

Women in Secondary Technical Vocational Education: Factors That Influence Their Educational and Work Trajectories

Mujeres en educación media técnico profesional: factores que influyen en sus trayectorias educativas y laborales

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Abstract

This paper discusses the factors that affect the educational and work trajectories of women who studied Secondary technical vocational education courses in the La Araucanía Region of Chile. A total of 12 women who graduated between 2013 and 2017 were interviewed; six of them studied specialties that are traditional for women and six were trained in highly male-dominated sectors. Our research, of a qualitative nature, leads us to question the concept of 'choice', since admission to this educational modality is strongly conditioned by economic and mobility factors. In the stage of selecting a specialty, it becomes apparent that there are subjective factors that motivate women to insert themselves into traditionally female-dominated areas or, instead, to challenge the gender mandates reproduced by some teachers or family members. After completing their secondary vocational and training education, the women often experience sexism and sexual harassment when engaging in internship programs, which, in some cases, generates disaffection towards male-dominated jobs. The decision to continue an educational project, to enter the working world, or to make both compatible, is mediated by socioeconomic restrictions, by maternity, and by the lack of family support networks. In summary, class, gender, geographic origin, and other variables intersect to condition the educational and professional trajectories of women.

Keywords: educational trajectories, gender segregation, intersectionality, secondary technical vocational education.

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Resumen

Este artículo discute los factores que inciden en las trayectorias educativas y laborales de mujeres que cursaron estudios secundarios técnico profesionales en la Región de La Araucanía, Chile. Se entrevistó a 12 mujeres que egresaron entre 2013 y 2017, seis de ellas de especialidades tradicionalmente femeninas y seis de sectores altamente masculinizados. La investigación nos conduce a tensionar el concepto de “elección”, pues el ingreso a esta modalidad educacional está condicionado por factores económicos y de movilidad. En la fase de selección de una especialidad se evidencian factores subjetivos que motivan a las mujeres a insertarse en áreas tradicionalmente femeninas, o bien, a desafiar los mandatos de género reproducidos en discursos docentes y familiares. Tras el término de su educación, las mujeres experimentan sexismo y acoso sexual en los espacios de práctica laboral que, en algunos casos, generan desafección hacia los oficios masculinizados. La decisión de continuar un proyecto educacional, insertarse en el mundo laboral, o compatibilizar ambos escenarios está mediada por restricciones socioeconómicas, maternidad y falta de redes de apoyo familiar. En síntesis, las variables de clase, género y procedencia geográfica se interseccionan para condicionar las trayectorias educativas y profesionales de las mujeres.

Palabras clave: educación media técnico profesional, interseccionalidad, segregación de género, trayectorias educativas.

Introduction

Educational trajectories are the itineraries that students follow in the educational system, from the preschool level onwards (Ministerio de Educación de Chile, Mineduc, 2017). In the configuration of these trajectories, personal choices, family paths, social histories, and institutional offering combine, in addition to structural components associated with cultural, economic, and symbolic capital, and with gender relations (Montes & Sendón, 2016). These factors influence educational itineraries and people's career paths. Thus, variables such as social class, gender, and geographic origin, have different impacts at different times in life without being determining factors.

This study examines the factors that influenced the educational and professional trajectories of women who graduated between 2013 and 2017 from secondary vocational education and training (hereinafter SVTE) in the La Araucanía region of Chile. Specifically, three times are addressed:

- Admission to the SVTE modality, after completing basic education;
- The choice of a specialty in the second year of secondary education; and
- Graduation from SVTE, which integrates the experience of work practice and the decisions taken after finishing secondary school.

The study focused on one of the four regions of Chile with the highest level of enrollment in SVTE. This information is relevant in light of the sociodemographic characteristics of a region in which nearly 30% of the population lives in poverty (Ministerio de Desarrollo Social, 2016). Although there is a diversity of factors that influence the choice of scientific-humanistic education (hereinafter EMHC, by the Spanish acronym) or SVTE, the socioeconomic factor is the one that has the largest influence (Larrañaga, Cabezas, & Dussailant, 2013). Research on this reports that 90% of students in SVTE or EMHC come from the two lowest income quintiles (Anaya, 2015; Larrañaga et al., 2013, 2014; Seville, 2011).

This study is based on the premise that the trajectories of women who studied SVTE are intersected by structural factors of class, gender, and geographic origin. Although there is insufficient evidence on how these intersections operate, various studies address the impact of the socioeconomic situation on the choice of SVTE (Anaya, 2015; Larrañaga et al., 2013, 2014; Seville, 2011), as well as the effects of gender on educational trajectories (Anaya, 2015; Larrañaga et al., 2014; Sepúlveda, 2017; Seville, 2015; Seville, Sepúlveda, & Valdebenito, 2019) and the influence of geographic origin on admission to this modality of education (Agencia de Calidad de la Educación, ACE, 2016). With the aim of attaining a vision that integrates the different factors, the questions posed for this research were: What factors affect the educational and work trajectories of SVTE graduates at different times? What are the reasons for choosing SVTE? Who influenced the choice of the specialty and how? What factors operated to maintain traditional gender relations and which factors promoted resistance strategies?

