

# Satisfaction of university students in relation to their transition into the workforce: a case study

*Satisfacción del universitario en su camino hacia la inserción socio-laboral: un estudio de caso*

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## Abstract

Are university students satisfied with the path to seeking employment? Student satisfaction is routinely forgotten, in both research and university career guidance services, when analyzing the transition into the workforce. In order to measure satisfaction, an ad-hoc scale was designed based on a theoretical framework for understanding career guidance in higher education. The chosen framework was the academic training-career guidance-employability prism. The present research aimed to validate a satisfaction rating scale using confirmatory factor analysis and SEM methodology. A second aim was to compare data on career guidance satisfaction by administering this scale to 497 final-year undergraduate students at the University of New Haven (USA) and the University of Padua (Italy). Outcomes showed good model fit and revealed that students completing the rating scale at UPD (Italy) were less satisfied than their American counterparts (UNH). This finding corresponds with other related studies. The present study demonstrates the adequacy and appropriateness of the satisfaction rating scale, highlighting it as an important tool for collecting reliable data with a view to improving university career guidance services.

**Keywords:** higher education, entering the workforce, satisfaction, career guidance, employability.

## Resumen

¿Está satisfecho el alumnado con el proceso de inserción socio-laboral iniciado en la universidad? La satisfacción de los estudiantes suele quedar en un segundo plano al analizar dicho momento de transición, tanto en la investigación como en los propios servicios de orientación profesional universitaria. Con el objetivo de medir este indicadora de calidad en la educación superior, esta investigación pretende validar una escala de satisfacción ad-hoc basada en el triángulo formación-orientación-empleabilidad como marco teórico de la orientación en la educación superior. Se recurre al Análisis Factorial Confirmatorio y a la metodología SEM para la validación de la escala y se comprueba su fiabilidad mediante el estadístico Alfa de Cronbach. Los datos obtenidos con esta escala entre los 497 estudiantes de último curso participantes de la Universidad de New Haven (EE. UU.) y de la Universidad de Padua (Italia) se comparan a partir de la prueba no paramétrica U de Mann-Whitney. Los resultados demuestran la relevancia y adecuación de la escala de satisfacción con el proceso de inserción socio-laboral. Además, los estudiantes que completaron la escala en la UPD (Italia) están menos satisfechos que los participantes estadounidenses (UNH), lo que coincide con otros estudios relacionados. Se demuestra la adecuación de la escala de satisfacción como herramienta válida para recopilar datos fiables para mejorar la orientación universitaria.

**Palabras clave:** formación académica, inserción laboral, satisfacción, orientación profesional, empleabilidad.

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In order to learn to move in a world of constant doubts and changes, it is essential to identify emerging opportunities and make the decision that best fits the lived reality (Sánchez-García & Suárez-Ortega, 2018). As stated by

Laïdi (2000), in an era characterized by the 'tyranny of urgency', the time available to make decisions is increasingly limited. This confronts individuals with a way of living that hinders their ability to reflect and propose long-term

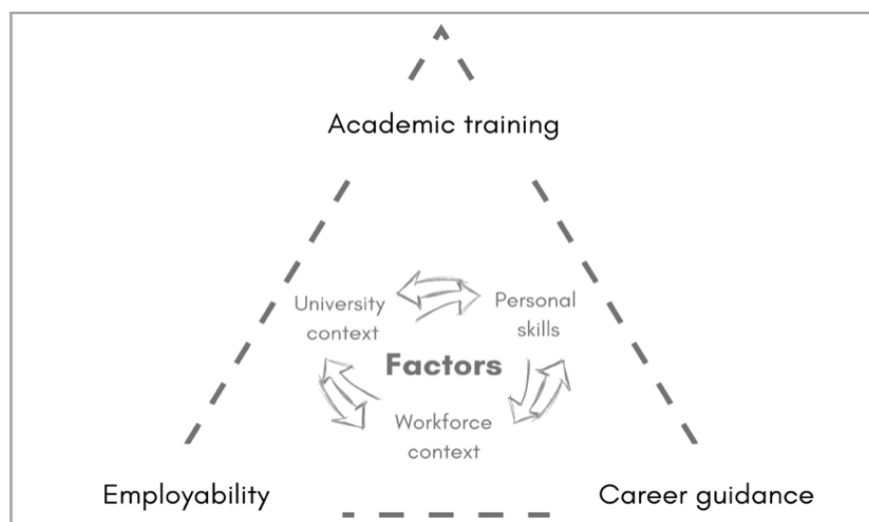
solutions. As a consequence, new generations find it difficult and complex to deal with this uncertainty, especially during their transition towards a productive life. Reasons for this include the fear of failure and inability to achieve set goals even after years of academic training.

