

# Academic determinants and motivations according to the gender of vocational training students

## Determinantes académicos y motivacionales en función del género del alumnado de Formación Profesional

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### **Abstract**

The diversity of elements that can influence the evolution of the academic and professional process in students at the adolescent stage, together with the large number of training itineraries students can opt for, increase the difficulty of decision-making when choosing a career. At the same time, the gender differences that are inherent in the processes of socialisation shape the behaviour and expectations of both sexes in the different phases of life. Thus,

academic decision-making in youth seems to be shaped by gender stereotypes in our society. This study analyses the academic and motivational determinants for choosing an educational and professional itinerary as a function of the gender variable. For this purpose, a survey-type methodology with a quantitative approach has been employed. Participants were selected by means of purposive sampling from among first-year students in intermediate and higher vocational training at three secondary schools in the Region of Murcia (Spain), and the sample consisted of 192 students. The data obtained were subjected to descriptive and inferential statistical tests through the use of the SPSS V26 data analysis programme. The results show the influence of gender in the choice of Vocational Family and Training Cycle, with women opting mainly for itineraries that involve helping other people and with less social prestige, and men opting for technical professions that are better paid and more socially valued. There are also differences according to the access grades of the different type of studies. In addition, women have higher means in the motivational determinants, with the exception of the *Employability* dimension. We can therefore conclude that the gender variable influences both the academic and motivational determinants of decision-making in Vocational Training students.

**Keywords:** Gender, Vocational Training, Vocational Families, Academic Motivation

### Resumen

La pluralidad de elementos que pueden ejercer influencia en la evolución del proceso académico y profesional en los estudiantes en la etapa de la adolescencia, unido a la extensa cantidad de itinerarios de formación por los que pueden optar, incrementa la dificultad para la elección de la carrera. Simultáneamente, las diferencias de género que se desarrollan en los procesos de socialización configuran el comportamiento y las expectativas de ambos sexos en todas las fases de la vida. Así pues, la toma de decisiones académicas en la juventud parece estar supeditada por los estereotipos de género existentes en nuestra sociedad. En el presente estudio se analizan los determinantes académicos y motivacionales para escoger un itinerario formativo y profesional en función de la variable sexo. Para ello, hemos empleado una metodología tipo encuesta, con enfoque cuantitativo. La selección de los participantes se ha realizado mediante un muestreo intencional, entre los estudiantes de primer curso de Formación Profesional de Grado Medio y Superior, de tres institutos Región de Murcia (España), quedando compuesta por 192 estudiantes. Con los datos obtenidos se han realizado pruebas estadísticas descriptivas e inferenciales utilizando el programa de análisis de datos SPSS V26. Los resultados muestran la influencia del sexo en la elección de la Familia Profesional y del Ciclo Formativo, donde ellas se decantan principalmente por itinerarios que implican la ayuda

a otras personas y con menor prestigio social, y ellos por profesiones técnicas mejor remuneradas y más valoradas socialmente. También existen diferencias según calificaciones de acceso a la modalidad de estudios. Además, las chicas presentan medias más altas en los determinantes motivacionales a excepción de la dimensión *Empleabilidad*. Con todo ello podemos concluir que la variable sexo influye tanto en los determinantes académicos como motivacionales, del alumnado de Formación Profesional, para la toma de decisiones.

*Palabras Clave:* Género, Formación Profesional, Ciclos Formativos, Familias Profesionales, Motivación Académica.

## Introduction

Choosing a career pathway is one of the most important decisions that young people and their families have to take after compulsory schooling (Merino et al., 2020). This decision may affect their professional future. At this stage, guidance intervention becomes a fundamental element in responding to the issues related to this choice. This guidance intervention can be carried out through an accompaniment process to develop the Professional Life Project (PLP) of the students. Thus, we can understand the PLP as a continuous process where the person learns to actively manage the changes that occur in themselves and in their environment, in order to build their own personal and professional project and facilitating the adaptation to the constant changes that occur in society. This process allows to strengthen their autonomy and responsibility in decision-making for their personal, academic and professional life (González & González, 2015).