The relevance of this research resides in the reconstruction that the women themselves carried out regarding their trajectories at three crucial times in their life cycle. Thus, identifying the factors that influenced their itineraries—in terms of gender and from an intersectional perspective—would constitute a contribution to the construction of knowledge in this area of study, while it could also be a resource to incorporate the gender perspective into SVTE policies.

Literature Review

Background information on SVTE in Chile

The official purpose of SVTE is to be a setting for preparation for working life and a space for comprehensive training for adult life (Mineduc, 2013). The curriculum for secondary vocational education and training organizes the educational process into four years: two of general training (first and second year of secondary education), and two of differentiated education (third and fourth year of secondary education), divided into 14 economic sectors and 46 specialties¹.

Even though it was initially conceived as a terminal educational modality and as a gateway into the labor market, greater access to higher education resulted in 41% of SVTE graduates conducting higher education studies (Larrañaga et al., 2013).

SVTE has been the subject of various studies to examine its effectiveness within the framework of Chilean education policy. The studies indicate a lack of general training that could affect the opportunities of those who continue in higher education (Farías & Carrasco, 2012), lack of curricular alignment between the secondary and tertiary levels (Sevilla, Farías, & Weintraub, 2014), and a weak connection between SVTE and the private sector (Arias, Farías, González-Velosa, Huneus, & Rucci, 2015).

Some studies recognize that SVTE reproduces gender inequalities and that it has a marked sexist bias (Anaya, 2015; Sevilla, 2015), since it segregates at an early stage in accordance with socially established roles. National enrollment data show that women are concentrated in areas of the service sector, while men prefer industrial areas (Sevilla et al., 2019). Considering this, despite the fact that women have better indicators of retention, completion of studies, and continuity in higher education, they are affected by significant lags in the employment market, because they prefer to choose undervalued economic sectors (Anaya 2015; Larrañaga et al., 2014).

1. Decree 452 (2013) from Chile's Ministry of Education established new curricular bases for differentiated vocational education and training, which are in the process of being implemented.

Educational institutions and reproduction of class and gender relations

Educational institutions conduct teaching and learning processes in different areas of the curriculum, while reproducing culture at the same time (Apple, 1986; Bernstein 1990; Bourdieu & Passeron, 1998; Torres, 2005). Bernstein (1998) considers that the power relations in the school space create, justify, and reproduce the constraints associated with categories of gender, race, and class, which stratify, socially divide, and create identities. Thus, education is one of the most influential mechanisms in the normalization of the patriarchal imaginary (Martínez, 2016).

Gender studies in education address explicit or implicit mechanisms that reproduce inequalities and maintain the order imposed by patriarchal society (Acker, 2000; Díaz, 2003; Maceira, 2006; Martínez, 2016). Gender is, therefore, a category that identifies power, stratification, and segregation relationships in the school system (Ballarín, 2006; Subirats, 2001). Meanwhile, the decolonial feminist perspective complicates the analysis, since it includes categories of domination such as gender, class, ethnicity, and geographic origin, among others (Lugones, 2008; Martínez, 2016). Thus, not all students experience power/subordination relationships in the same way, but their opportunities depend on multiple factors that can put them in positions of greater exclusion. The latter becomes particularly important in SVTE, since it concentrates the most socially vulnerable population in the country (Anaya, 2015; Larrañaga et al., 2013, 2014; Seville, 2011; Seville et al., 2019).

Class and gender inequalities in SVTE

There are various factors that operate in the choice of EMHC or SVTE. A study carried out in Scandinavian countries revealed that students select the vocational technical option because it would involve lower demands in terms of academic requirements and would be a safer option in terms of job opportunities (Salmela-Aro & Tynkkynenb, 2012). Meanwhile, national research indicates that low academic achievement at the preceding levels is an influential variable, since those who study SVTE obtain lower results in the Education Quality Measurement System (Simce by the Spanish acronym) compared to their peers in EMHC (Larrañaga et al., 2013). This difference is also observed when they finish high school, as SVTE graduates obtain an average of 30 points less on the University Selection Test, PSU (Farías & Carrasco, 2012). However, the socioeconomic variable has the largest influence, because SVTE favors more rapid employability and because low-income families may have lower expectations regarding the higher education system (Larrañaga et al., 2013, 2014).

One controversial aspect of SVTE is the early choice of a specialty. In theory, this decision is taken in 10th grade, at 16 years of age. However, in Chile, close to 90% of secondary schools are exclusively SVTE or EMHC, so, in practice, students have to choose in 8th grade (Arias et al., 2015; Seville, 2015), at an average of 14 years of age.

Even though there is a rising tendency to continue studying in higher education (Farías & Sevilla, 2015; Larrañaga et al., 2013, 2014), it has been shown that more than 50% do not complete these studies. On the one hand, dropout at this education level has been related to the lag that leads to late entry into higher education, since most are admitted between two and five years after graduating from high school, and, on the other, with the constraints imposed by the economic precariousness of the students (Larrañaga et al., 2013).

