



# UNIVERSIDADE CATÓLICA PORTUGUESA

CREATING TARGETED ONLINE CAREER SERVICE INTERVENTIONS:  
SURVEY OF STUDENTS' CAREER GUIDANCE NEEDS IN PORTUGUESE  
HIGHER EDUCATION

Dissertation presented to Universidade Católica Portuguesa to obtain a  
Master's Degree in Psychology in Business and Economics

By

Veronika Khurumova

Faculty of Human Sciences

November, 2021



# UNIVERSIDADE CATÓLICA PORTUGUESA

CREATING TARGETED ONLINE CAREER SERVICE INTERVENTION:  
SURVEY OF STUDENTS' CAREER GUIDANCE NEEDS IN PORTUGUESE  
HIGHER EDUCATION

Dissertation presented to Universidade Católica Portuguesa to obtain a  
Master's Degree in Psychology in Business and Economics

By

Veronika Khurumova

Faculty of Human Sciences

Under the supervision of Professor Joana Carneiro Pinto

November, 2021

### **Acknowledgements**

This work would not have been possible without the guidance and support from my dissertation supervisor, Professor Joana Carneiro Pinto, to whom I would like to express my deepest gratitude. The provided assistance, patience and encouragement throughout the duration of this project were invaluable, and I could not have asked for more.

I am also very grateful to all the staff of several Career Offices that responded positively to my requests, encouraged me, believed in the project and participated in it.

Finally, I would like to thank my family for believing in me and for being the greatest motivation to get things done.

## **Abstract**

Under modern economic conditions, universities have found themselves involved in a competition with each other in the developing market of educational services. Almost any higher educational institution nowadays faces a question of its alumni employability and the career services, among other initiatives, have been established in many universities to improve the competitiveness of their graduates in the labor market. Although the majority of universities in Portugal indicate the existence of a Career Office or a similar entity in the institution, the provision of career counselling services is not fully developed in many. In order to aid the development of career services, recipients' (i.e. students') specific requirements need to be assessed to support the understanding and meeting of expectations. What are the Portuguese students' current career needs and intervention preferences? Which online career guidance intervention would be welcomed, if any? The present study addressed these questions by analyzing data from an online survey administered to 361 Portuguese higher education students. The findings indicate the preferred modalities for career interventions, the current career support needs and the likelihood of joining an online or computer-assisted career counseling service if it were made available by their university. The study's findings can contribute to the promotion of students' employability by providing recommendations on the development of Career Offices at Portuguese universities through the creation of targeted career guidance programs, including online interventions.

**Keywords:** careers office, needs assessment, higher education, career intervention, online and computer-assisted career guidance.

## Resumo

Nas atuais condições económicas, as universidades competem entre si no mercado de serviços educacionais. Praticamente todas as instituições de ensino superior enfrentam hoje em dia a questão da empregabilidade dos seus antigos alunos e os gabinetes de carreira, entre outras iniciativas, têm sido criados em muitas universidades para melhorar a competitividade dos seus licenciados no mercado de trabalho. Apesar da maioria das universidades em Portugal indicar a existência de um gabinete de carreiras ou entidade similar na instituição, nem sempre a oferta de serviços de aconselhamento de carreira está totalmente desenvolvida. Com a finalidade de apoiar o desenvolvimento destes serviços, as necessidades específicas dos seus destinatários (i.e., estudantes) devem ser avaliadas para apoiar a compreensão e o cumprimento das expectativas. Quais são as atuais necessidades de carreira e as preferências de intervenção dos estudantes universitários portugueses? Que tipo de intervenção online ou assistida por computador seria adequada? O presente estudo abordou essas questões através de questionário online administrado a 361 alunos do ensino superior português. Os resultados indicam quais as modalidades de intervenção de carreira preferidas, quais as necessidades atuais de apoio neste âmbito e, também, qual a probabilidade de utilizar um serviço de aconselhamento de carreira *online* ou assistido por computador, se fosse disponibilizado pela sua universidade. Os resultados podem contribuir para a promoção da empregabilidade dos alunos, dando recomendações para o desenvolvimento dos gabinetes de carreira nas universidades portuguesas, através da criação de programas de orientação e aconselhamento de carreira, incluindo intervenções *online*.

Palavras-chave: gabinetes de carreira, avaliação de necessidades, ensino superior, intervenção na carreira, orientação de carreira online e assistida por computador.

## Table of contents

Acknowledgements .....	3
Abstract .....	4
Resumo .....	5
Introduction .....	7
1. Literature review .....	10
1.1. Brief history of Vocational Psychology .....	10
1.2. Career Services .....	15
1.3. Career Services at Portuguese universities .....	17
1.4. Employment and employability .....	23
1.5. University students career needs assessment .....	25
1.6. Online interventions .....	29
2. Method .....	31
2.1. Participants .....	31
2.2. Instrument .....	31
2.3. Data collection procedures .....	32
2.4. Data analysis procedures .....	33
3. Results .....	34
3.1. Knowledge of the higher education institution's Career Service .....	34
3.2. Preferred career intervention modality .....	34
3.3. Career needs of students in higher education .....	35
3.4. Personal career needs .....	35
3.5. Adherence to online career services .....	36
3.6. Career needs of higher education students and preferred career intervention modalities: relationships .....	37
3.7. Probability of attending an online career guidance or intervention program .....	40
3.8. Additional comments .....	45
Discussion .....	46
Conclusion and Recommendations .....	48
Limitations .....	49
References .....	50
APPENDIX A .....	60
APPENDIX B .....	69

## **Introduction**

Unless further education is attained, the common goal of most (if not all) students upon graduation is employment. Over 80% of students claim that the subsequent employment after graduation is a critical factor in their decision to enter a university (Eagan et al., 2016), and most universities worldwide are now providing employment guidance to their students, such as Career Offices, i.e. Career Services or Employability Centers aimed at assisting students with their career development.

Throughout the years, the scope of career guidance provided at universities reflected generational, social, political and economic developments (Dey & Cruzvergara, 2014). With recent economic downturns, VUCA (Volatile, Uncertain, Complex and Ambiguous) environment, fundamental labor market changes, such as elimination of particular required skills (OECD, 2019), high level of unemployment rate for college graduates (Department of Education & National Center for Education Statistics, 2020), overall impact of technological advances and the impact of the COVID19 pandemic on the probable prevalence of remote jobs in the future (Bartik et al., 2020), it appears critical for universities to rethink the ways they use to help graduates' transition into careers. Experts agree that nowadays the functions of Career Offices should be more comprehensive to meet the wide range of college students' needs to better prepare them for a job market that is highly competitive and keeps changing constantly (Gallup, 2016).

In order to help Career Centers develop, service recipients' (i.e. students') specific requirements need to be assessed to provide the understanding and fulfill the expectations. However, finding out students' career needs might not be enough on its own. Career Offices are competing in the attention economy like everyone else and in order to make students fully capitalize on the career services provided by their university, the right resources that maximize engagement are required. Thus, identifying what kind of specific types of career interventions students find useful and necessary (e.g., the option of online intervention), is equally important in order to adapt the delivery (Hayden & Ledwith, 2014). Indeed, assessing student career needs, intervention preferences and then aligning these expectations with the skills development at university career centers is a vital implication for all parties involved – universities, students and future employers in the pursue of a better workforce.

Despite the importance of developing the services of Career Offices and their alignment with the expectations of students, to increase the competitiveness and employability of graduates, it appears that not all higher education institutions in Portugal have either fully operating career centers or developed and accessible sets of services provided. With a significant annual growth of the number of tertiary education students in the country, both local and foreign ones<sup>1</sup> and paradoxically high level of youth unemployment (18.2% as of the third quarter in 2019, with an EU average of 14.4%)<sup>2</sup>, the provision of career services might be even more important in the country.

The present work, therefore, involves an exploratory study that aims to identify and prioritize current career needs of higher education students enrolled in Portuguese universities. More specifically, it aims to understand how Career Offices should adapt in order to align with the needs of the service recipients and whether nowadays online interventions are of demand among students. Thus, the findings of the study contribute to the understanding of what subsequently could be used in the development of such interventions and/or to the adaptation of the existing services provided. This should foster a service that is able to better satisfy the students' needs.

The present study is divided in two main parts: the theoretical framework which includes the literature review, and the empirical study which involves the purpose of the study, sample, instruments, procedures; results and a discussion of the results in accordance with the literature review.

The review of the literature presents a brief history of Vocational Psychology and career services; the importance of needs assessment; findings from prior research on career interventions at universities with a focus on online practices and an outline of present employment state of the youth. Moreover, analysis of current career services provision at higher education institutions in Portugal is also included.

The methodology part addresses the purpose of the study, its participants and the administered questionnaire. The procedures that were followed for the study are also included.

---

<sup>1</sup> <https://www.dgeec.mec.pt/np4/1109.html>

<sup>2</sup> <https://ec.europa.eu/social/main.jsp?catId=1161&langId=en&intPageId=3349>

The results chapter indicate the findings obtained through descriptive and correlation analyses as well as prediction of likelihood of online intervention usage from decision tree procedures.

Finally, the present work includes a discussion of the findings with several drawn assumptions. Conclusions and suggestions for career guidance interventions are provided.

## **1. Literature review**

The literature review begins with a short historical overview of the development of vocational psychology, then considers career services evolution and explores current state of career guidance provision in Portuguese higher education institutions. The role of needs assessment is analyzed and the concept of student involvement in the development of curriculum is highlighted. Literature on employability of students and online career interventions is examined.

### **1.1. Brief history of Vocational Psychology**

The early development of vocational psychology, i.e. vocational guidance at a time, was linked to the rapid urbanization of the US cities with the appearance of the factory system that transformed the nature of work (Savickas & Baker, 2005). In contrast to agricultural societies where a farmer performed all the necessary crop production activities, a factory worker was now responsible for only a few outlined tasks. This meant simplification, specialization and division of work - obvious benefits that were brought by the Industrial Revolution (Savickas & Baker, 2005). Nevertheless, the need for more skilled labor, as well as several unfavorable societal conditions (e.g. child and immigrant exploitation, urban overpopulation and a growing wealth gap), also appeared. In 1844 several London activists united to found The Young Men's Christian Association (YMCA) in order to "improve the spiritual condition and mental culture of young men engaged in drapery and other trades" (Savickas & Baker, 2005, p. 18). The association's first US branch was opened in Boston, USA 5 years later and pioneered offering vocational guidance. In 1908, the Boston YMCA sponsored the first vocational guidance course that was designed by Frank Parsons, a Boston University law professor and a civic rights activist. He established the Vocational Bureau at the Civic Service House in January 1908 and the term "vocational guidance" was used in the same year, in the first annual Bureau's report written by Parson (Savickas & Baker, 2005). Although Parsons' intention was to help the youth, he left a significant mark in vocational psychology by formulating the conceptual model on which the field is still based on (Savickas & Baker, 2005). Parson proposed a three-step paradigm of vocational choice and counselling in his book *Choosing a Vocation* (Parsons, 1909), i.e. increasing self-knowledge,

providing occupational information, and matching the self to the fitting job using “true reasoning”.

Over 1910s-1920s vocational guidance courses appeared in different universities across the US, and in 1916 Harry Hollingworth, a researcher at Columbia’s Barnard College published a book *Vocational Psychology*, the first one on the subject (Savickas & Baker, 2005). In 1928 Clark Hull published a book called *Aptitude Testing* (1928) that advocated using objective tests in vocational counseling (Hull, 1928). After the World War II, research of John C. Flanagan and colleagues concluded that there were up to 100 of independent personality traits related to job success and this knowledge changed the attention from employment, which had been the focus in the 1930s and 1940s, towards individual’s characteristics (Savickas & Baker, 2005).

Since 1950s, several vocational theories have appeared that attempted to explain evolving self-concept (Super, 1957; 1990), person-environment fit (Holland, 1997; Swanson & Schneider, 2013), job satisfaction and tenure (Dawis & Lofquist, 1984), career decision and satisfaction (Gottfredson, 2005; Hartung, 2013), academic and work well-being (Lent, 2013), occupational choice and work adjustment (Savickas, 2013), among other variables. Out of the “myriad of diverse career theories” (Matthews, 2017, p. 322), it is interesting to note that there considered to be major or the “big-five” theories that have guided career counselling practices as well as research in the past decades (Leung, 2008), namely: (i) Theory of Work Adjustment (TWA; Dawis & Lofquist, 1984), (ii) Holland’s Theory of Vocational Personalities (Holland, 1997), (iii) the Self-concept Theory of Career Development proposed by Super (Super, 1969) and more recently reviewed by Savickas (Savickas, 1997), (iv) Gottfredson’s Theory of Circumscription and Compromise (Gottfredson, 2002), and (v) Social Cognitive Career Theory (Lent et al., 1994).

The Theory of Work Adjustment (TWA; Dawis & Lofquist, 1984) originated in the late 60s under the “Work Adjustment Project” study at the University of Minnesota (Dawis, 2005) that aimed to analyze the adaptation to work of people undergoing vocational rehabilitation. The theory describes the interaction of a person and the environment and the degree of their correspondence to each other (Dawis, 2005). Thus, career choice and professional development are considered within the framework of this approach through the interaction of the individual and their environment. The applicant (individual) is looking for

the most suitable employment (environment), and tries to adapt to the existing conditions or change them. In a similar way, the employer (environment) acts with the goal of hiring employees (individuals) who are best suited to the needs.

Holland's theory of Vocational Personalities (Holland, 1997) offers a typology of people according to their professional interests. The typology of professions and places of work can determine how a certain job suits a particular person and help them choose a professional path. Thus, Holland identifies 6 professional personality types, reflecting professional interests. The underlying theory is that every person and every work environment match one of these types, and the desired outcome is the best fit between the worker and the workplace. The six types are: Realistic, Investigative, Social, Conventional, Enterprising and Artistic (RIASEC). The types form a hexagon, where opposite corners are the most distinct types, and adjacent corners have common features. One of the important prerequisites of this theory is the prerequisite for the stability of professional interests. Thus, according to the theory, by the end of adolescence, one's interests have been formed and will not alter in the future. As a result, the professional personality type of each individual also remains unchanged throughout adulthood. The theory states that most individuals can be successfully attributed to one of six types (Holland, 1997). However, the model also assumes the possibility of a more detailed classification using subtypes. Holland's theory is of great practical importance: over the 40 years since its inception, hundreds of studies have been carried out testing its positions and methods (Leung, 2008), and the tools based on the theory have been implemented and used in counselling practices worldwide.

Super's theory of career development, which appeared in 1969, states self-concept to be its key element. According to Hartung (2013) this theory is one of the two most significant, widespread and empirically substantiated career guidance theories. Its key element is the self-concept. Earlier, in the industrial society, it was believed that professional development determined the "I" of the individual. Super suggested the opposite: the self-concept is embodied in career choices and professional roles (Savickas, 1997). The formation of ideas about oneself is a natural process of creating mental representations of oneself, which is influenced by various objective factors, for example, social interactions, characteristics of the environment, and personal experience (Hartung, 2013). Super proposed a model of the life cycle, at different stages of which the self-concept is formed (Super, 1990). Professional

development takes place in 5 stages, at each of which the individual performs tasks appropriate to their age. One of the main advantages of the theory is its accessibility for practice (Leung, 2008). Super's approach has significantly advanced career counseling - counselors have stopped considering clients only in terms of professional development. The client has evolved from a one-dimensional to a complex one, and aspects of their lives that are not directly related to the career have come to be seen as an important context for professional development.

Another theory of Circumscription and Compromise (Gottfredson, 2002) is an attempt to explore the period of professional development that corresponds to the "growth" stage of Super. The author focuses on the ability of children to synthesize and organize information about the types of professional activities. This cognitive characteristic allows them to build a "map of types of professional activity", focusing first on the stereotypes of the environment, and then on their own "I-concept". Stereotypes are presented in three dimensions: gender, prestige, and areas of professional activity. They serve as the basis for a long process of exclusion from the "map" of unacceptable primary elections of a particular type of professional activity. The exclusion process lasts until the age of 14+, going through certain stages. Considering career choice as a process of exclusion is an important innovation by Gottfredson (Leung, 2008). Prior to her, career guidance theory was dominated by the tradition, within which the choice of a profession was considered as the choice of an individual of one or several elements from a set, that is, selection. The theory of Circumscription and Compromise arose out of growing concern in society about the degree of freedom available to people - career choices began to be perceived not only as an opportunity, but also as a burden (Gottfredson, 2002; Gottfredson, 2005).

