



THE CONSTRUCTION PROCESS OF STUDENT WORKERS' RETENTION: A STUDY ON IF SUDESTE MG CAMPUS SÃO JOÃO DEL-REI ¹

O Processo de Construção da Permanência dos Trabalhadores-Estudantes: Um Estudo Sobre o IF Sudeste MG Campus São João del-Rei

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ABSTRACT

The aim of this article is to present and discuss four social markers that shape the retention of working students enrolled in night school, technical and higher education: age, city of residence, type of employment relationship, and remuneration. From the data of a survey, two statistical techniques were used to support the analysis: the chi-square test and the correspondence analysis. The results indicated associations between variables that revealed non-linear conditioning to which student workers are submitted and that constitute the daily production of student experience/persistence. We conclude that knowledge about these associations can support and guide the elaboration of institutional retention policies in its broadest sense.

Keywords: Work and Education. Student Retention; Statistical analysis.

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RESUMO

O objetivo deste artigo é apresentar e discutir quatro marcadores sociais que conformam a construção da permanência de trabalhadores-estudantes matriculados no ensino noturno técnico e superior: a faixa etária, a cidade de residência, o tipo de vínculo de trabalho e a remuneração. A partir dos dados de um questionário, foram utilizadas duas técnicas estatísticas para subsidiar a análise: o teste qui-quadrado e a análise de correspondência. Os resultados indicaram associações entre variáveis que revelaram condicionamentos não lineares aos quais os trabalhadores-estudantes estão submetidos e que constituem a produção diária da permanência estudantil. Concluímos que o conhecimento sobre essas associações pode subsidiar e orientar a elaboração de políticas institucionais de permanência em seu sentido amplo.

Palavras-chave: Trabalho e Educação; Permanência na escola; Análise estatística.

INTRODUCTION

How do technical and higher education students work to cater for basic needs during the day and study at night looking for professional qualification, balancing through social contradictions this double burden (and sometimes triple, particularly for women)? This is the question that since 2015 guides the activities of the Educational Strategies to Working Students Research Group (EDIPET), linked to the Federal Institute of Education, Science and Technology of Sudeste of Minas Gerais (IF Sudeste MG). Researchers of this group, Carvalho, Dias e Silva (2018), highlight: (i) the multiple specifications that constitute the evasion and permanence phenomenon at technical and higher education working students; (ii) the contradictions surrounding the (ontological) relation between work and study; (iii) the concrete life dimensions of working students; and (iv) the retention strategies engaged before the daily challenge of this tense conciliation, contradictory and untimely. For that matter, the investigated subjects in the referred institution are working students (Sposito 1986) facing social commitments stemming from the need to earn an income as providers, which stops them to dedicate to their studies.

Beyond aspects related to survival, more recent research, such as that by Comin and Barbosa (2011), indicates that for these individuals, working has also become a requirement for studying, whether to cover basic expenses like food and transportation or to pay tuition fees in the case of those studying at private institutions. In the occasion, the authors investigated the specificities related to the workers that study on a relatively favorable socioeconomic situation, on two stances: i) expansion of the access to basic private and public higher education through policies as Reuni and Prouni, considering that in 2019 there was a increase of 400% in the number of Brazilian graduates from popular social classes, compared to 1982; ii) decrease of unemployment rates and income increase on this social strata. Still, from these studies the authors argue that "the desired conjunction between qualification and occupation is not only depended on educational policies; involve, as a last resource, to the economical development model" (Comin; Barbosa, 2011, p. 77).

Linked to the aim of this study, two conclusions about working students brought by Comin and Barbosa (2011, p. 94) should be highlighted: "the warming of the job market and the income increase of the poorer gave them optimism and money to stand the hard and extensive shifts of work with night school", and also:

[...] as to the pressing need of Brazil to elevate its education levels, common citizens, especially those who come from poorer families, have been doing their part. Low quality education and the job market not creating enough opportunities to the investment made by them in education to perform fully are subjects from another area; it concerns the quality of the economical development. Having a more qualified work force gives the country a larger scope to 'choose' its development paths and concerning to it, more education is always better than less education (*Ibid.*, p. 95).

That is, working to survive and, possibly, to study in adulthood is an established pattern in a country where, historically, the poorest individuals begin their working lives at a very young age.

Furthermore, as pointed by Vargas and Paula (2013), the whole scenario must be analysed considering the lack of social security of the working student, as well as the fragility of Brazilian educational policies in this aspect. Amplifying the critic, the authors state that in federal universities, this public is treated as "ideal higher education students, worth to mention, as the graduates from the beginning of the 19th Century, count on only themselves to overcome adversities that their socioeconomic condition impose" (*Ibid.*, p. 480).

Before this scenario, the more recent studies about retention indicate the need for amplification on the understanding of the concept of student aid. That is because *retaining study* involves a set of economic, cultural, symbolical and psychological conditions that demands institutional policies of material, educational and utilization of academic activities support, going beyond the mandatory teaching in classrooms, anchored in a reciprocal relationship between student and institution (Vargas; Heringer, 2017; Heringer, 2022).

In the same sense, Mendes (2020a; 2020b) argues about social inequalities that hinder the retention of students in higher education. To the author, the retention strategies compose a set of actions employed by the institutions and student body, aiming to favor continuity of the students until the conclusion of the course. Discussing the subject, the author clarifies that:

These strategies can be considered in the informal scope, be it individual or collectively, or formal, imposed as institutional policy. Informal strategies as much as formal ones can encompass the material dimension: conciliation between work and studies, night school, search for scholarships and aids, family aids; as to the symbolical dimension. In the symbolical dimension aspect of retention, there are more individual strategies: trying to study more to perform better on the subject, search support in fellow students and professors; as much as processes connected to collective dynamics, as identity affirmation and the search for acknowledgement; establishment of groups and support nets, as well as ways of collective organization viewing to make demands to the institution and society (Mendes, 2020b, p. 402 - 403).

As seen, retention strategies can be informal (individual or collective) and formal (through institutional policies). In both cases, according to Mendes (2020a; 2020b), the material and dynamic dimensions bring implications to the constitution of the retention process.

Some of the informal individual strategies related to time scarcity to study were identified by Carvalho, Dias and Silva (2018): (i) maximum attention to classroom class, taking advantage of the time in the institution; (ii) study during weekends; (iii) study right after class. It is important to highlight that those are motivated before the concrete reality of each student, that is, according to the social specificities that involve familiar constitutions and work environment. Therefore, those strategies are put in different ways, weighting the contingency of difficulties and daily challenges imposed by contemporary social development, more unequal each day.

