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EXPECTATIVAS EN SUS ESTUDIOS DEL ALUMNADO DE FP Y CÓMO PUEDEN MEJORARSE.

VET STUDENTS' EXPECTATIONS OF THEIR STUDIES AND HOW THEY CAN BE IMPROVED

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Resumen

Los objetivos del presente trabajo son realizar un estudio exploratorio de "las expectativas del alumnado de Formación Profesional (en adelante FP) con

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sus actuales estudios", "cómo pueden estos mejorarse" y validar un instrumento para poder analizar dichos campos en los estudios de FP. Responden 789 alumnos y alumnas a un cuestionario, elaborado ad hoc, con fiabilidad Alpha .950. El análisis factorial confirmatorio presenta dos factores: "expectativas con los actuales estudios" y "aspectos a mejorar en la FP". Se considera aceptable el modelo propuesto: RMSEA .06, SRMR .05, CFI .96, TLI .95 y X^2/gl 1.68. Los aspectos mejor valorados sobre las expectativas son: encontrar un mejor trabajo, mejorar la vida profesional y el nivel de vida. Dichos estudios pueden mejorarse adecuando la FP a las condiciones y necesidades del mercado laboral, mejorar aspectos como la orientación profesional, relaciones centro educativo-empresa, formación del profesorado y recursos didácticos. Las alumnas valoran mejor las variables propuestas. No se encuentran diferencias según la titularidad del centro y tener experiencia laboral o no. El protocolo que se aporta puede ser de interés para analizar la satisfacción del alumnado y la mejora de FP. Se considera que procede seguir investigando en el ámbito de la FP.

Palabras clave: *Formación Profesional, expectativas del alumnado, mejoras en la FP, análisis factorial confirmatorio, inspección de educación.*

Abstract

The objectives of this work are to carry out an exploratory study of "the expectations of Vocational Training (hereinafter FP) students with their current studies", "how these can be improved" and to validate an instrument to be able to analyze these fields in FP studies. 789 students respond to a questionnaire, prepared ad hoc, with Alpha reliability .950. The confirmatory factor analysis presents two factors: "expectations with current studies" and "aspects to improve in FP". The proposed model is considered acceptable: RMSEA .06, SRMR .05, CFI .96, TLI .95 and X2/df 1.68. The most highly rated aspects of expectations are: finding a better job, improving professional life and standard of living. These studies can be improved by adapting VET to the conditions and needs of the labor market, improving aspects such as professional guidance, educational center-

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company relations, teacher training and teaching resources. The students value the proposed variables better. There are no differences according to the ownership of the center and having work experience or not. The protocol provided may be of interest to analyze student satisfaction and improvement of FP. It is considered appropriate to continue researching in the field of FP.
Keywords: *Vocational Training, student expectations, improvements in vocational training, confirmatory factor analysis, Education Inspection*

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1. INTRODUCTION

In the document *Reflexiones sobre la Formación Profesional de Grado Medio y Superior en España* ("Reflections on Intermediate and Higher Vocational Training in Spain"), VET is understood as "all those studies and apprenticeships aimed at labour insertion, reinsertion and updating" (2018, p. 3), considering that its main objective is to increase and adapt the knowledge and skills of current and future workers throughout their lives.

On the other hand, for the first Strategic Plan for Vocational Training of the Spanish Education System, Vocational Training "constitutes one of the basic strategic training and economic lines in the Spanish and European framework, due to the role it has to play as a driving force for economic growth and employment" (2019, p. 4).

In the introduction to the study *La nueva ley de FP y su análisis. Una mirada técnica* ("The new VET law and its analysis. A technical overview"), published by the Union of Education Inspectors, its coordinators Asegurado-Garrido and Marrodán-Gironés, point out that:

> "In a society in which economic progress increasingly depends on the qualification of its human resources, vocational training is undoubtedly one of the key elements to be taken into account, as evidenced by the fact that, even in a country such as ours, with a poor tradition of vocational training, vocational training has become the most in-demand in the labour market, VET qualifications have now become the most in-demand in the labour market, surpassing the demand for university graduates, with around 19% of the demand for employment being directed at intermediate level graduates, around 23% at higher level graduates and around 18% at university graduates" (2022, p.9)

VET is a field of great educational and social interest, especially in relation to young people, affecting aspects such as social cohesion, inequality, the

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educational model and productivity in the workplace (Romero-Sánchez and Hernández-Pedreño, 2019). Rodríguez-Fernández, Rego-Agraso and Masemann (2017) understand that training for work is of great importance in the promotion of human rights. For Pio (2022) such training is like an engine of business innovation by providing quality career opportunities for young people. According to Racero-Montes and Castillo-García "VET must be key to successfully respond to the new transformation of the productive and educational system. They are systems that complement each other and are highly dependent on each other" (2022, p.12)

In Spain, with the publication of the Organic Law on the Organisation of the Education System in 1990, a fairly stable regulatory framework appeared in relation to VET. Regarding the current situation of VET in Spain, different studies (Álvarez-Rojo, García-Gómez, Gil-Flores and Romero, 2015; García-Jiménez and Lorente-García, 2015) consider that these studies have evolved favourably in Spain. However, for Fernández-Prados (2021) they are still not well regarded socially. Ruiz-Esteban and González-García (2021) conclude that the social image of VET should be strengthened.

According to Vinader-Segura, Puebla-Martínez and Navarro-Sierra (2021), it is necessary to bring the educational system closer to the professional world. For these authors, VET studies are presented as an alternative to university studies as they provide a rapid entry into the world of work.

On the other hand, VET offers students who have dropped out of the education system the opportunity to re-enter it (Bernárdez-Gómez, 2022; Ros-Garrido and García-Rubio, 2017).

This paper aims to investigate various aspects of VET students in the different communities of Spain. Sixteen variables are analysed with respect to their "expectations in relation to their current studies" (according to Alfonso-Gil et al., 2013, expectations represent what students hope to achieve throughout their academic and professional lives), and "how VET can be improved", as well as classification variables relating to gender, leaving other studies without having

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completed them, the desire to re-enrol again in current studies, the cycle being studied, the type of centre and whether they "only study" or whether they "study and work". The corresponding descriptive analyses, normality tests, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are carried out, taking into account the fit indices obtained in the model proposed in the CFA, in order to check whether this model is acceptable and thus be able to propose it for subsequent work with VET students.