Finally, the Socio-Cognitive career theory, which emerged in 1994 (Lent, 1994), is another theory that places great emphasis on the environment of the individual. It is an application of Albert Bandura's social cognitive theory to the field of career guidance (Bandura, 1986) and like Bandura, the authors of the theory focus on how people, their behavior and environment influence each other in different ways (Lent, 2005). According to this theory, the professional development of an individual is shaped by the environment in which he realizes his agency. The theory shares Holland's focus on interests, abilities, and values, but places more emphasis on shaping and changing them. Like the theories of Super

and Gottfredson, social-cognitive career theory recognizes the importance of certain stages, such as career choice. It complements the first with an explanation of the dynamics of changes in the life of an individual of various social roles, and the second with a more detailed explanation of the process of excluding career alternatives (Lent, 2013).

A relatively new vocational psychology theory is the Psychology of Working Framework (PWF; Blustein, 2013) that complements existing vocational theories and highlights how sociocultural factors (such as social class) may impact career selection and fulfillment, in particular those from underprivileged backgrounds. Another theory, the Psychology of Working Theory (PWT; Duffy et al., 2016) that incorporated specific elements of PWF introduced the centrality of decent work as a construct. It is defined by safe working conditions, leisure time, values consistency, fair compensation and healthcare. Thus, if these factors are fulfilled, three fundamental human needs ,i.e. survival, social connection and self-determination, can be met at work. They, in turn, are hypothesized to lead to overall well-being and fulfilling work. (Blustein et al., 2019).

It is important to mention, however, that currently researchers point out an important limitation in the field of vocational psychology: although new theories and advances appear, most are just Parsons' original trait-and-factor theory extensions (Blustein et al., 2019). Thus, due to the context of globalization and fast advance of technology and rapidly changing environment, new approaches seem to be needed to meet the needs of people seeking employment in the 21<sup>st</sup> century (Savickas et. al, 2009). Moreover, Savickas et al. (2009) claim that career development theories may no longer be functional because they are based on the assumptions of stability and predictability and, therefore, a new theoretical model that is called 'Life designing' was proposed (Savickas et. al, 2009). Although the theory accepts the great inheritance of the existing theories, it proposes to enrich them and go forward (Leung, 2008). According to the Life designing model, due to the current interconnectedness between the different domains of life, it is impossible to solely speak about career development or vocational guidance, instead, it is necessary to consider how individuals construct their lives via their work, by answering the question: "How may individuals best design their own lives in the human society in which they live?" (Savickas, 2009, p.241).

Finally, a note should be made on the usage of the terms career counseling, career development and vocational psychology. It has been acknowledged (Blustein et al., 2019)

that although the terms have different origins (in counselling and applied psychology respectively), they can be used interchangeably due to the vast contours of the field.

Due to the variability of existing theories, often career interventions are not designed using a single shared framework (Langher et al., 2018). However, it is important to understand to what extent these theories have met the current career needs of service recipients, particularly students in higher education, and also how they have influenced the development of Career Services in these institutions.

## **1.2. Career Services**

Career Services, also named Career Services Offices (CSOs), Career Centers, or Career Resource Centers (Herr et al., 2004) have a long history and to a large extent the advancement of these services reflects the overall development of the field in general as “services evolved from an orientation towards Job Placement to a full range of career planning services being offered to meet the needs of diverse student populations” (Niles & Harris-Bowlsbey, 2005, p.397).

Terzaroli (2019) note that before the Career Services establishment, there existed the Appointment Boards and Placement Offices (at the UK and the US universities respectively). Their scope of work, however, resembled more of mentoring or recommendation and was aimed solely at high-achieving students. According to Kretovicks, Honaker and Kraining (1999, p. 78): “In this model, the highly qualified student need only enroll in college and faculty mentors planed the student’s future employment”. In the UK the first Career Services appeared at the Oxford University in 1892 but only in 1950s and 1960s the services became incorporated in all institutions.

In the US, although one of the first career centers, Self-Help Bureau<sup>3</sup> was established at Princeton university in 1912, it was not until 1940s-1960s that career offices emerged on national college campuses. In the 1970s and 1980s when graduate unemployment increased and career counselors began stressing the importance of skill development and training to prepare students for competition in the work market, the services became popular among students. Ever since then, service provision has grown to meet current labor market demands, student vocational concerns as well as technological advances (Dey & Real, 2010). By 2000s

---

<sup>3</sup> <https://www.naceweb.org/career-development/organizational-structure/reimagining-career-services/>

career offices were transformed into “dynamic networking hubs that engaged hiring organizations in campus recruiting and facilitated networking between students and recruiters” (Dey & Cruzvergara, 2014, p. 5). Although services provided and modes of delivery differ from institution to institution, typically career service offices assisted students throughout their stay at university in the form of career counselling, job fairs and CV assistance, but nowadays there is also a strong emphasis on building connections with employers, experiential learning and mentoring (Dey & Cruzvergara, 2014).

Currently in Europe there is no single organizational or legal framework for Career Services and “curricular traditions and guidance approaches differ too greatly among member states” (Thomsen, 2014, p. 6). Services are offered either at a university’s central level, or by particular faculties and departments, they can be internal (to the university) or provided by external institutions. The same differentiation applies to both scope and modes of delivery as well as staffing and funding of the career counselling departments (Paviotti, 2015) and in the worldwide perspective, Career Offices have been traditionally much more strongly developed in some countries, - e.g., the United Kingdom and the United States (OECD, 2004).

The evidence from the leading US universities (MIT, Stanford University, Harvard University) suggests that great attention is paid to career development issues. The range of provided services are mostly common among Career Services offered worldwide in general: individual and group counselling, providing internships and holding career events on campus. However, the depth of work appears to be implied by the number of employees of the Career Centers. For example, in MIT<sup>4</sup> apart from over 20 full-time employees, several former trained students are also involved in the career guidance provision through ‘peer career advisor’<sup>5</sup> program. Stanford University provides the services through a separately created department (and a corresponding website) called BEAM<sup>6</sup> and the number of involved personnel is also impressive<sup>7</sup>. Compared with an average 4 employees<sup>8</sup> per country’s college Career Office, such figures suggest a more accessible and comprehensive service.

---

<sup>4</sup> <https://capd.mit.edu/about/capd-staff>

<sup>5</sup> <https://capd.mit.edu/about/peer-career-advisors>

<sup>6</sup> <https://beam.stanford.edu>

<sup>7</sup> [https://beam.stanford.edu/sites/g/files/sbiybj10676/f/beam\\_org\\_chart\\_2021-01-08.pdf](https://beam.stanford.edu/sites/g/files/sbiybj10676/f/beam_org_chart_2021-01-08.pdf)

<sup>8</sup> <https://www.naceweb.org/uploadedfiles/files/2017/publication/executive-summary/2016-17-nace-career-services-benchmark-report-exec-summary.pdf>

As the world and labor market keep changing, career services face the need for constant development and adaptation in order to respond (Kumar & Arulmani, 2014) with research and analysis being essential to understand what paths the Career Offices must follow. According to Gallup-Purdue Index survey (Gallup, 2016), current students tend to visit career offices more often than the previous generations, with a half of U.S. college graduates reporting at least one visit over their undergraduate years. However, the report also states that only 16% of service recipients rated the experience as being ‘very helpful’. Moreover, respondents of the survey who indicated that their experience of using career services was of high quality felt that their university prepared them well for life after graduation, their education was financially worthwhile and their current employment was fulfilling. These findings raise a serious question, if students show that they need career guidance, and those with positive experience report further benefits, what and how should career services change in order to improve the services they offer?

### **1.3. Career Services at Portuguese universities**

In Portugal specifically, first vocational guidance initiatives also appeared in the beginning of the XX century with the establishment of the Institute of Professional Guidance (IOP – Instituto de Orientação Profissional) in Lisbon in 1925. It was the first local institution involved in career guidance services and placement (Cordeiro et al., 2016) but under the political regime of Salazar (1932-1974), the IOP that had been integrated into the General Direction of Higher Education, experienced limitations of its activities. In 1960, however, the Portuguese Society of Psychology was created and in 1965 the National Employment Service was also established. The Service promoted employment, provided vocational training and implemented career guidance activities (Cordeiro et al., 2016). In 1979 the Employment and Vocational Training Institute (IEFP – Instituto de Emprego e Formação Profissional) was created and in the 80s, centers of educational and occupational guidance appeared at the Faculties of Psychology and Educational Sciences in Universities of Porto, Coimbra and Lisbon. In 2004 a group of academics and university career counsellors established the Counselling Psychology in Higher Education Network (RESAPES - Rede de Serviço de Apoio Psicológico no Ensino Superior - Associação Profissional). The organization that currently has 40 participating universities, helps professionals communicate

and share their experiences, as well as promote one other's professional development (Taveira, 2017).

Currently, Career Services in most universities, whether being a unit inside school departments or affiliated to the Rectorate, are an intrinsic element of the HEI in Portugal. They usually have one or two full-time employees, as well as a number of part-time ones. (Taveira, 2017). There are usually three main objectives to be fulfilled by these professionals, namely: assist students in their transition from high school to university; provide psycho-educational support in dealing with educational, personal or career-related issues; and support the transition from university to the labor market.

Despite the fact that much has been written about the importance of Career Services at universities (Niles & Harris-Bowlsbey, 2005; Dey & Cruzvergara, 2014; Schaub, 2012; Usher & Kwong, 2014) little comparative analysis on the provision of career services among different higher education institutions has been carried out, in Portugal specifically. Most national research to our knowledge, at least in the English language, has been made in the light of the historical data and the development of the sphere of Vocational Psychology and guidance (e.g. Cordeiro et al., 2016; Taveira, 2017) rather than the analysis of current provision of the services in the country's Higher Education Institutions. However, there is a recent work by Pereira and Arza Arza (2020) done to investigate the practice of career counseling at a university in northern Portugal.

Therefore, the following paragraph aims to present the analysis of the Career Services at the Portuguese universities following several formulated categories: (a) the organization of the Career Service, (b) educational and employment actions provided, (c) provision of online services and (d) provision of information in the English language. The mentioned categories were adapted from the analysis of the works of different authors in several other countries (Pereira & Arza Arza, 2020; Moitus & Vuorinen, 2003; Tezaroli & Oyekunle, 2019). Moreover, the researcher-subjective analysis of information accessibility and usability on the institutions websites is also included.

Currently, according to the Portuguese Directorate General for Higher Education (DGES – Direção Geral do Ensino Superior)<sup>9</sup>, there are 106 Higher Education Institutions in Portugal, with 70 being private and 34 being public. 67 Institutions are Polytechnics, while

---

<sup>9</sup> <https://www.dges.gov.pt/pt/pagina/ensino-superior-em-numeros?plid=371>

39 are Universities with a total number of almost 390,000 enrolled students as of 2020<sup>10</sup>, an over 11% increase compared to the 2015/2016 academic year. Moreover, according to data from DGES<sup>11</sup>, there is also a significant growth in the number of foreign students enrolled in national higher education (58,350 students), representing an increase of 15 % compared to the same period last year (50,721 of foreign students enrolled). Over 5,000 students were enrolled for the first time under the foreign student status in the academic year 2019/2020, which represents an increase of 34% in relation to the previous academic year. Given this trend, it can be hypothesized that graduating students, both local and foreign who decide to stay in Portugal, might face more and more severe employment difficulties, that leading to an increased need for career services.

For the purpose of this study, 92 out of 106 Portuguese HEIs (Higher Education Institutions) were analyzed (see Appendix A). Several institutions such as Higher Schools of Nursing, Nautical and Music, as well as Military and Police institutions were excluded from the analysis due to the peculiar nature of the fields and one institution (i.e. Escola Superior Artística de Guimarães) appeared not to have a functioning website. However, due to the fact that a number of universities, such as NOVA University, Catholic University, Universities of Porto and Lisbon have Career Services on different campuses (and Schools) that appear as separate and autonomous bodies with different sets of services, the total number of analyzed entities was 100. The data on career guidance provision was extracted from HEIs' websites or corresponding social media web pages.

In the present situation, around 73% of Portuguese HEIs have Career Services and, in most cases, employment support, through an internal employment portal, which dominates over other career interventions. In fact, job portals appear to be one of the most common ways for HEIs to ensure employment of their graduates, with 45 institutions providing such service and some, for example ISLA Santarem, solely it. Out of universities that do not have an internally established portal, some provide vacancies straight on their websites (ISCE, ISEC Lisboa, ISTECC, Politecnico Leiria etc.) Such state of affairs presents a limitation to this study, as it raises a question: can the sole provision of open job vacancies through a website or a portal be considered as an operating Career Services? Since the ultimate aim of Career

---

<sup>10</sup> <https://www.pordata.pt/Portugal/Alunos+matriculados+no+ensino+superior+total+e+por+sexo-1048>

<sup>11</sup> <https://www.dgeec.mec.pt/np4/1109.html>

Services is employability that can be described as a set of skills acquired during educational experience that helps students adapt and excel in the workplace (Yorke, 2006) and not merely securing a first job after graduation, the present analysis excludes a mere job listing from being considered as Career Services unless provided by an appointed Career Office.

In terms of the services currently provided at universities, only 28 of 100 HEIs investigated in Portugal have individual career counselling (clearly) offered to their students, although it is suggested by OECD (2010) that “individual career guidance should be a part of a comprehensive career guidance framework” (p.85). Other common methods of delivering career guidance content to students include skills workshops, events (such as career fairs) and internships. The provision of the latter is ensured by 43, and 5 HEIs state the provision of traineeships.

Only 7% of universities provide mentoring along other services, and only two of the analyzed entities claim to have peer or alumni rather than expert mentoring. In their meta-analysis, Brown and Ryan Krane (2000) concluded that there are five components to effective career interventions, with inclusion of mentors or role models who demonstrate effective career behavior being one of those components.

Finally, in addition to other services, entrepreneurship guidance is offered by 15 institutions, which seems as a positive trend considering a somewhat marginalized attitude<sup>12</sup> to such employment type after graduation.

Differences in terms of bodies that provide career guidance is also observed. At the present time, career guidance in Portuguese universities is delivered through different bodies such as Career Offices, GIP (Gabinetes de Inserção Profissional), GAIVA (Gabinetes de Apoio à Inserção na Vida Ativa), GESP (Gabinetes de Estágio e Saídas Profissionais), SIVA (Serviço de Inserção na Vida Ativa), Job Placement, Internship and Entrepreneurship Offices. Some work solely on provision of career guidance or employment, others are dually responsible for psychological as well as vocational counselling. In Polytechnic of Coimbra, for example, vocational guidance is offered by Gabinete de Psicologia e de Apoio Psicopedagógico, while the institution also has a jobs portal available.

In general, despite different delivery methods and organizational settings, there are 5 identified common programs/services that are shared by institutions:

---

<sup>12</sup> <https://www.iccdpp.org/entrepreneurship-career-guidance/>

- Individual guidance: available in many institutions, and is provided mostly face-to-face in Career Offices. However, a few mention the possibility of Skype sessions (e.g., at IPLeiria) ;
- Group guidance: seminars for career guidance is widespread among Portuguese HEIs;
- Internship and traineeship: these are the most common to all HEIs examined;
- Extra-curricular events on the topics related to career skills development.
- Entrepreneurship activities.

In terms of the apparent availability and accessibility of information on the websites, regarding the services offered, their frequency, mode of provision, as well as time relevance, up-to-date contact details of responsible personnel, most pages are still at a fairly basic level. For example, only P.Porto provides information on the full fees of additionally provided services<sup>13</sup>, and although in most cases career services are free in Portugal, information on possible (or lack of) fees might be beneficial to future or international students choosing an institution or service.

