



THE PRODUCTION OF THE FEMININE IN THE PROFESSIONAL AND **TECHNOLOGICAL EDUCATION ENVIRONMENT**

A PRODUÇÃO DO FEMININO NO AMBIENTE DA EDUCAÇÃO PROFISSIONAL E TECNOLÓGICA

LA PRODUCCIÓN DE LO FEMENINO EN EL ÁMBITO DE LA EDUCACIÓN PROFESIONAL Y TECNOLÓGICA



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ABSTRACT: This article addresses the production of the feminine in the Professional and Technological Education (EPT) environment, analyzing the construction of femininity in a space historically occupied by the masculine. This is a documentary and empirical research with a qualitative bias, whose course was based on the exploration of historical data that present facts of the presence, work, and education of women in the EPT, compared to current empirical data (2013 edition), extracted of the *Nilo Peçanha* Platform (PNP). The research results show that women, especially the poorest and most vulnerable, are, within the structure of professional training, still today, focused on areas of care, more specifically on the Educational and Social Development Axis. The greatest concentration of women is in the Initial and Continued Training Courses (FIC), which can be explained by the fact that they include women responsible for the family, beneficiaries of Federal Income Transfer Programs, and workers beneficiaries of the *Seguro-Desemprego* Program.

KEYWORDS: Education. Women. Education for Work.

RESUMO: O presente artigo aborda a produção do feminino no ambiente da Educação Profissional e Tecnológica (EPT), analisando a construção da feminilidade em um espaço ocupado historicamente pelo masculino. Trata-se de uma pesquisa documental e empírica, de viés qualitativo, cujo percurso se deu pela exploração de dados históricos que apresentam fatos da presença, do trabalho e da educação de mulheres na EPT, comparados a dados empíricos atuais (edição 2013), extraídos da Plataforma Nilo Peçanha (PNP). Os resultados da pesquisa evidenciam que as mulheres, sobretudo as mais pobres, vulneráveis, estão, dentro da estrutura de formação profissional, ainda nos dias atuais, voltadas para as áreas do cuidado, mais especificamente no Eixo Desenvolvimento Educacional e Social. A maior concentração feminina é nos Cursos de Formação Inicial e Continuada (FIC), o que pode ser justificado por abarcar mulheres responsáveis pela família, beneficiárias de Programas Federais de Transferência de Renda, e trabalhadores beneficiários do Programa Seguro-Desemprego.

PALAVRAS-CHAVE: Educação. Mulheres. Formação para o Trabalho.

RESUMEN: Este artículo aborda la producción de lo femenino en el ámbito de la Educación Profesional y Tecnológica (EPT), analizando la construcción de la feminidad en un espacio históricamente ocupado por lo masculino. Se trata de una investigación documental y empírica, con sesgo cualitativo, cuyo recorrido se basó en la exploración de datos históricos que presentan hechos de la presencia, trabajo y educación de las mujeres en el EPT, comparados con datos empíricos actuales (edición 2013), extraídos de la Plataforma Nilo Peçanha (PNP). Los resultados de la investigación muestran que las mujeres, especialmente las más pobres, más vulnerables, están dentro de la estructura de formación profesional, aún hoy, enfocadas en áreas de cuidado, más específicamente en el Eje Educativo y de Desarrollo Social. La mayor concentración de mujeres se encuentra en los Cursos de Formación Inicial y Continua (FIC), lo que se explica porque incluyen a mujeres responsables de la familia, beneficiarias de los Programas Federales de Transferencia de Ingresos y trabajadoras beneficiarias del Programa Seguro-Desemprego.

PALABRAS CLAVE: Educación. Mujer. Formación para el Trabajo

Introduction

This article addresses the production of femininity in the context of Professional and Technological Education (PTE). In this context, the objective is to analyze the construction of femininity in a space historically occupied by masculinity, such as vocational schools. This is a qualitative research whose path was guided by the exploration of historical data, grounded in specific literature presenting facts about women's presence, work, and education. This literature was selected from titles available on the platforms of various publishers (including university publishers). The criteria for selection/adoption were based on the choice of titles and works that involved themes of education/history of education/female education and work, compared to current empirical data (2013 edition) extracted from the *Nilo Peçanha* Platform (PNP).

This article is divided into two parts. In the first part, titled "*Education in History and the History of Education – where are the women?*," we provide a broad overview of the history of education and the presence/absence of women in Brazil over time, especially in vocational training. In the second part, "*Biases or advances in the 21st century? That is the question...*," we present the PNP data and, based on them, make gender-specific cuts.