In recent years, the process of globalisation, the persistent situation of the economic crisis and the pandemic generated by COVID 19 have increased the difficulties regarding the labour market insertion of Spanish youth. As Queiruga et al., (2022) point out, 'the link between professional and productive reality is a highly determining factor when deciding on training needs' (p. 92). In this constantly evolving and highly competitive scenario, companies have been forced to adopt a more flexible production model, leading to a situation in which the different types of Vocational

Education and Training (VET) seem to be the most appropriate alternative to respond to the new needs and demands of the labour market. Thus, enrolment rates in Intermediate and Higher Level Training Cycles have increased and as a consequence, there are a larger diversity of students in terms of gender, social origin, primary socialisation contexts, and also regarding the expectations and motivations of the student body (Masjuan, 2005).

In this context, it is important for schools to know the profile of incoming students, as well as the reasons that determine their choice of one or another professional activity, in order to establish appropriate guidance mechanisms to promote self-knowledge and decision-making of each student in the construction of their LPL. In the same way, it is essential to adjust its functioning to the educational needs of the students, as well as to the possible difficulties they may encounter, as well as to promote their academic and professional integration. After reviewing the research on the career choice process, it can be said that “this process is of vital significance for the correct academic and professional development of the students” (Martínez-Martínez et al., 2015, p. 19).

According to Vidal and Merino (2020), in order to understand young people’s choices from a sociological perspective, it is necessary to take into account that they are the result of a combination of the *opportunities* offered by the educational system and the socio-economic and cultural resources of the family, and the *preferences* linked to social norms, aspirations and emotions of the student body. Furthermore, it is necessary to take into account different perspectives, for example from the *human capital perspective*, which aims to maximise student interest in terms of costs and expected benefit expectations, and from the *perspective of methodological individualism*, which refers to the results of socialisation, grouped into primary effects (academic results) and/or secondary effects (resources and strategies of young people and their families according to school performance and mobility). In this sense, young people who opt for VET studies are a minority with respect to those who choose to study for the post-compulsory education and are characterised by having achieved lower school performance, coming from families with low socio-cultural levels and lower expectations regarding the success and educational trajectory of their sons and daughters (Merino et al., 2020).

This interaction between the various determining factors in the decision-making process leading to the choice of a training pathway

can be complex and multidisciplinary. Among the elements that influence career choice family characteristics, locality of residence, social class, economic level, socio-cultural and academic aspects or sexual differentiation, among others, can be highlighted (García-Cavazos, 2003). These elements are called *contextual factors* (Cepero, 2009; Rivas, 1998). The decision to make this choice involves a search and selection process in which students can combine simultaneously different intrinsic and extrinsic motivations (Cepero, 1997; González et al. 2011; Rivas, 1998; Sánchez-Martín & Contreras, 2018). As intrinsic motivation, associated with activities that aim to achieve personal growth or the ones that represent a reward for themselves, include some such as the desire to learn or the achievement of personal and professional development through studies (García et al., 2018). Regarding the extrinsic motivations, the search for social prestige, family influence or obtaining a well-paid job and financial solvency, among others can be highlighted (Gámez et al., 2015; García et al., 2018).

However, research in VET “is scarce, discontinuous and dispersed temporally and geographically, with insignificant sources of funding and little involvement in its development by universities and related entities” (Echeverría and Martínez-Clares, 2021, p. 234). The number of studies published in this field is limited and they are mainly focused on the topics of dropout (Celdrà-Navarro et al., 2020; Salvá-Mut, et al., 2020), tutoring (Cáscales-Martínez and Gomáriz, 2021), research (Echeverría and Martínez-Clares (2021), employment (Queiruga et al., 2022) and gender and sexism (Fernández-Rotaache et al., 2021; Moreno-Marques, 2021); and, to a greater but insufficient extent, on those factors related to academic motivation (Martínez-Martínez et al., 2016; Merino et al., 2020; Mosteiro and Porto, 2017; Sánchez-Martín, 2020; Sánchez-Martín et al., 2017).