Even though the information about the provided services is placed on the websites, the text design appears in a descriptive and introductory format, written in a formal style and often describing the mission and capabilities of the centers, rather than disclosing concrete and generally offered services. It seems that certain institutions do not necessarily ensure the provision of all services listed on the web to their students. Even if they do, the website – as the primarily and under some circumstances the only communication method between Career Office and students, subjectively do not provide clarity and ease when navigating for information search, the latter being one of the key attributes of a quality website (Fuller & Hinegardner, 2001). Moreover, most websites fail to indicate the existence of Career Services in the institution on the very first landing or home page and thus an elaborate search through the website is often required. Due to the fact that the services provided by different bodies (e.g. GISP, GAIVA, Job Placement, Internship and Entrepreneurship Offices, etc.), keywords searched might include “career office; career services; employment; entrepreneurship; internship; jobs” (carreira; serviços de carreira; emprego;

---

<sup>13</sup> [https://www.ipp.pt/ensino/apoio-aos-estudantes/gabinete-integracao-academica-profissional/empregabilidade-gestao-carreira/copy\\_of\\_GIAPTaxisdeparticipacao.pdf](https://www.ipp.pt/ensino/apoio-aos-estudantes/gabinete-integracao-academica-profissional/empregabilidade-gestao-carreira/copy_of_GIAPTaxisdeparticipacao.pdf)

emprededorismo; estágio; emprego) and thus finding appropriate information for a potential service user (prospect or existing student) becomes a challenging task. This observation also relates to one of the possible limitations of this research – insufficient and hard-to-find information on HIEs websites might distort the accuracy of this analysis but for the service recipients such state of affairs is ineffective both in terms of decision to enroll in a specific institution and of applying for the claimed services. Moreover, it is noted (Whinston & Rose, 2013, p. 250) that “there are often question about what type of services constitute career assistance or career guidance” and in that light a mere provision of job-related information or internship placement by a HEI is considered to be a career support and presents somewhat a challenge for analysis and another limitation of this study.

It is interesting to note that some analyzed Career Offices have social media pages, for example a LinkedIn page of IPVC Career Office<sup>14</sup> or a Facebook page of Career Office of Faculty of Law of University of Lisbon<sup>15</sup>. It has been suggested that social media presence can increase a student’s sense of connection to their school and those who are more connected are more likely to complete their degree at their current university (Wilson & Gore, 2013). Moreover, the use of social media in career-related activities has increased dramatically in recent years (Kettunen et al., 2013) and it presents a useful tool for professionals.

Since there is a constant increase of foreign students in Portuguese Higher Education, the HEIs were analyzed in terms of the availability of the information on the career services in the English language. Thus, 40 out of 100 institutions provide information in English, whether career guidance is offered in other languages apart from Portuguese is not possible to understand from the websites.

In terms of the provision of online services (excluding job portals), only 13 institutions fall into this category. In fact, out of 100 examined HEIs, 7 have information (e.g., tips) on career development on their job portals, two institutions offer MOOCs (Massive Open Online Courses), two offer either online workshops or individual guidance, while one - University of Acores - runs webinars and one - Polytechnic of Coimbra - has a developed e-learning entrepreneurship platform.

---

<sup>14</sup> <https://www.linkedin.com/showcase/gabinete-de-emprego-ipvc/?originalSubdomain=pt>

<sup>15</sup> <https://www.facebook.com/GSP.FDUL/>

Currently it has been noted that modern students tend to be very demanding in terms of the expectations they have towards universities (Karani et al., 2021) and up-to-date technologies, such as the website should be used to communicate effectively and reach out to their diverse users. Undoubtedly, much has changed since in 1999 Jakob Nielsen, an expert in Web usability, determined after many usability tests that most people did not come to the Web for an ‘experience,’ rather they came for information (Nielsen, 1999). Nevertheless, 22 years later content provided on a university website still (alongside with organization and readability) maximizes user satisfaction (Karani et al., 2021). In that light, finding the necessary information might present a problem to students. That is a rather worrying observation, since recent surveys (e.g. CAEL, 2018<sup>16</sup>) claim that students may no longer recognize the importance of career services or even not know that they are provided, which is a counterintuitive observation at a time when dramatic changes are happening in the labor and the demand for career guidance among graduates should be high.

In conclusion, in accordance with the obtained information through the web pages, Career Services in some Portuguese HEIs appear not to be fully developed, and where they exist, they often focus mostly (and sometimes only) upon job placement or internship provision. In the complex situation of high level of youth unemployment, using solely employment guidance strategies, or dealing solely with career planning is not enough - both elements are necessary to deal with career development aspects. “Career centers are no longer the sole custodians of job and internship opportunities” (Schaub, 2012, p.203) or are they mostly in Portugal?

#### **1.4. Employment and employability**

One of the major goals of the European Higher Education Area (EHEA) created in 2010 and the overall Bologna process has been enhancement of employability of students, since the first joint declaration in 1998. The first Bologna seminar to discuss employability was launched in 2004 and in 2015 ministers defined employability as one out of four priorities for the period until 2018. A working group on employability reported that provision of career services along other initiatives are good practices to be adopted by universities: “All higher education institutions, together with governments/government agencies and

---

<sup>16</sup> <https://files.eric.ed.gov/fulltext/ED586520.pdf>

employers, should improve the provision, accessibility and quality of their careers and employment-related services to students and alumni”<sup>17</sup>. The importance of graduate employability is not only recognized in literature (Jackson & Wilton, 2016; Helens-Hart, 2019; Yorke, 2006) but claimed by students themselves as one of the reasons for college enrollment (Eagan et al., 2016).

Yet, modern students find themselves in rather difficult conditions regarding their future employment, as, from a professional point of view, young people are at risk<sup>18</sup>. Firstly, individual qualities of this age category may include emotional instability, changing life and landmarks, frequent change of interests, lack of work experience and corporate communication experience. Combining with little idea on possible career paths and possible academic stamina lack<sup>19</sup>, all these add to the challenge of securing prospective employment. There are also several risks and challenges students may face in the transitional period such as emotional upheaval and psychological distress. Research shows that apart from academic, relationship and financial difficulties some other key stressors include career issues and adapting to change (Robotham & Julian, 2006). Moreover, high levels of stress are closely linked to health issues and personal well-being (Robotham & Julian, 2006). Secondly, there appears (and projected to continue) to be a rise in the requirements for qualifications<sup>20</sup> and what is more, today’s graduates are competing for the same vacancies with people who may be older and more experienced than them<sup>21</sup>. Moreover, it is widely acknowledged that many recent graduates experience difficulties finding work at a level that they consider appropriate right after graduation and many apply for positions that do not require the graduate’s standard of achievement (Alves & Korhonen, 2016). Depending on the field of study and the country, it may take from 6 months to up to 3 years to establish employment that they feel is of graduate level (Pastore et al., 2020) and what is more, the turnover among recent graduates is quite high, with an average tenure to be around 11 months with the first employer

---

<sup>17</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_09\\_675](https://ec.europa.eu/commission/presscorner/detail/en/IP_09_675)

<sup>18</sup> [https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/documents/publication/wcms\\_413826.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_413826.pdf)

<sup>19</sup> <https://www2.deloitte.com/us/en/insights/industry/public-sector/improving-student-success-in-higher-education.html>

<sup>20</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/863506/Working\\_Futures\\_Main\\_Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/863506/Working_Futures_Main_Report.pdf)

<sup>21</sup> <https://www.ft.com/content/2175d66f-cde5-47bd-b452-7a1fdca7d5a1>

(Wendlant & Rochlen, 2008). Additionally, youth unemployment presents a serious issue for Portugal, with over 20% of young people being unemployed (OECD, 2020).

Finally, literature shows that university graduates do not develop career skills sufficiently at universities and thus are under-prepared to enter the workforce (Bridgstock, 2009), and despite current high unemployment rates, companies report inability to attract qualified personnel<sup>22</sup>. Moreover, there seems to be a gap between student's perception of being prepared to work and employers' assessment of recent college graduates (Hart Research Associates, 2015), with later giving students low scores for preparedness across all surveyed learning outcomes (e.g., critical thinking, team-working etc.). Thus, the challenges of career services to promote the employability of students are greater than ever before (Dey & Real, 2010). Employability, indeed, exceeded "the ability to secure a job and progress in it" instead, "it is about developing critical and reflective abilities that empower and enhance the students' self-reliance" (Terzaroli & Oyekunle, 2019, p. 91). Higher education career centers should tailor their services towards empowering students to make them employable after graduation to meet the demands of the 21<sup>st</sup> century world of work.

### **1.5. University students career needs assessment**

Since the need to help students transition into workplace is a major aim of OECD countries and their education systems (OECD, 2010) and vocational guidance at universities can play a big role in fulfilling this challenge, students' vocational concerns need to be examined in order to develop tailored Career Office interventions. It is important to identify the specific areas that students feel they might need support in and by doing so, guidance and counseling programs can be developed that directly target these needs while also providing valuable data for program improvement. Surprisingly enough, some authors note that in the high school setting, for example, career education and guidance policy has been devised without any meaningful feedback from the students (Levin, 2000).

In terms of career guidance for tertiary education students, several studies have addressed the career needs assessment of university students on the national level in China (Li & Jung, 2021); single-university level in the USA (Fouad et al., 2006), Romania (Crişan

---

<sup>22</sup> <https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/attracting-and-retaining-the-right-talent>

et al., 2014); faculty level in Turkey (Güneri et al., 2016) and Taiwan (Yang & You, 2010). Moreover, overall counselling needs were explored in Finland (Lairio & Penttinen, 2006) and Greece (Giovazolias, 2010). The results indicate that with differences depending on the population, gender, age, race and socioeconomic status, the needs for professional and academic help seem to surpass the needs for personal and social support. In Greece, for example, the majority of participants indicated their primary career counselling needs as obtaining information mainly on study and career issues, and that they would come to the center in to get active support on issues of study and career as well as health and personal relations (Giovazolias, 2010).

The study done in a Romanian University (Crişan et al., 2015) concluded that among the student needs from the Career Center were counselling, career search and decision guidance, job interview preparation and other career development workshops. It is interesting to note that authors claim that students are quite passive about the usage of the services, for example, the latter identified that they would like the employers to come to the university and display open vacancies rather than having to seek the information themselves. Finally, students indicated the preference for a face-to-face rather than online interventions and group ones rather than individual.

In Turkey (Güneri et al., 2016) the study examined the career development needs of students at a particular Faculty and whether age, class and grades impacted the needs. The results revealed that common stated needs were getting information about world of work, university-to-work transition, career planning, and stress management, and that only grade point average (GPA) impacted the career development needs of the participants.

A study done by Crockett and Hays (2011) addressed the career counselling needs of international students in the US HEIs. According to the literature review done by the authors, international students, whose number is growing each year in the US colleges, are more prone to face career challenges and experience greater vocational difficulties than their peers from the USA regardless whether they stay for permanent employment or return to their home countries. This is due to the fact that reentering the home country is just as difficult for some as adjusting to the host one and a grieving process might take place when faced with realities of relationships and employment in the homeland. At the same time, several cultural and language barriers, lack of information on job search and visa regulations, unfamiliar

environment and employment procedures may put international students under stress and hinder their career development while still in the USA. Nevertheless, although foreign students express greater need for career placement and career planning than their American peers, counselling services seem to remain focused on the American learners.

In Portugal specifically, Pinto (2019) analyzed the counselling needs of Portuguese higher education students and 3 top areas such as “overcoming procrastination”, “job search strategies” and “time management skills” were shown to be the top concerns of students. Also, a study by Pereira and Arza Arza, 2020 investigated which types of career guidance as well as guidance agents were used by students in one Portuguese university and whether the services met the needs of the students. Findings indicated that the majority of the participants received guidance in the final years of their study and that most were not highly satisfied with the service.

Although the abovementioned studies analyzed students' career guidance needs, the research in this direction, nevertheless, seems quite limited. Therefore, investigating student career guidance needs in Portugal specifically will add to the body of work done by previous authors and will not only help shed light on the students' requests and perception, but it will also provide practical implications that are essential for creating and sustaining interventions. Thus, this work involves an exploratory pilot study that aims to identify and prioritize current career needs of higher education students enrolled in Portuguese universities, from their own perspective, as well as examine concrete intervention types that would be preferential, including the option of possible online career guidance.

Indeed, researchers believe that accurate and timely assessment of college students' needs are essential (Gallagher et al., 1992; Hammond, 2001; Makela & Rooney, 2014), in order to maintain the quality of the provided services. Surveys of student needs have been suggested to be important to identify students' concerns, design group programs, assist counsellors in getting training based on the identified needs or obtaining appropriate levels of university resources (Nicholas 1999; 2002 as cited in Pinto & Martins, 2017). Thus, this study aims to address the gap in the literature by asking the students directly what career guidance needs they have, to help understand their individual requests as well as views of online interventions. That way by including relevant stakeholders like students in the development of the intervention, it is possible to maximize the benefits of the service.

Moreover, current higher education students “are now a much more diverse population than previously” (Lairio & Penttinen, 2006, p. 145) in terms of their age, prior work experience, family status etc. As quoted Crites by Rowe & Mauer (1991, p. 225) “it is difficult for a standardized program, organized around the developmental stages of the “average” student, to be relevant to a large percentage of students”.

Apart from that, the survey itself and the feedback can ultimately empower students by showing them the importance of their own role in the formation of career guidance intervention. Indeed, apart from obtaining information from students, needs assessment can also increase their awareness of the assistance and information provided by Career Services, a much-needed component for successful career interventions (Zainudin et al., 2020). Therefore, the role of student needs assessment becomes an essential part in empowering students and driving change for development. Hammond (2001) notes that it is essential for career services to demonstrate its value and one way to do that is through a needs assessment, i.e. a ‘valuable tool to identify new directions or opportunities’ (Hammond, 2001, p. 190) in order to develop or improve offered programs and services as well as develop long-term goals and objectives.

In order to obtain information, this study will examine the needs of university students in Portuguese higher education through the distribution of a needs assessment questionnaire. Both feedback from those who have received the services and those who have never used them are sought as “it is critical to seek input from potential student groups who are not presently benefiting from service delivery in order to gain a complete picture of students’ needs” (Makela & Rooney, 2014, p.70). Students will be asked what aspects of career domain they need more assistance with, which intervention modalities are more preferable and whether possible interventions provided online are viewed positively. Finally, the goal of this work is to provide light on the role of needs assessments in better serving students at career centers, as well as how the results of these assessments might pave the way for the implementation and maintenance of online interventions.

It is expected that students will respond to this study's needs assessment by highlighting specific areas in which they require assistance, indicating explicit demands to be fulfilled. Students are also hypothesized to have a positive attitude about any online career assistance interventions that may be offered.

## 1.6. Online interventions

Due to the fact that Career Offices, on the one hand, often have limited personnel and funding and, on the other hand, increasing demands to respond to (Hammond, 2001), could the provision of online interventions alongside or instead of face-to-face practices increase the effectiveness of services provided as well as cut costs? Would students welcome such service? Considering the fact that the provision of face-to-face career guidance services is universally limited due to time allowance and personnel number (e.g., NACE, 2017 reports an average of 4 employees to around 1800 students<sup>23</sup>), online services seem beneficial in a sense they can be provided to a larger number of students and at their convenient timing. “Our systems have been built to serve the few...and it would be a disaster!” (if all students came to Career Office at once) states Farouk Dey, Vice President of Integrative Learning and Design at Johns Hopkins University in his presentation (TEDx, 2019).

The use of computer and ICT (information and communication technologies) in career counselling is not at all recent and it dates back to 1960s when the first computer software was used in career counseling (Watts, 2002). Nowadays, the internet has steadily become an important aspect of everyone’s life regardless of age, as a source of communication, entertainment, and information search. Thus, as a result, this increasing use and reliance on internet and technology has created opportunities for career counselling professionals to rethink and develop their services (Zainudin et al., 2020). CAEL (2018) in its report<sup>24</sup> note several ways for reinventing career services and, in fact, incorporating technology to better assist students in engaging with career-related activities and connecting with employers is one of them. According to the report, technology enables for the provision of virtual career services and tools, target outreach to students, and new means of connecting with employers and business owners.

In this line, it is also interesting to note that the presentations of Annual European Conference on Lifelong Guidance held in April 2021 focused primarily on the online interventions. Moreover, according to the CEDEFOP (European Center for the Development of Vocational Training) survey (2020) on career guidance at a time of COVID19 pandemic, during 2020 a number of counselors from different countries reported higher usage of email,

---

<sup>23</sup> <https://www.naceweb.org/uploadedfiles/files/2017/publication/executive-summary/2016-17-nace-career-services-benchmark-report-exec-summary.pdf>

<sup>24</sup> <https://files.eric.ed.gov/fulltext/ED586520.pdf>

rise in provision of individual online counselling and other guidance sessions using several online channels (e.g. Skype, Facebook community groups); webinars and online job fairs. Overall, as a result of and as a response to the pandemic's unique circumstances, in 2020 several countries have increased their funding of career guidance.