From the active enrollment data for the year 2022 (PNP) of the Federal Network of Professional, Scientific, and Technological Education (EPCT), categorized by gender, we identified a higher incidence of women in Professional Qualification, Initial and Continuing Education Courses (FIC) that are part of the National Program for Access to Technical Education and Employment (PRONATEC). These students benefit from the *Bolsa Formação* program. In addition to those covered by Federal Income Transfer Programs, the beneficiaries include women responsible for families benefiting from the mentioned programs and workers receiving unemployment insurance.

In the final considerations, we retrieve, in the historical context of PTE, the presence of women, up to the present day, in training for care in areas linked to domestic work.

Education in History and the History of Education – Where Are Women?

The history of education in Brazil is grounded in a social, political, cultural, and economic bias influenced by the capitalist mode of production and reproduction. Based on this premise, the thesis endorsed that the survival of this education has directly depended on and continues to depend on maintaining social and economic order. As the mode of human existence production changes, that is, how humans work, the ways in which people exist also change. Throughout history, different modes of human existence production can be detected, including the communal mode, primitive communism; the Asian mode of production; the ancient or slave mode of production; the feudal mode of production, based on the labor of the serf cultivating the land, the private property of the lord; and the capitalist mode of production, in which workers produce using means of production that are not their own. These different modes of production successively revolutionize the way people exist. The formation of individuals throughout history brings the determination of how they produce their existence (Saviani, 2003, p. 133, our translation).

The author adds that access to school throughout history was very limited, restricted to "[...] small portions of humanity [...] the very etymological origin of the word school – linked to leisure – is related to [...] social conditions of human existence production" (Saviani, 2003, p. 133, our translation). The school emerges in the narrative as a space destined for a restricted group of individuals, chosen based on their social origin and with objectives determined by their function in society. For the elite, the preservation of this social class is sought; for workers, access to the world of work is provided, with better conditions to make use of their productive skills.

In this perspective, what is indirectly pointed out is the devaluation of work detached from leisure and manual labor, which carries the mark of social marginalization. The distinction between manual labor (slaves, serfs, women, and children) and intellectual labor (privileged classes) hierarchizes the formulation of ideas in society: dominators and dominated.

For this reason, in the intrinsic proximity between education and work, the former has taken on contours delineated in relation to the latter's characteristics. Work has taken on various forms in Brazilian society: free, enslaved, employed, etc. Fausto, in presenting and explaining the history of colonial Brazil, warns that:

Slavery was a national institution. It permeated the entire society, conditioning its way of acting and thinking. The desire to enslave people and the effort to obtain them ranged from the ruling class to the humble white artisans in the cities. There were sugar plantation owners and mine proprietors with hundreds of slaves, small farmers with two or three, and householders in the cities with only one enslaved person. Prejudice against Black individuals persisted beyond the end of slavery and has been modified to reach our days. At least until the mass introduction of European workers in the central-southern region of Brazil, manual labor was socially scorned as "something for Black people" (Fausto, 2013, p. 69, our translation).

It is this notion of manual labor that transferred to enslaved Black individuals the

solution to the numerous tasks and demands that, in the colonizers' view, the discovered territory required. For a long time, this was the profitable form found by the colonizer for the economy in the colony. The enslaved individuals and, consequently, the trade generated around them provided Brazil's "manual" workforce. This process further instigated the distinction between manual and intellectual labor. More deleteriously, it added the racial mark originating from the Brazilian colonization process to this distinction.

Cunha (2000) analyzes industrial manufacturing education, which, according to him, is aimed at training the workforce directly linked to production. He highlights the limited intellectual production in the area, arguing that historians of Brazilian education are primarily concerned with what is intended for political elites and intellectual work, while manual labor is put on the back burner.

Since colonial times, when a large-scale manufacturing enterprise, such as naval arsenals, for example, required an unavailable contingent of workers, the State coerced free men to become artisans. It did so, not with any free men, but with those who were socially and politically unable to resist. As in the formation of military and naval garrisons, the impoverished were arrested. Similar procedures were adopted for minors destined for apprenticeship in trades: orphans, abandoned, and the destitute, whom judges and Holy Houses of Mercy referred to military and naval arsenals, where they were interned and put to work as artisans until, after a certain number of years, they could freely choose where, how, and for whom to work (Cunha, 2000, p. 91, our translation).