Further developing the issue on the retention strategies of the formal and institutional dimension, Mendes (2020a) differentiates the redistribution policies, defined by its material character that involves the concession of scholarships, aids the implementation of university restaurants and student housing, among others - from the recognition policies, marked by the symbolic aspect, for example the search for a sense of belonging between the student and the institution/course. That is, the process of continuing to study is constructed in the relation with the material and symbolical conditions, subjects idiosyncrasies and broader power relations present in society classes.

From this point on, it is highlighted that the discussions here exposed start from the understanding that the group of students investigated express, privately, the multiple

determinations of a broader phenomenon, that is work and study on a country where the work relations are increasingly precarious (Alves, 2011). It is worth mentioning that only 21,4% of the population between 18 to 24 years old attend higher education courses. Furthermore, only 24,2% of the registration in higher education courses are on public institutions (Brasil, 2019), this level of education being under domain of the private sector. That is, the enrollment in a federal institution in itself represents the overcoming of the access to education social barrier.

Therefore, the produced historical condition of belonging to the popular classes, typical of the night school students and materialized by the obligation to work, impacts directly their (im)possibilities of academical experience. Thus, after achieving a positive result in the selection process for technical or higher education, students need to mobilize retention strategies to achieve the conclusion of the course.

Well, if institutions in question are founded based on education, research and extension and the student retention in its broad sense relates to other experiences other than the strict follow-up of mandatory evening classes, another barrier (of pedagogical character) is identified to the working student, whose time to study is limited to the night time, once outside the classroom "the average hours studied weekly is of 5,4" (Carvalho; Dias; Silva, 2018, p. 127), most of it during the weekends.

Categorically, the above studies point that working and studying are unfavourable activities (Vargas; Paula, 2013), arduous (Comin; Barbosa, 2011), coming from the lack of social security and limited to what the nighttime period can offer (Vargas; Heringer, 2017). Thus, delving deeper into the broader question that guides the Edipet group, as introduced at the beginning of this article, we ask: how these concrete and adverse life conditions manifest and associate itself, conforming student retention when analysing specific social markers? That's the guiding question of this article.

When investigating the different trajectories of young Brazilians for the study, Guimarães, Brito and Comin (2020, p. 478) proposed a typology based on empirical data to interpret possible patterns for said trajectories, the so called "social markers – such as age, sex, racial condition, residency-urban-rural or the socioeconomic characteristics of the housing situation". The authors concluded that there are multiple youths in Brazil, which paths are socially determined by the historical movement of structural inequality. We won't focus in detailing the findings of this research on this article. For now, it is worth mentioning the importance of investigating how the concrete life conditions expressed by specific social markers operate and hinder the reality of working students, producing different levels of inequality that shape the daily production of student retention.

Based on the above considerations, we affirm that the need for an specific retention strategy — formal, informal, material, symbolic or the possibility of its combinations — distinguishes itself according to specificities revealed by the analysed social markers, implicating the elaboration of institutional retention policies.

Thus, this article aims to present and discuss four social markers that constitute the concrete life of these students and, demonstrably (through statistic tests), bring consequences, in different levels of difficulty and in a social contradiction setting, for the conciliation between work and study. They are: the age group of working students, the city of residence (if the same as the institution they study at or in neighbouring cities), the type of job (formal or informal) and the salary range.

For this reason, the methodological aspects of the research, the selection criteria and combination of the referred markers are explained. Later, data of two subsections will be presented and discussed: the first on age and city of residence and the second on the type of

labour ties and salary of the investigated. Finally, findings that as a whole and with no bounds will be assembled, revealing the multiple determinations that involve the phenomenon of student retention constitution between those which make the popular classes/fractions, showing inequality sublevels.

1- Methodological Aspects

The sampling of this research was of 150 students enrolled on technical and higher education night courses, at IF Sudeste MG campus São João del-Rei (SJDR), who present on the days the survey was applied (second semester of 2019) and accepted doing the research. The number of students enrolled on the following technical and higher education night courses (technologist and undergraduate level) of IF Sudeste MG *campus* SJDR was of 475 on the second semester of 2019. The percentage of working students on the institution is of 64,5% (Carvalho; Dias; Silva, 2018). Thus, the number of working students is of 306, 49% of those being interviewed.

This survey was made of 22 (twenty-two) questions, 19 (nineteen) of them objective questions and 3 (three) open ended questions. The central themes behind the questions are: (1) socioeconomic profile, (2) family situation, (3) information about the type of job and income, (3) conciliation process of work and studies, and, finally, (4) employer-employee relations.

After pre-analyse of the data, the variables (1) age group, (2) city of residence, (3) type of labour ties and (4) salary were considered the most productive among the survey themes, as they made possible to explain how specific social markers present different types of challenges to building student retention, based on the findings of Abramo, Venturini, and Corrochano (2020).

In this scope, the bivariate and multivariate analyses were employed, which tests allowed us to identify important associations and correlations that helps us in the understanding of the social conditions of these students, exceeding the boundaries of description.

In short, the analysis process was subdivided in four steps:

- (1) Tabulation of data and use of *software Statistical Package for the Social Sciences* (SPSS);
- (2) Construction of an elaboration model and analysis from the test results (Babbie, 1999);
- (3) Bivariate analysis using the chi-square test (X^2), as described by Fávero and Belfiore, 2017;
- (4) Multivariate analysis through correspondence analysis (CA), also according to Fávero and Belfiore, 2017;

The X^2 test is a bivariate technique that allows to verify, from a numerical value obtained, the existence of association (or not) between two variables. Thus, for the association between the variables to be confirmed, shaping the alternative hypothesis (H_1), the result of the X^2 test must be $P\text{-value} < 0,05$, indicating the dependency relation between them. If the result is $P\text{-value} > 0,05$, it means that the hypothesis is null (H_0), not existing associations, that is, the variables tested are independent between one another (Fávero; Belfiore, 2017).

Following, based on X^2 results which alternative hypotheses were confirmed (H_1), we did the CA, a multivariate technique that allows a graphic view of the association between variables on a perceptual map, in which the values are represented in coordinates (Fávero; Belfiore, 2017). Thus, the graphic proximity or distance between the control variable and the dependent variable ($H_1 — X^2 < 0,05$) indicate a result to be observed.