The results of various studies on motivations for career choice at the university level show that gender is one of the determinants with the greatest impact on this decision (Cepero, 2009; Rivas, 1998). It has been identified that, in general, women are more academically motivated (Herrera et al., 1999), get better grades (Martínez et al., 2015), devote more time and effort than men to study (Comas and Granado, 2002) and choose their degree mainly for more altruistic or intrinsic reasons, opting to a greater extent for humanities and social studies (Santana et al., 2012) and health sciences (Cepero, 2009; Fonseca and Corospum,

2004; García et al., 2018; Vázquez and Manassero, 2009). In contrast, men show preferences for more scientific, mathematical or technical studies and career paths (Rodríguez et al., 2016).

The distinction between sex and gender leads us to distinguish between the biological and social origin of people (Fargas, 2020). Specifically, the term gender refers to the social meaning of sex (Torres, 2018). Unlike sex, gender is developed in the processes of socialisation (Subirats & Brullet, 1988), shaping the behaviour and expectations of both sexes in all phases of life. Thus, most of the differentiating features of both genders are cultural constructions, products of society and not necessarily derived from nature. Gender is constituted as the result of a process of historical, social and cultural construction through which the expectations and values that each society attributes to men and women are symbolically assigned. The process of construction of the person does not take place without the determination of gender and, therefore, femininity and masculinity are a construction, a consequence of making a sexed person a woman or a man (Mayobre, 2006). As a result of this process of socialisation and cultural learning, both men and women display the values, attributes, roles, identities and representations that have been assigned to them under the label of gender. Although there have been changes in gender roles with the increasing level of education attained by women and their incorporation into the labour market, this change does not imply the disappearance of gender stereotypes.

Numerous studies suggest that the academic decisions and vocations of young people seem to be subject to existing gender stereotypes in our society, the result of social and cultural construction learned through socialisation processes (Alemany-Arrebola et al., 2019; Martínez-Martínez et al., 2016). The study by Vázquez and Blanco-Blanco (2019) confirms that, in the academic and professional decision-making process, being male or female still seems to be a determining factor. Therefore, it is considered that the choice of studies is largely influenced by existing gender stereotypes in our society (Martínez-Martínez et al., 2015). Thus, the vocational aspect is essential when it comes to choosing studies (Cepero, 2009; Martínez & Carmona, 2010), being gender one of the indicators that has the greatest impact on the preferences and vocational choice of students. Therefore, the aim of this study focuses on analysing the differences in the academic and motivational determinants for the choice of vocational training as a function of the gender variable.

## Methodology

### Design

Given the scarcity of studies on VET, we have chosen to carry out an exploratory descriptive study, based on a survey-type methodology, with a quantitative approach.

### Participants

The participants in this research were selected through a non-probabilistic purposive sampling, in which all first year students of the VET Cycles of three Secondary Education Schools of the Region of Murcia were invited to participate. The students were studying the following Vocational Training Cycles: Early Childhood Education, Communicative Mediation, Social Integration and Care for People in a Situation of Dependence; Administration and Finance; Design and Management of Digital Production, Digital Pre-printing; and Catering Services, Cooking and Gastronomy, Tourist Accommodation Services, Kitchen Management, coming from four different Professional Families: Sociocultural and Community Services (SSC), Administration (A), Graphic Arts (GA) and Catering and Tourism (CT).

The sample consisted of 192 participants with a mean age of 20 years ( $SD=5.5$ ), of whom 72 were male (37.5%) and 120 female (62.5%). Table I shows the breakdown of the participants by sex, age, the Vocational Training Cycle they are studying and the Vocational Family to which they belong.