Confronted with this new scenario, the role played by higher education institutions in tackling the challenges faced by their students when starting their professional career in a digitized job market is questioned, unclear and increasingly generalized. Concerns regarding this issue have been voiced in a number of international scientific publications which address the realities faced by university students (generally graduates) when going through the process of entering the workforce (Cole & Tibby 2013; Holmes, 2013; McCracken et al., 2015; Pineda-Herrero et al., 2018; Ruiz-Corbella et al., 2019; Savickas & Porfeli, 2012; Torres-Valdés et al., 2018; Wilton, 2012).

The transition into the productive world has been much debated. A number of different

approaches and trends can be found when it comes to specifying the main factors to determine success in this process. Based on the aforementioned research and other specialized literature (Ayala & Manzano, 2020; Brooman & Stirk, 2020; Byrne, 2020; Dapia & Fernández, 2016; Jackson & Edgar, 2019; Pérez-García, 2018), a degree of consensus is generally found when it comes to identifying the overriding factors that influence the hiring of university students in certain job positions. These are the following: 1) The graduate's personal characteristics and skills, 2) workforce context (job market conditions, community or locality in which they reside, etc., and 3) other factors related to the university system and features of the academic training offered. In higher education institutions, these factors (intrinsic and extrinsic) should be integrated into the prism proposed by Isus (2008), in which academic training, career guidance and employability are interconnected to make up a complex ecosystem that guides students through the process of finding employment (figure 1).

Figure 1. Influence of factors within the academic training – career guidance - employment prism on inclusion in the workforce



Universities typically focus their efforts on identifying the outcomes of the aforementioned transition according to short-term criteria of efficacy. This fails to consider the difficulties associated with these factors and the potential

impact of intervention processes when implementing the academic training – career guidance - employability prism (figure 1). In this way, studies on workforce inclusion demonstrate that university graduates do not

report satisfactory outcomes upon leaving university, or, as highlighted by Botella and Pérez (2019), outcomes are at least not in line with the years dedicated to academic training. Considering this data, not only is the low satisfaction of university graduates due to their lack of preparation for facing the transition into the workforce evident but, also, high levels of uncertainty upon completing university studies can also be seen.

In addition to the influence of these three major factors (academic training, career guidance and employability) on workforce inclusion, student satisfaction must be considered as a key factor for consideration since, transversally, this aspect affects other studied factors (Clarke, 2018; Herron et al., 2019; Marasi et al., 2020). The evaluation of student satisfaction has been established as an important indicator for identifying variables that can be modified throughout the career guidance process provided by the university, as well as being useful for determining the attitudes or beliefs held by students in relation to this process (Donald et al., 2019).

Currently, various studies on graduate satisfaction with access to employment following the termination of university studies exist, with these generally collecting data between one- and three-years following graduation (Martínez-Nicolás et al., 2018; Michavila et al., 2016; Pérez-García, 2018). Nonetheless, little scientific literature has focused on the satisfaction of university students and future graduates transitioning into the workforce. Other research projects have emerged which seek to clarify the general satisfaction of the different groups involved in this process in order to improve employability from higher education institutions. Unfortunately, these fail to consider satisfaction with job prospects, career guidance, or the transition into the workforce (Bryne, 2020; Pineda-Herrero et al., 2018; Römgens et al., 2019).

In line with the view of the academic training – career guidance – employability prism (Isus, 2008) taken here of the three main factors influencing job insertion (shown in Figure 1)

and the literature discussed above, certain limitations emerge when it comes to addressing student satisfaction regarding their transition into the workforce. Although some relevant studies exist, most were limited to evaluating student satisfaction when students had already graduated (Behle 2020; Succi & Canovi, 2019). Others analyzed satisfaction in relation to factors that have little to do with the transition of interest, focusing more on student satisfaction regarding teaching practices (Bolliger & Inan, 2014; Harrison et al., 2020), or were limited to identifying satisfaction pertaining to developed skills and the receipt of academic training (Ramírez, 2015; Riu et al., 2020). Along the same lines, Wilcox and Nordstokke (2019) focused on evaluating the satisfaction of first-year students with their adaptation period. This was conducted as a marketing strategy in order to later be able to advertise the high satisfaction rates and, thus, attract a greater number of new students in later cohorts.