Just as opportunities for SVTE students are affected by class inequalities, they are also impacted by gender differences. In this respect, a Chilean study that compared the employment options for graduates of both modalities showed that although those who complete SVTE have greater opportunities to obtain work, there are differences between men and women: male SVTE graduates have better working conditions, followed by male EMHC graduates. In third and fourth place are female graduates of SVTE and EMCH, respectively. In addition, the income of female SVTE graduates is, on average, 73.2% of that obtained by men (Larrañaga et al., 2014), because they are concentrated in undervalued areas such as administration and social services.

Vocational choice in adolescence: conditioning factors of class and gender

León and Mora (2010) state that vocation is a structuring undertaken by a person based on vital preferences. Thus, each student experiences their vocation as an intense connection with their preferred activity and perceives it as valuable and pleasant.

In most western societies, vocational decisions are made during adolescence and represent a reflective transition with one of its focuses being the question regarding the individual's professional or occupational project (Aisenson et al., 2013). According to Navarro and Casero (2012), the characteristics of the adolescent period set the tone for vocational choice, conditioned by internal factors such as lack of knowledge of themselves, a self-concept in training, and limited experience in the professional field. The most common thing is that every student lacks sufficient vocational maturity to decide.

Rodríguez-Martínez, Sánchez-Rivas, and Labajos-Manzanares (2017) consider that children between 10 and 12 years old (when SVTE or EMHC is chosen) experience the feeling of "I want to be this or that because I like it", without including other significant experiences in this decision, which are added later based on interests, abilities, capacities, school performance, and the integration of individual and sociocultural aspects. Furthermore, at that stage, no decisions with long-term consequences have yet been made, but rather specific and immediate options. The decision is therefore improvised, without prior reflection and heavily conditioned by external variables such as opportunities, socioeconomic level (Navarro & Casero, 2012), and gender socialization (Rodríguez, Torío & Fernández, 2006; Santos & Porto, 2002).

Values that circulate in society regarding gender roles and attributes have a large influence on professional choices (Anker, 1997). A study carried out in Argentina with women who go into vocational education and training shows that generational components, family support, and teacher incentives influence their choices (Bloj, 2017). When making a vocational decision, the most frequent thing is that a student is exposed to myths and gender stereotypes about professions, internalized in primary socialization, in school texts, in teacher discourse and other informal sources. In addition to this is a professional orientation that does not consider gender guidelines as limiting vocational choice (Pardini, 2016; Rial & Mariño, 2011).

There is some empirical evidence regarding the influence of gender in the vocational choice of adolescents. Across social classes, the role of mothers or caregivers influences their motivations, self-esteem, interests, aspirations, and identification with professions (Monzón, Alfonso, & García, 2013; Ricoy & Sánchez-Martínez, 2016). While Semidober (2002) found that Spanish women from middle socioeconomic sectors combine the role of wife and mother with a professional project, Argentine studies by Aisenson et al., (2013) and Bloj (2017) concluded that socially vulnerable adolescent girls experience the maternal role, domestic responsibilities, and raising children as a social mandate in accordance with which they build a recognized and valued identity, even though these limit their educational and professional careers. Therefore, it is also possible for young women to assume external pressures more easily, which could suggest a certain level of submission to the environment (Lozano & Repeto, 2007).

To sum up, studying involves the adolescent girls reconciling a family project with an educational project (Aisenson et al., 2013), which would mediate their vocational interests.

Expectations, gender, and educational trajectories

A study carried out in the La Araucanía region of Chile, reported that teachers justify vocational choices differentiated by sex in terms of values such as tenacity and perseverance in women, while in men it is ability and personal interest that predominate (Fernández & Hauri, 2016). Meanwhile, research by Baeza and Lamadrid (2018) carried in the same country, but in Santiago, concluded that teachers normalize the different options of men and women by attributing them to innate abilities.

According to Rico and Trucco (2014), the educational system has played an important role in the transmission of gender stereotypes. Sexist stereotypes and gender segregation are also reproduced in the SVTE modality, because it tends to perpetuate the generic position by establishing training specialties that are socially identified as male or female. For example, those who study this modality are known to belong to the most impoverished social groups, with social expectations regarding women linked to early motherhood, domestic work, and job insecurity (Millenaar & Jacinto, 2015). They also experience negative consequences when they do not respond to the dominant discourse regarding the roles of men and women (Acker, 2006).

One expression of gender discrimination is benevolent sexism, which values typically feminine characteristics and abilities and considers women to be emotionally capable, but rationally weak and thus requiring male protection (Glick & Fiske, 1996). Meanwhile, Seville et al. (2019) state that stereotypical beliefs related to male and female attributes are ingrained in SVTE students and teachers and are expressed in apparently inclusive discourses, which detract from gender and conceal the obstacles faced by women in male-dominated areas. In addition, privileged treatment can be identified that extols feminine qualities in female-dominated specialties and reproduces stereotypical beliefs that limit opportunities.

In summary, educational trajectories are influenced by a set of internal and external factors, and none by itself is a determinant, but they are instead relational or interdependent (Lahire, 2004). However, despite the diverse structural and subjective factors, men and women develop differentiated trajectories, mediated largely by gender socialization (Baeza & Lamadrid, 2018; Ruiz-Gutiérrez & Santana-Vega, 2018).