**TABLE I.** Distribution of students in Vocational Families and Training Cycles according to gender and age

		Men	Women	Age
	N=192	%	%	Average (D.T.)
Graphic Arts	9	83.3	16.7	23.8 (6.8)
Digital Production Design and Management	4	85.7	14.3	22.1 (1.9)
Digital Prepress	5	81.8	18.2	24.9 (8.6)
Administration	14	39.3	60.7	18.6 (1.7)
Administrative Management	13	34.6	65.4	18.5 (1.7)
Administration and Finance	1	100	0	20.5 (0.7)
Catering and Tourism	27	55.8	44.2	22.08 (7.5)
Catering Services	4	40.0	60.0	19.0 (2.7)
Cooking and Gastronomy	11	69.6	30.4	21.5 (8.4)
Tourist Accommodation Services	6	38.5	61.5	24.3 (9.2)
Kitchen Management	3	66.7	33.3	24.3 (3.6)
Sociocultural and Community Services	48	18.1	81.9	21.2 (4.3)
Early Childhood Education	14	7.1	92.9	20.2 (1.8)
Communicative Mediation	10	30.0	70.0	26.1 (6.6)
Social Integration	11	36.4	63.6	21.4 (2.2)
Care for people in a dependency situation	12	4.2	95.8	18.2(1.4)

## Measuring instruments

The instrument used in the data collection was the *Cuestionario sobre los Determinantes para el Elección del Ciclo de Formación Profesional* or CDECFP (in English Questionnaire on the Determinants for the Choice of Vocational Training Cycle) by Sánchez-Martín & Contreras (2018). Although the original instrument consists of three subscales, only the items of the subscales of academic determinants and motivational determinants for the choice of studies were used. In the latter, the authors obtained a satisfactory scale reliability ( $\alpha=.703$ ). In this study, a slightly higher level of reliability was achieved ( $\alpha=.726$ ). The scale consists of five factors:

- The first of these refer to personal determinants: “In my career it is important to get long-term promotions”, “it is important to develop my personal skills in my profession”, “it is important to feel at ease with myself at work”, “it is important to achieve certain goals” and “I think it is important to explore different activities to find the kind of work I can do best”.
- The second focuses on determinants related to employability: “I think that when I finish the Vocational Training Cycle, I will get a job for sure” and “I think that this Vocational Training Cycle has good prospects for professional opportunities”.
- The third factor refers to economic determinants and security: “it is important for me to earn a lot of money when I finish my studies”, “I think that working as an employee gives me more security” and “I find it interesting to start my own business”.
- The fourth factor refers to determinants related to specialisation and stability: “in my opinion, it is important to receive recognition for the knowledge in which I have specialised”, “in my profession it is essential to specialise in a specific area” and “I consider it important to have long-term job stability”.
- And the last factor focuses on social determinants: “I think that the Training Cycle I have chosen is fashionable” and “I think that the Training Cycle I have chosen will provide me professional prestige”.

## Procedure

In order to carry out the fieldwork, the appropriate permissions and informed consent were requested, guaranteeing the confidentiality and anonymity of the participants. After which we proceeded to collect the data. The data were collected in person in the second quarter of the course, at two points in time:

- In the 2015/2016 academic year, in eight training cycles: Catering Services, Cooking and Gastronomy, Tourist Accommodation Services, Catering, Hotel and Tourism Management); Administrative Management, Administration and Finance (from the Administration

Professional Family); and Design and Management of Digital Production, Digital Pre-printing (from the Graphic Arts Professional Family).

- During the 2018/2019 academic year, in four training cycles: Early Childhood Education, Communicative Mediation, Social Integration and Care for Dependent Persons, of the Professional Family Sociocultural and Community Services.

## Data analysis

For descriptive analysis of the data, we initially analysed the normality of the data distribution using the Kolmogorov-Smirnov test. In the absence of normality, the non-parametric Mann-Whitney U test was used for several samples with sex as the grouping variable. The accepted level of significance, p-value, was  $\leq .05$ . Analyses were performed with the SPSS v.26 statistical package (IBM Corp., 2017).

## Analysis and results

On analysing the differences according to gender in the academic determinants for the choice of Training Cycle, it is found that gender influences the choice of the Professional Family ( $p=.004$ ) and of the Training Cycle ( $p=.000$ ) with higher average ranges for women in Care for People in a Situation of Dependence (128.50), Early Childhood Education (125.39), Communicative Mediation (103.70) and Social Integration (97.59) from the Vocational Family Sociocultural and Community Services; and to a lesser extent Digital Pre-printing (53.95) and Design and Management of Digital Production (60.50) from the Vocational Family Graphic Arts.