Although both forms of career services (online and face-to-face) are important, it seems that full integration of technological advances into the career guidance practice is still far from being ready (Bright, 2014). Furthermore, it is a mistake to suppose that all aspects of using technology in career guidance are beneficial since there can be several issues such as information overload, feedback misinterpretation, (low) perceived quality of the provided services (Galliot, 2017), privacy issues (Venable, 2010), lack of digital literacy and/or computer skills necessary to use the service (Zainudin et al., 2020). Nevertheless, students, as the target audience of Career Offices, are young people who actively use the Internet nowadays and because of being generally technology-savvy, they seem to have certain expectations that services and information should be available to them any time and place (Venable, 2010). One advantage of online career counseling addresses precisely that - its 24/7 availability as well as instant feedback, do appeal to the younger generation (Zainudin et al., 2020). Other advantages of online interventions may include the dynamism and less time needed to update information (Venable, 2011), possible interaction with employers (e.g. through incorporated social media) (Venable, 2011), wider outreach (Zainudin et al., 2020), a vast number of methods and resources to provide the guidance (Galliot, 2017; Zainudin et al., 2020).

However, it is interesting to note that authors state that despite obvious merits and potential of online career counseling, such interventions are likely to be more beneficial if combined with in-person counselling (Galliot, 2017). And providing online services 'with the right mix of technology and human contact' (Venable, 2010, p. 94) can be a difficult goal to achieve.

Nevertheless, it is very important, for all the above mentioned, to understand if these added values of online career counseling are also understood in this way by its users (i.e. the students). One of the questions addressed in this study is precisely to try to understand what the adherence of students would be if this type of service were available from their higher education institution.

## 2. Method

### 2.1. Participants

A total of 361 students who were enrolled in 18 different Higher Education Institutions in Portugal, in the academic year of 2020/2021 participated in this study. Of these participants, 78 (21.6%) were male and 281 (77.8%) were female, 2 participants (0.6%) indicated their gender as “Other”. The respondents were aged between 17 and 60 years ( $M=24$ ;  $SD=6.8$ ). 122 (34%) are enrolled in a public institution and 239 (66%) in a private institution. 179 (50%) are pursuing a Bachelor's degree, 171 (47%) a Master's degree, and 11 (3%) a PhD, of which 221 (61%) are pursuing their studies in the Social and Behavioral Sciences, 86 (24%) are studying Humanities, Law or Educational Sciences and 22 (6%) are attaining Business Sciences.

### 2.2. Instrument

A quantitative study approach was used. We developed a questionnaire to analyze the study's objective. The Career Offices in Higher Education: Needs Assessment Questionnaire was developed specifically for this research, taking into account a set of other questionnaires previously existing and disseminated in scientific investigations (Güneri et al., 2016; Yang & You, 2010; Pinto, 2009). This questionnaire is organized into 6 distinct parts:

(i) *Knowledge of the Career Service of your Higher Education Institution*: consisting of three questions that assess whether students are aware of the existence of a Career Office at their institution, how they obtained this knowledge, and if they have ever used the service;

(ii) *Preferred Career Intervention Method*: consisting of a list of 10 distinct options from which the person selects the preferred three in terms of career intervention. The various options presented include, for example, individual or group career counseling sessions, face-to-face or online career counseling sessions, employability workshops and mentoring. There is also a question that allows the person to indicate another preferred type of support not mentioned in the previous list.

(iii) *Career Needs of Higher Education Students*: made up of a list of 23 distinct career needs, which include, for example, the need for support in preparing a CV, the need for support in using social platforms for job search and the need for support in negotiation of

job offers. For each of these needs, the answer is requested on a 4-point Likert scale (1 “no need” and 4 “high need”);

(iv) *Own Career Needs*: consisting of a list of 23 distinct career needs from which the person selects the five that best represent their current support needs; the list is the same as in the previous section;

(v) *Adherence to Online Career Services*: through a single item (0 to 10 points) the probability of the participant’s adherence to an online or computer-assisted career counseling service is assessed, if it were made available by their University; and,

(vi) *Other Additional Comments*: open-ended question, in which students are asked to indicate any additional comments regarding their university's Careers Office and the services it provides.

This questionnaire can be found on the link in the footnote<sup>25</sup>.

### **2.3. Data collection procedures**

Data was collected by the researcher with the help of the Faculty of Human Sciences of the Catholic University of Portugal, between January and August 2021. For this purpose, the Careers Office of the aforementioned Faculty sent by email an invitation to all students to collaborate in this investigation and the Office of Communication and Marketing released it on various digital platforms. Moreover, each of the functioning Career Office of total of 89 Portuguese HEIs as well as their social platforms (i.e. Facebook page) were also contacted via email with an invitation to participate in the survey via distributing the questionnaire among the students. For this purpose, the Ethical Declaration from the CRC-W (*Católica Research Centre for Psychological, Family and Social Wellbeing*) was submitted upon request.

The invitation email contained information regarding the purpose of the study, as well as the access link to the assessment protocol inserted in the Qualtrics platform. The assessment protocol included a more detailed explanation of the objective of the study, an informed consent, the assessment instrument previously presented and a brief sociodemographic questionnaire. The average time to complete the questionnaire was 8 minutes.

---

<sup>25</sup> [https://ucpcienciashumanas.eu.qualtrics.com/jfe/form/SV\\_01950hzUbeBOWu9](https://ucpcienciashumanas.eu.qualtrics.com/jfe/form/SV_01950hzUbeBOWu9)

#### **2.4. Data analysis procedures**

Data was entered into a database and processed using software for statistical analysis (SPSS version 26). Exploratory data analysis was performed in order to examine if there were problems in the data such as outliers, non-normal distributions, problems with coding, and/or missing values, and to examine the extent to which the assumptions of the statistics that we planned to use were met.

We used descriptive statistics (namely measures of central tendency and dispersion) for the various questions related to the student' needs and intervention preferences. In addition, correlation analyses between higher education students' career needs and modalities preference were also performed.

Also, several decision trees were conducted in order to predict the likelihood that students would use an online career service if it were provided by the Career Office of their respective universities/colleges. The decision tree procedure creates a tree-based classification model. It classifies cases into groups or predicts values of a dependent (target) variable based on variable independent (predictor) variable values (IBM SPSS Decision Trees 21). The decision trees were carried out using the CHAID method (decision tree analysis with the chi-squared automatic interaction detector algorithm). The tree diagrams, graphic representations of the tree model, will be presented. The risk and classification tables will provide a quick evaluation of how well the models work.

The results were considered statistically significant when  $p < .05$ .

The open question was treated through content analysis procedures (Bardin, 1977).

### 3. Results

#### 3.1. Knowledge of the higher education institution's Career Service

The descriptive results of the awareness of the existence of the Career Office at the respondents' schools and universities indicate that the majority of students, namely 277 participants (76.7%) heard about the service, while 84 students (23.3%) did not. The information was mostly obtained through emails from the Career Office (161 students, 47%); other common sources stated were 'From other students' (30 respondents, 8%), 'Referred by lecturer' (29 students, 8%) and institutional webpage (22 respondents, 6%). In terms of Career Office services usage frequency, out of those who knew about the Career Office, 263 (72.9%) never used the services, 74 (20.5%) and 15 (4.2%) used the services 1-2 or 3-4 times a year respectively.

#### 3.2. Preferred career intervention modality

Regarding the types of career intervention, a list of ten options was presented to which the participants needed to indicate their three preferred modalities. As can be seen in table 1, the modalities that are most preferred are (in descending order): *Online information about internship and/or job opportunities* (230=64 %), *In-person individual guidance and counseling sessions* (187=52 %), *Mentoring programs/ sessions* (185= 51 %), *Career fairs/events* (159=44 %) and *In-person workshops* (147 = 41%).

**Table 1.**

*Preferred Career Intervention Modality: Frequencies and Percentages*

Modality	Freq. (%)
In-person individual career guidance/ counselling sessions	<b>187 (51.8%)</b>
In-person group career guidance/ counselling sessions	62 (17.2%)
Online individual career guidance/ counselling sessions	111 (30.7%)
Online group career guidance/ counselling sessions	51 (14.1%)
In-person workshops (e.g., development of soft skills)	<b>147 (40.7%)</b>
Webinars (e.g., development of soft skills)	106 (29.4%)
Career Mentoring	<b>185 (51.2%)</b>
Career events (e.g., career fairs)	<b>159 (44.0%)</b>
Printed information (e.g., about internships and job opportunities)	69 (19.1%)
Online information (e.g., about internships and job opportunities)	<b>230 (63.7%)</b>

### 3.3. Career needs of students in higher education

Table 2 presents a list of 23 career needs for which the participants were asked to indicate, from their point of view, the degree of need of higher education students, on a scale of 1 to 4 points. As can be seen, the respondents indicate as the main needs of students in higher education: *'Identifying the information about possible employment opportunities and required qualifications'* ( $M=3.66$ ), *'Learning job search strategies'* ( $M=3.55$ ), *'Developing job interview skills'* ( $M=3.53$ ), *'Discussing career strategies that increase the likelihood of achieving my career goal'* ( $M=3.52$ ) and *'Gaining experience through internships'* ( $M=3.52$ ).

**Table 2**

*Career Needs of Higher Education Students*

Career needs	Mean (DP)
Determining own interests and developing new ones	2.99 (.877)
Determining own skills and developing new ones	3.29 (.734)
Determining own values and lifestyle	2.60 (1.047)
Determining personality traits and its relationship with specific environment contexts	2.86 (.935)
Exploring different career options, such as determining my own choice between advanced studies or employment after graduation	<b>3.58 (.632)</b>
Determining the paths to advanced studies in domestic and international programs	3.40 (.750)
Identifying the type of job I'm best fitted for	<b>3.48 (.715)</b>
Identifying the information about possible employment opportunities and required qualifications	<b>3.66 (.551)</b>
Learning job search strategies	<b>3.55 (.674)</b>
Developing clear, specific and realistic career goals	3.38 (.762)
Discussing career strategies that increase the likelihood of achieving my career goal	<b>3.52 (.675)</b>
Selecting a new academic degree (e.g., Masters/PhD degree)	3.05 (.822)
Applying for a scholarship	3.24 (.798)
Gaining experience through internships	<b>3.52 (.628)</b>
Writing cover letters	3.21 (.802)
Preparing a résumé/ CV	3.32 (.835)
Developing job interview skills	<b>3.53 (.683)</b>
Using social media platforms to search for job offers (e.g., LinkedIn)	3.13 (.869)
Negotiating job offers	<b>3.50 (.708)</b>
Networking effectively	3.47 (.666)
Transferring skills gained in the course to the workplace	3.39 (.738)
Learning how to be a freelancer or start my own business using knowledge gained from my degree	3.32 (.786)
Supporting the soft-skills development (e.g., teamwork, communication, problem-solving, leadership workshops)	3.29 (.762)

### 3.4. Personal career needs

Table 3 presents a list of 23 career needs for which participants were asked to indicate which five they considered to best represent their own current support needs. As can be seen,

the majority (189 out of 361 participants, 52%) indicated that current need is *'Identifying the type of job I'm best fitted for'*; second most popular option with 133 answers (37%) was to the *'Exploring different career options, such as determining my own choice between advanced studies or employment after graduation'*, followed by *'Gaining experience through internships'* with 123 respondents (34%). The lowest number of participants (21 out of 361, 6%) expressed the need for *'Using social media platforms to search for job offers'*.

**Table 3**

*Personal Career needs of Higher Education Students*

Personal Career needs	Freq. (%)
Determining own interests and developing new ones	65 (18%)
Determining own skills and developing new ones	94 (26%)
Determining own values and lifestyle	32 (8.9%)
Determining personality traits and its relationship with specific environment contexts	37 (10.2%)
Exploring different career options, such as determining my own choice between advanced studies or employment after graduation	<b>133 (36.8%)</b>
Determining the paths to advanced studies in domestic and international programs	53 (14.7%)
Identifying the type of job I'm best fitted for	<b>189 (52.4%)</b>
Identifying the information about possible employment opportunities and required qualifications	105 (29.1%)
Learning job search strategies	101 (28%)
Developing clear, specific and realistic career goals	76 (21.1%)
Discussing career strategies that increase the likelihood of achieving my career goal	101 (28%)
Selecting a new academic degree (e.g., Masters/PhD degree)	57 (15.8%)
Applying for a scholarship	43 (11.9%)
Gaining experience through internships	<b>123 (34.1%)</b>
Writing cover letters	35 (9.7%)
Preparing a résumé/ CV	61 (16.9%)
Developing job interview skills	89 (24.7%)
Using social media platforms to search for job offers (e.g., LinkedIn)	21 (5.8%)
Negotiating job offers	63 (17.5%)
Networking effectively	64 (17.7%)
Transferring skills gained in the course to the workplace	66 (18.3%)
Learning how to be a freelancer or start my own business using knowledge gained from my degree	69 (19.1%)
Supporting the soft-skills development (e.g., teamwork, communication, problem-solving, leadership workshops)	52 (14.4%)

### 3.5. Adherence to online career services

Assessed through one item (0 to 10 points), there was a mean score of 7.53 (SD=2.197) about the participant's likelihood of joining an online or computer-assisted career counseling service if it were made available by their college. It was also found that 98 (27%)

of the participants have a disbelieving/detractor attitude, 128 (36%) have a passive attitude, and 135 (37%) have a promoting attitude towards this type of service.

### **3.6. Career needs of higher education students and preferred career intervention modalities: relationships**

Table 4 presents the relationship between the students' career needs and the preferred intervention modalities.

Students prefer in-person individual career guidance sessions to address needs such as *Determining own interests and developing new ones* ( $r=.162$ ,  $p=.002$ ), *Determining own skills and developing new ones* ( $r=.190$ ,  $p=.000$ ), *Determining own values and lifestyle* ( $r=.138$ ,  $p=.009$ ), *Determining personality traits and its relationship with specific environment contexts* ( $r=.107$ ,  $p=.043$ ), *Identifying the type of job I'm best fitted for* ( $r = .112$ ,  $p= .034$ ), *Developing clear, specific and realistic career goals* ( $r = .110$ ;  $p= .038$ ) and *Negotiating job offers* ( $r = .108$ ,  $p= .040$ ).

Students choose group career guidance at the Career Office to fulfill the need of *Learning how to be a freelancer or start own business using knowledge gained from my degree* ( $r = .105$ ;  $p= .046$ ).

Students prefer online in-person career guidance sessions to address needs such as *Developing clear, specific and realistic career goals* ( $r= .133$ ;  $p= .011$ ) and Online Group Career Guidance Sessions for *Discussing career strategies that increase the likelihood of achieving my career goal* ( $r= .115$ ;  $p= .029$ ).

Students opt for in-person workshops to address the *Exploring different career options, such as determining my own choice between advanced studies or employment after graduation* ( $r= .126$ ,  $p= .017$ ), *Learning job strategies* ( $r= .176$ ;  $p= .001$ ), *Discussing career strategies that increase the likelihood of achieving my career goal* ( $r= .119$ ;  $p= .023$ ), *Selecting a new academic degree* (e.g., Masters/PhD degree) ( $r= .108$ ;  $p= .041$ ), *Gaining experience through internships* ( $r= .144$ ,  $p= .006$ ), *Writing cover letters* ( $r = .102$ ;  $p= .053$ ), *Developing job interview skills* ( $r = .106$ ;  $p= .044$ ), *Using social media platforms to search for job offers* (e.g. LinkedIn) ( $r = .151$ ,  $p= .004$ ), *Negotiating job offers* ( $r = .133$ ,  $p= .011$ ), *Transferring skills gained in the course to the workplace* ( $r = .154$ ;  $p= .003$ ), *Supporting the soft-skills development* ( $r = .147$ ;  $p= .005$ ).

Finally, students prefer career mentoring to fulfill needs such as *Developing clear, specific and realistic career goals* ( $r = .130$ ,  $p = .014$ ), *Discussing career strategies that increase the likelihood of achieving my career goal* ( $r = .112$ ;  $p = .033$ ).