An important aspect to consider is, as has been pointed out, the possible dropping out of school in studies prior to those currently being studied. Hernández-Prados, Álvarez-Muñoz and Aranda-Martínez, in their paper analysing a document on "school drop-out", point out that "the results show an area of educational research that is progressing, but with little impact, as work has been moderate and incoherent" (2017, p.89)

Vocational guidance, on the other hand, is considered to be a very important element in the prevention of school dropout (Álvarez, García-Gómez, Gil-Flores and Romero, 2015; García-Gracia and Sánchez-Gelabert, 2020; Holgueras-González, 2016). Another relevant aspect in relation to VET students is student involvement in their education, which involves connecting with other students and teachers (Niittylahti, Annala and Mäkinen, 2023; Quin, 2016; Satu, Johanna and Mäkinen, 2019). Such involvement reduces, according to Cerda-Navarro, Sureda-García and Salva-Mut (2020), the risk of school dropout. For Asegurado-Garrido and Marrodán-Ginés (2022), career guidance is a key element in a changing production environment and in a flexible training system.

As regards the students' gender, according to Mosteiro-García and Porto-Castro (2017), female students are more sensitive to aspects related to working conditions, social recognition and difficulties in accessing the labour market. Differences are also found in the choice of professional family and training cycle, with female students opting for subjects that involve helping people and have less social prestige, while male students choose technical professions that are

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better paid and more socially valued (Sánchez-Martín, Corral-Robles, Llamas-Bastida and González-Gijón, 2023).

When analysing the differences taking into account whether or not they do paid work compatible with their studies, Sánchez-Bolívar and Escalante-González (2020) consider that those who combine their studies with paid work have higher levels of socio-occupational skills than unemployed students.

Another relevant factor is related to the academic and professional guidance of students (Sánchez-Martín et al., 2017). In this sense, Cascales-Martínez and Gomariz-Vicente (2021) highlight the benefit of tutoring in contributing to improving academic, professional and personal aspects of students.

In relation to research in the field of VET in Spain, it is considered deficient (Echeverría-Samanes and Martínez-Clares, 2021; Rego-Agraso and Rial-Sánchez, 2017; Sarceda-Gorgoso and Penado-López, 2018). According to Echeverría-Samanes and Martínez-Clares, it is necessary to "build a culture of research and innovation in VET (...) that offers real spaces for exchange, participation and decision-making" (2021, p. 249).

According to Moso (2019) VET is a relatively new area of research at the international level. Michael-Gessler, Bohlinger and Zlatkin-Troitschanskaia (2021) consider vocational education and training (VET) to be an internationally fragmented field in which there is no international research network. A lack of research, on the other hand, has been found in this study, both in relation to VET in general and specifically in the fields analysed.

Bieger, Domingo-Souto, Pin, and García-Lombardía, (2018) believe that the improvements to be made in VET should be related to its image, social consideration, the relationship between the educational centre and the company, teacher training and the curriculum. In the work *Reflexiones sobre la Formación*

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Profesional de Grado Medio y Superior en España (2018) [Reflections on Medium and Higher Vocational Education and Training in Spain], important proposals for the improvement of VET are made, such as fostering a greater connection between all the actors involved in these studies, presenting these studies as an important option, highlighting their employability, prioritising investment in VET, evaluating plans frequently and periodically, fostering inclusive VET for all, promoting distance VET, providing teachers with the appropriate resources and methodologies, promoting the offer of bilingual cycles, favouring mobility and internationalisation, addressing current and future employability needs and encouraging companies to demand qualifications and specialisation.

2. OBJETIVES

In order to analyse the expectations of VET students regarding their current studies and what they think about how these can be improved, an *ad hoc* questionnaire was developed and, once sent to a sample of schools (according to their location and ownership), responses were obtained from 789 students. The objectives of the research are mainly related to:

1. The expectations that students have with their current VET studies regarding: "their personal life", "their family life", "their professional life", "finding a better job", "finding a job that is more suited to their vocation", "improving their standard of living" and "improving their social status", "improving the quality of life" and "improving their social status".

2. The importance of improving VET: "improving its social consideration", "improving its educational importance", "being more up-to-date", "improving vocational guidance in education", "improving the training of VET teachers", "improving teaching resources in VET education", "adapting VET education to the needs of the labour market" and "adapting VET education to working conditions".

3. By means of factor analyses, validate a model that may be useful for further studies with respect to VET students.

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3.METHODOLOGY

3.1. SAMPLE

In order to analyse the assessments made by VET students regarding their expectations in relation to their current studies and how these can be improved, the responses of 789 students from the different regions of Spain were studied. Previously, a questionnaire had been sent to a sample of centres, randomly drawn according to the population of each Community and their ownership, from the Spanish Ministry of Education's State Register of Non-University Teaching Centres. The link to the questionnaire was sent via a Google application. Obviously, although the students were consulted, it was up to the people in charge of the centre to decide whether or not to open the e-mail and, if so, to make it available to them.

Slightly more than half (56.4%) of the students completing the questionnaire are girls and four out of ten students (41.5%), 2.1% do not indicate their sex. Almost half (49.6%) are in higher education, four out of ten (40.8%) in intermediate education and one out of ten (9.6%) in basic vocational training. As an interesting fact, and which may consider VET as "refuge" studies, it is noted that slightly more than a third (36.9%) of the total number of students have previously abandoned other studies without having completed them. In the sample, students from public schools are more represented in the sample (92.7%), as opposed to private and subsidised private schools (1.4% and 5.9%, respectively).

In relation to student satisfaction with having chosen their current studies adequately or not, 11.4% "would not re-enrol in them" and 10.6% "would re-enrol but with many doubts" (22.0% in total). The remaining 78.0% "would re-enrol without any doubts" (50.9%) or "would re-enrol with some doubts" (27.1%).