Aiming to organize the relations between four control variables (Babbie, 1999) and the respective dependent variables from the X2 test (H1), chart 1 and chart 2, presented further on the article, express the elaboration model of this research.

It is emphasised that, in the course of the tests, a great number of H1 was attained and thus, for the limitations of an article, it was necessary to select a sampling for the composition of the CA and production of perceptual maps. As criteria, aligned to the aim and theoretical reference of the research, H1 that indicated results on the importance of work and studies to the interviewed were prioritized, the relationship between time and space to work and study, the academic experience (development of extracurricular activities) and also, the ones about profile, such as color, sex, marital status and dependent relatives.

2- THE PRODUCTION OF WORKING STUDENTS RETENTION FROM THE FOUR SOCIAL MARKERS

Abramo, Venturini and Corrochano (2020) bring up the discussion about the different ways of living and signifying work and studies as parallels in multiple and complex factors. The results of this research indicate that are many the paths and youths according to the placement in the cycle of life and stage of education, other than emphasising that the aspects from family life cannot be ignored on this type of analysis.

Thus, the paths of these subjects are characterized as non-linear, changing and result in diverse experiences, experienced in different levels of difficulty. The authors argue still, that such process is dependent on:

[...] the nature of the work, the relationship with the study area and the condition and working and study hours, other than the time spent and the fatigue caused by the displacement from one activity to the other and from those back their homes, rare are the times when close to each other (Abramo; Venturini; Corrochano, 2020, p. 538).

In this sense, data referring to the four social markers presented in the subsections inform some of the elements that comply this diversity of experiences, conditioning and differentiating the contradictory process of conciliation between work and study, even if the subjects belong to the same social class (or fraction of class). Based on the data base of the survey applied and the results from Abramo, Venturini and Corrochano (2020), we selected two control variables referring to the survey theme *socioeconomic profile* of the interviewed (age range and city of residence) and two related to the theme *type of job and income* (type of labour ties and income), to be discussed bellow.

2.1 AGE RANGE AND CITY OF RESIDENCE OF WORKING STUDENTS

This subsection presents and discusses the associations between the control variable age range and city of residence of working students e the respective H1 obtained on X2 test, according the evaluation model presented on chart 1. In addition, it details and deepens, through perpetual maps, the specificities that involve these first two social markers when related to the sample of dependent variables which compose the CA.

Chart 1: Elaboration model from the control variables age range and city of residence of working students.

Control variable	Relation of variables with confirmed alternative hypothesis (H1)
Age Range	Area of work Type of labour tie Salary Leaving work to study without workload compensation Study at free time Absence at work to participate on academic activities Extracurricular activities What is more important (work or studies) The course enhances your performance at work Dedicating only to study
City of residence (SJDR, campus headquarters or other cities)	Workload Salary Absence at work to participate on academic activities Leaving work to study without workload compensation Spaces used to study What is more important (work or studies) Dedicating only to study

Source: Elaborated by the authors.

The control variables on chart 1 were selected from a primary data analysis, from which was identified relevance to the aim of this research, while social markers assist the understanding of conditions and concrete needs of the production of conciliation between work and studies. Let's take a look each one of them with their dependent relations identified on the X2 test and perceptual maps generated.

a) **Age range**

The variables on the second column of chart 1 have a dependent relation with the control variable age range, meaning that subgroups of younger students differentiate themselves from subgroups of older students when performing the X2 test and the H1 obtained refer to the area and type of labour tie; to the salary; to the concrete possibilities of leaving work to study, without having to compensate the work hours used; to the study at the place of work during free time; to the absence at work to participate in extracurricular activities; to the comparative evaluation in relation to the importance of work and study in their lives; to the impact of the course chosen to the performance at work; and, lastly, to the possibility of quitting their jobs to dedicate themselves to their studies.

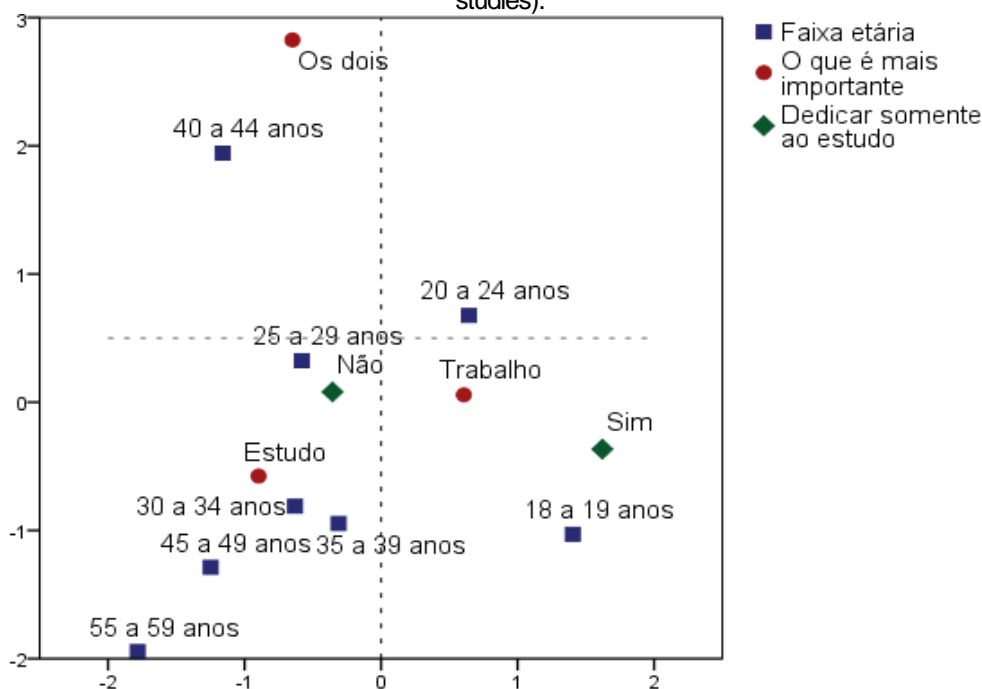
The ages used on the research were based on the Brazilian Institute of Geography and Statistics (IBGE, 2010) standard, distributed from 5 to 5, beginning at 15 and finishing at 50 years old. Thus, the respondents were between 18 and 59 years old (minors were not a part of the sample), as exemplified by the table below:

Table 1: Percentage of participants per age range.