Adequate satisfaction with academic studies may lead to greater success during the transition into the workforce (Pérez-García, 2018). However, it is still unknown whether satisfaction with career guidance and employability training also influence the way in which university students experience this transition. The relationship between employment and satisfaction seems clear since personal characteristics and skills linked to employability increase the likelihood of individuals meeting their expectations and feeling satisfied with their chosen profession (Felicetti, 2017). Despite this, in-depth analysis has not yet been performed of the way in which satisfaction with career guidance and employability training during higher education influences university student perceptions when transitioning into the workforce.

In light of the need to address this issue, a confirmatory factor analysis was carried out to analyze university student satisfaction at the time of tackling inclusion in the job market. Student perceptions were examined from two different universities located in Italy and the USA. The aim of this was to achieve a global vision of the state of the issue prior to the

completion of university studies. This was done by addressing three main objectives: (1) perform a descriptive analysis of a satisfaction rating scale based on the academic training – career guidance – employability prism; (2) examine the validity and reliability of a satisfaction rating scale based on the three levels of the academic training – career guidance – employability prism; (3) understand and analyze student satisfaction pertaining to the three dimensions of interest as a function of university of origin.

## Method

### Sample

The sample was comprised of 497 final-year undergraduate students from two universities, one in Italy (Università degli studi di Padova, UPD) and the other in the United States (University of New Haven, UNH). This sample was selected based on probability sampling according to the principle of equiprobability. Specifically, stratified random sampling was

applied in which each included university represented a sample unit corresponding to its geographic area. The parameters used to calculate this sample denote its adequacy and representativeness, with a confidence level of 97% that determines  $k = 2.24$ , a margin of error of  $\pm 5$  and an expected participation rate of 50% ( $p = q = 0.5$ ). According to these parameters, a total sample of 497 students was obtained, of which 215 belonged to UNH and 282 to UPD (43.3% and 56.7%, respectively).

The average age of the participants was 21.34 (SD = 3.047), with 65.4% being female. 72% of the sample were undertaking degree programs in the field of Social Sciences, with other areas, such as the Health Sciences (3%), Sciences (14.7%) and Engineering (10.3%), being represented in a smaller proportion. It is important to identify the general characteristics specific to each university (Table 1) in order to better contextualize differences and aid later interpretation of the results and discussion.

Table 1. Characteristics of the UNH and UPD

Academic year 2017/2018 <sup>1</sup>	University of New Haven (UNH)	Università di Padova(UPD)
Country	United States	Italy
Funding	Private	Public
Year founded	1920	1222
Total student body (undergraduate and graduate degrees)	6984 (51.5% women)	58136 (52.9% women)
Total undergraduate students	5412	48643
Number of degree programs	57	173
Total number of professors	263	2,902

### Measures

For data collection, the questionnaire about career guidance and entering the workforce (QCGEW) was employed. This formed part of a broader international research investigation into the inclusion of university students in the workforce. This questionnaire includes a set of closed questions which address the main sociodemographic and educational characteristics of university students, two

measurement scales and several additional dichotomous response questions which address student interests and strategies when it comes to job placement. Reliability and validity of outcomes from the satisfaction scale pertaining to the academic training – career guidance –employability prism (Table 2) were analyzed. For this, final-year undergraduate students were asked to assess each item on a five-point Likert scale, where 5 represented maximum satisfaction.

<sup>1</sup> Latest data available at both universities from the year 2019

Table 2. Satisfaction rating scale items pertaining to the academic training – career guidance - employability prism.

Construct	Code	Items
Satisfaction with academic training	S1	Training provided within the degree program to tackle the current job market
	S2	Complementary training offered and/or received
	S3	The specialization of training within the degree
	S6	Training delivered within the degree for professional development
	S7	Training delivered within the degree for personal development
Satisfaction with career guidance	S8	Resources and services offered by the university to help job placement
	S9	Career guidance received during degree training
	S10	Career guidance offered and/or received to help understand the career opportunities offered by specific career paths
	S11	Career guidance offered and/or received on job search techniques
	S12	Career guidance offered and/or received on international mobility possibilities for employment
	S13	Career guidance offered and/or received on self-employment.
	S14	Career guidance offered and/or received to start managing a professional career
Satisfaction with employability	S4	Development of participatory and personal skills
	S5	Development of technical and methodological skills
	S15	Information about job prospects
	S16	Professional experience acquired during degree training (through internships and practicums)
	S17	Professional opportunities offered and/or carried out abroad

### *Design and Procedure*

1) In-depth literature review: main reports on current unemployment youth rates and challenges faced by university graduates when entering the workforce were reviewed. Needs related to career guidance and employability in the international context were detected, leading to the specification of research objectives and establishment of student satisfaction as a quality indicator.