Methodology

This study, which had a qualitative focus, analyzed a corpus of 12 semi-structured interviews, applied during 2018 to women who graduated from secondary vocational education and training establishments in La Araucanía. The interviews, which lasted between 60 and 90 minutes, were carried out at a location chosen by the participants: at their homes in some cases, at the workplaces of others, or in a place defined by mutual agreement. We used the snowball sampling technique, due to difficulties in locating potential participants. Thus, from contact with some young women, we accessed others, until the sample was completed. The general criteria for selecting the participants were that they had graduated from an SVTE establishment between 2013 and 2017. As a specific criterion, it was established that six were graduates of traditionally female-dominated specialties, that is, those that mainly included women (over 70%), such as those in the health, administration, education, and services sectors; and that the remaining six had graduated in male-dominated economic sectors, that is, specialties where enrollment of men exceeded 80%, such as those in the industrial and technological areas (Navarro & Casero, 2012; Quattrocchi et al., 2017; Sevilla et al., 2019). Based on this criterion, the sample was comprised of six graduates from the Construction, Automotive Mechanics, Industrial Mechanics, and Wood Processing Technician courses, and six graduates were from the Nursing and Food Technician courses. Of the total number of interviewees, around half reported that they were from rural areas.

We used qualitative content analysis as an analytical technique. To do this, the interviews were transcribed and the text was segmented and coded according to the categories defined operationally and/or theoretically and those that emerged from the interviews (see Table 1). The analysis was supported with the use of the qualitative analysis software ATLAS.ti 7.5.7 (2014).

Table 1. Identification of the categories of analysis, according to their a priori or emerging origin.

Educational and occupational trajectories	Structural factors **			Subjective factors ***	
	Social class	Gender	Geographical origin	Of a family order	Of an individual order
Times*	Dimensions***				
Admission	Socioeconomic factor as limiting condition	Gender stereotypes and roles as limiting condition	Rural origin as limiting condition	Family support	Adoption of the family decision
Choice of specialty	-	Tensions related to male-dominated choices	-	Influencia paterna	Intereses personales
Graduation	Socioeconomic factor as limiting condition	Benevolent sexism / Hostile sexism (labor and sexual harassment) / motherhood as a limiting factor / Depatriarchalization of the profession	-	Paternal influence	Personal interests

* Times defined a priori, according to the operational definition of the trajectory in SVTE.

** Factors defined a priori, depending on approach to the problem studied.

*** Emerging factors, according to analysis of the data.

Source: Prepared by the author.

Results and Discussion

Based on the literature review and the corpus of interviews, three particular times moments were identified that denote different conditions in the educational and professional trajectories of the SVTE graduates: admission to the SVTE modality when they finish basic education, choosing a specialty in the second year of SVTE, and graduation, which includes professional internship and subsequent decisions. For each of these times we identified the factors with the highest influence and those that perpetuated gender segregation in the educational and employment fields, or which were mechanisms of resistance against the sexual division of labor. In the following sections, emphasis is placed on these factors and their consequences for equal educational and employment opportunities.

Admission of women to SVTE: The limits of a choice

The analysis showed that the most important factor to enter vocational education and training institution is the socioeconomic one. For some families, SVTE resolved short-term material aspects, such as exemption from payment: “Being able to study for free is also one of the factors... my family didn't have the financial means to pay for the course that I chose, that I wanted” (Graduated as Technician in Nursing), or which alleviated the economic demands of the school uniform: “There were classmates who were given their uniform at the school, for example, in vocational education and training... So I said I had a different situation” (Graduated as Technician in Nursing).

Most of the participants acknowledge that their family situation did not allow any other alternative and many did not see any possibility of higher education: “It had to be a technical [course], because the truth is that I never thought of studying afterwards, because for me studying was like...” (Graduated in Construction).

Economic difficulties influenced admission to SVTE in all the cases studied, since, in addition, to the practical and material aspects, this guaranteed a technical qualification and, therefore, would facilitate rapid insertion into the employment market. EMHC, on the other hand, was recognized as a project that involved higher education studies, which, for most of the graduates, seemed very difficult or almost impossible.

The socioeconomic factor as a condition of admission to SVTE may not be a major novelty, since it is known that it is dominated by the lower-income population (Anaya, 2015; Larrañaga et al., 2013, 2014; Seville, 2011; Sevilla et al., 2019) and by those who have had and will have lower academic performances (Farías & Carrasco, 2012; Larrañaga et al., 2013). However, the socioeconomic component requires particular analysis when it comes to women, mainly due to the feminization of poverty linked to job insecurity, horizontal and vertical segregation, and the wage gap. These and other asymmetries in remunerated work are, in part, favored by gender segregation in SVTE and are reflected in income inequality when joining the workplace (Anaya, 2015; Larrañaga et al., 2014). Thus, gender may operate as a second factor that affects entry to this educational modality. Although at this point in the trajectories it does not appear so explicitly in the discourse, it cannot be dismissed as a determining factor associated with the geographical proximity between the secondary school and the home, which would imply not having to change town or city or not traveling long distances. In this respect, the adolescents reveal apprehensions regarding their insertion in an unknown urban area, with a lack of support and with feelings of social isolation: “What am I going to do there? Who am I going to get together with? I'm going to be alone, that was the fear in reality” (Graduated as Technician in Nursing).

