# Chapter #2

# PORTFOLIO AS A STRATEGY TO IMPROVE CAREER ADAPTABILITY RESOURCES

#### Liliana Faria

Universidade Europeia & Socius/CSG, ISEG-Universidade de Lisboa, Portugal

#### ABSTRACT

This study aimed to determine whether the levels of career adaptability resources could be increased through the use of a portfolio writing strategy. Based on a mixed methods approach, the study used the design quasi-experimental, with two independent groups and with repeated measures, together with a focus group. Forty students (17 from the experimental group; 23 from the control group) in university-work transition completed the Portuguese version of the Career Adaptation Scale. The pre-test survey was administered at the beginning of the semester of the curricular unit of personal and professional development project (PPDP) in both groups. This was followed, in the experimental group, by a fourteen-week portfolio writing intervention, under the PPDP. In the control group, the PPDP followed the traditional expository teaching methodology. After completing the intervention procedure, post-test research was conducted by both groups. Five students from the experimental group also participated in a focus group of feedback on the writing of portfolios under the PPDP. The results revealed that writing the portfolios contributed to a career adaptability resources increase as well as for the confidence, self-knowledge and knowledge of the market opportunities of these students. The use of portfolios in the PPDP unit course is recommended.

Keywords: portfolio, career adaptability, university-to-work transition.

# 1. INTRODUCTION

In an increasingly unpredictable, changing and dynamic professional world, in which the career transition occurs more and more frequently (Lent & Brown, 2013), continually requiring each individual critical thinking development and the flexibility to deal with various demands, in order to be able to create your own career opportunities and adapt to different contexts (Zacher, 2015), building a successful career is a great challenge (De Vos & Dries, 2013; Savickas et al., 2009).

The challenge may be even greater for students who are in a transition phase between university and work (Koen, Klehe, & Vianen, 2012; Swanson & Fouad, 1999), process that stretches over time, which begins even before the transition itself and it continues until adaptation to the world of work (Swanson & Fouad, 1999; Vieira, Caires & Coimbra, 2011; Vieira, Maia, & Coimbra, 2007).

The university-work transition is a time for the establishment of new professional goals, which implies planning for the future, reassessing past choices and experiences, as well as anticipating what is to come, both professionally and personally (Swanson & Fouad, 1999; Monteiro, & Almeida, 2015; Monteiro, Taveira, & Almeida, 2019). Thus, in order to build a career, students will need to development a set of skills that help them face and adapt to the demands of the increasingly dynamic and borderless world of work (Savickas et al., 2009), namely career adaptability skills (Carvalho, Moreira, & Ambiel, 2017; Yang, Tien, Wu, & Chu, 2015).

# 1.1. Career adaptability

Career adaptability is a central concept in Career Construction Theory (CCT, Savickas, 2005, 2013). Savickas (2005) assumes the career as the result of a construction, for which individuals must have full responsibility and commitment. The individual must build his career through his life stories, for the reconstruction of his narrative, and for the co-construction of a narrative identity. The individual must build his own narrative and prepare for transitions between projects (Duarte, 2019; Savickas, 2011; Savickas et al., 2009). This construction has as its main determinant the personal meaning that each individual attributes to his personal experiences, but also academic, professional, social and leisure (Savickas, 2005), and the way he deals with the possibility of building a life and deciding how it incorporates work and work life (Duarte, 2019).

Career construction theory and practice (Savickas, 2005, 2013; Savickas et al., 2009) advocate career adaptability as having a primary role in its management and construction. They offer an important structure to enable people to adapt to new scenarios and find ways to guarantee a job that offers them a sense of meaning, purpose and personal direction (Duarte, 2019; Savickas, 2005; Ribeiro & Duarte, 2019).