In 1809, the College of Factories was established in the city of Rio de Janeiro. It was a professional education institution that aimed to teach various trades in addition to housing orphans from *Casa Pia de Lisboa*³. The establishment was considered a reference for others that were subsequently installed, using the teaching of trades, in general, outside the establishment (on the docks, in hospitals, in military or naval arsenals), in addition to learning the basics (Cunha, 2000).

Up until this moment in history, women were not even mentioned. Cunha (2000) highlights the existence of Houses of Artisan Students, establishments that adopted the military model, including hierarchical and disciplinary standards. Later, in 1875, the creation of the

³ *Casa Pia de Lisboa* is an institution that "[...] welcomed orphaned minors [...] educated, trained as artisans and urban workers and then [sent] to occupations in workshops, commercial houses, or factories" (Matta, 1996, p. 6, our translation). "With the migration of the royal family to Brazil, this interest increased. Dom João organized, in Rio de Janeiro, in 1809, the *Colégio das Fábricas*, aimed at training artisans and apprentices coming from Portugal and a company of artisans for the army, with military organization, where master artisans held ranks such as sergeants, non-commissioned officers, and corporals. The Prince was clear about the need for schools that facilitated the learning of trades and the emergence of factories" (Matta, 1996, p. 41-42, our translation).

Asylum for Deprived Boys in Rio de Janeiro was established. It was intended for children aged 6 to 12 found in a state of poverty (without clothes and in a state of beggary). These students received primary instruction and learned an occupation: "[...] typography, bookbinding, tailoring, carpentry, joinery, turning, carving, tinsmithing, blacksmithing, locksmithing, leatherworking, or shoemaking" (Cunha, 2000, p. 91, our translation). After completing vocational training, the student stayed an additional three years to work in the workshops, paying for their apprenticeship and saving money, which was given to them at the end of the period.

Only in 1827, very timidly, through the General Education Law of October 5, a proposal for education aimed at women emerged, but it was restricted only to elementary female schools. It stipulated that girls should learn domestic activities while boys would learn geometry, with mathematical operations being forbidden to girls. Thus, the General Education Law assigned the role of mother to women and attributed to them the natural function of educators.

[...] Women's education only managed to break the last legal barriers in 1971 with the Law of Guidelines and Bases of Education (LDB), which granted equivalence between secondary courses. From then on, the secondary normal course, a branch intensely attended by women since the late 19th century, was no longer discriminated against for being "just" a vocational course but also allowed access to higher education (Rosemberg, 2013, p. 334, our translation).

The author points out the existence of numerous constraints on formal and public education for women:

[...] sexual segregation [...] forbidding mixed education; [...] education [...] should be more restricted than that of boys [...] due to their fragile health, limited intelligence, and focus on their 'mission' as mothers; the impediment to the continuation of studies [...] (Rosemberg, 2013, p. 334, our translation).

The overcoming of these obstacles occurs slowly in Brazilian education.

When they regulated with the first public education law the teaching of "pedagogies" – incidentally, the only level to which girls would have access – they stated that teachers of these establishments would be appointed as "those ladies who, by their honesty, prudence, and knowledge, prove themselves worthy of such teaching, including sewing and embroidery." It is worth noting here that, although the law stipulated equal salaries, the curriculum differentiation ended up representing a salary differentiation, as the inclusion of geometry in the education of boys implied another level of remuneration in the future – which would only be enjoyed by [male] teachers (Louro, 2022, p. 444, our translation).

Louro (2022) based on the legal text, outlines the conditions and content by which women would be educated in school, associating them with respectable ladies who possessed skills in domestic duties. As described by Rosemberg (2013), such individuals were considered beings of limited intelligence, with fragile health, and whose functions were restricted to procreation and filial education.

[f]emale schools dedicated intense and repeated hours to training their students' manual skills, producing young women "accomplished" in the most delicate and complex needlework or painting. The marks of schooling were thus inscribed on the subjects' bodies. At times, this was done in such dense and particular ways that it allowed — from minimal traces, small indications, a way of walking or talking — to almost confidently say that a certain young woman was a trainee primary, that a boy attended military school, or that another studied in a seminary. [...] The school continues to imprint its "distinctive mark" on individuals in new forms. Through multiple and discreet mechanisms, bodies and minds are schooled and distinguished (Louro, 1997, p. 62, our translation).