**Table 4***Career Needs and Career Modalities: Correlations*

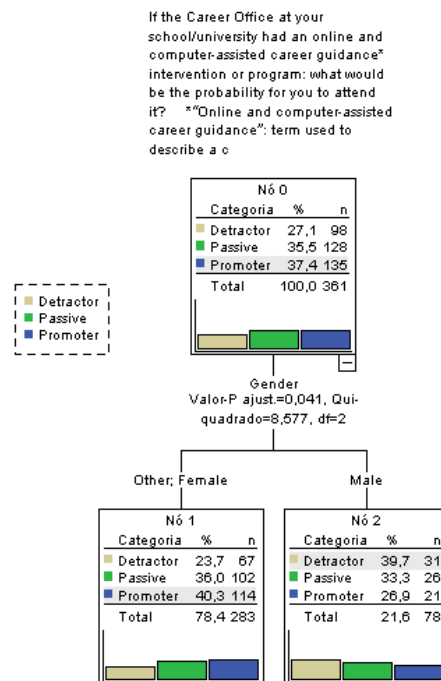
Career needs/Preferred intervention modalities	In-person individual Career Guidance Sessions	In-person group career guidance sessions	Online Individual Career Guidance Sessions	Online Group career guidance sessions	In-person workshops (e.g., career management, soft skill development)	Webinars (e.g., career management, soft skill development)	Career Mentoring	Career events/ Career fairs	Printed information about internships and job opportunities	Online information about internships and job opportunities
Determining own interests and developing new ones	<b>.162 (.002)</b>	-.021 (.693)	.082 (.121)	.067 (.201)	.066 (.212)	-.042 (.421)	.054 (.306)	.053 (.315)	.013 (.811)	-.073 (.167)
Determining own skills and developing new ones	<b>.190 (.000)</b>	-.009 (.870)	.066 (.213)	-.018 (.728)	.090 (.089)	-.054 (.304)	.081 (.125)	.001 (.978)	-.018 (.733)	-.065 (.219)
Determining own values and lifestyle	<b>.138 (.009)</b>	.053 (.314)	.086 (.103)	.062 (.237)	.061 (.251)	-.012 (.825)	.044 (.405)	.053 (.313)	.002 (.966)	-.077 (.147)
Determining personality traits and its relationship with specific environment contexts	<b>.107 (.043)</b>	-.008 (.873)	.039 (.466)	.011 (.828)	.074 (.163)	-.037 (.479)	.034 (.525)	.041 (.434)	-.061 (.249)	-.049 (.357)
Exploring different career options, such as determining my own choice between advanced studies or employment after graduation	.041 (.434)	.009 (.867)	.039 (.458)	.053 (.317)	<b>.126 (.017)</b>	.058 (.269)	.025 (.633)	.080 (.128)	.019 (.724)	.042 (.429)
Determining the paths to advanced studies in domestic and international programs	.033 (.537)	-.027 (.612)	.022 (.679)	.049 (.349)	.101 (.056)	.006 (.912)	.016 (.757)	.094 (.075)	.014 (.793)	.010 (.855)
Identifying the type of job I'm best fitted for	<b>.112 (.034)</b>	.034 (.522)	.057 (.278)	-.016 (.761)	.060 (.258)	-.024 (.652)	.080 (.128)	-.025 (.636)	-.001 (.990)	-.042 (.425)
Identifying the information about possible employment opportunities and required qualifications	.063 (.234)	.031 (.562)	-.031 (.553)	.022 (.678)	.005 (.924)	.005 (.932)	.046 (.386)	<b>.128 (.015)</b>	.047 (.370)	.084 (.112)
Learning job strategies	.057 (.280)	.053 (.318)	.034 (.519)	.046 (.384)	<b>.176 (.001)</b>	.050 (.340)	-.008 (.878)	.078 (.141)	.052 (.325)	.036 (.494)
Developing clear, specific and realistic career goals	<b>.110 (.038)</b>	.014 (.788)	<b>.133 (.011)</b>	.069 (.188)	.053 (.311)	.022 (.675)	<b>.130 (.014)</b>	.005 (.927)	.063 (.232)	.043 (.412)
Discussing career strategies that increase the likelihood of achieving my career goal	-.019 (.715)	.022 (.672)	.052 (.327)	<b>.115 (.029)</b>	<b>.119 (.023)</b>	.003 (.948)	<b>.112 (.033)</b>	-.032 (.539)	.078 (.140)	.055 (.293)
Selecting a new academic degree (e.g., Masters/PhD degree)	.038 (.468)	-.001 (.988)	.084 (.112)	.014 (.789)	<b>.108 (.041)</b>	.020 (.703)	-.083 (.117)	.028 (.600)	.022 (.677)	-.038 (.467)
Applying to a scholarship	.073 (.168)	-.016 (.758)	.042 (.428)	.048 (.359)	.042 (.423)	-.010 (.856)	-.021 (.686)	.085 (.108)	.058 (.272)	-.013 (.806)
Gaining experience through internships	-.026 (.627)	.006 (.905)	.008 (.872)	.016 (.755)	<b>.144 (.006)</b>	-.005 (.927)	.037 (.488)	.069 (.191)	.077 (.143)	.051 (.331)
Writing cover letters	.036 (.499)	-.008 (.878)	.015 (.783)	.034 (.522)	<b>.102 (.053)</b>	.023 (.668)	-.045 (.399)	-.021 (.689)	-.029 (.578)	.002 (.977)
Preparing a resume/ CV	.029 (.580)	.026 (.628)	-.014 (.788)	.081 (.126)	.077 (.145)	.027 (.615)	-.066 (.210)	-.017 (.748)	-.028 (.591)	-.004 (.943)
Developing job interview skills	.037 (.484)	.033 (.537)	-.018 (.734)	.057 (.281)	<b>.106 (.044)</b>	.006 (.916)	-.028 (.602)	-.054 (.309)	-.028 (.598)	-.003 (.958)
Using social media platforms to search for job offers (e.g. LinkedIn)	.071 (.176)	.060 (.255)	-.015 (.779)	.069 (.193)	<b>.151 (.004)</b>	.045 (.389)	.047 (.369)	-.066 (.211)	-.015 (.783)	.044 (.400)
Negotiating job offers	<b>.108 (.040)</b>	.074 (.163)	.023 (.669)	.018 (.738)	<b>.133 (.011)</b>	.027 (.608)	-.025 (.630)	.093 (.079)	.006 (.910)	-.046 (.380)
Networking effectively	.012 (.818)	.000 (.996)	.063 (.229)	.061 (.246)	.086 (.102)	.003 (.948)	-.022 (.681)	-.029 (.585)	.029 (.589)	-.049 (.352)
Transferring skills gained in the course to the workplace	.071 (.178)	.026 (.622)	.052 (.328)	.075 (.156)	<b>.154 (.003)</b>	.019 (.719)	-.028 (.591)	-.004 (.938)	.037 (.485)	-.004 (.944)
Learning how to be a freelancer or start my own business using knowledge gained from my degree	.088 (.096)	<b>.105 (.046)</b>	.058 (.268)	.058 (.269)	.102 (.053)	.025 (.635)	.071 (.178)	.010 (.856)	.045 (.393)	.035 (.511)
Supporting the soft-skills development	.081 (.125)	.075 (.154)	.066 (.209)	.063 (.233)	<b>.147 (.005)</b>	.039 (.460)	-.002 (.965)	-.020 (.709)	.025 (.631)	-.034 (.515)

### 3.7. Probability of attending an online career guidance or intervention program

Next, we present the results of the several decision trees conducted in order to predict the likelihood that students would use an online career service if it were provided by the Career Office of their respective universities/colleges. The dependent variable used, “*If the Career Office at your school/university had an online and computer-assisted career guidance intervention or program: what would be the probability for you to attend it?*”, since it is a “Net Promoter Score” type variable, was organized into three categories: students who are detractors, students who are passive, and students who are promoters of using these types of services (nominal variable). Three independent analyses were performed. In each of these analyses, the independent variables used were: (i) sociodemographic (gender, age, academic degree, public vs. private institution, area of study), (ii) the higher education students’ career needs, and, (iii) own career needs.

#### (i) Decision tree with sociodemographic variables

This tree diagram (Figure 1) shows that gender is the best predictor of the “what would be the probability for you to attend an online career guidance or intervention program” ( $X^2(2)=8.577, p=.041$ ).



**Figure 1.**

*Attending an online career guidance or intervention program: Decision tree with sociodemographic variables*

For both gender groups (female and male), this is considered a terminal node, since there are no child nodes. Female students are more likely to be promoters (40.3%) of this type of service (vs 36% passive and 23.7% detractor). In contrast, male students are more likely to be 39.7% detractors (vs 33.3% passive and 26.9% promoters).

The risk (table 5) estimate of .598 indicates that the category predicted by the model is wrong for 60% of the cases. So the “risk” of misclassifying a student is approximately 60%. The results in the classification table are consistent with the risk estimate. The table 6 shows that the model classifies approximately 40.2% of the students correctly. The classification table (Table 6) does, however, reveal two potential problem with this model: (i) for those students with a passive behavior, it predicts 0% of them – these are often classified as being promoters; and (ii) for those students with a detractor behavior, it predicts their behavior in only 31.6%% of the cases, which means that 69% of students are inaccurately classified with the a “promoter behavior”.

**Table 5**

*Attending an online career guidance or intervention program and sociodemographic variables: Risk estimation*

Estimate	Error
.598	.026

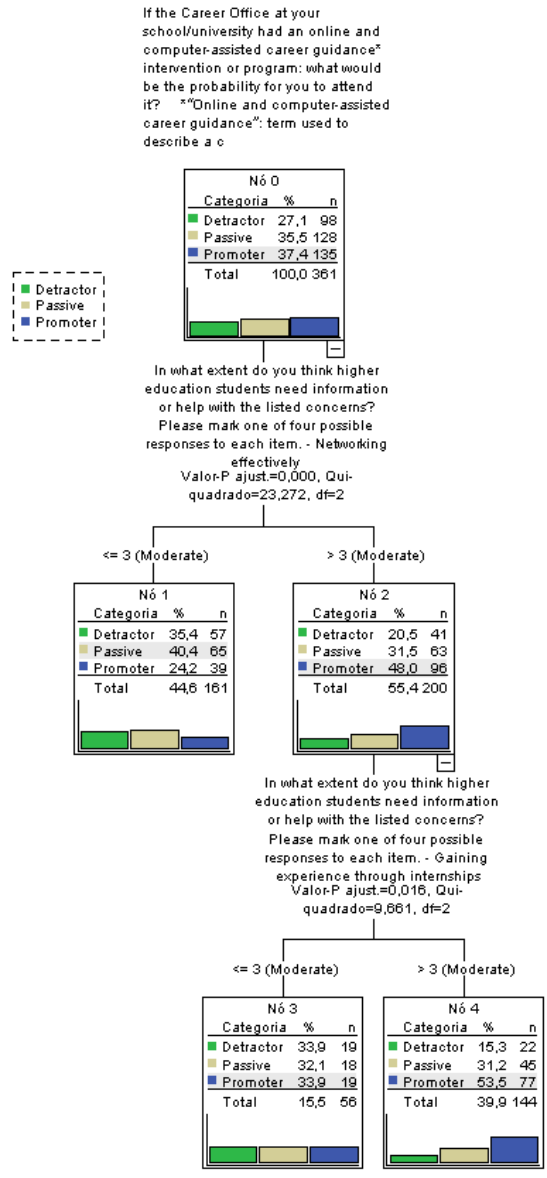
**Table 6**

*Attending an online career guidance or intervention program and sociodemographic variables: Classification*

Observed	Predicted			Correct percentage
	Detractor	Passive	Promoter	
Detractor	31	0	67	31.6%
Passive	26	0	102	0.0%
Promoter	21	0	114	84.4%
Total %	21.6%	0.0%	78.4%	40.2%

**(ii) Decision tree with the career needs of higher education students**

This tree diagram (figure 2) shows that the personal concern “networking effectively” is the best predictor of the “what would be the probability for you to attend online career guidance or intervention program” ( $X^2(2)=23.272, p<.000$ ).



**Figure 2.**

*Attending an online career guidance or intervention program: Decision tree with career needs of higher education students*

For the category of those with a reduced need, this is considered a terminal node, since there are no child nodes. Within this category, 40.4% of students take a passive behavior on the likelihood of seeking online and computer-assisted career guidance for this topic, while 35.4% of students take a detractor behavior.

For the category of students who have a moderate to high need, the model includes one more predictor – “gaining experience through internships”. Of the students who indicate a low need, 33.9% have a promoting behavior (vs 33.9% detractor and 32.1% passive) while of the students who indicate a moderate to high need, 53.5% have a promoting behavior (vs 15.3% detractor and 31.5% passive).

The risk estimate (table 7) of .554 indicates that the category predicted by the model is wrong for 55% of the cases. So the “risk” of misclassifying a student is approximately 55%. The results in the classification table are consistent with the risk estimate. The table 8 shows that the model classifies approximately 44.6% of the students correctly. The classification table (table 8) does, however, reveal that for those students with a passive behavior, are wrongly classified as promoters by almost 50%; and those with detractor behavior are never correctly identified.

**Table 7**

*Attending an online career guidance or intervention program and career needs of higher education students:  
Risk*

Estimate	Error
.554	.026

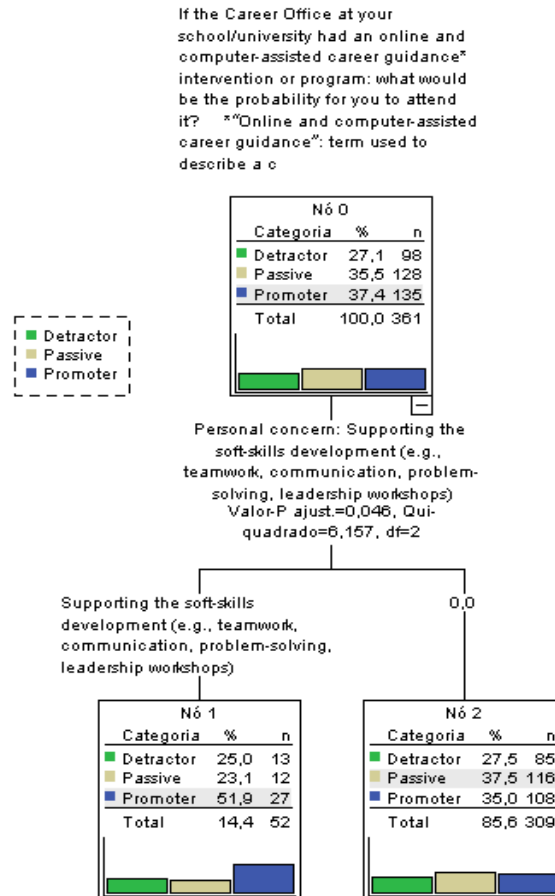
**Table 8**

*Attending an online career guidance or intervention program and career needs of higher education students:  
Classification*

Observed	Predicted			Correct percentage
	Detractor	Passive	Promoter	
Detractor	0	57	41	0.0%
Passive	0	65	63	50.8%
Promoter	0	39	96	71.1%
Total %	0.0%	44.6%	55.4%	44.6%

**(iii) Decision tree with the variables of own career needs**

This tree diagram (figure 3) shows that the personal concern “supporting the soft-skills development” is the best predictor of the “what would be the probability for you to attend an online career guidance or intervention program” ( $X^2(2)=6.157, p=.046$ ).



**Figure 3.**

*Attending an online career guidance or intervention program: Decision tree with own career needs*

For both groups, those who feel the need and those who do not feel the need to have soft skills development support, this is considered a terminal node, since there are no child nodes. However, taking into account those who do not feel this type of need, their behavior towards using an online career service is mostly “passive” (37.5%), while those who feel this type of need tend to adopt mostly a “promoting behavior (51.9%).

The risk estimate (table 9) of .604 indicates that the category predicted by the model is wrong for 60% of the cases. So the “risk” of misclassifying a student is approximately 60%. The results in the classification table are consistent with the risk estimate. The table 10 shows that the model classifies approximately 39.6% of the students correctly. The classification table (table 10) does, however, reveal two potential problem with this model: (i) for those students with a detractor behavior, it predicts 0% of them; and (ii) for those students with a promoter behavior, it predicts their promoting behavior in only 20% of the cases, which means that 80% of student with a promoter behavior are inaccurately classified with the a “passive behavior”.