2) Research method design: a quantitative methodological approach was selected, following a non-experimental, cross-sectional and descriptive research design employing a survey method.

3) Design and qualitative validation of the QCGEW questionnaire via an expert panel comprised of university lecturers with recognized academic-research experience in the area of interest (12 in total). Content was validated content through quantitative and qualitative viewpoints. Following this process, expert suggestions regarding the questionnaire were incorporated and a pilot test was

conducted with 35 university students with similar characteristics to the main study participants. This led to improved understanding and relevance of items. Outcomes from this validation can be found in a previous publication (Martínez-Clares & González-Lorente, 2018, 2019).

4) Ethical standards and good practice: A self-evaluation form was completed on the protocols of ethics in research. Researchers then attended the universities to request approval from the pertinent administration and data handling procedures were conducted.

5) Data was collected over an academic year, during school hours and with a researcher present in the classroom to provide appropriate instructions to university students, constantly reminding them of the voluntary, anonymous and confidential nature of the research, in accordance with the approved ethical standards.

6) A database was developed. Firstly, the statistical software SPSS v24 was employed to create all fields and variables of the QCGEW

questionnaire. Main characteristics of each variable pertaining to its label, values and measurement type (scale, ordinal or nominal) are included. Following this, student data was entered into the database.

7) Analysis and data handling: Analysis with the Kolmogorov-Smirnov (K-S) test produced a *p-value* <.05, showing that data was non-normally distributed. Given that the null hypothesis was rejected, the nonparametric Mann-Whitney U test was used for inferential analysis of data collected from both universities. Next, the Barlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) test were conducted to verify whether factor analysis was appropriate for the data (López-Aguado et al., 2019). The Kaiser-Meyer-Olkin statistic was .898, which is acceptable for conducting factor analysis (>.80). The Bartlett test outcome was  $p = .000$ , enabling rejection of the null hypothesis of variable correlation and supporting use of confirmatory factor analysis (CFA). Based on these results, CFA was carried out instead of EFA (exploratory factor analysis). Further the nature of the study, which established, a priori, the number of factors to be included on the satisfaction scale and the relationship between them, also meant this analysis was appropriate. In this way, direct estimation via CFA enabled the theoretical basis to be confirmed and adjusted to collected data, as has already been done in other studies (Marsh et al., 2014).

8) Interpretation of outcomes: a report was written based on obtained data and the pertinent analyzes addressing the proposed objectives. This report included a discussion of other studies, alongside discussion of the present study's conclusions and limitations.

## Results

### *Descriptive analysis*

In order to analyze the different items that make up the satisfaction scale, a descriptive analysis was performed by calculating means and standard deviations (SD). Skewness and kurtosis coefficients were also considered to describe sample distribution (Table 3). Produced data indicated low-medium means, with values ranging between 2 and 3 on the Likert scale employed.

Of the evaluations conducted, greatest satisfaction emerged in relation to *degree training for my personal development* (S7), followed by *the development of participatory and personal skills* (S4), where average scores close to 4 were obtained ( $\bar{X}=3.809$  and  $\bar{X}=3.793$ , respectively). In contrast, less student satisfaction was seen in relation to *the career guidance offered and/or received to start managing your professional career* (S14) and in *the professional opportunities offered and/or carried out abroad* (S17), with average values being below 2.5.

With regards to sample distribution, it was necessary to carry out a subsequent CFA. Table 3 presents generalized skewness values of between .015 and .669 in absolute terms. Most of these items presented left-side skewness, except in the cases of S11, S12, S13, S14, S16 and S17, which, produced positive values, denotes right-sided asymmetry. Further, kurtosis coefficients indicate a higher concentration of data around the mean for items S1 (.187), S4 (.328) and S7 (.309), whilst, for all other items, less concentrated data was seen with negative coefficients produced for this measure of distribution.

Table 3. Descriptive analysis of the student satisfaction scale with the academic training-career guidance-employability triangle.