It is evident that, for a long time, white women of the elite could, in some way, have some form of formal education. However, the intention is not professionalization per se, but preparation for domestic skills, the role of mother and wife. To illustrate the full vigor of patriarchy, including contemporary times, the unusual phrase promoted by *Revista Veja* in the online article published on April 18, 2016, titled "*Marcela Temer: bela, recatada e 'do lar'* (Marcela Temer: beautiful, modest, and 'homemaker''') is cited (Linhares, 2016). The focus at the time was to describe the then-wife of the Vice President of Brazil, Michel Temer. The emphasis was on portraying her as someone who occupies a discrete and, one might say, subdued role, in the shadow of her husband, beautiful to be showcased alongside the virile male, as in a showcase, and capable of organizing and managing everything that demands caregiving (home, husband, family, house, etc.).

And what about non-white women? Louro points out:

"[...] for the population of African origin, slavery meant a denial of access to any form of schooling. The education of black children occurred in the violence of labor and the forms of struggle for survival. The successive laws that slowly loosened the bonds of slavery did not bring, as a direct or immediate consequence, educational opportunities for blacks. Initiatives proposing the acceptance of black children in schools or isolated classes were recorded as exceptional and philanthropic in nature [...] something similar happened with indigenous descendants: their education was linked to the practices of their original groups, and although they were the target of some religious action, their presence was nevertheless prohibited in public schools" (Louro, 2022, p. 445, our translation).

Non-white women were not even mentioned, as the author aptly notes. For the population of African origin and indigenous peoples, everything, even their existence, was denied. And if we think throughout history, little has changed.

Through Decree No. 2118-b, dated September 28, 1911, from the state of São Paulo, "[...] two institutes of professional education are created, one for males [...] and another for females, under the name *'Escola Profissional Feminina'* (Female Professional School) [...]" [...]" (São Paulo, 1911). This is the first indication of spaces for professional training for women. However, as expected, the first article states that "[t]he Professional Schools of the Capital are establishments intended for the teaching of arts and crafts to male students, and of domestic economy and manual skills to female students" (São Paulo, 1911, our translation). And the determinations continue:

Article 4 The Female Professional School comprises the following Sections: a) drawing; b) typewriting; c) dressmaking and tailoring for ladies or children; d) dressmaking for white clothes; e) embroidery and lacework; f) making flowers and decorating hats; g) culinary art in all its branches and domestic economy (São Paulo, 1911, our translation).

Despite the creation of this space for the professional training of women, as seen in the above legal document, Article 4 emphatically reflects what patriarchal thinking projected for them. A space to strengthen the domestic role and connection with the home assigned to women.

In the opinion of many, there was no need to fill women's minds with information or knowledge since their primary destiny – as wives and mothers – would demand a solid moral foundation and good principles above all. She needed to be, first and foremost, the virtuous mother, the pillar of the home, the educator of future generations. Therefore, women's education would be directed beyond themselves, as its justification did not lie in their desires or needs but in their social function as educators of children or, in republican language, as formers of future citizens (Louro, 2022, p. 446-447, our translation).

From 1920, various educational reforms were implemented that reached several Brazilian states (*Bahia – Anísio Teixeira; Minas Gerais – Francisco Campos/Mário Casassanta; Distrito Federal – Fernando de Azevedo; São Paulo – Sampaio Dória*) (Novelli, 2004). Faced with this reformist movement, the state of São Paulo, like the others, embraced a "[...] set of new principles considered modern, which will organize and alter education [...] and confirm the implementation of European and American pedagogical theories, called progressive, according to Brazilian pedagogical thought of the time" (Novelli, 2004, n.p., our translation).

From the landmark Sampaio Dória reform (1920), there was a gradual increase in the supply and variety of professional training courses for women while still focusing on reproductive work (Domestic Education, Dietetics for Housewives, Assistant in Nutrition, among others). What is evident is that women's professional training schools, from their inception, were characterized by the sexual and social division of labor.

As Oliveira (1994, p. 60) cautions, the *Escola Profissional Feminina* "[...] was conceived to serve the clientele consisting of girls from working-class families, over 12 years old and holders of a diploma from the group school or with equivalent instruction." The author adds that these establishments aim to prepare working-class women for occupations related to domestic activities, and in the "[...] eagerness to initiate their intervention in the process of training submissive, productive workers imbued with a certain type of patriotism" (Oliveira, 1994, p. 59, our translation).

Taking a leap in history to understand the biases and perhaps advances of women in Professional Education regarding access, enrollment, and retention in these courses in the 21st century, data from the PNP (*Nilo Peçanha* Platform) for the 2023 edition, with the base year 2022, updated on June 15, 2023, are mentioned in the following section.

Biases or Advances in the 21st Century? That is the Question...

As mentioned in the introduction, the research addressed in this article is documentary and empirical, with a qualitative bias. The process involved exploring historical data through specific literature that presents facts/presence of women's work and education in Professional and Technological Education (EPT).