3.2. METHOD OF ANALYSIS

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An exploratory study is carried out on the assessments made by VET students regarding their expectations of their current studies and how VET can be improved. A variety of tests were used to analyse the responses received. Thus, the Kolmogorov-Smirnov test, for the normality of the distribution of the variables; to calculate homoscedasticity, the Levene test (for equality of variances); for the non-parametric distribution, the Mann-Whitney U test; for the proposed model, the exploratory and confirmatory factor analyses; Cohen's D to interpret the magnitude of the effect sizes; also calculating the statistical power. The statistical packages used are JAMOVI, JASP and G*Power.

3.3. TOOL

According to the questionnaire sent out, students were asked to rate the following aspects: "possible causes of leaving previous studies without completing them", "importance of different reasons for enrolling in current VET studies", "student satisfaction with current VET studies", "expectations with current studies" and "possibilities for improvement of VET". In the present study, and for reasons of editorial limitation, the topics of "expectations with current studies" and "possibilities for improvement in VET" are analysed.

The variables proposed in relation to "students' expectations with their current studies" refer, as indicated above, to: "improving personal life", "improving family life", "improving professional life", "finding a better job", "finding a job more suited to my vocation", "improving standard of living" and "improving social status". In relation to "the importance of improving VET, the following are proposed: "improve its social consideration", "improve its educational importance", "make VET more up-to-date", "improve vocational guidance in education", "improve the training of VET teachers", "improve teaching resources in VET education", "adapt VET education to the needs of the labour market" and "adapt VET education to working conditions".

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To analyse the content validity of the questionnaire, "expert judgement" is used (Galicia-Alarcón, Balderrama-Trápaga and Edel-Navarro, 2017), of which a total of 9 are VET teachers, VET school managers and education inspectors. The experts assessed the variables on a scale of 0 to 10 points, eliminating those that did not obtain a minimum average score of 7 points. The variables that have exceeded this score are re-analysed in order to review their quality and wording.

The final document consists of 16 variables. Students are offered a scale of 0 to 10 points for their assessment, with 0 being the lowest and 10 the highest. The socio-demographic variables that are also included refer to: sex, cycle being studied, ownership of the centre, work experience and interest in re-enrolling.

3.3.1. KOLMOGÓROV-SMIRNOV, SKEWNESS AND KURTOSIS TESTS

To check the statistical normality of the variables, they are analysed with various descriptive statistics (mean, standard deviation, median, skewness and kurtosis), as well as the Kolmogórov-Smirnov test. The Kolmogórov-Smirnov test shows that these variables do not have a normal distribution. However, the skewness and kurtosis have values that can be considered normal (Ferrando and Anguiano-Carrasco, 2010; Muthen-Kaplan, 1992).

Table 1 shows the values of the variables relating to “expectations in the performance of current studies” as well as “the importance of different aspects for improving VET” with respect to the descriptive statistics already mentioned and the Kolmogórov-Smirnov normality test.

Table 1

"Expectations for their current studies" and "Importance of different aspects for the improvement of VET". Descriptive statistics. Kolmogórov-Smirnov normality test.

"Expectations with regard to the completion of their current studies" with respect to: (Scale, 0 "no importance" and 10 "maximum importance").	**Descriptive statistics**						**Normality test**
	M	***DT***	**Average range 95%**		**Asymmetry**	**Kurtosis**	**Kolmogórov-Smirnov**
			lower	**upper**			
1. "Personal life".	7.0	2.4	6.8	7.2	-0.876	0.523	**<.001**

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2. "Family life".	6.5	2.6	6.4	6.7	0.799	0.183	**<.001**
3. "Professional life".	7.2	2.4	7.1	7.4	1.013	0.858	**<.001**
4. "Finding a better job".	7.3	2.4	7.1	7.5	1.045	0.958	**<.001**
5. "Finding a job that is more in line with my vocation".	7.1	2.5	6.9	7.3	.954	.0578	**<.001**
6. "Improve my standard of living".	7.2	2.4	7.0	7.4	1.026	0.980	**<.001**
7. "Improve my social status".	6.4	2.6	6.2	6.6	0.702	0.050	**<.001**
"Importance for the improvement of VET". (Scale, 0 "no importance" and 10 "maximum importance").	***M***	***DT***	**Descriptive statistics Average range 95% lower**	**upper**	**Asymmetry**	**Kurtosis**	**Normality test Kolmogórov-Smirnov**
1. "Improve the social consideration of vocational education and training".	6.6	2.6	6.4	6.8	-0751	0.210	**<.001**
2. "Improve the educational relevance" of VET.	7.3	2.2	7.1	7.5	-0.955	1.002	**<.001**
3. "To make VET more up to date".	7.4	2.4	7.3	7.6	-1.114	1.090	**<.001**
4. "Improve vocational guidance in education".	7.5	2.2	7.3	7.6	-1.043	1.081	**<.001**
5. "Improve the relationship between educational centres and companies".	7.2	2.4	7.1	7.4	-0.910	0.609	**<.001**
6. "Improve the training of VET teachers".	7.3	2.3	7.1	7.5	-0.974	0.835	**<.001**
7. "Improve teaching resources in VET education".	7.3	2.3	7.2	7.5	-0.927	0.710	**<.001**
8. "Adapt VET education to the needs of the labour market".	7.6	2.3	7.4	7.7	-1.102	1.161	**<.001**
9. "Adapt VET teaching to labour market conditions	7.7	2.3	7.5	7.9	-1.217	1.413	**<.001**

Source: Own elaboration.

3.3.2. LEVENE'S TEST

The Levene's test is used to calculate homoscedasticity by contrasting the ratings of the items according to sex. The "p-value" indicates that there is equal variance in the variables studied.

Table 2 shows, according to gender, "expectations with the completion of their current studies" and "the importance of different aspects to improve VET", the "p" value with the non-parametric Mann-Whitney U test and the Levene's test for equality of variances.

Table 2

Expectations for their current studies and the importance of different aspects for improving VET, according to gender. Non-parametric and homoscedasticity tests.