The gender factor associated with distance and displacement responds to generic patterns of mobility, widely studied in different Latin American countries (Jirón & Zunino, 2017), which also suggest a relationship between admission to SVTE and gender.

The women indicate that their choice was supported by their family, although it is inferred that it was rather adopted by the responsible adults. In this regard, the results show limitations where personal taste—although recognizable and legitimate—did not always act as the deciding factor in this phase of the trajectories. This contrasts with what was stated by Rodríguez-Martínez et al. (2017), who maintained that an adolescent aged 10 to 12 is able, due to their cognitive maturity, to choose a vocational alternative based on personal preferences and interests as the sole element of judgment. In the case of the participants, this did not seem to be the case, since at a young age they experienced certain coercion to select an education that was consistent with their economic, geographic, and gender restrictions, but not with their personal interests.

The socioeconomic variable, gender, and rural origin (for some students) are essential to understand why the participants chose to enter SVTE. The combination of these factors, in addition to their early age, places stress on the concept of choice, since they were constrained by what Crenshaw (1995) called “intersectionality”, in

reference to a complex system of structures of oppression that operate simultaneously. This intertwining of power relations (Viveros, 2016) significantly conditioned this stage of their educational trajectories. In the opinion of Sevilla et al. (2019), when entering the vocational education and training modality structural and subjective factors intervene that shape and define the trajectories. The results of this study reveal that, when entering SVTE, there is strong incidence of the former factors.

Choice of a specialty: social expectations versus individual interests

Given the possible consequences for women's working lives, the choice of specialty that, in theory, is made during the second year of SVTE was examined. In this phase, greater influence of subjective factors related to personal interests and tastes is evident. Notwithstanding the above, they refer to a strong conditioning of sexist discourses by the family and particularly by teachers. Of those who chose traditionally female-dominated specialties, their choice was not a source of tension because it was in line with expectations:

And the teachers told me that I had a mother's instinct... I had a good relationship with the teacher, and she told me: "No my girl, help me here" and I was quite interested in what she did, the contribution that I could make, so I stayed (Graduated as Technician in Nursing).

The choice for students who opted for male-dominated areas was a greater source of stress. In these cases the taste prevails for the specialty, the attraction to the clothing, the tools, and the tasks:

I really liked my course, because, damn, my dad works a lot with electric tools, circular saws, jig saws and all of that, and here at the school they also made us work a lot with electric machinery, and that was more interesting to me, wearing overalls, safety boots, and all of that (Graduated as Technician in Wood Processing).

The discourse of the students who opted for male-dominated specialties usually refers to paternal influence in the shaping of their own interests: "I love to weld, my dad is a welder" (Graduated as Automotive Technician). In these cases, they express affection for the work that they saw their father doing out from a young age, recall participating in these tasks, and recognize that sharing activities with them were times of emotional closeness that, to some extent, influenced their future inclinations:

My dad had a car since I was about 11... and I helped him repair it, that's the thing. I think it also has to do with the romantic thing that it was one of the few things I did with my dad (Graduated as Mechanic).

Unlike entering SVTE, at this point in the trajectory, choice for personal reasons can take place, even contradicting traditional gender roles. In some cases, women show greater fortitude to follow their personal interests and challenge the sexist stereotypes of significant adults in the family.

Similarly, the majority of the students who entered specialties that contrasted with social expectations had to face the opposition of teachers: "There were some [teachers] who told me that this wasn't a job for girls or for young ladies, that it was very heavy, it was very tiring" (Graduated as Technician in Industrial Mechanics), or:

It always seemed wrong [to the teachers]... [They said] I should study business administration or telecommunications, but not mechanics. "How are you going to go into mechanics?!" It was difficult because they make you think, since they say it so much. My course teacher told me to change my specialty... not to go into Mechanics, because it was going to be bad for me: "A woman, how...?! You! That's not going to work out for you" (Graduated as Technician in Automotive Mechanics).

The analysis shows that women made their decisions based on personal interests, independently of the sexist discourse of their teachers. This is consistent with the study by Sevilla et al. (2019), who examined the experience of women in industrial specialties in SVTE in Chile, and concluded that in the choices, the taste, recognition, and value that women assign to the specialty coexist; therefore, the vocation may operate as a resistance mechanism against gender determinism.

In general, formal teacher actions to facilitate equality between men and women when choosing a specialty are not observed. Furthermore, the choice is naturalized based on sexist representations that reproduce the patriarchal order. However, at this point in their trajectory, the young women seemed to have the personal capacity to oppose a choice motivated by the pressure of social expectations about gender.

The results seem encouraging regarding the possibilities of resistance displayed by some students to confront social pressure and follow their own preferences. Even though teachers associate women with tenacity, order, responsibility, and care for others, and men with the ability to choose a career according to their interests (Baeza & Lamadrid, 2018; Fernández & Hauri, 2016), the participants made choices that created strain on these beliefs. This finding should be viewed with caution, because although women enter male-dominated specialties, enrollment data show low and very slow insertion.