**Table 9**

*Attending an online career guidance or intervention program and own career needs: Risk*

Estimate	Error
,604	,026

**Table 9**

*Attending an online career guidance or intervention program and own career needs: Classification*

Observed	Predicted			Correct percentage
	Detractor	Passive	Promoter	
Detractor	0	85	13	0.0%
Passive	0	116	12	90.6%
Promoter	0	108	27	20.0%
Total %	0.0%	85.6%	14.4%	39.6%

### 3.8. Additional comments

After finishing analyzing the responses to the open-ended question for additional comments to the survey, we found that the majority of respondents (35%) indicated several requests concerning the range of provided services, 19% complained that Career Offices are difficult to reach and 15% stated that intervention should be incorporated in the academic curricula. A complete list of the different topics can be found in Appendix B.

## Discussion

This dissertation involved an exploratory study that aimed to identify current career needs of students enrolled in Portuguese higher education and whether online interventions would be of demand among students. Based on the results of the analysis, several assumptions can be drawn.

Despite the fact that most of the students are aware of the existence of a career center at their university, only a small proportion of the respondents have ever used the services of the centers. Compared to the study by Gallup (2016) that stated that 52% of students in the US tend to visit Career Offices at least once over their undergraduate studies, our findings are clearly lower than expected. In this context, the analysis of the additional comments section might indeed be a partial answer to the question why that is so. According to the survey respondents, Career Centers are difficult to reach. This is also confirmed by our analysis of the existing websites of the centers - non-updated information, difficult to find contact details and sometimes even what might look as unprofessional appearance of some of the pages. Such state of affairs can confirm the stigma towards a career specialist in Portugal (Pinto, 2012) that they can only distribute psychological tests instead of providing valuable support. Most students claim they need career support, yet, based on our findings they rarely apply for it.

While the majority of students are interested in receiving online information regarding internships and vacancies, the most preferred modalities of intervention are nevertheless the in-person ones ranging from individual sessions to career fairs. This is consistent with results from previous studies (e.g., Crişan et al., 2015; Pinto, 2019), although contrary to the study by Crişan et al. (2015) Portuguese students systematically indicate a preference for individual sessions or workshops over group counseling sessions (Pinto, 2019).

Out of 23 presented career concerns, most respondents indicate the need for those, connected with the internship experience, search for employment and passing the job interview. According to our analysis of Career Offices at Portuguese universities such services range is quite common, and the majority of offices do provide job interview preparation sessions on demand and distribute information on internships and employment. What is interesting, however, is when asked about current personal needs, the results show

that students need counselling support in understanding whether they should continue studying or finding employment after graduation and with the latter, identifying the type of the employment that would be the best fit. Compared with prior research, there is a tendency to focus on aspects of job search tactics and career decision-making, devaluing the self-exploration component that should support the career management process (e.g., Crişan et al., 2015; Pinto, 2019; Yang & You, 2010). Therefore, it is necessary to make students aware of the importance of the theme of self-knowledge.

The results from correlation analysis allows to draw conclusions on which concerns students want to tackle using specific intervention types. It is clear that in-person individual career guidance sessions can be used to address several personal needs such as determining and developing own interests, skills, values and goals, whereas in-person workshops can be used for topics on learning job strategies, negotiating job offers and developing soft skills.

In terms of possible on-line career intervention, the majority of respondents welcome such an option, yet again, out of listed possible intervention modalities, online individual counselling sessions are the top preferences by respondents, followed by webinars. This is congruent with prior research that states a possible need for human interaction (with a counselor) alongside an online guidance intervention (Galliot, 2017; Venable, 2010). What is different, however, is that similar international studies on needs assessment (Crişan, et al., 2015; Güneri et al., 2016) indicated a low preference of online counselling and low usage of internet and other online tools for career support. In this study, however, students recognize that their preferred mode of intervention when it comes to developing career goals and discussing goal-oriented career strategies are individual online sessions and group online sessions respectively. Moreover, according to our analysis, the likelihood that students would use an online career service if it were provided by the Career Office of their respective universities might depend on the gender and on the specific personal need, with networking and soft-skills development being top possible predictors.

Although our findings provide various insights that could be used by Career Offices in order to tailor their existing programs or to develop the new ones in accordance with the students' preferences, the results on the topic of online intervention suggest possible difficulties in using the online format for higher education students. Further in-depth exploration is needed.

## **Conclusion and Recommendations**

Although much has been discussed in literature and done on national levels to promote the importance of career counselling for students and to increase its availability, the services provision seems not to be fully developed in a large number of Portuguese HEIs with students not using the services as expected. Since there is clearly a demand for the career support that is hypothesized to increase even more, universities need to rethink the way they market career services to students and whether the websites provide easy access to all necessary information. Thus, raising awareness of the provided career services and improving the information accessibility (e.g. though increasing the quality of corresponding website sections), are of great importance.

Due the promising nature and growing popularity of online career counselling (Bright, 2014; Galliot, 2017) and the fact that most Career Offices employ a very limited number of personnel, online career interventions seem to be a perfect solution. Yet, without a meaningful consultation with service recipients, i.e. students, creation of online career intervention proves to be impossible. The career need assessment has a crucial role in understanding concerns and preferences of students and translating these to action. Only in that way the efforts and financial investments would yield a service that meets students' needs more effectively and would be, in the end, used. Although there are several advantages to online career counselling (Zainudin et al., 2020) and most students would welcome such intervention mode, more research is needed in order to establish possible specific concerns that could be addressed in such a format. Since there is a clear preference among students for individual career guidance, universities might need to adapt the intervention types and/or add such sessions regardless of the type. Finally, due to novice of the topic and insufficient evidence, universities need to collaborate in order to foster knowledge exchange.

In his historical survey, Shapin (2012) refers to universities being once “ivory towers”, not involved in the problems of the societies that created and sponsored them. We conclude this work with optimism that Career Offices would not become such disengaged and out of reach entities, but instead would be open for the dialogue with the service recipients in order to contribute to the promotion of students' employability by adapting the range of the services and creation of targeted career guidance programs, including online interventions. In the pursuit of a better workforce, identifying student career needs,

intervention preferences, and then connecting these expectations with skills development at university Career Offices, is a critical implication for all parties involved – institutions, students, and prospective employers.

### **Limitations**

This study also acknowledges its limitations. Firstly, the sample size and the variety of students' profiles might have been larger and more varied, but the majority of the contacted Career Offices at Portuguese HEIs ignored the participation request or refused to disseminate the study among their students, thus leading to a limited sample size.

Secondly, there might have been several issues with the questionnaire wording structure due to the fact that it was written in the English language and distributed to non-native English speakers. The original number of participants was over 500 students, but the majority dropped the completion of the survey after the second question on whether they ever used the services. It is unclear why such a drop-out occurred.

Finally, the study wanted to address not only Portuguese native students but also international students in Portugal. Although many did participate in the survey, they indicated their country as Portugal and not their home one, thus, we had to leave this question out of the analysis.

## References

- Alves, M. G., & Korhonen, V. (2016). Transitions and trajectories from higher education to work and back – A comparison between Finnish and Portuguese graduates. *European Educational Research Journal*, 15(6), 676–695. <https://doi.org/10.1177/1474904116661200>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice- Hall, Inc.
- Bardin, L. (1977). *Análise de conteúdo* (L. A. Reto & A. Pinheiro, Trans.). Lisboa: Edições 70.
- Bartik, A., Bertrand, M., Cullen, Z., Glaeser, E., Luca, M., & Stanton, C. (2020). *The impact of COVID-19 on small business outcomes and expectations*. Proceedings Of The National Academy Of Sciences, 117(30), 17656-17666. <https://doi.org/10.1073/pnas.2006991117>
- Blustein, D. L. (Ed.) (2013). *The Oxford handbook of the psychology of working*. New York, NY: Oxford University Press. <http://doi.org/10.1093/oxfordhb/9780199758791.001.0001>
- Blustein, D. L., Ali, S. R., & Flores, L. Y. (2019). Vocational Psychology: Expanding the Vision and Enhancing the Impact. *The Counseling Psychologist*, 47(2), 166–221. <https://doi.org/10.1177/0011000019861213>
- Bridgstock, R. (2009). The graduate attributes we've overlooked: enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31–44. <https://doi.org/10.1080/07294360802444347>
- Bright, J. (2014). If you go down to the woods today you are in for a big surprise: seeing the wood for the trees in online delivery of career guidance. *British Journal Of Guidance & Counselling*, 43(1), 24-35. <https://doi.org/10.1080/03069885.2014.979760>
- Brown, S.D., & Ryan Krane, N.E. (2000). Four (or five) sessions and a cloud of dust: Old assumptions and new observations about career counseling. In S.D. Brown & R.W. Lent (Eds.), *Handbook of Counseling Psychology* (3rd ed., pp. 740-766). New York: Wiley.
- Cedefop; European Commission; ETF; ICCDPP; ILO; OECD; UNESCO (2020). Career guidance policy and practice in the pandemic: results of a joint international survey –

- June to August 2020. Luxembourg: Publications Office of the European Union.  
Retrieved from <http://data.europa.eu/doi/10.2801/318103>
- Cordeiro, S. A., Costa-Lobo, C., Taveira, M. C., & Silva, A. D. (2016). *History and Evolution of Vocational Psychology in Portugal: Contributions and implications*. Póster apresentado na IAEVG Internacional Conference 2016, Madrid.
- Crişan, C., Pavelea, A., & Ghimbuluţ, O. (2015). A Need Assessment on Students' Career Guidance. *Procedia - Social and Behavioral Sciences*, 180, 1022-1029.
- Crockett, S., & Hays, D. (2011). Understanding and Responding to the Career Counseling Needs of International College Students on U.S. Campuses. *Journal Of College Counseling*, 14(1), 65-79. <https://doi.org/10.1002/j.2161-1882.2011.tb00064.x>
- Dawis, R. V. (2005). The Minnesota Theory of Work Adjustment. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 3–23). John Wiley & Sons, Inc.
- Dawis, R. V., England, G. W., & Lofquist, L. H. (1964). A theory of work adjustment. *Minnesota Studies in Vocational Rehabilitation* (No. XV), pp. 1–27. Minneapolis: University of Minnesota, Industrial Relations Center.
- Dawis, R.V. & Lofquist, L.H. (1984) A Psychological Theory of Work Adjustment. Minneapolis: University of Minnesota Press.
- Dey, F., & Cruzvergara, C. (2014). Evolution of Career Services in Higher Education. *New Directions For Student Services*, 2014(148), 5-18. <https://doi.org/10.1002/ss.20105>
- Dey, F., & Real, M. (2010). Emerging trends in university career services: Adaptation of Casella's career centers paradigm. *NACE Journal*, 71, 31–35.
- Duffy, R.D., Blustein, D.L., Diemer, M.A., & Autin, K.L. (2016). The Psychology of Working Theory. *Journal Of Counseling Psychology*, 63(2), 127-148. <https://doi.org/10.1037/cou0000140>
- Eagan, M. K., Stolzenberg, E. B., Ramirez, J. J., Aragon, M. C., Suchard, M. R., & Rios-Aguilar, C. (2016). *The American freshman: Fifty-Year trends, 1966–2015*. Los Angeles: Higher Education Research Institute, UCLA
- Fallows, S. & Weller, G. (2000). Transition from student to employee: A work-based programme for 'graduate apprentices' in small to medium enterprises. *Journal of*

<https://doi.org/10.1080/13636820000200143>

- Flanagan, J. C. (1947). Research reports of the AAF Aviation Psychology Program. *American Psychologist*, 2(9), 375, 374. <https://doi.org/10.1037/h0063688>
- Fouad, N. A., Guillen, A., Harris-Hodge, E., Henry, C., Novakovic, A., Terry, S., & Kantamneni, N. (2006). Need, Awareness, and Use of Career Services for College Students. *Journal of Career Assessment*, 14(4), 407–420. <https://doi.org/10.1177/1069072706288928>
- Fuller, D. M., & Hinegardner, P. G. (2001). Ensuring quality Website redesign: the University of Maryland's experience. *Bulletin of the Medical Library Association*, 89(4), 339–345.
- Gallagher, R.P., Golin, A. & Kelleher, K. (1992). The personal, career and learning skills needs of college students. *Journal of College Student Development* 33, 301-309. <https://doi.org/10.1007/BF01409602>
- Galliot, N. (2017). Online Career Guidance: Does Knowledge Equate to Power for High School Students? *Journal of Psychologists and Counsellors in Schools*, 27(2), 190-207. <https://doi.org/10.1017/jgc.2017.7>
- Gallup, I. (2016). One in Six U.S. Grads Say Career Services Was Very Helpful, from <https://news.gallup.com/poll/199307/one-six-grads-say-career-services-helpful.aspx>
- Giovazolias, T., Leontopoulou, S., & Triliva, S. (2010). Assessment of Greek university students' counselling needs and attitudes: An exploratory study. *International Journal for the Advancement of Counselling*, 32(2), 101–116. <https://doi.org/10.1007/s10447-010-9092-2>
- Gottfredson, L. S. (2002). Gottfredson's theory of circumscription, compromise, and self-creation. In D. Brown & Associate (Eds.), *Career choice and development* (4th ed., pp. 85–148). San Francisco, CA: Jossey-Bass.
- Gottfredson, L. S. (2005). Applying Gottfredson's Theory of Circumscription and Compromise in Career Guidance and Counseling. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 71–100). John Wiley & Sons, Inc.

- Güneri, O. Y., Owen, W.D., Tanrikulu, I., Dolunay C. F., Büyükgöze K. A. (2016). Examining career development needs of faculty of education students. *Journal of Theory and Practice in Education*, 12(1), 178-193
- Hammond, M.. (2001). Career Centers and Needs Assessments: Getting the Information You Need to Increase Your Success. *Journal of Career Development*. 27. 187-197. <https://doi.org/10.1023/A:1007835009496>
- Hart Research Associates (2015). Falling short? College learning and career success. Washington, DC: Association of American Colleges and Universities.
- Hartung, P. J. (2013). Career as story: Making the narrative turn. In W. B. Walsh, M. L. Savickas, & P. J. Hartung (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (pp. 33–52). Routledge/Taylor & Francis Group.
- Hayden, S.C.W., & Ledwith, K. (2014). Career Services in University External Relations. *New Directions For Student Services*, 2014(148), 81-92. <https://doi.org/10.1002/ss.20110>
- Helens-Hart, R. (2019). Career Education Discourse: Promoting Student Employability in a University Career Center. *Qualitative Research in Education*, 8(1), 1-26. <https://doi.org/10.17583/qre.2019.3706>
- Herr, E. L., Cramer, S. H., & Niles, S. G. (2004). *Career guidance and counseling through the lifespan: Systematic approaches* (6th ed.). Allyn & Bacon.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Psychological Assessment Resources.
- Hull, C. L. (1928). *Aptitude testing*. World Book Company. <https://doi.org/10.1037/11019-000>
- Jackson, D., & Wilton, N. (2016). Perceived employability among undergraduates and the importance of career self-management, work experience and individual characteristics. *Higher Education Research & Development*, 36(4), 747-762. <https://doi.org/10.1080/07294360.2016.1229270>
- Karani, A., Thanki, H., & Achuthan, S. (2021). Impact of University Website Usability on Satisfaction: A Structural Equation Modelling Approach. *Management and Labour Studies*, 46(2), 119–138. <https://doi.org/10.1177/0258042X21989924>