	Mean	SD	Skewness (error std=.110)	Kurtosis (error std=.219)
S1	3.294	.858	-.392	.187
S2	3.056	1.072	-.201	-.610
S3	3.463	.997	-.344	-.366
S4	3.793	.842	-.529	.328
S5	3.644	.875	-.382	-.092
S6	3.563	.929	-.451	-.086
S7	3.809	.934	-.669	.309
S8	3.080	1.053	-.120	-.551
S9	2.988	1.071	-.065	-.602
S10	2.946	1.056	-.015	-.673
S11	2.744	.998	.200	-.383
S12	2.869	1.150	.034	-.769
S13	2.581	1.032	.078	-.678
S14	2.350	1.007	.266	-.617
S15	2.958	1.057	-.018	-.632
S16	2.702	1.213	.199	-.913
S17	2.499	1.200	.378	-.779

### Scale Validation

Examination of scale validation allows more accurate identification of whether gathered data fits the previously proposed factorial model (table 2). This model was divided into three dimensions of satisfaction, which related to: 1) the academic training received during the degree, 2) the career guidance offered by the university and 3) employability preparation of university students facing the process of securing a job position. Each of these constructs or latent variables in the SEM methodology are represented in figure 2 by ellipses. Curved bidirectional arrows are used to present the covariance generated between independent variables. On the other hand, unidirectional straight arrows denote the coefficients produced between the three independent variables and each of the items that make up the overall scale, known as observable variables and represented with a rectangle which, in turn, are always associated with a prediction error.

For more in-depth analysis, regression weights (RW and SRW), standard errors (SE), critical ratios (CR) and *p*-values associated with each parameter are examined (Table 4). Amongst these outcomes, statistically significant regression weights are observed in all cases ( $p \leq .05$ ) with values that, when standardized, exceed the value .5 established as acceptable. The only exception is seen for the item describing the influence of university education on personal development (S7), which produced a standardized regression coefficient of .35 in relation with the variable *satisfaction with academic training*. On the other hand, as seen in Figure 2, large coefficients were produced between the variable *satisfaction with career guidance* and its associated items, especially, with the career guidance received during undergraduate training (S9) and the career guidance offered and/or received to inform about the employment prospects of specified career paths (S10).

Figure 2. Confirmatory factor analysis outcomes pertaining to the satisfaction scale based on the academic training -career guidance - employability prism.

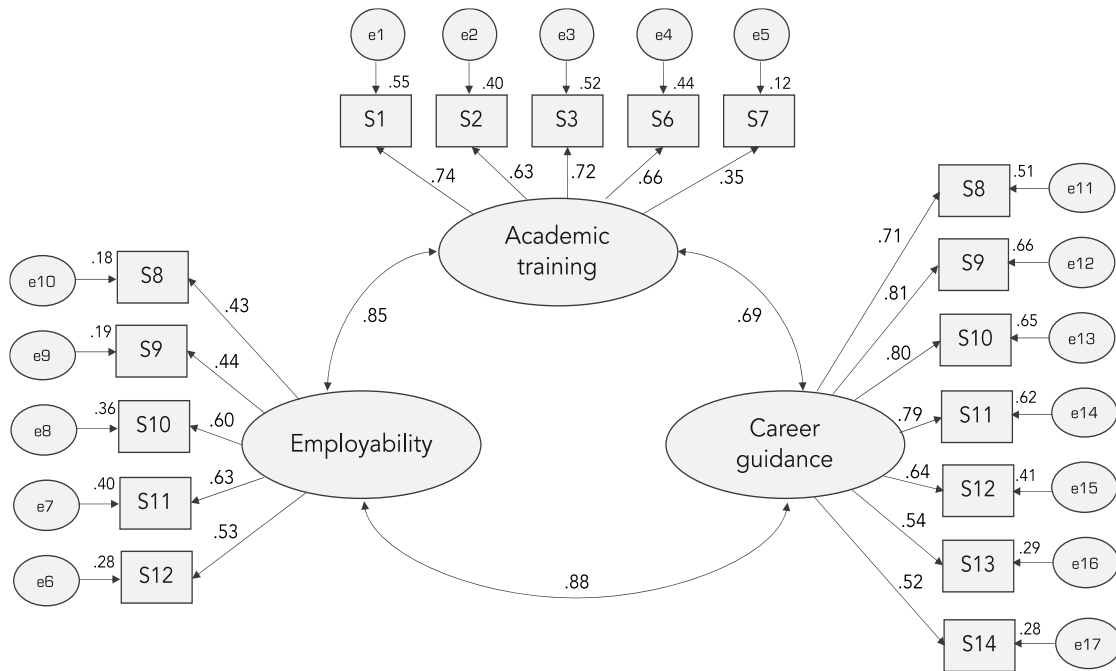


Table 4. Unstandardized (RW) and standardized regression weights (SRW) produced in relation to observed variables.