To sum up, subjective factors gain importance at this stage of the trajectories, since personal interest and taste both operate to fulfill social expectations imposed by gender beliefs and stereotypes, as well as to challenge and resist them.

Graduation from SVTE: benevolence and hostility in the working world

On graduation from SVTE, we analyzed the performance of work practices and the decisions taken after finishing secondary school.

Approximation to the working world: Experiences of internships. Internships are the first formal approximation to the working world in the specialty studied. The two main factors that influenced this stage were motherhood and sexist practices.

Motherhood hindered or delayed completion of SVTE, but it did not generally hinder the completion of studies, since most of the participants reported having had family networks and the educational institutions made allowances for them. The following testimony shows that obtaining a professional technical qualification was valued as an achievement and as a tool to move forward by those who experienced motherhood:

Because it was very hard for me, as I was a mother and I had to travel and my son was four months old when I was finishing my fourth year [12th grade], I think that was my greatest achievement, the qualification (Graduated as Technician in Wood Processing).

As regards the second factor, sexism was exacerbated during incorporation into male-dominated sectors in internships. Indeed, despite the fact that the graduates prioritized their personal interests over social expectations, in the workplace they experienced discrimination that was expressed in terms of differentiated assignment of tasks according to gender in mechanical workshops: “Me and two other colleagues, and there... of course, really nice, they sent us to do different things, not me... They left me sweeping up” (Graduated in Industrial Mechanics). A similar situation took place in construction works: “Afterwards the boss started taking me out of that, getting me to look at plans, doing take-off, formulating quotations; a cleaner work and he had my colleagues with pickaxes” (Graduated in Construction).

So, professional internships deepen the discursive contradiction experienced in the classroom, regarding how it is positive that women can be in traditionally male-dominated spaces, that they are able to function in them, but in differentiated roles:

[The boss said]: “you [the women] will help us keep things clean”; he didn't tell us to clean, but he did have the impression that with us around things would be kept cleaner, because we were going to keep things tidy (Graduated in Automotive Mechanics).

These experiences were recurrent and refer to rhetoric about gender equality that coexists with micropractices that reproduce stereotypes (Sevilla et al., 2019). Thus, the sexism experienced by women manifested itself in a wide range of forms, from benevolent expressions that restricted them to traditional roles with positive but simultaneously subordinate connotations (Cárdenas et al., 2010; Glick & Fiske, 1996), to outright violence, touching on intermediate positions of subordination.

When these individuals opted for male-dominated specialties, they also faced the difficulty of being accepted because they were women:

It was difficult to find an internship, because the idea was to do it at a workshop where I could get into the engine and... the workshops where mechanics was practiced in this way didn't accept women and there were some outside Temuco and for financial reasons that wasn't an option for me and, of course, of those that were here in Temuco only three accepted women and, in the end, we had to choose internships where they accepted women (Graduated as Technician in Automotive Mechanics).

However, without a doubt, the biggest obstacles were sexual and occupational harassment:

Later they fired me because I didn't want to go out with the boss, that's why they fired me. I let it pass several times, without saying anything because it was nothing more than “hey, we're going to have a drink, hey, when are you going to have time?”... until one day he spoke to me about a motel, and I lost my temper and I told him to get lost, literally and in a very aggressive way in front of all the workers, and I suppose that he had no choice but to get rid of me. It was horrible because I really needed the money. It is horrible to be a woman in an area that has to do with metal. I think that if I hadn't had such strong support from my mother, telling me that I didn't have to put up with those things... I wouldn't have been able to. They treated me terribly (Graduated as Technician in Automotive Mechanics).

The first few months were really good. What happens is that most of the workers there are men and I had to do quality control. Then I switched to assembling the furniture materials and everything there was really good until I met a man who really went too far; he said things to me, he hassled me. At one point he started recording me, he took photos of me until one time I came out of the bathroom and he was outside, I was alone and he didn't want to let me get past (Graduated as Technician in Wood Processing).

In the scenario of internships, they had experiences that were sexist, discriminatory, and violent, the effects of which were the reification of traditional gender roles and the punishment of transgression, through sexual harassment in the most serious cases. Regarding this point, the participants did not report that they received support from educational establishments, nor did they observe deliberate strategies to minimize the effect of these experiences on their educational trajectories.

Continuing studies versus entering the working world. Once the students completed their training in SVTE, they took various paths that, to a large extent, were limited by economic conditions and gender factors.

Table 2. Graduates from highly female-dominated specialties.

Graduates in highly female-dominated specialties				
Participant	Specialty in which graduated	Higher education studies	Employment	Children
1	Technician in Nursing	Psychology University	No	No
2	Technician in Nursing	No (enrolled, but has been unable to enter)	Nursing home (sporadic)	Yes
3	Food services	Professional Hairdressing	Hairdressing	No
4	Technician in Nursing	Nutrition (dropped out)	No	No
5	Technician in Nursing	Occupational Therapy University	No	No
6	Technician in Nursing	Topography University (Technical Level)	No	No

Source: Prepared by the author.