Documentary research is conducted based on contemporary or retrospective documents considered scientifically authentic (non-fraudulent). It has been widely used in the social sciences and historical research to describe/compare social facts, establishing their characteristics or trends [...] (Pádua, 2004, p.68, our translation).

Literature selection was based on titles available on various platforms, including university publishers. The criteria for selection/adoption were established by choosing works and studies addressing topics related to education, the history of education, and women's education and work. With this literature, it was possible to compare current empirical data (2023 edition) extracted from the PNP.

The institutions belonging to the Federal Network of Professional, Scientific, and Technological Education (EPCT), whose indicators are found in the PNP, are:

[...] Federal Institutes of Education, Science, and Technology - Federal Institutes; Federal Technological University of Paraná - UTFPR; Federal Centers for Technological Education Celso Suckow da Fonseca - CEFET-RJ and Minas Gerais - CEFET-MG; Technical Schools Linked to Federal Universities; and *Colégio Pedro II* (Brasil, 2021, our translation).

What is PNP?

[...] is a virtual environment for collecting, validating, and disseminating the official statistics of the Federal Network of Professional, Scientific, and Technological Education (Federal Network). Its goal is to gather data related to the faculty, students, technical-administrative staff, and financial expenses of Federal Network units for the calculation of management indicators monitored by the Professional and Technological Education Secretariat of the Ministry of Education (SETEC/MEC) (Brasil, 2023a, our translation).

Based on the data from the 2023 edition, a table was created presenting enrollments categorized by course type (TABLE 1) and organized by gender to identify the predominance of female enrollments. The Federal EPCT Network reported a total of 1,513,075 active enrollments in 2022. Of these, 172 do not have gender identification. Thus, the total reported in the PNP was 1,512,903 active enrollments with gender identification.

Course Type	Brazil					
	Male	Female	Not Specified	Total		
Bachelors	88.656	52.419	10	141.085		
Licentiate	47.792	59.049	9	106.850		
Technology degree course	57.208	42.504	5	99.717		
Doctorate	466	479		945		
Master's	1.504	1.424	3	2.931		
Professional Masters	3.339	3.432		6.771		

 Table 1 - Total Enrollments by Course Type and Gender - 2022

Lato Sensu Specialization	22.580	32.043	6	54.629
Technical Specialization	188	205		393
Professional Qualification (FIC)	207.135	352.601	44	559.780
Technical	256.728	268.795	83	525.606
High School	3.045	3.635	11	6.691
Elementary School I	1.306	1.251	1	2.558
Elementary School II	2.499	2.382		4.881
Early Childhood Education	125	113		238
Total	692.571	820.332	172	1.513.075

Source: Compiled by the authors, based on PNP data (Brasil, 2023a).

As highlighted in Table 1, Professional Qualification Courses (FIC) have the highest number of female students (207,135 - male - 37.1%; 352,601 - female - 62.9%). Given this proportion, where female enrollment is significantly higher than male enrollment, an effort was made to understand what Professional Qualification Courses (FIC) are and their purpose and then identify the areas with the highest enrollment.

Initial and continuing education (FIC) or professional qualification programs are organized to prepare individuals for productive and social life, promoting the insertion and reinsertion of young people and workers into the workforce. This includes vocational training courses, professional development, and updates for workers at all levels of education. It encompasses special courses freely offered to the community and professional qualification courses integrated into the educational system's formative pathways (Brasil, 2023b, our translation).

Interestingly, these courses are part of the PRONATEC, and students benefit from *Bolsa Formação* (Brasil, 2015). Article eight of Ordinance No. 817/2015⁴ states:

Bolsa-Formação will prioritize:

I - Public high school students, including those in Youth and Adult Education (EJA); II - Workers; III - Beneficiaries, both primary and dependents, of federal income transfer programs, among others, who meet criteria outlined in the *Plano Brasil sem Miséria* [...] IV - Per the regulations, students who have completed high school in public schools or private institutions are full scholarship holders. § 10 The participation of people with disabilities, indigenous peoples, *quilombola* communities, adolescents and young people under socio-educational measures, **women responsible for the family unit benefiting from federal income transfer programs**, and workers benefiting

⁴ This concerns the provision of the *Bolsa-Formação* within the scope of the *Programa Nacional de Acesso ao Ensino Técnico e Emprego* (National Program for Access to Technical Education and Employment, PRONATEC), as provided for in Law No. 12,513, dated October 26, 2011, and establishes other measures. Available at: http://novoscaminhos.mec.gov.br/images/arquivos/portaria_mec_817_2015_bf_alterada_por_1460_2016_1163_2018.pdf. Accessed in: 11 Aug. 2023.

from the Unemployment Insurance Program, considered repeat beneficiaries, will be encouraged, in accordance with Decree No. 7,721, of April 16, 2012 [...] (Brasil, 2015, emphasis added, our translation).