- Kettunen, J., Vuorinen, R., & Sampson, J. P., Jr (2013). Career practitioners' conceptions of social media in career services. *British journal of guidance & counselling*, 41(3), 302–317. <https://doi.org/10.1080/03069885.2013.781572>
- Kretovicks, M., Honaker, S., & Kraning, J. (1999). Career centers: Changing needs require changing paradigms. *Journal of Student Affairs at Colorado State University*, 8, 77–84.
- Kumar, S., & Arulmani, G. (2014). Understanding the Labor Market: Implications for Career Counseling.
- Lairio, M., & Penttinen, L. (2006). Students' career concerns: challenges facing guidance providers in higher education. *International Journal for Educational and Vocational Guidance*, 6, 143-157.
- Langher, V., Nannini, V., & Caputo, A. (2018). What Do University or Graduate Students Need to Make the Cut? A Meta-analysis on Career Intervention Effectiveness. *Journal of Educational, Cultural and Psychological Studies (ECPS Journal)*, 0(17), 21-43. <https://doi.org/10.7358/ecps-2018-017-lang>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79–122. <https://doi.org/10.1006/jvbe.1994.1027>
- Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social cognitive career theory. In D. Brown & Associate (Eds.), *Career choice and development* (4th ed., pp. 255–311). San Francisco, CA: Jossey-Bass.
- Lent, R. W., Miller, M. J., Smith, P. E., Watford, B. A., Lim, R. H., Hui, K., Morrison, M. A., Wilkins, G., & Williams, K. (2013). Social cognitive predictors of adjustment to engineering majors across gender and race/ethnicity. *Journal of Vocational Behavior*, 83(1), 22–30. <https://doi.org/10.1016/j.jvb.2013.02.006>
- Leung S.A. (2008) The Big Five Career Theories. In: Athanasou J.A., Van Esbroeck R. (eds) *International Handbook of Career Guidance*. Springer, Dordrecht. [https://doi.org/10.1007/978-1-4020-6230-8\\_6](https://doi.org/10.1007/978-1-4020-6230-8_6)
- Levin, B. (2000). Putting Students at the Centre in Education Reform. *Journal of Educational Change* 1, 155–172. <https://doi.org/10.1023/A:1010024225888>

- Li, X., & Jung, J. (2021). Career concerns and needs of mainland Chinese Master's students in Hong Kong. *Asia Pacific Journal of Education*, 1-15. <https://doi.org/10.1080/02188791.2021.1896477>
- Makela, J., & Rooney, G. (2014). Framing Assessment for Career Services: Telling Our Story. *New Directions For Student Services*, 2014(148), 65-80. <https://doi.org/10.1002/ss.20109>
- Matthews, R. (2017). A Theory for Everything? Is a Knowledge of Career Development Theory Necessary to Understand Career Decision Making?. *European Scientific Journal*, ESJ, 13(7), 320. <https://doi.org/10.19044/esj.2017.v13n7p320>
- Moitus, S., & Vuorinen, R. (2003). Evaluation of Guidance Services in Higher Education in Finland. *International Journal for Educational and Vocational Guidance* 3, 159–175 <https://doi.org/10.1023/B:IJVO.0000006586.65262.b2>
- Nicholas, L (1995). Personal, career and learning skills needs of first-year university students. *International Journal of Advancement of Counseling*, 18, 33-37. <https://doi.org/10.1007/BF01409602>
- Nicholas, L. J. (2002). South African first-year student's counseling needs and preferred counseling sources. *International Journal of Advancement of Counseling*, 24, 289-295. <https://doi.org/10.1023/A:1023376930986>
- Nielsen, J. (1999). *Designing Web Usability: The practice of Simplicity*. New Riders Publishing, USA.
- Niles, S. G., & Harris-Bowlsbey, J. A. (2005). *Career development interventions in the 21st century*. Upper Saddle River, N.J: Pearson/Merrill Prentice Hall.
- OECD (2004). *Career Guidance and Public Policy. Bridging the Gap*. <https://doi.org/10.1787/9789264105669-en>
- OECD (2019). *OECD Employment Outlook 2019: The Future of Work*, OECD Publishing, Paris. <https://doi.org/10.1787/9ee00155-en>
- OECD (2010). *Learning for Jobs*, Paris: Organisation for Economic Co-operation and Development.
- Parsons, F. (1909). *Choosing a vocation*. Houghton, Mifflin and Company.

- Pastore, F., Quintano, C. & Rocca, A. (2020). Stuck at a Crossroads? The Duration of the Italian School-to-Work Transition. IZA Discussion Paper No. 13462. Retrieved from <https://ftp.iza.org/dp13462.pdf>
- Paviotti, G., (2015), Toward the European Career Development Programme: initiatives, cases, and practices in universities. Retrieved from [http://www.icard-project.eu/docs/ICARD\\_O1\\_report\\_final.pdf](http://www.icard-project.eu/docs/ICARD_O1_report_final.pdf)
- Pereira, N., & Arza Arza, N. (2020). The Practice of Career Guidance in a Northern Portuguese University. *The International Journal of Management Science and Business Administration*, 6(5), 31-37. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.65.1004>
- Pinto, J. C. (2019). Psychological Counseling in Portuguese Higher Education: What are the Students' Needs? *Universitas Psychologica*. 18, 1-15.
- Pinto, J. C. (2012). Training and performance systems of psychology professionals: the particular case of career guidance and counselling. In M. C. Taveira, J. C. Pinto & A. D. Silva. *Learning, Achievement and Career Development* (1a ed.). Braga: Associação Portuguesa para o Desenvolvimento da Carreira – APDC.
- Pinto, J. C., & Martins, M. (2017). Psychological intervention needs: validation of a survey with Portuguese university students. *Revista De Estudios E Investigación En Psicología Y Educación*, 4(2), 112-121. <https://doi.org/10.17979/reipe.2017.4.2.2922>
- Robotham, D., & Julian, C. (2006). Stress and the higher education student: a critical review of the literature. *Journal Of Further And Higher Education*, 30(2), 107-117. <https://doi.org/10.1080/03098770600617513>
- Rowe, F. A., & Mauer, K. A. (1991). Career Guidance, Career Assessment, and Consultancy. *Journal of Career Development*, 17(3), 223–233. <https://doi.org/10.1177/089484539101700307>
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *Career Development Quarterly*, 45, 247–259.
- Savickas, M. L. (2002). Career construction: A developmental theory of vocational behavior. In D. Brown & Associate (Eds.), *Career choice and development* (4th ed., pp. 149–205). San Francisco, CA: Jossey-Bass.

- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. T. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). Hoboken, NJ: Wiley.
- Savickas, M. L. (2013). Career construction theory and practice. In R. W. Lent & S. D. Brown (Eds.), *Career development and counseling: Putting theory and research to work* (2a ed., pp. 147-183). Hoboken, New Jersey: John Wiley & Sons.
- Savickas, M. L., & Baker, D. B. (2005). The History of Vocational Psychology: Antecedents, Origin, and Early Development. In W. B. Walsh & M. L. Savickas (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (pp. 15–50). Lawrence Erlbaum Associates Publishers.
- Savickas, M., Nota, L., Rossier, J., Dauwalder, J., Duarte, M., & Guichard, J. et al. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal Of Vocational Behavior*, 75(3), 239-250. <https://doi.org/10.1016/j.jvb.2009.04.004>
- Shapin, S. (2012). The Ivory Tower: the History of a Figure of Speech and its Cultural Uses. *The British Journal for the History of Science*. 45. <https://doi.org/10.1017/S0007087412000118>
- Schaub, M. (2012). The Profession of College Career Services Delivery: What College Counselors Should Know About Career Centers. *Journal of College Student Psychotherapy*, 26(3), 201–215. <https://doi.org/10.1080/87568225.2012.685854>
- Super, D. E. (1957). *The psychology of careers; an introduction to vocational development*. Harper & Bros.
- Super, D. E. (1969). Vocational development theory: Persons, positions, and processes. *The Counseling Psychologist*, 1(1), 2–9. <https://doi.org/10.1177/001100006900100101>
- Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown & L. Brooks, *Career choice and development: Applying contemporary theories to practice* (pp. 197–261). Jossey-Bass.
- Swanson, J. L., & Schneider, M. (2013). Minnesota theory of work adjustment. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 29–54). New York, NY: John Wiley.
- Taveira, M.C. (2017). Career education and guidance services in Portugal : deeds and needs. In R. G. Sultana (Ed.), *Career guidance and livelihood planning across the*

- Mediterranean : challenging transitions in South Europe and the MENA region* (pp. 401-416). Rotterdam: Sense Publishers.
- TEDx (2019, March 19). Farouk Dey: Life purpose reconsidered [Video file]. Retrieved from <https://hub.jhu.edu/magazine/2019/summer/farouk-dey-life-design/>
- Terzaroli, C. (2019). Career Services as an institutional approach to employability. *Form@re - Open Journal Per La Formazione in Rete*, 19(2), 161-177. <https://doi.org/10.13128/formare-25243>
- Terzaroli, C., & Oyekunle, Y. (2019). Career Service as a Measure to support Employability. *Andragoška spoznanja*.
- Thomsen, R. (2014). A Nordic perspective on career competences and guidance – Career choices and career learning. NVL & ELGPN concept note, Oslo: NVL. Retrieved from <http://www.elgpn.eu/publications/browse-by-language/english/career-choices-and-career-learning.-nvl-elgpn-concept-note/>
- U.S. Department of Education, National Center for Education Statistics. (2020). The Condition of Education 2020 (NCES 2020-144), Employment and Unemployment Rates by Educational Attainment. Retrieved from <https://nces.ed.gov/pubs2020/2020144.pdf>
- Usher, A., Kwong, A. (2014). Career Services Offices: A Look at Universities and Colleges across Canada. Toronto: Higher Education Strategy Associates. Retrieved from <https://higherstrategy.com/wp-content/uploads/2014/08/Intelligence-Brief-9-Career-Services-Offices-3.pdf>
- Venable, M. (2010). Using Technology to Deliver Career Development Services: Supporting Today's Students in Higher Education. *The Career Development Quarterly*, 59(1), 87-96. <https://doi.org/10.1002/j.2161-0045.2010.tb00132.x>
- Venable, M. (2011). Providing Critical Support to Online Students. Retrieved from <https://www.onlinecollege.org/whitepapers/2011-08.pdf>
- Watts, A. (2002). The Role of Information and Communication Technologies in Integrated Career Information and Guidance Systems: A Policy Perspective. *International Journal for Educational and Vocational Guidance* 2, 139–155 (2002). <https://doi.org/10.1023/A:1020669832743>

- Wendlandt, N. M., & Rochlen, A. B. (2008). Addressing the College-to-Work Transition: Implications for University Career Counselors. *Journal of Career Development*, 35(2), 151–165. <https://doi.org/10.1177/0894845308325646>
- Whiston, S. C., & Rose, C. S. (2013). Career counseling with emerging adults. In W. B. Walsh, M. L. Savickas, & P. J. Hartung (Eds.), *Handbook of vocational psychology: Theory research and practice* (4th ed., pp. 249-272). New York: Routledge.
- Wilson, S., & Gore, J. (2013). An attachment model of university connectedness. *The Journal of Experimental Education*, 81(2), 178-198. <https://doi.org/10.1080-00220973.2012.699902>
- Yang, M. Y., & You, M. (2010). A survey of career guidance needs of industrial design students in Taiwanese Universities. *Asia Pacific Education Review*, 11(4), 597-608. <https://doi.org/10.1007/s12564-010-9106-0>
- Yorke, M. (2006). Employability in Higher Education: What It Is, What It Is Not. Retrieved from [https://www.ed.ac.uk/files/atoms/files/hea-learning-employability\\_series\\_one.pdf](https://www.ed.ac.uk/files/atoms/files/hea-learning-employability_series_one.pdf)
- Zainudin, Z.N., Hassan, S.A., Talib, M.A., Ahmad, A., Yusop, Y.M., & Asri, A.S. (2020). Technology-Assisted Career Counselling: Application, Advantages and Challenges as Career Counselling Services and Resources. *The International Journal of Academic Research in Business and Social Sciences*, 10, 67-93.

## APPENDIX A

### *Provision of career services in Portuguese HEIs: websites analysis*

HEI	Career Office	Individual Career Counseling	Other services	Online Career Counselling	Information in English	Website
Atlantic University Business School	Y	N	Internship Entrepreneurship	N	N	<a href="https://www.abs.pt/estudantes/guia/">https://www.abs.pt/estudantes/guia/</a>
Autonoma University	Y	n/a	Job portal Internship	N	Y	<a href="https://en.autonoma.pt/servicos/gabinete-de-insercao-profissional/">https://en.autonoma.pt/servicos/gabinete-de-insercao-profissional/</a>
ESAD	Y	n/a	Internship Workshops	N	Y	<a href="https://esad.pt/pt/news/gabinete-de-empregabilidade">https://esad.pt/pt/news/gabinete-de-empregabilidade</a>
Escola Superior Gallaecia	Y	n/a	Internship Workshops Events Entrepreneurship	N	Y	<a href="https://esg.pt/estudantes/gabinete-de-apoio-ao-aluno/insercao-na-vida-ativa/">https://esg.pt/estudantes/gabinete-de-apoio-ao-aluno/insercao-na-vida-ativa/</a>
ESECVP-AT	Y	n/a	n/a	N	N	<a href="https://esecvpaltotamega.pt/pt/paginas/pagina.php?idpag=57">https://esecvpaltotamega.pt/pt/paginas/pagina.php?idpag=57</a>
ESTGV	Y	N	Internship	N	N	<a href="https://www.estgv.ipv.pt/estgv/?v=73">https://www.estgv.ipv.pt/estgv/?v=73</a>
Estoril Higher Institute for Tourism and Hotel Studies	Y	n/a	Internship	N	Y	<a href="http://www.eshte.pt/pt/servicos/servicos/gabapoio-profissional-e-empresarial">http://www.eshte.pt/pt/servicos/servicos/gabapoio-profissional-e-empresarial</a>
Europeia University	Y	n/a	n/a	N	Y	<a href="https://www.europeia.pt/en/employability/employability-office">https://www.europeia.pt/en/employability/employability-office</a>
Higher Institute of Leiria	Y	Y	n/a	N	N	<a href="https://www.islaleiria.pt/gabinete-de-apoio-e-acompanhamento-ao-estudante/">https://www.islaleiria.pt/gabinete-de-apoio-e-acompanhamento-ao-estudante/</a>

Higher School of Health University of Atlantica	Y	Y	Internship Entrepreneurship Workshops	N	N	<a href="https://careermanagement.uatlantica.pt">https://careermanagement.uatlantica.pt</a>
Institute of Advanced Technologies (ISTEC)	Y	Y	Internship Entrepreneurship Workshops Events	N	N	<a href="https://www.istec.pt/index.php/gabinete-de-apoio-ao-estudante-e-a-empregabilidade/">https://www.istec.pt/index.php/gabinete-de-apoio-ao-estudante-e-a-empregabilidade/</a>
Institute of Education and Sciences	Y	Y	Internship Workshops	N	Y	<a href="https://www.iseclisboa.pt/index.php/en/employment">https://www.iseclisboa.pt/index.php/en/employment</a>
Institute of Information Sciences and Administration	Y	Y	Internship	N	N	<a href="https://iscia.edu.pt/giape-gabinete-de-integracao-academica-e-profissional-do-estudante/">https://iscia.edu.pt/giape-gabinete-de-integracao-academica-e-profissional-do-estudante/</a>
Instituto Politécnico de Gestão e Tecnologia	Y	Y	Internship Workshops Events	No	N	<a href="http://instituto.islagaia.pt:8080/bolsa/">http://instituto.islagaia.pt:8080/bolsa/</a>
Instituto Superior de Lisboa e Vale do Tejo	Y	n/a	Internship Entrepreneurship Workshops	N	N	<a href="https://www.isce.pt/pt/vida-no-isce/servicos-de-apoio-ao-estudante/isce-vida-ativa">https://www.isce.pt/pt/vida-no-isce/servicos-de-apoio-ao-estudante/isce-vida-ativa</a>
Instituto Superior de Paços de Brandão	Y	n/a	n/a	No	N	<a href="https://www.facebook.com/Gabinete-de-Inserção-Profissional-de-Paços-de-Brandão-1026212760865545">https://www.facebook.com/Gabinete-de-Inserção-Profissional-de-Paços-de-Brandão-1026212760865545</a>
Instituto Superior Politécnico Gaya	Y	n/a	n/a	N	Y	<a href="https://www.ispgaya.pt/site/por/page/view/services">https://www.ispgaya.pt/site/por/page/view/services</a>
IPAM	Y	Y	Workshops Job Portal Internship Events	Y* (job platform has career	Y	<a href="https://www.ipam.pt/lisboa/empregabilidade/employability-office">https://www.ipam.pt/lisboa/empregabilidade/employability-office</a>

				development info)		
ISAG	Y	Y	Workshops Internship Events Job Portal	N	Y	<a href="https://www.isag.pt/isag/unidades_geral.visualizar?p_unidade=592">https://www.isag.pt/isag/unidades_geral.visualizar?p_unidade=592</a>
ISCTE Business School	Y	Y	Internship Events Workshops Mentoring Job portal	Y* (job platform has career development info)	Y	<a href="https://ibs.iscte-iul.pt/contents/the-experience/1575/career-services">https://ibs.iscte-iul.pt/contents/the-experience/1575/career-services</a>
ISCTE SSP	Y	Y	Internship Events Workshops Job portal	Y* (job platform has career development info)	Y	<a href="https://www.iscte-iul.pt/conteudos/iscte/schools/school-of-sociology-and-public-policy/career-services/2160/students">https://www.iscte-iul.pt/conteudos/iscte/schools/school-of-sociology-and-public-policy/career-services/2160/students</a>
ISMT	Y	n/a	Internship Entrepreneurship	N	N	<a href="https://ismt.pt/unidades-de-apoio/gabinetes/gabinete-de-empreendedorismo/">https://ismt.pt/unidades-de-apoio/gabinetes/gabinete-de-empreendedorismo/</a>
ISPA	Y	n/a	Internship	N	Y	<a href="https://en.ispa.pt/pagina/internship-and-career-center-office">https://en.ispa.pt/pagina/internship-and-career-center-office</a>
ISSSP	Y	n/a	Internship Workshops Events Entrepreneurship	N	N	<a href="https://www.issp.pt/issp/unidades_geral.visualizar?p_unidade=4">https://www.issp.pt/issp/unidades_geral.visualizar?p_unidade=4</a>
ISVOUGA	Y	Y	n/a	N	N	<a href="https://isvouga.pt/pt/estudantes/bolsa-emprego/">https://isvouga.pt/pt/estudantes/bolsa-emprego/</a>
Maia University	Y	n/a	Internship	N	N	<a href="https://www.ismai.pt/unidades-de-apoio/gabinetes/GEIMT">https://www.ismai.pt/unidades-de-apoio/gabinetes/GEIMT</a>