Parameter	RW				SRW
	Estimate	SE	CR	<i>p</i>	Estimate
S1 <--- Academic training	1.000				.730
S2 <--- Academic training	.920	.122	7.520	***	.582
S3 <--- Academic training	1.018	.115	8.849	***	.698
S4 <--- Academic training	.847	.102	8.332	***	.651
S5 <--- Academic training	.692	.104	6.690	***	.514
S6 <--- Employability	1.000				.327
S7 <--- Employability	1.306	.330	3.955	***	.487
S8 <--- Employability	1.771	.414	4.276	***	.630
S9 <--- Employability	.702	.206	3.412	***	.348
S10 <--- Employability	.638	.195	3.280	.001	.324
S11 <--- Career guidance	1.000				.700
S12 <--- Career guidance	1.351	.114	11.851	***	.874
S13 <--- Career guidance	1.283	.113	11.394	***	.836
S14 <--- Career guidance	1.215	.107	11.330	***	.831
S15 <--- Career guidance	.725	.096	7.575	***	.546
S16 <--- Career guidance	.943	.113	8.360	***	.604
S17 <--- Career guidance	.860	.108	7.994	***	.577

Note: SE=standard error; CR=critical ratio; *p*= \*\*\*=.000



The standardized regression weights, or *beta*, produced between the three latent variables or constructs (Table 5) were strong, specifically, .884 for the career guidance – employability path, .850 for the academic training - employability path and .691 for the academic training – career guidance path. Values associated with the critical proportion (CR) were also high in all cases. Thus, it can be confirmed that all estimated parameters were statistically significant at the .005 level with only a 5% probability of error.

Finally, a maximum likelihood (ML) approach was taken to estimate the measurement model and determine whether data collected during the study corresponded acceptably with the model. This estimation method was chosen because, according to Mora (2018), under general assumptions and when a large sample is used, a ML approach is more consistent and efficient. In this sense, Table 6 presents the most commonly applied approximate fit indices for evaluation of goodness-of-fit (Kline, 2016), alongside the values obtained for them in the present research.

Table 5. Unstandardized (RW) and standardized regression weights (SRW) produced in relation to the latent variables.

Parameter	RW			SRW
	Estimate	SE	CR	Estimate
Career guidance <--> Employability	.263	.066	3.967	*** .884
Academic training <--> Employability	.229	.059	3.892	*** .850
Career guidance <--> Academic training	.291	.053	5.520	*** .691

Note: S.E.=standard error; C.R.=critical ratio; *p*= \*\*\*=.000

Table 6. Approximate fit indices for evaluation of model fit via the maximum likelihood method.

Approximate Fit Indexes	Values
Chi-square $\chi^2$	$\chi^2 = 879.810$ ; $df=261$ ; $sig.=.000$
Comparative fit index: CFI	.891
Incremental fit index: IFI	.892
Normed fit index: NFI	.854
Goodness of fit index: GFI	.824
Root mean square error of approximation: RMSEA	.049

Although a *p*-value higher than .05 is recommended for the chi-square statistic to be appropriate, the size of the sample in the present study may have affected the value obtained given that it is highly sensitive to sample size. For this reason, it is common to concurrently use different indicators to assess the adequacy of the model. For all other estimated approximate fit indices, with the exception of RMSEA, values close to 0.9 indicate optimal fit (Hair et al., 2005). In the case of the present study, values demonstrate acceptable fit of the satisfaction model. In the case of RMSEA, values lower than .05 indicate good fit (Kline, 2016). The present study obtained a value of .049, enabling

confirmation of good fit of the structural diagrams, in addition to supporting the appropriateness and validity of the proposed model.

### Scale Reliability

Following validation of the structure of the satisfaction scale, scale reliability was examined according to the Cronbach alpha ( $\alpha$ ) coefficient. This provided evidence of the internal consistency of the distribution of 17 items into three main blocks. As shown in Table 7, this statistic was applied to analyze the reliability of both the scale as a whole and for each of the three proposed constructs.

Table 7. Approximate fit indices for evaluating model fit according to a maximum likelihood method.

Satisfaction rating scale	Number of items	Cronbach's alpha ( $\alpha$ )
Satisfaction with academic training	5	.753
Satisfaction with career guidance	7	.863
Satisfaction with employability	5	.657
Overall scale satisfaction	17	.894