With regard to gender suitability, there are no significant differences between students' beliefs, although, as can be seen in table II, there are still 12.5% of males and 13.4% of females who continue believing that there are degrees that are more suitable for men and others for women

**TABLE II.** Beliefs about gender appropriateness of Vocational Training according to sex

	Men (N=72)	Women (N=120)	Chi Square	
			p	
Yes	12.5	13.4	.035	.851
No	87.5	86.6		

The access mode to Vocational Training (table III) also shows significant differences according to gender ( $p=.006$ ), with female students (50.74) ranking higher than male students (32.82), who mainly access through Post-Compulsory Education (76.5%) and female students through Compulsory Secondary Education (51.9%), followed by Post-Compulsory Education (44.2%).

**TABLE III.** Access mode to Vocational Training according to gender

	Men (N=72)	Women (N=120)	U	p
Post-Compulsory Education	76.5	44.2	405.000	.006
Medium-level qualification (diploma)	11.8	2.6		
Compulsory Secondary Education	11.8	51.9		

With regard to the access grades to *Vocational Training* (table IV), there are again statistically significant differences according to gender ( $p=.002$ ), with higher average ranges for females (49.25) than for males (39.56).

**TABLE IV.** Access Grades to Vocational Training according to gender

	<b>Men (N=72)</b>	<b>Women (N=120)</b>	<i>U</i>	<i>p</i>
Pass	5.9	3.9	519.000	.002
Good	29.4	16.9		
Merit	58.8	62.3		
Distinction	5.9	16.9		

The average grade obtained in the first and second four-month periods do not show significant differences according to gender, although as can be seen in table V, women obtain a lower performance than men, with the exception of the “Distinction” grades in which women obtain a higher percentage (15.6%).

**TABLE V.** Grades obtained in Vocational Training according to gender

	<b>Men (N=72)</b>	<b>Women (N=120)</b>	<i>U</i>	<i>p</i>
Fail	0	7.8	519.000	.127
Pass	0	6.5		
Good	5.9	6.5		
Merit	88.2	63.6		
Distinction	5.9	15.6		

The results presented in table VI show that *the order of the different options in which the students choose the degree they wish to study* is not a variable influenced by gender ( $p=.900$ ), despite the fact that women are on average (87%) more likely than men (70%) to be studying the degree chosen as their first option.

**TABLE VI.** Order of the options for the choice of training cycle according to gender

	<b>Men (N=72)</b>	<b>Women (N=120)</b>	<i>U</i>	<i>p</i>
First	70	87.0	544.500	.090
Second	17.6	9.1		
Third	11.8	3.9		

As for the degree of satisfaction, table VII show that men, in general, are more satisfied than women with the choice they make. Although 37.7% of women are very satisfied with the Vocational Training Course they are studying, 19.4% say they are not satisfied enough and 2.6% are not satisfied at all. However, gender has no influence on the level of satisfaction with the vocational training degree chosen ( $p=.983$ ).

TABLE VII. Satisfaction with the choice of Vocational Training according to gender

	Men (N=72)	Women (N=120)	U	p
Nothing	0	2.6	652.500	.983
Regular	11.8	19.4		
Quite	88.2	40.3		
A lot	0	37.7		

Similarly, as it can be seen in table VIII, gender does not show statistically significant differences regarding the future plans ( $p=.439$ ), men show a greater intention to complete the Vocational Training Cycle they are studying (88.2%) than women (81.8%).

TABLE VIII. Future plans according to gender

	Men (N=72)	Women (N=120)	U	p
Completing your studies	88.2	81.8	603.000	.439
Changing studies	5.9	0		
Work	5.9	11.7		
Other	0	6.5		

Table IX shows the results of the second objective “to analyse the differences in the motivational determinants for the choice of vocational training according to gender”.