NOVA FCH	Y	n/a	Internship Events Job portal	Y* (job platform has career development info)	Y	<a href="https://www.fcsh.unl.pt/en/students-2/internships-and-volunteering/">https://www.fcsh.unl.pt/en/students-2/internships-and-volunteering/</a>
NOVA IMS	Y	N	Internship Events	N	Y	<a href="https://www.novaims.unl.pt/gabinete-de-insercao-profissional-apoio-a-empregabilidade">https://www.novaims.unl.pt/gabinete-de-insercao-profissional-apoio-a-empregabilidade</a>
NOVA School of Business & Economics	Y	Y	Internship Events Workshops Mentoring	Y	Y	<a href="https://www2.novasbe.unl.pt/en/programs/bachelors/management/careers-placement">https://www2.novasbe.unl.pt/en/programs/bachelors/management/careers-placement</a>
NOVA School of Law	Y	n/a	n/a	N	Y	<a href="https://novalaw.unl.pt/contactos-e-localizacao/">https://novalaw.unl.pt/contactos-e-localizacao/</a>
NOVA School of Science and Technology	n/a	n/a	Internship Events Job portal	Y* (job platform has career development info)	N	<a href="https://www.fct.unl.pt/en/node/23083">https://www.fct.unl.pt/en/node/23083</a>
Politecnico Leiria	Y	n/a	Internship	N	Y	<a href="https://www.ipleiria.pt/inovar/comunidade-e-parceiros/bolsa-de-emprego/">https://www.ipleiria.pt/inovar/comunidade-e-parceiros/bolsa-de-emprego/</a>
Polytechnic Institute of Beja	Y	Y	Internship Job Portal	N	N	<a href="https://www.ipbeja.pt/servicos/giva/Paginas/default.aspx">https://www.ipbeja.pt/servicos/giva/Paginas/default.aspx</a>
Polytechnic Institute of Bragança	Y	Y	Entrepreneurship Internship Job Portal	N	N	<a href="http://portal3.ipb.pt/index.php/p/tpb/quem-somos/servicos-centrais/gabinetes-tecnicos/gabinete-de-promocao-do-empreendedorismo">http://portal3.ipb.pt/index.php/p/tpb/quem-somos/servicos-centrais/gabinetes-tecnicos/gabinete-de-promocao-do-empreendedorismo</a>

Polytechnic Institute of Castelo Branco	Y	n/a	Internship Job Portal	N	N	<a href="https://www.ipcb.pt/sa/portal-emprego">https://www.ipcb.pt/sa/portal-emprego</a>
Polytechnic Institute of Cavada and Ave	Y	n/a	Internship Workshops Events	Y* (job platform has career development info)	N	<a href="https://ipca.pt/ipca/unidades/upraxis/g3e/emprego/estagios/">https://ipca.pt/ipca/unidades/upraxis/g3e/emprego/estagios/</a>
Polytechnic Institute of Guarda	Y	Y	Entrepreneurship Internship Volunteering Job Portal	N	N	<a href="http://www.gesp.ipg.pt">http://www.gesp.ipg.pt</a>
Polytechnic Institute of Maia	Y	N	Internship	N	N	<a href="http://www.ipmaia.pt/pt/unidades-de-apoio/gabinetes/geimt">http://www.ipmaia.pt/pt/unidades-de-apoio/gabinetes/geimt</a>
Polytechnic Institute of Portalegre	Y	n/a	Entrepreneurship Internship Workshops	Y (MOOCs)	N	<a href="http://gee.ipportalegre.pt">http://gee.ipportalegre.pt</a>
Polytechnic Institute of Santarem	Y	N	Entrepreneurship	N	N	<a href="https://www.ipsantarem.pt/pt/unidades/empreendedorismo/">https://www.ipsantarem.pt/pt/unidades/empreendedorismo/</a>
Polytechnic Institute of Setubal	Y	n/a	Entrepreneurship Internship	N	N	<a href="https://www.ips.pt/ips_si/web_base.gera_pagina?P_pagina=30556">https://www.ips.pt/ips_si/web_base.gera_pagina?P_pagina=30556</a>
Polytechnic Institute of Viana do Castelo	Y	N	Internship	N	N	<a href="https://www.ipvc.pt/en/viver/emprego/">https://www.ipvc.pt/en/viver/emprego/</a>
Polytechnic of Coimbra	Y	Y	n/a	Yes (e-learning entrepreneurship platform)	N	<a href="https://www.ipc.pt/ipc/en/acao-social/saude-psicologia/">https://www.ipc.pt/ipc/en/acao-social/saude-psicologia/</a>

Polytechnic of Leria	Y	Y	n/a	Y* (online 121)	Y	<a href="https://www.ipleiria.pt/viver/servicos/apoio-psicologico/">https://www.ipleiria.pt/viver/servicos/apoio-psicologico/</a>
Polytechnic of Portalegre	Y	n/a	Entrepreneurship	Yes (MOOCs)	N	<a href="https://www.ipportalegre.pt/pt/emprededorismo/emprededorismo-e-ensino/">https://www.ipportalegre.pt/pt/emprededorismo/emprededorismo-e-ensino/</a>
Polytechnic of Porto	Y	Y	Internship Workshops Events Entrepreneurship	N	Y	<a href="https://www.ipp.pt/education/student-support-services/academic-and-professional-integration-office/employability-and-career-management/employability-and-career-management">https://www.ipp.pt/education/student-support-services/academic-and-professional-integration-office/employability-and-career-management/employability-and-career-management</a>
Polytechnic of Viseu	Y	n/a	n/a	N	N	<a href="http://siva.ipv.pt/?opt=MTE4LjYxLjUxLjQ5Lg==">http://siva.ipv.pt/?opt=MTE4LjYxLjUxLjQ5Lg==</a>
School of Education Paula Frassinetti	Y	N	Workshops Entrepreneurship	N	N	<a href="https://www.esepf.pt/saidas-profissionais/">https://www.esepf.pt/saidas-profissionais/</a>
UCP FCH	Y	Y	Internship Events Workshops Mentoring Job portal	N	Y	<a href="https://fch.lisboa.ucp.pt/sobre-fch/servicos/gabinete-de-carreiras/careers-office">https://fch.lisboa.ucp.pt/sobre-fch/servicos/gabinete-de-carreiras/careers-office</a>
UCP Lisbon School of Business & Economics	Y	Y	Internship Events Workshops Job portal	Y* (job platform has career development info)	Y	<a href="https://www.clsbe.lisboa.ucp.pt/pt-pt/atuais-alunos/careers-talent-office">https://www.clsbe.lisboa.ucp.pt/pt-pt/atuais-alunos/careers-talent-office</a>
UCP Porto	Y	Y	Internship Events Workshops Job portal	N	Y	<a href="https://www.ee.porto.ucp.pt">https://www.ee.porto.ucp.pt</a>

UCP Porto Business School	Y	N	Internship Events Job portal Pre-University Teen Academy	Y* (job platform has career development info)	Y	<a href="https://catholicabs-porto.jobteaser.com/pt/users/sign_in?back_to_after_login=%2F">https://catholicabs-porto.jobteaser.com/pt/users/sign_in?back_to_after_login=%2F</a>
UFP	Y	n/a	n/a	N	Y	<a href="http://international.ufp.pt/campus-life/services-facilities/">http://international.ufp.pt/campus-life/services-facilities/</a>
UL FDUL	Y	n/a	Traineeship Workshops	N	Y	<a href="https://www.fd.ulisboa.pt/students/student-support-centre/careers-office/">https://www.fd.ulisboa.pt/students/student-support-centre/careers-office/</a>
UL School of Economics and Management	Y	Y	Internship Workshops Job platform Events	N	Y	<a href="https://iseg.ulisboa.pt/aquila/research/cmx/students/job-offers-&amp;-internships?locale=en">https://iseg.ulisboa.pt/aquila/research/cmx/students/job-offers-&amp;-internships?locale=en</a>
UL School of Science	Y	n/a	Internship Volunteering Events	No	Y	<a href="https://ciencias.ulisboa.pt/en/employment">https://ciencias.ulisboa.pt/en/employment</a>
University Lusiana Lisbon	Y	n/a	n/a	N	N	<a href="https://www.lis.ulisiada.pt/pt-pt/in%C3%ADcio/informa%C3%A7%C3%B5es/uteis.aspx">https://www.lis.ulisiada.pt/pt-pt/in%C3%ADcio/informa%C3%A7%C3%B5es/uteis.aspx</a>
University Lusiana Porto	Y	n/a	Job portal Internship	N	N	<a href="http://www.por.ulisiada.pt/extendior/sp/index.html">http://www.por.ulisiada.pt/extendior/sp/index.html</a>
University Lusofona Lisbon	Y	Y	Job portal Internship Workshops Events	Yes (workshops)	N	<a href="http://eva.ulusofona.pt">http://eva.ulusofona.pt</a>
University Lusofona Porto	Y	n/a	n/a	N	Y	<a href="https://www.ulp.pt/en/international-office">https://www.ulp.pt/en/international-office</a>
University of Açores	Y	Y	Workshops Job portal Internship	Y* (webinars)	Y	<a href="https://uac.pt/pt-pt/career-lab">https://uac.pt/pt-pt/career-lab</a>

University of Aveiro	Y	Y	Events Job portal Internship Workshops	Y* (job platform has career development info)	Y	<a href="https://www.ua.pt/en/professional-integration">https://www.ua.pt/en/professional-integration</a>
University of Beira Interior	Y	Y	Events Job portal Internship Workshops Traineeship	N	Y	<a href="https://www.ubi.pt/en/page/gisp_en">https://www.ubi.pt/en/page/gisp_en</a>
University of Coimbra	Y	Y	Events Job portal Internship Workshops	Y* (job platform has career development info)	Y	<a href="https://ucoimbra.jobteaser.com/pt/users/sign_in?back_to_after_login=%2F">https://ucoimbra.jobteaser.com/pt/users/sign_in?back_to_after_login=%2F</a>
University of Evora	Y	n/a	Job portal Workshops Traineeship	N	Y	<a href="https://www.uevora.pt/en/Innovation/Employability">https://www.uevora.pt/en/Innovation/Employability</a>
University of Madeira	Y	n/a	Job portal Internship	N	N	<a href="https://oe.uma.pt">https://oe.uma.pt</a>
University of Minho	Y	Y	Internship Workshops Mentoring	N	Y	<a href="https://www.eeg.uminho.pt/en/Interacao/gabinete%20de%20carreras/Pages/default.aspx">https://www.eeg.uminho.pt/en/Interacao/gabinete%20de%20carreras/Pages/default.aspx</a>
University of Porto	Y	n/a	Job portal Internship Workshops	Y* (job platform has career development info)	Y	<a href="https://uporto.jobteaser.com/en/users/sign_in?action=new&amp;back_to_after_login=%2F%3F&amp;controller=custom_devise%2Fsessions&amp;i18n_locale=pt">https://uporto.jobteaser.com/en/users/sign_in?action=new&amp;back_to_after_login=%2F%3F&amp;controller=custom_devise%2Fsessions&amp;i18n_locale=pt</a>
UTAD	Y	n/a	Job portal Internship Workshops	N	Y	<a href="https://www.utad.pt/en/students/employability/">https://www.utad.pt/en/students/employability/</a>

			Events Volunteering			
--	--	--	------------------------	--	--	--

## APPENDIX B

*Additional comments to the survey*

Theme	N (%) of students contributing to the theme	Examples
<i>Incorporate your initiatives in academic classes</i>		
Incorporating activities in curricula	4 (15%)	<p><i>I think it would be pertinent for there to be lectures from the first year onwards that would help first-year students to develop certain skills for the professional and practical world. And gain more knowledge and skills in this regard. So that in the future we can have the tools and the capacity to discern what we want to follow and do.</i></p> <p><i>I believe that all universities teach to orient their students more about the possibilities that they can, and they learn, because if I had this orientation when I graduated, maybe my life today would be different.</i></p> <p><i>It should actually be a yearly course in the last year of the bachelor's degree</i></p>
Negative attitude towards the services and reaching the career office	5 (19%)	<p><i>Last year, I was going through a period of not being able to even get an interview for a job or internship. I contacted the Career Office of FCH by email, asking if I could have a meeting. They never contacted back. I find it interesting that they never seem to help when students need the most, it is only for show.</i></p> <p><i>It seems that this office is very distant from us students...</i></p> <p><i>Career Office help doesn't really match my needs or field of work. Instead of just letting the students know about what programmes are recruiting or which applications are open, the Careers Offices should also help the students understand and know about what is</i></p>

---

*the programme/course/etc. about; and in what level does it help or contributes to the student's future career.*

*I would like to know how I can reach you or schedule meetings*

*I've often tried contacting the Careers Office with no success. I believe that workshops dedicated to just know how to write a CV or a cover letter aren't enough and are not well suited for MA or PhD students with already professional experiences.*

*Announcement of job opportunities*

*I believe that the workshops that took place during the 1st semester should be done again for those who were unable to attend them. I also think that we should receive more internship offers throughout the semester.*

*It is urgent and there is no justification for not having, until today, a job offer platform identical to the Faculty of Economics.*

*I think there should be more internship opportunities provided by the Career Offices since there are over 500 students (in Communication only) interested and only about 10 internship spots.*

Range of services

9 (35%)

*Instead of just letting the students know about what programmes are recruiting or which applications are open, the Careers Offices should also help the students understand and know about what is the programme/course/etc. about; and in what level does it help or contributes to the student's future career.*

*Mainly help us understand what is the best type of job concerning our interests and skillsets.*

*Mentoring*

---

---

		<i>The Career's app (Symplicity) is not being used and it would be helpful if some jobs/internships were there since it has an easier access.</i>
		<i>Workshop</i>
		<i>The type of services they should provide are sessions with psychologists about our future: if we are in the correct place, what master do we really want...</i>
Demand for individual sessions	3 (11%)	<i>I think its very important to talk about individual goals in a personal coaching-like atmosphere rather than a computer program while the program could be used for more general information</i>
		<i>I would think every student should be presented an invitation to participate in an individual meeting at the Careers Office. I would very much like to enjoy such an opportunity.</i>
		<i>I believe Career Offices should make more publicity.</i>
		<i>Please be more active, we really need you!</i>
Demand for more publicity	3 (11%)	<i>So far, I've only heard of the careers office through email, mostly. It would be very interesting to meet you. But because we, students, are sometimes embarrassed/shy or procrastinate to walk up to you, maybe you could come to us, to introduce yourselves. I think it would be very engaging and icebreaking opportunity. Like a 20 min talk during a class (and not just to the finalists, but also starting from the 1st year) to explain in person what you do and how you do it. Thanks for your work!</i>
Other	2 (8%)	<i>I don't attend more because of my schedule</i> <i>No TSI again please; academic options</i>

---