Age range	Percentage	Age range	percentage
18 to 19 years old	10,7%	40 to 44 years old	2,7%
20 to 24 years old	32%	45 to 49 years old	2,7%
25 to 29 years old	28%	50 to 54 years old	0%
30 to 34 years old	14%	55 to 59 years old	0,7%
35 to 39 years old	9,3%	More than 60 years old	0%

Source: Elaborated by the authors.

Figure 1 presents the CA that expresses the proximity between the subgroups by age range, crossing with two dependent variables (H1) selected from chart 1, according to the criteria explained in the methodology: dedicate to the study and what is more important (work or studies).

Figure 1: Perceptual map between age range, dedicating only to study and what is more important (work or studies).

Source: Elaborated by the authors.

Let's take as a reference point the age range (blue square) and the proximity or distance relation from the indicative indexes from the evaluation of what is more important, work or studies (red circle) and the (im)possibility to dedicate only to study (green diamond).

It is observed on figure 1 that the students aged 18 to 19 can dedicate themselves solely to their studies, while older students face greater challenges in doing so. Concerning the comparative assessment on what is more important, work or studying, we can affirm that those whose age is between 18 to 24 care more about work. For the others, the assessment of the interviewed shows that studying is more important than work, even if there is no possibility to dedicate only to the course they are enrolled at.

The data analysis reveals that the younger (18 to 19) stand out as the group which can dedicate themselves only to studying. In face of this, these students represent the target audience to institutional retention policies of the material type (combination to other types is a possibility). In this sense, they would have the potential to achieve the position of solely students.

From another point of view, the absolute majority of students over 20 years old are workers looking for professional qualification, without the option to dedicate exclusively to their studies. As explained by Abramo, Venturini and Corrochano (2020, p. 536):

[...] the social development in higher education is possible, mostly, through the combination between work and study: young people developed the strategy of working to continue studying, as they cannot ask their parents for support in this stage of life or they do not feel comfortable doing such.

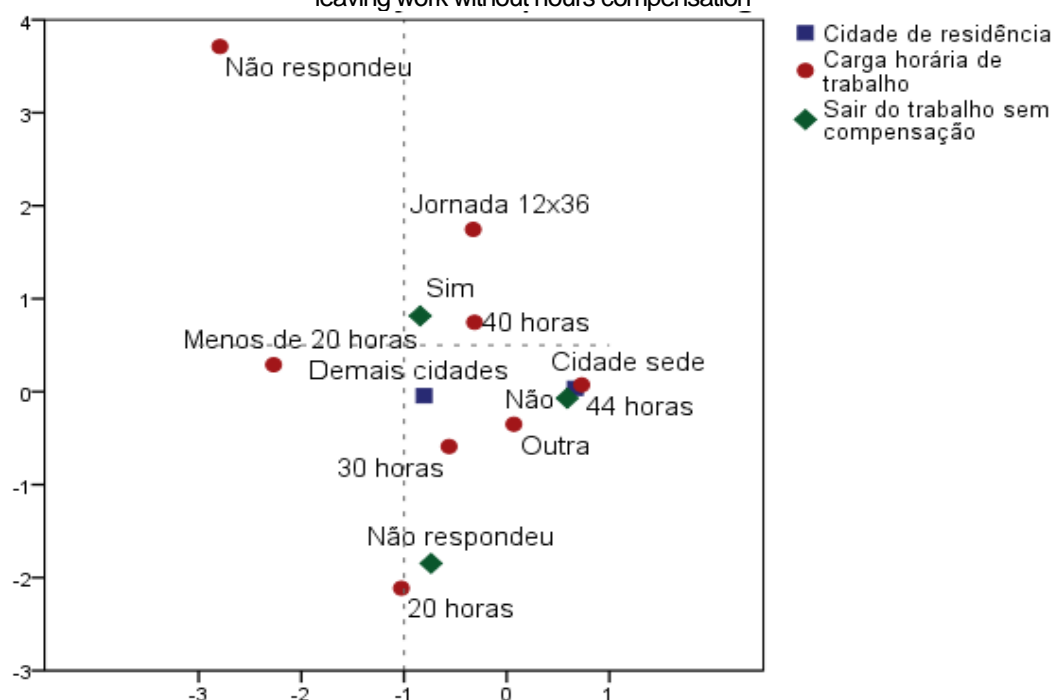
So, in this context, an institutional alternative would be the prioritization of material and symbolical policies (Tavares, 2020b) with compatible criteria to work.

b) City of residence

The variables on the second column of chart 1 have a dependent relation with control variable city of residence, meaning that the students subgroups that reside at the same city as the education institution (SJDR) (54,7%) differentiate themselves from the students that reside in neighbouring cities (45,3%) when the X2 test was done and the H1 obtained were relative to weekly hours worked; salary; the possibility to leave work to study (without the need to compensate hours after); missing work to participate in academic activities; spaces used to study; comparative evaluation about the importance of work and studies in their lives; and, lastly, the possibility to dedicate themselves only to studying.

Figure 2 exposes the CA that translates the proximity relation between the subgroups by type of city of residence (same as the institution or neighbouring cities) on the intersection with two dependent variables (H1) selected from chart 1: weekly hours worked and leaving work to study without the need to compensate hours.

Figure 2: Perceptual map between city of residence (same as university or neighbouring cities), hours worked and leaving work without hours compensation



Source: Elaborated by the authors.