TABLE IX. Motivational determinants according to gender

Determinants	Men (N=72)		Women (N=120)			
	M	DT	M	DT	U	p
<i>Personal</i>						
Promotions	3.53	.96	3.81	.91	3723.500	.091
Personal capacities	4.40	.72	4.53	.66	3901.500	.199
Personal realisation	4.76	.51	4.79	.51	4218.500	.794
Achieving employment goals	4.33	.65	4.58	.644	3396.000	.005
Exploring activities	4.10	.75	4.23	.87	3784.000	.120
<i>Employability</i>						
Secure employment	3.24	1.06	3.16	1.05	4092.000	.522
Career opportunities	3.92	.83	3.80	1.03	4132.000	.596
<i>Economic and Security</i>						
Money	3.34	.99	3.36	1.07	4116.000	.757
Employment	3.13	1.08	3.08	1.04	4174.500	.682
Own business	3.07	1.27	3.17	1.24	4084.500	.517
<i>Specialisation and Stability</i>						
Professional recognition	3.79	.82	4.06	.81	3516.500	.030
Job specialisation	3.33	1.08	3.24	.98	4050.500	.448
Job stability	4.40	.76	4.62	.71	3599.00	.021
<i>Social</i>						
Fashion	2.92	1.36	2.88	1.24	4265.500	.881
Professional prestige	3.51	.91	3.69	1.01	3818.000	.157

Women obtain higher mean scores than men in all items of the “Personal Determinants” dimension, they give more importance to *obtaining long-term promotions* (M=3.8; SD=.91), *developing their personal skills in their chosen profession* (M=4.5; SD=.66), they feel at ease with themselves at work (M=4.7; SD=.51), as well as *exploring different activities to find the type of work they can do best* (M=4.2; SD=.87), although the only item that shows statistically significant differences is *achieving goals* ( $p=.00$ ; M=4.5; SD=.64), with a higher average rank for women (104.20) than for men (83.67).

However, men have slightly higher mean scores on the items of the “Employability determinants” dimension than women, although these

differences are not statistically significant ( $p>.05$ ). Men have chosen the Vocational Training Cycle they are studying because they think that *they will get a secure job* ( $M=3.2$ ;  $SD=1.0$ ) and that *they have good prospects for professional opportunities* ( $M=3.9$ ;  $SD=.83$ ).

With regard to the Dimension “Economic and Security Determinants”, although none of the items show statistically significant differences, the mean scores are slightly higher among female students, specifically *they find it more interesting to start their own business* ( $M=3.1$ ;  $SD=1.24$ ) and to *earn a lot of money* at the end of their studies ( $M=3.3$ ;  $SD=1.0$ ), whereas male students value *to work for others* to a greater extent as it provides them with greater security ( $M=3.1$ ;  $SD=1.0$ ).

In the “Specialisation and Stability Determinants”, with the exception of the item *in my profession it is essential to be specialised in a specific area* ( $M=3.3$ ;  $SD=1.0$ ) which does not present statistically significant differences according to gender, women present higher mean scores in the rest of the items of this dimension, in which gender does have an influence: it is important to receive recognition for the knowledge in which they have specialised ( $p=.03$ ;  $M=4.0$ ;  $SD=.81$ ), with higher mean ranges for females (102.20) than for males (85.53); and they consider it more important to have long-term job stability ( $p=.02$ ;  $M=4.6$ ;  $SD=.71$ ), with higher mean ranges for women (102.51) than for men (86.49).

Regarding the “Social Determinants”, male students obtain slightly higher mean scores than female students in the influence of fashion ( $M=2.9$ ;  $SD=1.3$ ) and female students obtain slightly higher mean scores in the variable professional prestige ( $M=3.6$ ;  $SD=1.0$ ), although none of these variables show significant differences according to gender.

## Discussion and conclusions

This study presents the differences between men and women in relation to the determinants that influence the access to VET cycles. As Mosteiro and Porto (2017) point out, the choice of professional career according to gender has been studied more from the perspective of access to university studies than from the perspective of access to vocational training.

Gender influences the choice of Vocational Family and Training Cycle. Women choose to a greater extent Vocational Cycles of the Vocational Family Sociocultural and Community Services (Care for People in a

Situation of Dependence, Early Childhood Education, Communicative Mediation and Social Integration); and to a lesser extent those of the Vocational Family Graphic Arts (Digital Pre-printing and Design and Management of Digital Production). These data coincide with the previous study carried out by Moreno-Marques (2021), which highlights the existing gender-based gap in the configuration of professional vocations, with a clear horizontal segregation. This author points out that there are highly feminised vocational training specialisations and a much larger number of highly masculinised specialisations, and this implies a reduction in women's chances of finding employment. According to her data, out of half of the specific job offers, only 15.69% are linked to feminised professional families.

