area.

In this sense, the main results show that, in the RMS, in 2015, young people from 15 to 29 years of age who do not study and do not work represent 215,350 people or 22% of the youth contingent of that metropolis (954,1400). As for demographic and socioeconomic attributes, most are female, with a predominance of brown and black race/color, approximately 50% have completed high school or incomplete higher education, mostly single, live with their mothers, in an urban household and with low family income.

Regarding the estimates obtained through the Probit model, it was found that per capita income below half the minimum wage is the variable with the greatest impact on the probability of being "NEET", followed by the positive influence of being female. In addition, it showed the importance of schooling in reducing such probability.



Thus, it is necessary to reaffirm the relevance of the theme addressed, which involves the social sphere, as it deals with the lives and future perspectives of young people, and the economic sphere, due to the importance of this population segment for the future and development of the country, as well as in the Metropolitan Region of Salvador. Thus, it becomes important to know more about this theme and/or these young people, for other geographic areas of Brazil.

Furthermore, it is necessary to act, through the continuity and improvement of initiatives and programs regarding access to education, including vocational education, and opportunities for the first job and permanence in the job positions, especially for low-income youth and women, profiles that are more likely to be in the “NEET” condition.

Thus, in addition to the academic contribution, it is expected that the results of this study will help to focus public policies to combat school dropout, youth unemployment and programs that reduce gender differentials and the exit from the “NEET” condition, especially for the low-income girls and youth of the RMS.

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Submitted: 09/16/2020

Approved: 16/02/2022



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Financing source: --