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"Expectations with regard to their current studies", according to gender (scale, 0 "no importance" and 10 "maximum importance").	**Average range**		**Mann-Whitney U test.**	**Levene's test for equality of variances**	
	Student (f)	**Student (m)**	**p value**	**F**	**p value**
1. "Personal life".	**402.58**	318.98	**<.001**	0.358	**.550**
2. "Family life".	**386.08**	341.52	**.005**	0.020	**.880**
3. "Professional life".	**391.78**	328.47	**.001**	1.814	**.178**
4. "Finding a better job".	**387.19**	331.73	**<.001**	3.288	**.070**
5. "Finding a job that is more suited to my vocation".	**389.07**	333.78	**<.001**	0.007	**.935**
6. "To improve the standard of living.	**390.30**	324.33	**<.001**	2.047	**.153**
7. "Improve social status".	**392.23**	322.52	**<.001**	0.773	**.380**
"Importance they have for improving VET", according to sex (Scale, 0 "no importance" and 10 "maximum importance").	**Average range**		**Mann-Whitney U test.**	**Levene's test for equality of variances**	
	Student (f)	**Student (m)**	**p value**	**F**	**p value**
1. "Improve its social consideration".	**396.07**	321.81	**<.001**	0.737	**.391**
2. "Improve its educational importance".	**402.48**	312.12	**<.001**	0.055	**.850**
3. "Make it more up to date".	**396.54**	324.68	**<.001**	0.012	**.913**
4. "Improve vocational guidance in education".	**400.83**	310.61	**<.001**	0.085	**.771**
5. "Improve the relationship between educational centres and companies".	**395.70**	323.42	**<.001**	0.134	**.714**
6. "Improve the training of VET teachers".	**394.15**	323.61	**<.001**	0.684	**.408**
7. "Improve teaching resources in VET education".	**391.30**	324.48	**<.001**	0.634	**.426**
8. "Adapt VET teaching to the needs of the labour market".	**396.24**	320.48	**<.001**	3.033	**.082**
9. "Adapt VET teaching to labour market conditions".	**398.82**	324.89	**<.001**	9.476	.002

Source: Own elaboration.

3.3.3. EXPLORATORY AND CONFIRMATORY FACTOR ANALYSIS

In order to be able to study the proposed model with respect to "students' expectations for their current studies" and "the importance of different aspects for the improvement of VET", the corresponding factor analyses are carried out. The exploratory factor analysis (hereinafter EFA) of the 16 variables in all cases provides factor loadings above .400. For Ferrando and Lorenzo-Seva (2014), exploratory and confirmatory factor analysis are two poles of a continuum. The sample adequacy of the Kaiser-Meyer-Olkin (KMO) CFA is .939 and Bartlett's test of sphericity has a degree of significance of <.001. The "Principal Axes" method is

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used for extraction and for rotation "Oblimin" which converges in four iterations. Two factors are extracted: "Expectations with the completion of their current studies" and "Importance that different aspects have for improving VET", which explain 70.636% of the variance, with the former accounting for 56.878% and the latter for 13.758%. The reliability of the 16 variables, according to Cronbach's Alpha is .950 and McDonald's Omega .923. The reliability of the first factor is .933 and .892 (respectively) and of the second factor .936 and .886, (respectively). These indices are considered to have good internal consistency.

Table 3 shows the factor loadings of the 16 variables in relation to "Expectations with the completion of their current studies" and "The importance of different aspects for improving VET". It shows how both factors are constituted, their factor loadings, as well as the reliability of the set of variables and of each of the factors, both according to Cronbach's Alpha and McDonald's Omega.

Table 3

Confirmatory factor analysis.

"Expectations with the completion of their current studies". "Importance for the improvement of VET" of the following aspects:		FACTORS 1	FACTORS 2
1. "Your personal life".		**.895**	
6. "Improving my standard of living".		**.887**	
4. "Finding a better job".		**.837**	
5. "Finding a job that is more suitable for my vocation".		**.828**	
7. "Improve my social status".		**.812**	
2. "Your family life".		**.785**	
3. "Your professional life".		**.780**	
"Importance of the following aspects for the improvement of VET":			
6. "Improving the training of VET teachers".			**.920**
7. "Improving the teaching resources in VET education".			**.916**
8. "Adapting it to the needs of the labour market"			**.874**
9. "To adapt it to the working conditions".			**.833**
5. "Improve the relationship between the VET educational centre and companies".			**.792**
4. "Improve vocational guidance in education".			**.740**
3. "Make it more up to date".			**.672**
1. "Improve its social consideration".			**.575**
2. "Improve its educational importance".			**.513**
Cronbach's Alpha	**total .950**	**.933**	**.936**
McDonald's Omega	**total .923**	**.892**	**.886**

Source: Own elaboration.

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Adjustment indexes obtained with the AFC are: RMSEA with value .06 (acceptable), SRMR .05 (acceptable), CFI .96 (acceptable), TLI .95 (acceptable) and X2/gl=1.68. Therefore, the proposed model can be considered acceptable with the two factors indicated, as shown in table 4 (Lloret-Segura, Ferreres-Traver, Hernández-Baeza and Tomás-Marco, 2014).

Table 4

Adjustment of confirmatory factor analysis models

Models	**Measures of absolute adjustment**		**Incremental adjustment measures**		**Parsimony adjustment measures**
Indexes	**RMSEA (1)**	**SRMR (2)**	**CFI /3)**	**TLI (4)**	**X²/gl (5)**
Proposed model	.06 (acceptable)	.05 (acceptable)	.96 (acceptable)	.95 (acceptable)	1.68 (acceptable)
Optimal indexes	Less than or equal to .06 (6)	Less than or equal to .08 (7)	Higher than or equal to .95 (8	Higher than or equal to .90 (9)	Less than or equal to 5.00

Note: (1) RMSEA: Root mean squared error of approximation; (2) SRMR: Standardized root mean square residual; (3) CFI: Comparative fit index; (4) TLI: Tucker-Lewis index; (5) X2/gl: Chi-square between degrees of freedom. (6) Laia (2020). (7) Cho, Hwang, Sarstedt, and Ringle (2020). (8) Laia (2020). (9) Xia, and Yang (2019). Source: Own elaboration.