Table 2 shows that of the six women who graduated from female-dominated courses (Nursing Technician and Food Technician) three began university studies that were relatively related to their specialty, but one of them suspended her studies. Two others went into work, one sporadically in her specialty and the other in a different area, also female-dominated (hairdressing). There is one paradigmatic case of a young woman who transitioned from a traditionally female-dominated specialty (Nursing Technician) to higher education studies in a male-dominated area (Topography).

Table 3. Graduates from highly male-dominated specialties.

Graduates in highly male-dominated specialties				
Participant	Specialty in which graduated	Higher education studies	Employment	Children
1	Construction	General Accounting and Auditing (in progress)	No	No
2	Industrial Mechanics	Mechanical Engineering (suspended)	Woodturning	Yes
3	Automotive Mechanics	Mechanical Engineering (suspended)	Mechanical workshop	Yes
4	Industrial Mechanics	Mechanical Engineering (in progress)	Mechanical workshop	No
5	Wood Processing	Technician in Preschool Education (completed)	Sporadic, food outlet	No
6	Wood Processing	No	Supermarket	Yes

Source: Prepared by the author.

According to Table 3, the three graduates of Mechanics (Automotive and Industrial) entered courses in the same area in professional institutes; however, only one managed to combine working and studying, while two had to drop out. All three have remained in employment, working in traditionally male areas. The other three graduates (Technician in Wood Processing and Building) decided to switch to female-dominated areas in higher education or in the labor market.

Of the 12 graduates, nearly half entered a higher education institution and have remained there. In these cases they reported a significant amount level of family support and, although this is not recurrent, some refer to an early incentive to study in higher education: “I entered university because it was something that was instilled in me as a child, that after secondary school, I wouldn't finish studying; afterwards came university” (Graduated as Technician in Nursing).

A significant number of the graduates—conditioned by socioeconomic—went directly into work or, instead, they enrolled in a higher education institution, but had to suspend the course due to the need to generate income: “I wanted to continue studying another course, but in the end I still had to work, I wasn't going to have the time... I had to look for two jobs” (Graduated as Technician in Wood Processing).

Another factor that motivated the young women to give up higher education projects to integrate themselves into paid employment was motherhood, which, combined with the socioeconomic factor, hindered their educational projections.

I was in the third year and when I was about to start really studying I got pregnant... and the following year I froze [my course]. I had a due date for May and that was a difficult time at university and I said to myself that I would do one thing well, instead of doing everything not so well... when I wanted to study again I had an issue with the loan and it no longer covered it (Graduated as Technician in Automotive Mechanics).

At this point in the trajectory, the socioeconomic factor and motherhood acted as determining factors to decide on an educational project or an employment project. Two factors are generally identified that help students with significant economic constraints to continue studying in higher education. The first is gratuitous education and the second is to be women with no children. The results thus suggest that motherhood in a situation of socioeconomic vulnerability makes continuing an educational path more difficult, if not impossible.

Resistance to traditional gender roles: depatriarchalization of the profession

The testimonies demonstrate a certain naturalization of the sexual division of labor and the generalization of subjectivity in the framework of patriarchal culture. In this regard, young women were stressed by the working world that places contradictory demands on them (Walkerdine, Lucey, & Melody, 2001), since the public and private spaces are marked by gender (Páramo & Burbano, 2011). This tension is reduced in female-dominated spaces, where women value the skills assigned to the gender, more than the academic training received:

Knowledge in the area of cleanliness and comfort is care for the patient, cleaning and those things, but for what little I did in my two weeks [of internship] people thanked me a lot. It was very nice for me because I honestly talked to people who were dying, but I was able to give them a smile, a hug, but those things satisfied me. Social skills were much more useful to me than those in the academic area (Graduated as Technician in Nursing).

The vocational choice of those who chose male-dominated areas reveals a split with the generic matrix that assigns different work spaces to men and women, since the naturalization of the hierarchical relationship still exists. Women who manage to remain in male-dominated specialties, studying, working or both, report that being a source of pride for their families and themselves encourages them to continue in a hostile environment. In other cases, they find a male figure that helps minimize the violence.

Thanks to him [head of section] they began to respect me, they left me alone, because he defended me. It wasn't that I didn't defend myself, but that they didn't take any notice of me, even if I said something. But he was the oldest one there and they had, have a lot of respect for him, a lot (Graduated as Technician in Automotive Mechanics).

The graduates suggest that that remaining in spaces historically occupied by men requires the establishment of different logics and practices of resistance against biopolitical control of gender, such as, for example, fraternal alliances between women or sisterhood:

One lady spoke to the boss a while ago... her father was a mechanic and he left the mechanical workshop to her as an inheritance and the lady wanted to lease it to us, the price wasn't close to what a workshop would cost, so support arrived in that way. She said "if they're going to have a workshop, let it be a good one, let it be important for women" (Graduated as Technician in Automotive Mechanics).

For some of the participants, the internship was a traumatic experience that led them to decide not to work with men again. This option resulted in two paths: one was to move towards a female-dominated area and the other—less common—was to create mechanisms to depatriarchalize the profession. In this latter regard, there was the conspicuous experience of a mechanical workshop for women who proposed to conduct the profession away from violence and male domination.