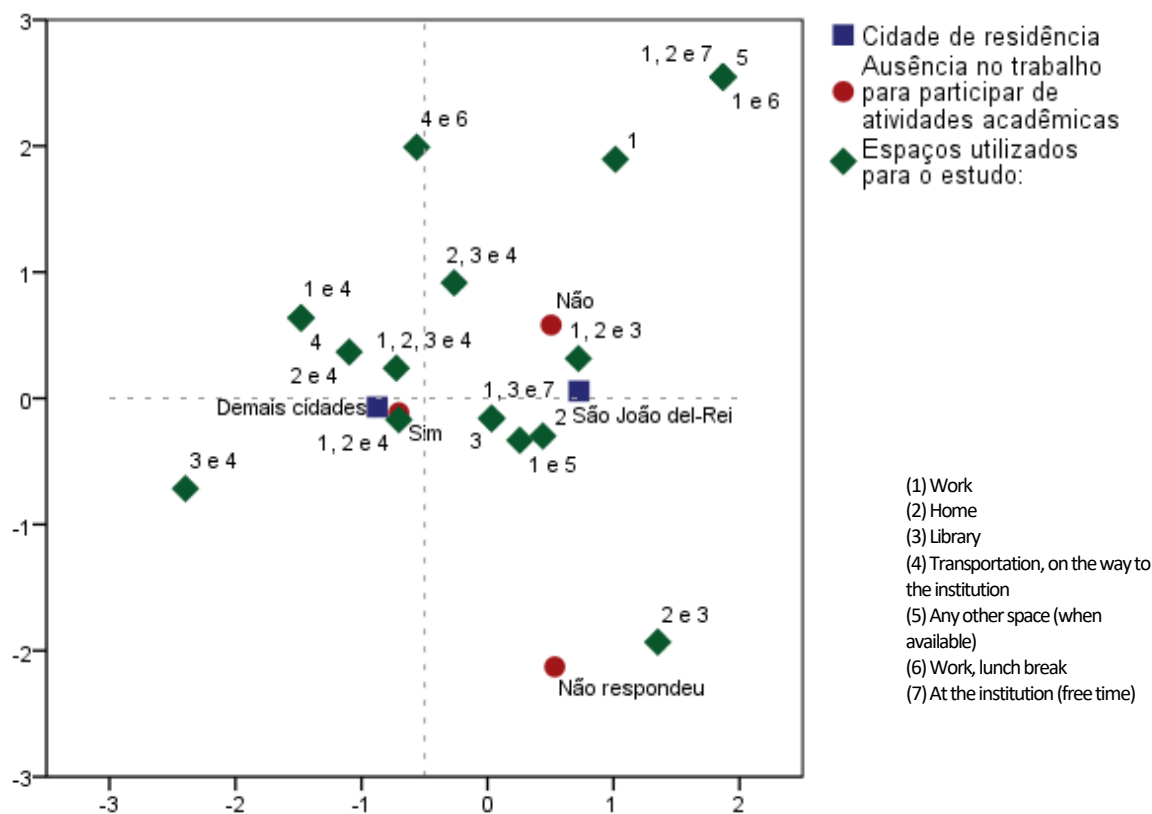
Let's take as a reference point the city students reside in, the educational institution city (SJDR) or neighbouring cities (blue square) and the proximity or distance relation of the indicative icons of weekly hours worked (red circle) and the possibility of leaving work to study without hour compensation (green diamond).

The students residing in the same city as the SJDR campus are more likely to work 40, 44, or 12x36-hour shifts. That means that such subgroup has less time to study during the week, once they have more extensive work hour to fulfil. Other than that, the figure reveals the difficulty in getting employer permission to leave earlier (without having to make up for the hours missed used to study), aiming to participate in academic activities.

Students who reside in neighbouring cities to the institution's, on one hand, have less work hours to fulfil (20 to 30 hours) and are closer to leave work for academic activities without the need to compensate the work hours missed. On the other hand, it is important to consider that these same students need more time to dislocate from their cities to get to their courses.

In addition to interfere in the work relationship, residing or not in the same city as the institution also impacts study activities, as it can be seen on figure 3. The CA in figure 3 expresses the proximity relation of students subgroups by type of city of residence (headquarters or neighbouring cities) and other two dependent variables (H1) selected from chart 1: missing work to participate on extracurricular activities and spaces used to study.

Figure 3: Perceptual map between city of residence, spaces⁶ used to study and missing work to participate on extracurricular activities



Source: Elaborated by the authors.

Let's take as a reference point the type of city students reside in, same as the institution – SJDR or neighbouring cities (blue square) and the proximity or distance relation with the indicative icons of possibility of missing work to participate in academic activities (red circle) and spaces used to study (green diamond)

The students residents of the SDRJ campus headquarters city, get permission to leave work to join in extracurricular activities less frequently compared to the residents of neighbouring cities. We stress that such absence would demand later work hours compensation, contrary to the variable leave work to study without work hours compensation.

On the spaces used to study, the figure demonstrates that work place, home and the campus library are the most used by resident students of SDRJ headquarter city. In contrast, resident students from neighbouring cities use, other than home and work spaces, the intercity public transportation space to study. In addition, this subgroup used the institution's library less frequently.

⁶ Due to the amount of information, the results on spaces used to study were represented by the numbers 1 to 7, followed by a green diamond. Each number corresponds to an specific space, being: (1) work; (2) home; (3) library; (4) on the the way to the institution; (5) free time regardless of location; (6) lunch hour at work; and (7) free time at the institution. When the diamond presents more than one number, it indicates that a part of the sample utilizes more than one space to study.

Residing or not in the same city as the institution is a marker that creates different needs between the working students. Institution headquarters city residents have less time to study and day-time academic activities, since they have extensive work hours to fulfil. This finding is relevant because it deconstructs (at least in part) the false impression that working and studying in the same city would only bring benefits.

Since the ones who reside in neighbouring cities have more time and flexibility to conciliate due to shorter work hours, at the same time that is contradictory, the transportation surely represents an obstacle, according to Abramo, Venturini and Corrochano (2020). In other words, from these associations, it can be inferred that shorter work hours have implications so workers who reside in neighbouring cities can study.

2.2 TYPE OF LABOUR TIES AND SALARY OF WORKING STUDENTS

This subsection concerns to present the associations between control variables and type of labour ties and salary and the respective H1 obtained through X2 test. In addition, it details and deepens through perceptual maps the specificities that involve these two social markers when related to the sampling of dependent variables composing the CA.

Chart 2: Elaboration model from control variables type of labour ties and salary of working students.

Control variable	Relation of variables with confirmed alternative hypothesis (H1)
Type of labour ties	Period Marital status Age range Has dependent relatives Father's level of education Area of work Workload Work shift hours Salary Leaving work to study without later work hours compensation Leaving work to study with later work hours compensation Studying on free time Group study at the company Conciliation between school and work vacation. Missing work to participate on extracurricular activities Participation on extracurricular activities Dedicating only to studying Course contribution to enhancement at work
Salary	Course Color Sex Marital status Age range Has dependent relatives Father's level of education Workload Area of work Type of labour tie Dedicating only to studying What is more important - work or studying Study hours on weekends

Source: Elaborated by the authors.

As on chart 1, control variables present on chart 2 were selected from data pre-analysis, through which relevance was assigned to the goal of this research on social markers. In this sense, among the combination possibilities after the tests, the type of labour ties (formal or informal) and the salary of the investigated (between half and three minimum wages) were evaluated as important characteristics to find conciliation between work and studies. In sequence, the associations and relations from the dependent variables (H1) identified in X2 and perceptual maps produced.