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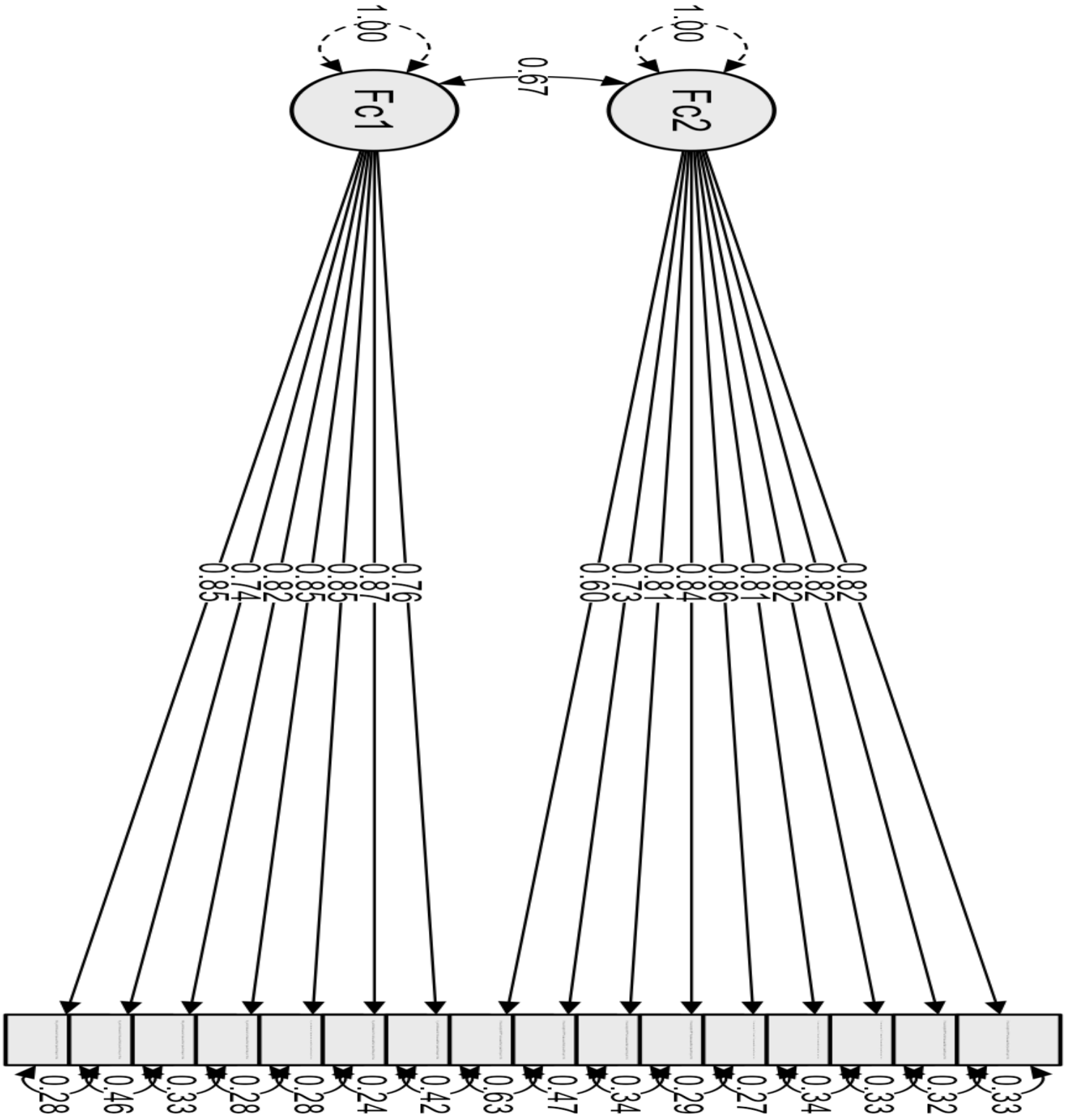
Diagram 1. *Confirmatory factor analysis*.



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Source: Jamovi project (2022).

4.RESULTS

4.1. "EXPECTATIONS WITH THEIR CURRENT STUDIES" AND "THE IMPORTANCE OF DIFFERENT ASPECTS FOR THE IMPROVEMENT OF VET"

Regarding the "expectations that students have in relation to their current studies", the aspects analysed have the highest value for "finding a better job" (M = 7.3, SD =2.4) and the lowest value for "improving social status" (M = 6.4, SD =2.6). The most highly rated aspects of "the importance of various aspects for improving VET" are "the training you are getting for a future job" (M = 7.1, SD =2.3), "adapting VET education to working conditions" (M = 7.7, SD =2.3), with the least rated aspect being "improving your social status" (M = 6.6, SD =2.6). Table 5 shows the mean and standard deviation of the 16 variables analysed.

Table 5

"Expectations with the completion of their current studies" and "importance of different aspects for the improvement of VET", according to mean and standard deviation.

"Expectations with the completion of their current studies". (Scale, 0 "no importance" and 10 "maximum importance").	***M***	***DT***
1. "Personal life	7.0	2.4
2. "Family life".	6.5	2.6
3. "Professional life".	7.2	2.4
4. "Finding a better job".	7.3	2.4
5. "Finding a job that is more suited to my vocation".	7.1	2.5
6. "Improve the standard of living".	7.2	2.4
7. "Improve social status".	6.4	2.6
"Importance for the improvement of VET". (Scale, 0 "no importance" and 10 "maximum importance").	***M***	***DT***
1. "To improve its social consideration".	6.6	2.6
2. "To improve its educational importance".	7.3	2.2
3. "To make it more up-to-date".	7.4	2.4
4. "Improve vocational guidance in education".	7.5	2.2
5. "Improve the relationship between education centres and companies".	7.2	2.4
6. "Improve the training of VET teachers".	7.3	2.3
7. "Improve teaching resources in VET education".	7.3	2.3
8. "To adapt VET education to the needs of the labour market".	7.6	2.3
9. "Adapt VET teaching to labour market conditions".	7.7	2.3

Source: Own elaboration.