However, "both in the case of medium and superior level of VET studies, the number of unemployed women is higher than unemployed men" (Moreno-Marques, 2021, p.98). Considering the data related to unemployed young people according to the economic activity (Observatorio de las Ocupaciones, 2019), the major issue is that women will work in the service sector (63.4% of unemployed young people) while men will work in the industrial sector (5.56% of unemployed young people).

Although important changes in gender stereotypes are observed, "certain stereotypical behaviours that perpetuate gender inequalities are still maintained" (Mosteiro and Porto, 2017, 155). Society transmits gender stereotypes that mark students' preferences. In this case, the influence of gender socialisation on the choice of vocational training studies is evident, with discriminatory effects for female students who see their chances of finding employment reduced as they are linked to feminised professional families (Moreno-Márquez, 2021).

Even though, it seems that there are no significant gender differences in the beliefs that there are studies and professions that are more suitable for men and women, still a high percentage of students hold these beliefs in their youth (Aguaded, 2017; Esteban and Fernández, 2017). Therefore, it would be necessary to continue raising awareness in educational institutions "in terms of equality in order to achieve a fairer and more egalitarian society" (Mosteiro and Porto, 2017, p. 151) with interventions aimed at teachers, students and families. Likewise, gender also influences the mode and grades access to Vocational Training Cycles. Female students enter Vocational Training Cycles with better grades than male students,

therefore, they can choose their first option and their main access is through the Compulsory and Post-Compulsory Education routes. On the other hand, gender does not seem to influence: the number of options in which students choose the degree they are studying (determined by the average grade), the degree of satisfaction obtained in the first year and their plans for the future. Although the majority of women are taking their first-choice degree, in general, they have lower academic performance in the first year, lower levels of satisfaction and higher drop-out intentions than men.

These results differ from those obtained in other studies which indicate that female students present better levels of academic motivation in general, especially in the stages prior to university entrance, being more motivated to maintain study behaviour (Fuente de la and Justicia, 2001; Herrera et al., 1999). A more recent study by Salva-Mut et al. (2020) suggests that women have a lower drop-out rate in VET studies than men for Spain as a whole, with Murcia being the region with the lowest drop-out rate.

With regard to motivational aspects, with the exception of the “Employability” dimension, women have higher mean scores than men in all dimensions. Male students have slightly higher mean scores in the items of the “Employability” dimension, as they claim to have chosen the Vocational Training Cycle they are studying due to the job opportunities and the chances of getting a secure job. These results coincide with numerous studies that present the determining factors for young people’s choice of studies which based on intrinsic and extrinsic motivation. While for men the search for financial stability is important, for women the choice is mainly based on personal interest in a particular academic degree (Merino et al., 2020; Vidal and Merino, 2000). Although in the results of this study gender does not influence the variables included in the dimension “Economic and Security Determinants”, women obtain slightly higher mean scores on their interest to start their own business and earning a lot of money at the end of their studies. In contrast, men prefer an employed job that gives them more security. The influence of gender on the “Social Determinants” variables was also not found, although students report choosing, on average, the studies they have chosen due to the influence of “fashion”, mainly among students enrolled in different cookery specialisations. Female students, however, make their

choices according to professional prestige reasons influenced, as it has been mentioned above, by gender stereotypes (Mosteiro & Porto, 2017).

In the “Personal Determinants”, an influence of gender on the goal attainment variable has been found. This association seems to be related to the fact that women continue to opt for studies related to professions that involve helping other people (professions considered typically female) and with less social prestige. Whereas men tend to choose technical professions which, in turn, are better paid and socially valued and have greater employment opportunities (Moreno-Márquez, 2021). In the dimension “Specialisation and Stability Determinants”, the influence of gender is found in the variables “recognition for the knowledge in which they have specialised” and “long-term job stability”. This is not the case for the variable “specialisation”, where the differences are not statistically significant. These conclusions, in general, are in line with the study carried out by Merino et al. (2020) whose objective was to find out the motivations of 4th of Compulsory Education students when they choose the academic labour market pathway in VET. Their conclusions suggest that young people who choose the VET pathway have high sociocultural motivations, understood as “a cultural identification associated with a specific professional conception. For example, from a gender perspective, women feel more identified with care occupations and men with manual occupations” (p. 263); and high functional motivations, understood as “a reasonable expectation of accessing the labour market in better conditions than without having done the training” (p. 263).