In this analysis, the focus is on

[...] beneficiaries who are primary and dependents of federal income transfer programs [and] women responsible for the family unit, beneficiaries of federal income transfer programs, and workers beneficiaries of the Unemployment Insurance Program (Brasil, 2015, our translation).

Program indicators suggest that they are intended for a predominantly female audience, which has over time been relegated to underemployment and is often responsible, in a "solo" manner, for their families in all aspects, from maintaining food to social formation.

Analyzing Table 2, which presents the technological axes to which the enrollments belong, the Educational and Social Development stands out. Of the 429,964 enrollments, excluding the 34 without gender identification, there are 429,930, distributed among 155,298 (36.1%) male enrollments and 274,632 (63.1%) female enrollments. This axis, in terms of enrollments, represents 28.42% of the entire offering. There are 14 axes, and only this one has a percentage higher than 20%.

	Not				
Technological Axis	Male	Female	Informed	Brazil	%
Environment and Health	37.221	80.820	16	118.057	7,80%
Control of Industrial Processes	123.224	40.261	10	163.495	10,81%
Educational and Social Development	155.298	274.632	34	429.964	28,42%
Management and Business	76.285	131.943	22	208.250	13,76%
Information and Communication	135.948	82.800	44	218.792	14,46%
Infrastructure	35.686	31.900	5	67.591	4,47%
Military	109	63	-	172	0,01%
Food Production	13.609	31.130	5	44.744	2,96%
Cultural Production and Design	9.464	15.789	2	25.255	1,67%
Industrial Production	13.233	20.840	2	34.075	2,25%
Propaedeutic	6.975	7.381	12	14.368	0,95%
Natural Resources	63.613	67.354	18	130.985	8,66%
Security	9.330	11.145	2	20.477	1,35%
Tourism, Hospitality, and Leisure	12.576	24.274	-	36.850	2,44%
Totals	692.571	820.332	172	1.513.075	-

Table 2 - Distribution of enrollments by technological axis and gender

Source: Compiled by the authors, based on PNP data (Brasil, 2023a).

Table 3 shows the sub-axes within the Educational and Social Development Axis. Among the FIC courses offered are: School Food Agent, School Secretary Assistant, School Assistant, Library Assistant, and Pedagogical Assistant (Brasil, 2023a). Another important fact the PNP reveals is that 90% of FIC courses with female enrollment are offered online. This data point deserves a broader discussion regarding quality and learning, among other factors. Given its importance, it requires a separate study. However, it is an indicator that cannot be overlooked.

 Table 3 - FIC Courses - Educational and Social Development Axis - 2022 distribution by sub-axis and gender

			Not	
Technological Sub-Axis	Male	Female	Informed	Total
Scientific Development	2.766	5.796		8.562
Educational Development	77.715	126.336	15	204.066
Educational and Social Development	71.203	129.413	15	200.631
Social Development	3.614	13.087	4	16.705
Totals	155.298	274.632	34	429.964

Source: Compiled by the authors, based on PNP data (Brasil, 2023a)

With the data presented so far, the results indicate that women, especially the poorest and most vulnerable, are still, to this day, directed towards care-related areas within the professional training structure. In this ideology, strongly constructed by the patriarchal system throughout history, that women should be tied to care issues, it is evident that, in some way, their legitimation occurs

[...] with the cooperation of women, acquired through indoctrination, [...] the denial of women about their history, the division of women between respectable and non-respectable, coercion, discrimination in access to economic resources and political power, and the reward of class privileges given to conforming women. Women participate in the process of their subordination because they internalize the idea of their inferiority (Aronovich, 2019, p. 25, our translation).

These responsibilities are associated with domestic labor. From the capitalist perspective, domestic work is not recognized as such, as it is not considered productive and, consequently, is not remunerated. However, this activity plays a fundamental role in capitalism by providing the workforce for the rear of productive work, encompassing home care, effective consumption through children as future labor, and attention to husbands, components of the productive force, by serving them physically, emotionally, and sexually, promoting well-being

and ensuring capitalist production (Federici, 2019).