4.2. "EXPECTATIONS WITH THEIR CURRENT STUDIES" AND "IMPORTANCE OF DIFFERENT ASPECTS FOR THE IMPROVEMENT OF VET", ACCORDING TO GENDER"

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In the analysis carried out with the Kolmogórov-Smirnov test, it was found that the variables analysed did not have a normal distribution. Therefore, in order to find out whether there are differences according to gender in "expectations regarding the completion of their current studies" and "the importance of certain aspects for improving vocational training", the non-parametric Mann-Whitney U test was used. It can be seen that female students rate all the variables proposed in the two fields indicated better than male students, with high statistical power and a small effect size (according to Cohen's D).

Table 6 shows the 16 variables, their average rank according to gender, the Mann-Whitney U "p", the statistical power and the effect size according to Cohen's D.

Table 6

Expectations with their current studies. Importance of improving vocational training, according to gender.

"Expectations with their current studies", according to gender (Scale, 0 "no importance" and 10 "maximum importance").	**Student (f) Average range**	**Student (m) Average range**	**U Mann-Whitney**	**p value**	**1-β (1) Statistical output**	**D (2) Cohen**
1. "Personal life".	**402.58**	318.98	50608	**<.001**	0.99	.30
2. "Family life".	**386.08**	341.52	57533	**.005**	0.82	.19
3. "Professional life".	**391.78**	328.47	53471	**.001**	0.96	.26
4. "Finding a better job".	**387.19**	331.73	54486	**<.001**	.90	.22
5. "Finding a job that better suits my vocation".	**389.07**	333.78	55139	**<.001**	.93	.24
6. "To improve the standard of living.	**390.30**	324.33	52148	**<.001**	.94	.25
7. "To improve the social level".	**392.23**	322.52	51687	**<.001**	.99	.34
"Importance for improving VET, according to gender". (Scale 0 "no importance" and 10 "maximum importance").	**Student (f) Average range**	**Student (m) Average range**	**U Mann-Whitney**	**p value**	**1-β (1) Statistical output**	**D (2) Cohen**
1. "Improve social consideration".	**396.07**	321.81	51486	**<.001**	0.99	.30
2. "Improve educational importance".	**402.48**	312.12	48538	**<.001**	0.99	.40
3. "Make it more up-to-date".	**396.54**	324.68	52381	**<.001**	0.98	.30
4. "Improve vocational guidance in education".	**400.83**	310.61	48066	**<.001**	0.99	.36
5. "Improve the relationship between educational centre and companies".	**395.70**	323.42	51979	**<.001**	0.99	.40

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6. "Improve the training of VET teachers".	**394.15**	323.61	52054	**<.001**	0.98	.29
7. "Improve teaching resources in VET education".	**391.30**	324.48	52238	**<.001**	0.95	.26
8. "Adapt VET teaching to the needs of the labour market".	**396.24**	320.48	51080	**<.001**	0.99	.34
9. "Adapt VET teaching to labour market conditions".	**398.82**	324.89	52464	**<.001**	0.99	.34

NOTES: (1) The conventionally expected statistical power for an analysis is 80% (Cardenas-Castro and Arancibia-Martini, 2014).
(2) References for interpreting the magnitude of effect sizes: d = .20: small, d = .50: medium, d = .80: large (Cohen, 1992).

Source: Own elaboration.

4.3. "EXPECTATIONS WITH THE COMPLETION OF THEIR CURRENT STUDIES". "IMPORTANCE FOR THE IMPROVEMENT OF VOCATIONAL EDUCATION AND TRAININ", ACCORDING TO WHEHER OR NOT THEY WOULD LIKE TO RE-ENROL OR NOT

Given the importance of the expectations that students have in their studies, they were asked about their desire to re-enrol, with four possible options: 1. "No"; 2. The first two options were grouped into a first set and the last two into a second set. Using the non-parametric Mann-Whitney U test, the students who consider that they would re-enrol in their current studies ("yes, with some doubt" and "yes, without any doubt"), give a better evaluation of all the aspects proposed with respect to "expectations with the completion of their current studies" and "the importance it has for improving vocational training". These variables have a high statistical power and a medium effect size according to Cohen's D.

Table 7 shows the values of these variables. The average ranks of male and female students. The Mann-Whitney U "p" value. The value of the statistical power and the effect size for each variable.

Table 7

Expectations with the completion of their current studies. Importance for improving vocational training. According to whether or not you wish to re-enrol in them.

"Expectations with their current studies", according to gender (Scale, 0 "no importance" and 10 "maximum importance")	**(1)**	**(2)**	**U Mann-Whitney**	**p value**	**1-β (1) Statistical output**	**D (2) Cohen**
	Average range	**Average range**				
1. "Personal life".	241.99	**412.00**	26233	**<.001**	1.00	.83
2. "Family life".	274.83	**401.90**	31542	**<.001**	0.99	.57

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3. "Professional life".	248.63	**406.67**	27160	**<.001**	1.00	.75
4. "Finding a better job".	268.75	**398.65**	30440	**<.001**	0.99	.62
5. "Finding a job that better suits my vocation".	248.11	**406.82**	27076	**<.001**	1.00	.96
6. "To improve the standard of living.	263.89	**399.20**	29547	**<.001**	1.00	.66
7. "To improve the social level".	271.99	**396.33**	30859	**<.001**	0.99	.61
"Importance for improving VET, according to gender". (Scale 0 "no importance" and 10 "maximum importance").	**Student (f) Average range**	**Student (m) Average range**	**U Mann-Whitney**	**p value**	**1-β (1) Statistical output**	**D (2) Cohen**
1. "Improve social consideration".	278.94	**396.16**	31984	**<.001**	0.99	.53
2. "Improve educational importance".	262.61	**400.74**	29340	**<.001**	1.00	.68
3. "Make it more up-to-date".	280.73	**397.65**	32393	**<.001**	0.99	.58
4. "Improve vocational guidance in education".	293.51	**390.27**	34345	**<.001**	0.99	.47
5. "Improve the relationship between educational centre and companies".	298.95	**391.32**	35363	**<.001**	0.99	.52
6. "Improve the training of VET teachers".	308.24	**388.23**	37021	**<.001**	0.99	.41
7. "Improve teaching resources in VET education".	302.35	**388.84**	36193	**<.001**	0.99	.43
8. "Adapt VET teaching to the needs of the labour market".	295.34	**391.73**	34775	**<.001**	1.00	.47
9. "Adapt VET teaching to labour market conditions".	293.10	**396.76**	34539	**<.001**	0.99	.47