These results are also congruent with the results of the work of Vidal and Merino (2020), in which, on analysing gender inequalities according to school motivations, they verify the persistence of gender inequalities in VET. Their results corroborate the validity of expressive motivations with a gender variant and the strong presence of instrumental motivations in both women and men. The findings of this study have a series of implications for educational policies, administration, teachers, guidance teams and families with respect to VET. Since the establishment of the General Education Act of 1970, educational reforms have been aimed at eliminating social prejudices towards this educational pathway among young people and their families, as well as attracting and promoting VET as a quality vocational academic pathway adapted to the demands and needs of workers and the labour market (Queiruga et al., 2022). However, at present, this option continues to be a clear minority and chosen mainly

by young people with low grades or coming from families with a basic education level (Merino et al., 2020). Moreno-Márquez (2021) stresses that the I Strategic Plan for Vocational Training in the Education System 2019-2020 (PEFP) highlights the importance of:

Reducing the existing gender gap in access to certain professional profiles is a responsibility shared by all citizens, but which specifically affects the administrations and the social partners, highlighting as a measure the quality professional information and the guidance on professional sectors and occupations (p. 100).

However, it is worth noting that the main issue is not the low recruitment of women, but the choice of studies. This highlights the importance of acting beforehand in all educational stages from early childhood and the need to involve the family, as the main agent of socialisation, from the centres in activities that address equality between men and women. As the scientific literature has shown, if action is taken only at the time of career choice or access to the labour market, these measures will have little success due to the persistence of gender stereotypes.

Despite the social importance of gender equality, it is not a priority line of action in education. There is even a perceived resistance to change, both institutional and individual, which undermines the importance of equality policies (Lombardo and Mergaert, 2013). Sexism persists in young people, in a vital stage in which social restructuring and identity consolidation take place (Aguaded, 2017; Esteban & Fernández, 2017), especially vulnerable to the development of sexist beliefs and attitudes (Fernández-Rotaecche et al., 2021), educational guidance teams play an extremely important role in raising awareness of equality among students, teachers and families. Other studies focusing on the dropout rate in Vocational Training (CEDEFOP, 2016; Cerdà-Navarro, 2019; Klotz et al., 2014), suggest improving the guidance processes for students prior to the choice of professions, highlighting the emotional and/or instrumental link between students and the profession (Cerdà-Navarro et al., 2020), without including gender stereotypes in this choice. To this end, the proposal by Cáscales-Martínez and Gomáriz-Vicente (2021) should be adapted in order to establish a teaching timetable that allows for collective tutoring throughout the academic year and a better integration of Tutorial Action (TA) in the classroom, in which gender equality in career guidance is worked on.

Regarding the limitations of the present study, they are mainly related to the sample selected and the study period analysed. Firstly, we should stress that the data analysed have been generated regarding the determinants for the choice of VET cycle, offered to the students enrolled in the master's degree in Teacher Training. The data collection has been carried out during the internship period of these students in Secondary Education centres and, as a result of the pandemic caused by COVID-19, the fieldwork was suspended during the academic years 2019-2020 and 2020-2021. Secondly, the study is limited to the Region of Murcia, thus the results may not be generalised to other regions.

To conclude with a suggestion for future lines of research, it can be said that it would be necessary to carry out new studies in other regions and including other Professional Families. It would also be very enriching to incorporate qualitative data collection instruments, in order to understand in depth, from the perspective of the participants, the causes of these differences. After the return to normality, these limitations lead us to continue this exploratory line of research by means of a mixed research design, including other data collection techniques that would allow for a deeper understanding of the object of study.

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