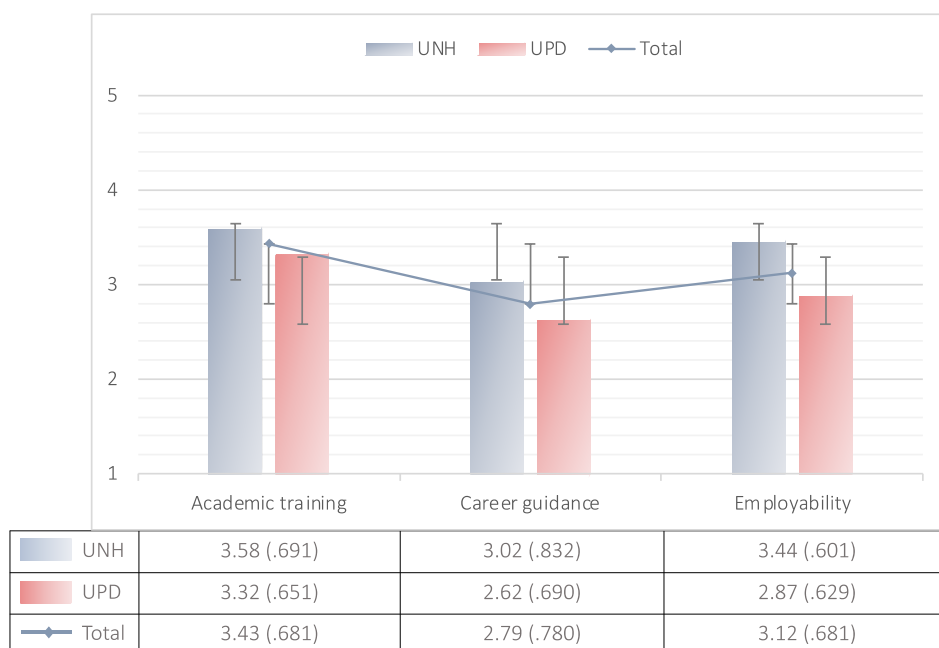
Reliability scores demonstrate acceptable correlations between the items of each construct. The employability dimension was evaluated as showing ‘adequate’ reliability, compared with the overall scale which demonstrated ‘very good’ reliability. In the case of the latter, Cronbach Alpha  $\alpha = .894$ , with this being very close to 0.9 and indicating ‘excellent’ reliability according to Hernández et al. (2014). According to these same authors, reliability can vary depending on the number of items included in the scale since the inclusion of more items causes this value to increase. This ratio may have affected the final obtained values in the cases of the academic training and employability factors as these are made up of only five items each. Nonetheless, the elimination of not a single item from these two factors produced a significant

improvement in reliability outcomes, neither in relation to the overall scale nor each of the individual constructs.

### *Student Satisfaction According to University*

Once the scale was validated in line with the proposed theoretical model, satisfaction scores for each factor was analyzed, with this analysis also being considered in relation to the university attended by participants. As shown in Figure 3, participants overall reported moderate satisfaction with the three proposed constructs, without reaching a score of 4 (deemed to be good satisfaction on the Likert scale) in any case. In addition, lowest satisfaction was seen in relation to the factor related to the career guidance offered and/or received at the university, this factor stood out with an average value of just 2.79 ( $\sigma = .780$ ).

Figure 3. Descriptive analysis of the constructs of the satisfaction rating scale by university (mean and standard deviation)



In the case of UNH students, greater satisfaction with the three dimensions of the academic training - career guidance - employability prism was reported than in the case of UPD students. UNH (USA) students reported an average satisfaction value of higher than 3 on the Likert scale (with 5 being the maximum). On the other hand, UPD (Italy) student satisfaction was not so high, with the exception of in relation to the construct of academic training. In order to further analyze these differences, an inferential nonparametric test was used in the form of the Mann-Whitney U statistic. Of the outcomes produced from this test, a *p-value* of .000 was obtained in relation to the three dimensions analyzed. This reveals that statistically significant differences exist between constructs as a function of the university grouping variable.

## Discussion and conclusions

The transition of university students into the job market has recently attracted more international attention due to growing concerns around the access to quality employment of the best prepared generation in history (Bialik & Fry, 2019; International Labour Office, 2020) when operating in the current knowledge-based, technological and advanced society. Given this reality, there is heavy scrutinization of universities and the role they play to ensure that students are prepared for the workforce and to promote and strengthen their employability throughout their professional life.

On the one hand, some experts are in favor of defending higher education institutions as assets that professionalize society and, therefore, should aim to meet the demands of the job market (Eurydice, 2014; McCowan, 2015). On the other hand, others defend the academic freedom of universities and view knowledge dissemination from a holistic standpoint, focusing on the improvement of society in addition to the demands of the professional world (Ortega & Gasset, 1930; United Nations Educational, Scientific and Cultural Organization, 2009). In both cases, experts and academics themselves assess the

role that higher education institutions should play in society. It is necessary to break this trend and give voices back to students so that they themselves can contribute their vision and value to the comprehensive academic training they receive during their time at university.