Re-select current studies: 1. "No" and "yes, with many doubts" 2. "Yes, with some doubt" and "yes, without any doubt".
NOTES: (1) The conventionally expected statistical power for an analysis is 80% (Cardenas-Castro and Arancibia-Martini, 2014). (2) References for interpreting the magnitude of effect sizes: d = .20: small, d = .50: medium, d = .80: large (Cohen, 1992).
Source: Own elaboration.

4.4."EXPECTATIONS WITH THEIR CURRENT STUDIES" AND "IMPORTANCE FOR IMPROVING VOCATIONAL TRAINING", ACCORDING TO THE CYCLE BEING STUDIED, TYPE OF CENTRE, PAID WORK EXPERIENCE AND WHETHER "ONLY STUDYING" OR "STUDYING AND WORKING".

The non-parametric Mann-Whitney U test indicates that no significant differences are found with respect to "expectations regarding the completion of their current studies" and "the importance of improving vocational training", according to the "ownership of the centre in which they study" and "whether or not they have work experience".

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The students who study a "higher cycle" value significantly better than those of a "medium cycle", "expectations with the completion of their current studies" about "professional life", ("medium cycle", Mnd =7.0, Range = 318.64, "higher cycle", Mnd = 7.0, Range = 349.17; U = 50442, p = .040, Cohen's D = .16, statistical power = 0.67). According to "the importance of improving VET", students in the "higher cycle" value the proposed aspects better than those in the "middle cycle", except for the variables "improving its social consideration" and "improving its educational importance" in which no differences are found.

Table 8 shows the better assessment of students in the higher cycle with respect to "expectations with the completion of their current studies", of the variable "professional life" (p = .040, for Mann-Whitney U). The differences, according to the Mann-Whitney U test, for five of the variables, between students in the intermediate and higher cycles, with an indication of the statistical power and the size of the effect, are also indicated according to "the importance of improving vocational training".

Table 8

"Expectations with the completion of their current studies". "Importance for the improvement of VET", according to the cycle being studied.

"Expectations with regard to the completion of their current studies", according to the cycle being studied (scale, 0 "no importance", 10 "maximum importance").	**Intermediate cycle. Average range**	**Higher cycle. Average range**	**U Mann-Whitney**	**p value**	**1-β (1) Statistical output**	**D (2) Cohen**
3. "Professional life".	318.64	**349.17**	50442	**.040**	0.67	.16
(Importance for the improvement of VET", according to the cycle being studied. (Scale, 0 "no importance", 10 "maximum importance").	**Intermediate cycle. Average range**	**Higher cycle. Average range**	**U Mann-Whitney**	**p value**	**1-β (1) Statistical output**	**D (2) Cohen**
3. That it is more up to date.	314.45	**354.39**	49197	**.007**	0.83	.20
4. Improve vocational guidance in education.	311.03	**351.70**	48134	**.006**	0.88	.22
5. Improve the relationship. between education centres and companies.	318.84	**348.14**	50502	**.048**	0.67	.16
6. To improve the training of VET teachers.	305.31	**358.30**	46442	**<.001**	0.93	.25

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7. To improve teaching resources in VET education.	305.65	**356.19**	46539	**.001**	0.94	.26
8. Adapt VET education to the needs of the labour market.	311.19	**354.59**	48226	**.003**	0.94	.26
9. Adapt VET education to labour market conditions.	309.43	**362.26**	47705	**<.001**	0.98	.30

NOTES: (1) The conventionally expected statistical power for an analysis is 80% (Cárdenas-Castro and Arancibia-Martini, 2014).
(2) References for interpreting the magnitude of effect sizes: d = .20: small, d = .50: medium, d = .80: large. (Cohen, 1992)

5. DISCUSSION AND CONCLUSIONS

As mentioned above, 16 variables were analysed with a sample of 789 male and female students studying VET in the different autonomous communities of Spain, with regard to "expectations with regard to their current studies" and "the importance of different aspects for improving VET". 56.4% are female students and 41.5% are male students, with an average age of 22.7 years. Of these, 49.6% are enrolled in the higher cycle, 40.8% in the intermediate cycle and 9.6% in basic vocational training. On the other hand, 36.9% have abandoned other studies without having completed them. 71.3% devote their activity only to study, while the remaining 28.7% study and work. When asked whether they would re-enrol in their current studies, 11.4% "would not re-enrol", 10.6% "yes, although with many doubts", 27.2% "yes, although with some doubts" and 50.9% "yes, without any doubts".

The aspects valued by the students in relation to "expectations with the completion of their current studies", have an average range of 7.3 points to 6.4. Expectations regarding "finding a better job", "professional life", "improving standard of living", "finding a job more suited to my vocation" and "personal life" were the most highly rated. The least valued aspects were "improving social status" and "family life".

Regarding the evaluations made in relation to "the importance of different variables for improving VET", there is an average range of 7.7 to 6.6 points. The most highly rated aspects refer to "adapting VET education to working

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conditions", "adapting VET education to the needs of the labour market", "improving vocational guidance in education" and "making it more up-to-date".

One of the objectives was to find a model with the 16 variables, by means of factor analyses, that could be useful for further studies of the VET student body, with respect to "the expectations of the student body in carrying out their current studies" and "the importance that different aspects have for improving VET". The analyses carried out indicate that the model is adequate, which is proven by the RMSEA .06, SRMR .05, CFI .96, TLI .95 and X2/gl 1.68 of the CFA. This analysis has a Kaiser-Meyer-Olkin (KMO) measure of .939, a Bartlett's test of sphericity with a degree of significance of <.001, with two factors explaining 70.636% of the variance. Cronbach's Alpha was .950, with the resulting factors being "expectations with the completion of their current studies" and "importance that different aspects have for improving VET" and "importance that different aspects have for improving VET".