Final considerations

In this article, we aim to examine the production of the feminine within the Technical and Vocational Education (EPT) environment, analyzing the construction of femininity in a space historically occupied by the masculine. Throughout the historical research, we observed that the educational space, focused on vocational training, was not conceived for female occupation. The school space, linked to leisure and recreation, constituted a place for the privileged, those with access to intellectual work, and a public restricted to the elite. This universe did not encompass enslaved individuals, serfs, women, and children, the latter being heirs to manual labor.

The Factory Schools and Artisan Students' Houses emerged to teach trades to poor, orphaned boys in a state of begging, adopting an education model inspired by military ideology (hierarchy and discipline) to "fit" them into manual labor and a subservient position to capital. Women, until then, were not even mentioned. This was because only domestic work, the role of procreation, and the natural place of educator and caregiver were attributed to them.

Only in the year 1827, with the General Education Law, were women "encamped" in education. However, what existed was a space restricted to basic literacy and learning domestic activities. Education is marked by sexual segregation, limited content (focused only on the domestic), and a terminal character. The intention was not professionalization but the preparation of women for domestic skills and the roles of mother and wife (Linhares, 2016). Even then, the presence of any education intention directed at women was limited to white and elite individuals, with no mention or consideration of black women.

Following the *Reforma Dória*⁵ (1920), as previously described in the article, vocational training courses were offered, targeting women now from working-class families. However, the focus was always on reproductive work, imprinting the "innate" task of caregiving upon them. The intention was to train workers for domestic activities.

Given this scenario, current data was sought to analyze the presence of women's work and education in Technical and Vocational Education (EPT). Based on the data from the 2013 edition of the National Program of Professional Education (PNP), it was evident that women,

⁵ The *Reforma Dória* is a set of measures proposed by the governor of São Paulo, João Dória, with the aim of promoting structural and economic changes in the state.

especially those who are poorer and more vulnerable, are still, in the present day, directed towards caregiving areas within the professional training structure, specifically in the Developmental and Social Education Axis. The highest concentration of women is in Continuing Education Courses (*Cursos de FIC*), which can be justified by including women responsible for their families, beneficiaries of Federal Income Transfer Programs, and workers benefiting from the Unemployment Insurance Program.

Reflecting on this professional training context in the light of patriarchy reveals the extent to which, throughout history, women have been marginalized, excluded from spaces of productive work, power, and resistance, and restricted to the confines of their homes to prevent them from rising against what has been imposed upon them as "innate" and natural.

REFERENCES

ARONOVICH, Lola. Prefácio. *In:* LERNER, Gerda. A criação do patriarcado: história da opressão das mulheres pelos homens. Tradução de Luiza Sellera. São Paulo: Cultrix, 2019.

BRASIL. **Plataforma Nilo Peçanha.** Brasília: Ministério da Educação. Secretaria de Educação Profissional e Tecnológica, 2023a. Available at: https://www.gov.br/mec/pt-br/pnp. Accessed in: 08 Aug. 2023.

BRASIL. Cursos de Formação Inicial e Continuada (FIC) ou Qualificação Profissional Apresentação Formação Inicial e Continuada ou Qualificação Profissional. Brasília: Ministério da Educação, [s.d.], 2023b. Available at: http://portal.mec.gov.br/cursos-da-ept/formacao-inicial-e-continuada-ou-qualificação-profissional. Accessed in: 09 Aug. 2023.

BRASIL. **Portaria nº 817, de 13 de agosto de 2015.** Dispõe sobre a oferta da Bolsa-Formação no âmbito do Programa Nacional de Acesso ao Ensino Técnico e Emprego -Pronatec, de que trata a Lei no 12.513, de 26 de outubro de 2011, e dá outras providências. Brasília: Ministério da Educação, 2015. Available at: https://www.in.gov.br/materia/-/asset_publisher/Kujrw0TZC2Mb/content/id/20462540/UCEQITzKXPyVi6cWuD3q0ksQ. Accessed in: 09 Aug. 2023.

BRASIL. **Portaria nº 146, de 25 de março de 2021**. Define conceitos e estabelece fatores para uso na Plataforma Nilo Peçanha - PNP e para cálculo dos indicadores de gestão das Instituições da Rede Federal de Educação Profissional, Científica e Tecnológica. Brasília: Secretaria de Educação Profissional e Tecnológica. Ministério da Educação, 2021. Available at: https://www.in.gov.br/en/web/dou/-/portaria-n-146-de-25-de-marco-de-2021-310597431. Accessed in: 08 Aug. 2023.