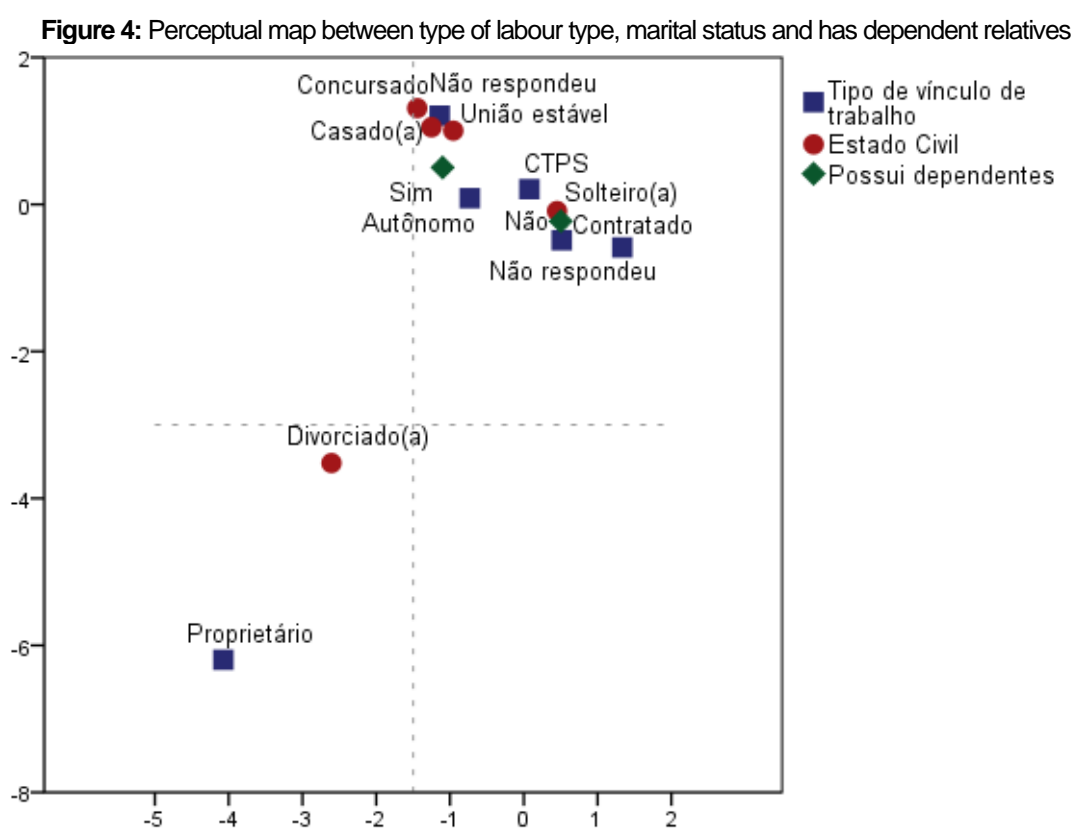
a) **Type of labour ties**

The variables present on the second column of chart 2 have a dependent relation to control variable type of labour ties, meaning that students subgroups that have work on the book and the ones who hold government positions are different from the ones who are self-employed or have another type of temporary work contract. This finding was identified when making X2 tests and obtaining H1 referring to the semester period of the course enrolled; to having relative dependents and the level of education of the father. The subgroups differentiate as well when

it comes to the are they work at, the weekly work hours, work shift hour and salary. The same occurs in terms to the possibilities of leaving work to study with or without work hour compensation; of studying at work free time; of studying in group at the work place; of conciliating school and work vacation and missing work to participate extracurricular activities. At last, such social marker is associated to the (im)possibility to participate in extracurricular activities of the course, to dedicating exclusively to studying and the assessment on the contribution of the course to the enhancement of work performance.

In relation to labour ties, the student sample is composed of 57,3% working on the book and with social security rights (Carteira de Trabalho e Previdência Social, CTPS), 25,3% temporary contracts, 7,4% working for the government, 7,4% self-employed, 1,3% small business owners and 1,3% did not answer.

Bellow, figure 4 illustrates the relations between the type of labour ties and the two selected H1 for the CA: marital status and has dependent relatives.



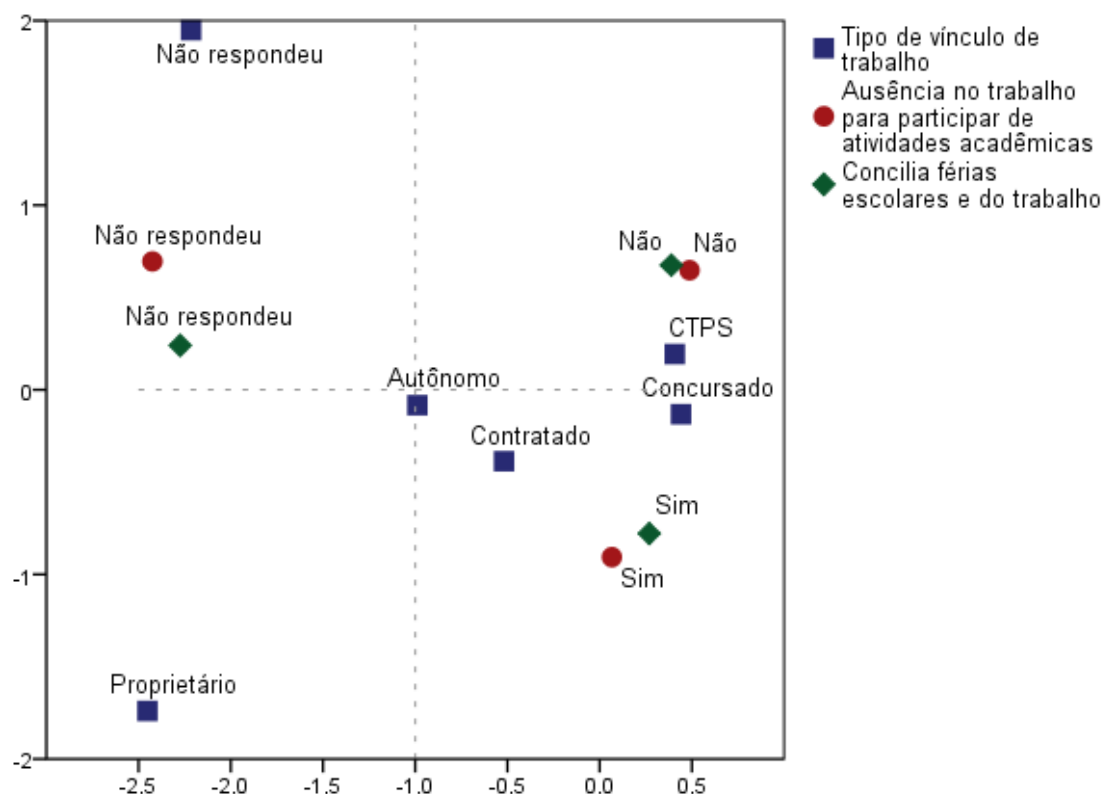
Source: Elaborated by the authors.