Female students rate significantly higher than male students the variables proposed in relation to "expectations in pursuing their current studies" and "the importance of certain aspects for improving vocational training". On the other hand, students who "would re-enrol in their current studies and those who would re-enrol, although with some doubts", also rate the aspects analysed regarding the subjects of expectations and improvement of VET significantly higher than students who "would re-enrol although with many doubts and those who would not re-enrol".

Pupils who study a "higher cycle" rate their expectations regarding "professional life" significantly higher than those who study an "intermediate cycle". Those who study a "higher cycle" consider the proposed aspects to be more important for improving VET, except for the variables "improving its social consideration" and "improving its educational importance" in which no differences are found.

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No significant differences were found regarding "expectations with regard to their current studies" and "the importance of improving VET", depending on the type of centre where they study and whether or not they have work experience.

The information obtained regarding students' expectations for their VET studies is of particular interest, given that it can contribute to a greater knowledge of students' opinions and lead to improvements in the educational system.

It can be seen that a significant 36.9% of students have abandoned other studies without completing them, representing for them the opportunity to re-enter the educational system (Bernárdez-Gómez, 2022).

According to Vinader-Segura, Puebla-Martínez and Navarro-Sierra (2021), it is necessary to bring the educational system closer to the professional world. In this study, students also consider it important to improve different aspects of VET related to this proximity, such as the variables of "improving the relationship between the educational centre and the company", "adapting VET education to the needs of the labour market" and "adapting VET education to working conditions".

On the other hand, for students who have dropped out of the education system, VET represents an opportunity to re-enter the education system (Bernárdez-Gómez, 2022; Ros-Garrido and García-Rubio, 2017). The assessments made by students regarding both their expectations and the importance of certain variables for improving VET also indicate that the incorporation of these studies into the education system is a real new educational opportunity.

For several authors (Álvarez-Rojo, García-Gómez, Gil-Flores and Romero, 2015; García-Gracia and Sánchez-Gelabert, 2020; Holgueras-González, 2016), career guidance is considered a very important element in the prevention of early school leaving. The students consulted give an important value to "career guidance in education" in order to improve VET.

According to Mosteiro-García and Porto-Castro (2017), female students are more sensitive to aspects related to working conditions, social recognition

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and difficulties in accessing the labour market. As can be seen in this study, female students also rate significantly higher than male students the variables proposed in relation to "expectations with regard to their current studies" and "the importance of certain aspects for improving VET".

When analysing the differences considering whether or not a paid job compatible with their studies is carried out, for Sánchez-Bolívar and Escalante-González (2020), those who combine their studies with a paid job have higher levels of socio-occupational skills than unemployed students. It is evident that this study does not analyse these socio-occupational skills; however, no significant differences are found in the evaluations made according to whether or not they have work experience.

For Bieger, Domingo-Souto, Pin, and García-Lombardía, (2018), the improvements to be made in VET should be related to its image, social consideration, the relationship between the educational centre and the company, teacher training and the curriculum. These improvements coincide with the assessments made in these aspects by the students consulted in this study. Similarly, the assessments of the nine variables proposed to the students coincide with some of those indicated in the work *Reflexiones sobre la Formación Profesional de Grado Medio y Superior en España* [Reflections on Intermediate and Higher Vocational Education and Training in Spain] (2018). For Racero-Montes and Castillo-García (2022), the situation of youth unemployment in Spain, school failure and the social discrediting of VET makes it necessary to promote these studies. Asegurado-Garrido and Marrodán-Gironés understand that VET is not a lower quality alternative to other studies but a more effective path in relation to employment and labour productivity. The authors consider that "the development of a vocational training system (...) requires placing these studies as part of the initial training system (...) and as a key part of the lifelong learning system" (2022, p. 16).

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Further, Fernández-Franco and Robles-Chacón (2022) indicate that according to the European Centre for the Development of Vocational Training (CEDEFOP) Spain needs to increase the rate of citizens with an average level of qualification by at least 10 percentage points.

It is considered appropriate to continue researching the field of VET in Spain, considered deficient by different authors (Echeverría-Samanes and Martínez-Clares, 2021; Rego-Agraso and Rial-Sánchez, 2017; Sarceda-Gorgoso and Penado-López, 2018). As well as being the object of special social and governmental concern (Romero-Sánchez and Hernández-Pedreño, 2019) and a factor in the promotion of human rights (Rodríguez-Fernández et al., 2017).

On the other hand, Racero-Montes and Castillo-García (2022) consider that given the in-depth knowledge that the Education Inspectorate has of the reality existing in educational centres, its role is fundamental in VET studies. Regarding the attention paid to these studies by the different action plans of the Education Inspectorates of the Education Administrations, Sánchez-Hermosilla (2022) points out that only in a small number of cases is express mention made in regular actions or specific tasks.

In relation to the tasks of the Education Inspectorate reflected in the new Law on the Organisation and Integration of VET, Campillo-Frutos, Martínez-Llácer and Noguera-Peribáñez, consider that it makes little mention of these studies, understanding, however, that "it is relevant to highlight the reference to the new areas in which the work of the Inspectorate is to be developed, by expressly mentioning the accreditation of competences" (2022, p. 157), with the Inspectorate overseeing the quality of the actions and services in the VET system, especially with regard to vocational guidance, the training provided and the accreditation of professional competences. The Inspectorate must also be aware of the different training itineraries.

On the other hand, according to Anguita-López, Armendía-Santos and Rojas-Sáenz (2022), the Education Inspectorate Service should contribute to

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enhance the value of this educational and vocational guidance in order to reduce the drop-out rate in these courses, improving their quality.

Therefore, in general terms, it is considered (Sánchez-Hermosilla, 2022) that the intervention of the Education Inspectorate in the VET system will require well-planned and designed actions with clear and specific objectives, based on the three main areas of competence: supervision and control, assessment and evaluation.

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