For this reason, a valid and reliable measurement scale was created in order to identify university student satisfaction with the career guidance on offer to them and the academic training received to promote their employability. Carrying out studies of this type guarantees that the information collected, and its subsequent interpretation, fits the reality in which it is intended to be applied. This has already been done in other research utilizing structural equation modeling (Collie et al., 2016; Esnaola et al., 2017; Lambie et al., 2018; Slaten et al., 2019).

The outcomes produced from both examined universities coincide with other reports made in the international context (Michavila et al., 2016; Pérez-García, 2018), with regards to low student satisfaction in higher education when it comes to the process of obtaining a job in the desired career path. Thus, examination of the three overarching variables involved in the development of student satisfaction allowed identification of the need to optimize strategies and resources, especially those related to the career guidance offered and received by students. Targeting this key factor may improve the job market inclusion and job quality.

With regards to the satisfaction expressed by students attending the University of New Haven (UNH) and the Università di Padova (UPD), descriptive and inferential analysis of the data shows differences in the three dimensions of the proposed prism in consideration of the imminent transition into the workforce. This data coincides with other studies carried out in the Italian university setting (Maiolo et al., 2013; Solinas et al., 2012), where student satisfaction with academic training focused on skill development for employability did not reach medium values. In contrast, studies such as

those carried out by Lee et al. (2019) and Sirgy et al. (2007) in the United States, showed higher levels of satisfaction in this regard. The differences found in both the present study and previously conducted literature in American and Italian universities may be influenced by other factors not considered by the proposed measurement scale. Such factors include the job expectations of university students or job demands in their respective countries, university climate (Mainardes et al., 2013) and the context in which they find themselves following graduation (González-Peiteado et al., 2017).

In both cases, the job market characteristics and setting exposed to by students attending UNH and UPD presented notable differences, as highlighted by descriptive data pertaining to the sample recruited in the present study. The size of UNH, in addition to the number of degrees and students it oversees (with about 1,400 graduates/year) is far from that seen at the UPD who, in contrast, must manage the process of 12,000 graduates entering the job market each year. Although it is smaller and therefore more manageable, UNH is located in a highly competitive market with numerous other private and public universities surrounding its campus. Despite this, there is an employment rate of 3.7% within students from the general population, compared to 8.6% in the population aged under 25 (Bureau of Labor Statistics, 2019). This being said, the labor and economic context of Italy, where UPD is located, is currently characterized by an unemployment rate of 32.2% among young people. This makes it one of the countries with the highest unemployment rate, only exceeded by Spain and Greece in the Euro Zone (Organization for Economic Co-operation and Development, 2019).

Faced with this reality, European universities must fight to decrease the high rates of youth unemployment faced by many recent graduates in the European Union (European Commission, 2018). US universities are more focused on expanding their reach to favorably bias recruiters and employers towards hiring their graduates, as

well as increasing assessments for accountability and conducting market-focused research (Krskova et al., 2020; Luu & Metcalfe, 2020). This can be seen in the annual surveys conducted, such as that carried out by the National Association of Colleges and Employers (2016), which act as a reference for evaluating the achievements of university and college graduates at a national level.

Finally, outcomes reported overall for both universities denote a wide spectrum of improvement in student satisfaction regarding university preparation to help them enter the job market successfully. The reliable, continuous and appropriate measurement of this construct via the proposed satisfaction scale may, therefore, guide higher education institutions to make coherent and pertinent decisions, listening to the assessment of students to capitalize on opportunities for improvement. Porter (2011) also echoes this thought by remarking that survey validation is critical for obtaining reliable and accurate student data in order to appropriately evaluate the effectiveness of activities carried out at universities. Gathering such information in a transversal and continuous way, alongside the collection of information from other implicated agents, may add objectivity to the perceptions of satisfaction reported by students rather than relying on the provision of information from a single source.

One of the main limitations of the present study to be considered when developed future lines of research is that university student satisfaction was exclusively measured in relation to students' personal opinions, failing to compare information from other educational agents and employers. Gathering such information from other agents involved in this process in a transversal and continuous way may add greater objectivity to student perceptions of satisfaction. In addition, other limitations resulted from the analysis of two universities located in very different contexts, in terms of both socioeconomic and educational tenets. The specific nature of the two samples prevents outcomes from being extrapolated to the general university

population. However, the research can provide a broader vision of a common phenomenon, and its inherent difficulties and consequences for young university students all over the world. Identification of the strengths and weaknesses of the transition of university students into the workforce through perceived satisfaction favors better quality of training processes as a whole, promotes continuous improvement and encourages necessary reflection on current practice.

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