As we all get along, it's fun because it's a group of women. Now the boss is like the mother, we're the little sisters. The other day the boss was talking about "Conchito" [the baby of the family], since she was the youngest one of us to graduate (Graduated as Technician in Automotive Mechanics).

The presence of women in male-dominated spaces is complex, because discrimination and violence operate as a centrifugal force that, in many cases, ends up pushing them out towards traditional areas. In other cases, they are supported by protective male figures and in others they create cooperative mechanisms between women to depatriarchalize the profession.

Conclusions

In the educational trajectories of the women, we can identify structural and subjective factors that take on differentiated relevance in the educational itinerary. When entering SVTE, a family decision predominates that is motivated by socioeconomic aspects and generalized mobility patterns that constrain the space for decision. In choosing a specialty, the subjectivity of the women is expressed, since they are motivated by personal interests and tastes. In this stage, we can see significant influence of the teaching staff, due to the transmission of gender stereotypes and sexist practices that place stress on the decision. The greatest complexity was experienced by those who opted for male-dominated areas who, defying gender mandates, made their vocational preferences prevail, supported by personal and family resources and by father figures who opened up such less traditional spaces from childhood. In the graduation stage, women who opted for male-dominated areas faced sexist practices, ranging from benevolent treatment to sexual harassment; in fact, in the most severe cases of sexism, they abandoned their educational project to transfer to a traditionally feminine specialty. In this phase of the trajectories, the socioeconomic variable has another impact, because it conditions the decision to continue higher education, go directly into the working world, or combine both. Generally speaking, women who continue higher education have to make it compatible with work: in some cases they manage to do this and in others they have to abandon their studies to insert themselves fully in the working world. The main factors that hinder the continuation of higher education include motherhood, the lack of support networks, and economic precariousness.

We can conclude that the variables of class, gender, and geographic origin create complex intersections that condition the trajectories of women in different ways. Furthermore, these structures are further complicated by sexist practices that maintain gender segregation in SVTE and limit women's projections.

Despite the fact that some women revert traditional gender mandates and select male-dominated specialties, the experiences of discrimination and material or symbolic violence experienced in classrooms, internships, and the world of paid employment act as factors that create disaffection to remain in those spaces. Changing these situations would imply systematic actions at various levels; firstly, in SVTE establishments, in order for the opening of male-dominated spaces to go beyond the rhetoric of equal opportunities (Sevilla et al., 2019) and become solidified in practices that eradicate sexism. It is also important to encourage the insertion of women in these spaces, both among teaching staff and students, in order to promote female alliances that depatriarchalize professions and help women to continue in non-traditional projects.

Secondly, it is also necessary for secondary schools to carry out systematic actions in internship spaces to eradicate sexism. They are required to safeguard the functions assigned to women and to deploy supervisory mechanisms and action protocols when sexual harassment and other manifestations of gender violence occur. This is an ethical imperative, since the choice of a male-dominated specialty could constitute a risk factor for the students, with potential negative effects on their trajectories.

The results also suggest challenges at other levels. The first is related to the need to research further into gender socialization in basic education. Research on occupational segregation by gender has mainly focused on university students or those close to choosing a professional career (Cupani & Pérez, 2006; Monzón et al., 2013; Navarro & Casero, 2012; Pardini, 2016; Rodríguez-Martínez et al., 2017; Sánchez, 2014). Rather than having conclusive data regarding choice at an early age, questions are raised about how the psychosocial characteristics of the adolescent period could make the student vulnerable to gender socialization and socioeconomic disadvantages (Navarro & Casero, 2012; Rodríguez et al., 2006; Santos & Porto, 2002). Studies referring to educational trajectories are relevant, since they reconstruct the stories of vocational choice in relation to the psychological characteristics and the sociocultural context.

Another challenge is related to the need for educational establishments to adopt measures with the students from an early age that guarantee vocational choices that are less governed by traditional gender stereotypes. Rial and Mariño (2011) and Pardini (2016) suggest rethinking vocational orientation and incorporating the influence of gender socialization into decision-making. In this respect, Chile's General Education Law N° 20,370 (2009) states that a vocational orientation based on principles of equity and diversity must be guaranteed during vocational training. Likewise, the law that creates the New National Public Education System states that education must train children and young people as rights-bearing subjects (Mineduc, 2017), which requires strategies to eradicate the segregating influences of gender stereotypes, socioeconomic level, and geographical origin.

Finally, new research could go beyond the limitations of this study, which focused on SVTE graduates, but neglected to look at the experiences of women who are close to admission or who are already studying this modality. This would enable us to explore the processes studied in this paper at the same time as they take place. It is similarly essential for future research to look more deeply into the relationship between geographic origin and educational trajectories, since the results suggest that, due to gender reasons, women from rural areas may prefer educational options that do not imply a change of city or traveling long distances between the home and the educational establishment.

It is possible that the greater visibility that gender issues have attained in Chilean politics could mean that the participants are more likely to identify the role of gender as a limiting factor in their trajectory rather than the roles that could be played by other factors such as geographic origin.

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