As a reference point let's look at the type of labour ties (blue square) and the proximity or distance relationship of the indicative icons on marital status (red circle) a has dependent relatives (green diamond).

Students with CTPS, temporary work contract and self-employed are closer to the the single marital status. Only the self-employed part of the sample are closer to the indicative of having dependent relatives. The government employees are closes to the married and stable union marital status, and also have dependent relatives. In this case, the need to work goes beyond personal sustenance, including family members, differently from other subgroups.

Continuing the analysis of this marker, figure 5 exposes the correspondence analysis between the type of labour ties and two other dependent variables present on chart 2, the possibilities of missing work to participate on academic activities and conciliating work and school vacation.

Figure 5: Perceptual map between type of labour ties, possibility of missing work participate on academic activities and conciliating school and work vacation



Source: Elaborated by the authors.

Let's take as a reference the type of labour tie (blue square) and the proximity or distance relations between the indicative icons of possibility of missing work to participate on academic activities (red circle) and conciliation of vacation (green diamond).

Permission to miss work to participate in extracurricular activities is not a reality for working students. It is slightly more common among workers with contracts. Then it comes the government employees, the self-employed, and the ones with CTPS, which are the majority of the investigated.

It can be noted on figure 5 that students with formal ties (CTPS) do not conciliate their school vacation with their work vacation, being that a reality to government employees and the ones with other type of work contract. Self-employed working students do not have regular vacation.

Thus, it can be affirmed that working students with formal labour ties, CTPS and government employees, have less flexibility to attend other day-time academic activities, other than night classes, making up a condition similar to the institution headquarters residents subgroups. This data corroborates with what Vargas and Paula (2013) say about the lack of social and legal security of working students.

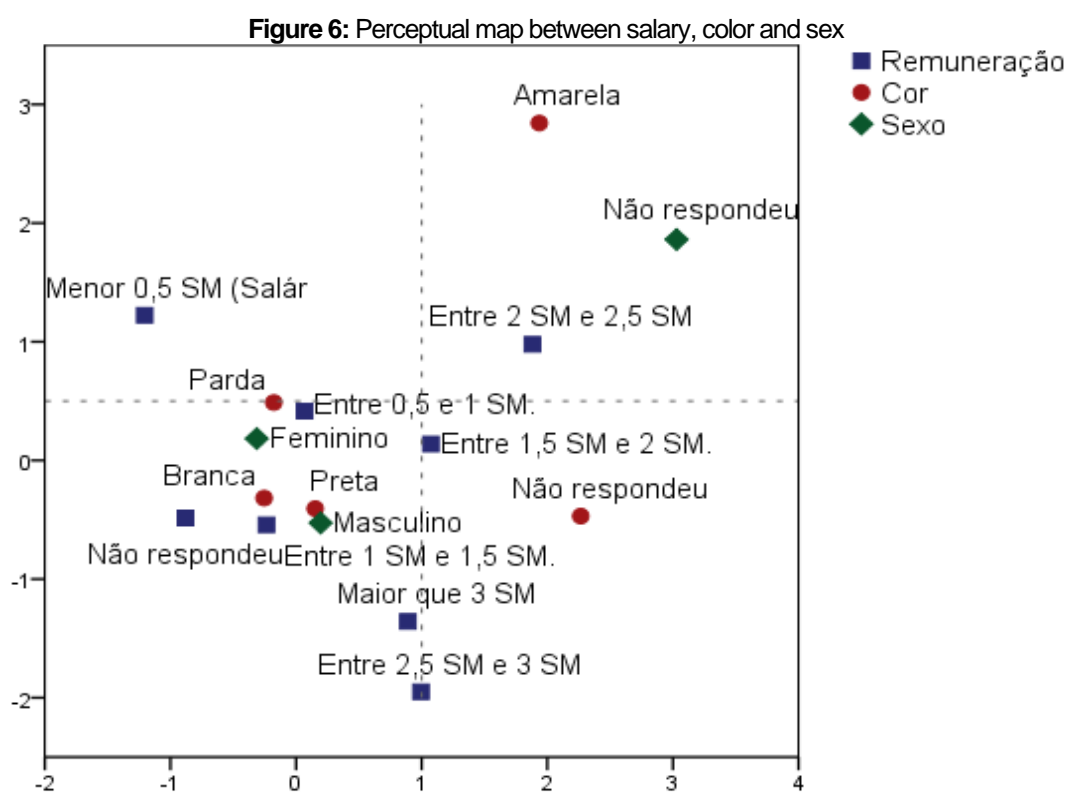
With regard to other types of labour ties that present more possibilities to conciliate academic activities, we cannot forget the different precarious ways subjects with unregulated jobs work with, operating as an obstacle. In any case, this data reveal that regardless of the labour ties, support policies as well as viability to join in extracurricular policies (Vargas e Heringer, 2017; Heringer, 2022) are urgent.

b) Salary

The variables present on the second column of chart 2 have a dependent relation with control variable salary, meaning that students subgroup lower on the pay scale differentiate from those higher on the scale according to the X2 test results and H1 referring to course subjects are enrolled in, color, sex, marital status, age range, having dependent relatives or not and father's level of education. It also differs when it comes to weekly work hours, area of work and type of labour ties. In the academic context, the same happens to the possibility of dedicating only to studying, the assessment of the subjects about what is more important, work or studying and, at last, the hours dedicated to studying during weekends.

General data on salary indicate that 11,3% of the investigated earn up to half minimum wage; 25,3% earn between half and one minimum wage; 44,7% between one and one and a half; 8,7% between one and a half and two; 5,3% between two and two and a half; 2,7% more than three minimum wages and 0,7% did not answer.