CUNHA, Luiz Antônio. O ensino industrial-manufatureiro no Brasil. **Revista Brasileira de Educação**, Rio de Janeiro, n. 14, p. 89-107, maio/jun./jul./aug. 2000.

FAUSTO, Boris. **História do Brasil.** 12. ed. São Paulo: Editora da Universidade de São Paulo, 2013.

FEDERICI, Silvia. **O ponto zero da revolução:** trabalho doméstico, reprodução e luta feminista. Tradução de Coletivo Sycorax. São Paulo: Elefante, 2019.

LERNER, Gerda. A **criação do patriarcado:** história da opressão das mulheres pelos homens. Tradução de Luiza Sellera. São Paulo: Cultrix, 2019.

LINHARES, Juliana. Marcela Temer: bela, recatada e "do lar". **Veja**, [*S. l.*], 16 abr. 2016. Available at: https://veja.abril.com.br/brasil/marcela-temer-bela-recatada-e-do-lar/. Accessed in: 01 Aug. 2023.

LOURO, Guacira. **Gênero, sexualidade e educação.** Uma perspectiva pós-estruturalista. 2. ed. Petrópolis-RJ: Vozes, 1997.

LOURO, Guacira. Mulheres na sala de aula. *In:* PRIORE, Mary Del. **História das mulheres no Brasil.** 10. ed. São Paulo: Contexto, 2022. p. 443-481.

MATTA, Alfredo Eurico Rodrigues. **Casa Pia Colégio de Órfãos São Joaquim:** de recolhido a assalariado. 1996. Dissertação (Mestrado em História) – Universidade Federal da Bahia, Bahia, 1996. Available at:

https://ppgh.ufba.br/sites/ppgh.ufba.br/files/1996._matta_alfredo_eurico_rodrigues._casa_pia _colegio_de_orfaos_de_sao_joaquim._de_recolhido_a_assalariado.pdf. Accessed in: 01 Aug. 2023.

NOVELLI, Giseli. Ensino profissionalizante na cidade de São Paulo: um estudo sobre o currículo da Escola Profissional Feminina nas décadas de 1910, 1920 e 1930. *In:* REUNIÃO ANUAL ASSOCIAÇÃO NACIONAL DE PÓS-GRADUAÇÃO E PESQUISA EM EDUCAÇÃO (ANPED), 27., 2004, Caxambu. **Anais** [...]. Caxambu, 2004. Available at: http://27reuniao.anped.org.br/gt09/t0910.pdf. Accessed in: 02 Aug. 2023.

OLIVEIRA, Sueli Teresa de. Escolarização Profissional Feminina, em São Paulo, nos anos 1910/20/30. **Projeto História: Revista do Programa de Estudos Pós-Graduados de História**, [S.I.], v. 11, p. 57-67, 1994. Available at:

https://revistas.pucsp.br/index.php/revph/article/view/11414. Accessed in: 02 Aug. 2023.

PACHECO, Eliezer Moreira; PEREIRA, Luiz Augusto Caldas; SOBRINHO, Moisés Domingos. Educação Profissional e Tecnológica: das Escolas de Aprendizes Artífices aos Institutos Federais de Educação, Ciência e Tecnologia. **T&C Amazônia**, Ano VII, n. 16, fev. de 2009.

PÁDUA, Elisabete Matallo Marchesini de. Metodologia da Pesquisa – Abordagem teóricoprática. 10. ed. rev. e. atual. Campinas, SP: Papírus, 2004.

ROSEMBERG, Fúlvia. Mulheres educadas e a educação de mulheres. *In:* PINSKY, Carla Bassanezi; PEDRO, Joana Maria (org.). **Nova História das mulheres no Brasil.** São Paulo: Contexto, 2013. p. 333-359.

SÃO PAULO (Estado). **Decreto nº 2118-B, de 28 de setembro de 1911.** Organiza as Escolas Profissionais da Capital, de acordo com a Lei nº 1214, de 24 de outubro de 1910 e dá-lhes

regulamento. São Paulo-SP, 28 set. 1911. Available at: https://www.al.sp.gov.br/repositorio/legislacao/decreto/1911/decreto-2118B-28.09.1911.html. Accessed in: 01 Aug. 2023.

SAVIANI, Dermeval. O choque teórico da politecnia. **Revista Trabalho, Educação e Saúde**, Rio de Janeiro, v. 1, n. 1, p. 131-152, 2003. Available at:

https://www.scielo.br/j/tes/a/zLgxpxrzCX5GYtgFpr7VbhG/?format=pdf&lang=pt. Accessed in: 30 July 2023.

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