In figure 6, the CA that translates the proximity of the students subgroups by salary range and two H1 selected from chart 2: color and sex.



Source: Elaborated by the authors.

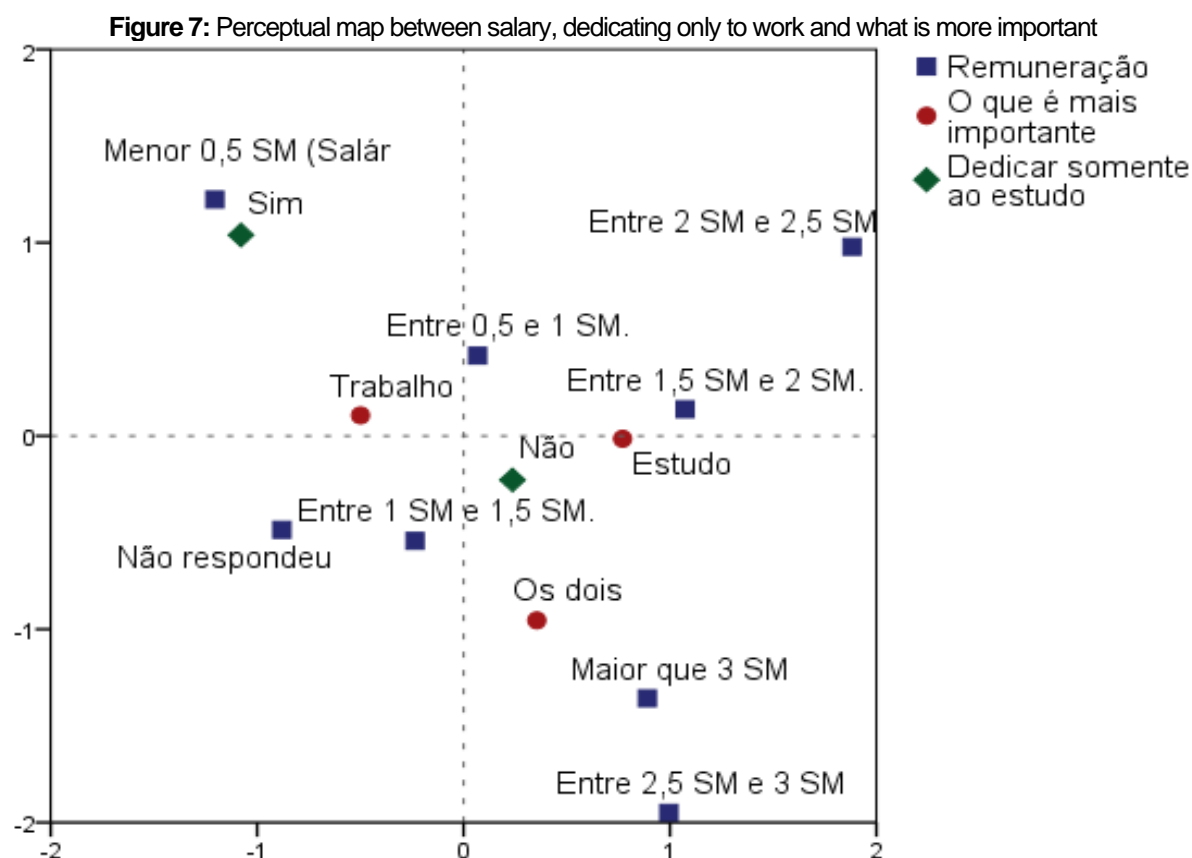
As a reference, let's take a look the pay scale groups present in figure 6 (blue square) and the proximity or distance relations of the indicative icons of color (red circle) and sex (green diamond).

The state of light-skinned working students draws attention, once they are closer to the lower positions on the pay scale (less than half and one and a half minimum wage), while black and white working students are higher on the pay scale. Analysing gender relations, it becomes clear that higher pay is positioned closer to men, women being further from it.

Confirming the discussion of Guimarães, Brito and Comin (2020) on the growth of inequality, figure 6 expresses that most vulnerable condition of light-skinned and female students. This

data ratifies the importance of student retention policies elaboration, material and symbolical to this public, converging with Mendes (2020b)

In addition to the aspects presented above, the variable salary implicates the relation with studying. In figure 7, the CA with proximity relation to students subgroups by salary range and other two H1 selected from chart 2: the possibility to dedicate only to studying and the assessment of what is more important - work or studying.



Source: Elaborated by the authors.

As reference, let's observe the salary range (blue square) and the proximity or distance relation of the indicative icons of what is more important — work or studies (red circle) and the assessment on the possibility to dedicate only to studying (green diamond).

Students who earn less than half, between half and one and a half minimum wages consider work more important. As a hypothesis, this tendency is linked to need for survival imposed by concrete life conditions and provided by work.

In contrast, those with higher salaries consider studying more important. This data reveals the symbolical and affirmative aspect about how important the professional qualification process is to these subjects, even if the salary gap between graduated and non-graduates is not that large anymore, "consequence of the growth of lower salaries" (Comin e Barbosa, 2011, p. 95).

Finally, the possibility to dedicate exclusively to studying is an alternative to the subjects who earn less than half minimum wage, showing that material student assistance policies could make it possible to this subgroups to be only students. Other students subgroups are closes to the green diamond, indicating the opposite of this affirmation.

Final Considerations

The identified associations in this study allow us to specify and deepen, to each social marker analysed, how concrete life conditions, historically built, operate in different ways in the daily construction of working students retention, even if they are a part of the same social class/fraction and attend the same educational institution.

The results show that considering age range, city of residence, type of labour ties and salary range, specific subgroups of students are subject to particular circumstances, which creates different needs before the contradictory process of studying and working at the same time. That is, even if they belong to the same social class, are equally working students, producing student retention will demand different strategies and institutional policies.

From the above, we highlight that, even though far from equality of rights, established constitutionally and for which we fight for, creating this type of knowledge complies with its social, ethical and political function of deconstructing the simplistic and pseudo-concrete explanations that turn invisible social antagonisms and the relevance of public policies, rooted in meritocracy and individualism as the only explanation for student retention. At the same time, we hope these results, from an educational institutional perspective, can contribute to the elaboration and enhancement of retention policies on a broader sense, contrary to superficiality and oversimplification. And what are such policies that converge towards a greater goal, striving to achieve the necessary transformations possible in the current historical context, building a just social formation, in which dedicating exclusively to studying is the rule, not the exception.

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