The adaptability process (Savickas, 2005) comprises the readiness to adapt, the adaptation behavior, the ability to put adaptation resources into action and, results in an adaptation, always transitory (Ribeiro & Duarte, 2019). In this way, career adaptability is considered a psychosocial construct that represents individuals' self-regulatory resources to deal with current and impending career tasks and occupational transitions and personal traumas, and that helps them to implement their identities / self-concepts in occupational roles (Savickas, 1997, 2005; Savickas & Porfeli, 2012; Tolentino et al, 2014). These career adaptability resources comprise four dimensions, at all stages of the career (Savickas, 2005, 2013; Savickas & Porfeli, 2012): (i) concern: when the individual wonders if he has a future - competence to plan; (ii) control: when the individual asks himself who has control over his future - competence of choice and decision-making; (iii) curiosity: when the individual asks about what he will do with his future? - exploration competence and curiosity; and (iv) confidence: when the individual asks if he can do this - problem solving competence (Ribeiro & Duarte, 2019).

#### 1.2. Portfolio as a learning tool in higher education

Based on a constructivist approach to learning focused on teaching-learning processes in the search for active and new knowledge, the portfolio works as an efficient instrument (Barak & Maskit, 2017; García, 2017; Salazar & Arévalo, 2019; Volmer & Sarv, 2018) and effective in terms of teaching, experimental learning and evaluation, in a university environment (e.g., Cevik, Shaban, Zubeir, & Abu-Zidan, 2018; Escalante, Toro, & Mena, 2017; Eskici, 2015; Sartori, 2016; Canalejas, 2010; Maldonado & Portillo, 2013).

Carina (2015) defines the portfolio as an instrument for gathering information, evidence and skills that instruct students in their academic training. It consists of a systematic and organized aggregation of works carried out by the students, reflecting the evolution of their skills, knowledge, attitudes and aptitudes in the domain of a given curricular unit. In this way, it favors the processes of self-reflection on progress, academic processes and student learning outcomes (Arís & Fuentes, 2016; Sartori, 2016), reconstructing and reworking the learning process and the acquisition of skills (Slepcevic-Zach & Stock, 2018), valuing professional learning and academic performance (Barak & Maskit, 2017).

In this context, the portfolio allows, on the one hand, teachers to focus on the process, rather than on students' products, and provide individualized feedback (Atai & Alipour, 2012; Cheng, Cheng, Chang, & Li, 2018) and, on the other hand, that students take responsibility for their learning process, allowing them to continuously measure and evaluate their learning (Mckenna, Baxter, & Hainey, 2017). It therefore plays an important role in improving the teaching-learning process, assessing students and supporting teacher practice (Salazar & Arévalo, 2019).

### 1.3. Research aims

This investigation seeks to answer the following research question: Does writing career portfolios potentially increase the levels of career adaptability resources?

#### 2. METHOD

This study is framed by a mixed-methods approach, which allows for the combination of both quantitative and qualitative methods (Creswell, 2014).

Within the quantitative methodology, we can fit this study in the quasi-experimental type of research 2X2, since there are two conditions: a situation for the control effect and an experimental group, and use of pre and post intervention measures in both groups. In this way, the groups are evaluated at two different times, before (pre-test) and after (post-test) the manipulation of the independent variable, writing portfolios.

In turn, the qualitative approach is present through a focus group, a research method aimed at obtaining data, which locates the interaction in the group discussion as the source of the data and recognizes the researcher's active role in stimulating group discussion for the purposes of the data presented.

# 2.1. Participants

A non-probabilistic and convenience sampling procedure was used in this study.

Participated in the experimental group 17 students, of both sexes (15 women; 2 men), aged between 21 and 29 years, students of 3rd year of psychology degree's program, attending the personal and professional development project (PPDP) curricular unit, with 56 hours of tutorial classes, in the academic year 2019-2020, using the teaching—learning methodology of portfolio writing.

The control group consisted of 23 students of both sexes (19 women; 4 men), aged between 21 and 25 years old, attending the PPDP in the 3rd year of the psychology degree's program, in the academic year 2018-2019, using the traditional expository teaching—learning methodology.

Five students (4 women and 1 man), aged between 21 and 23 years, participated in the focus group, all belonging to the experimental group.

# 2.2. Data collection procedure

# 2.2.1. Quantitative data

For the quantitative data, the pre- and post-test surveys used in this study draws upon the Portuguese version of the Career-Adapt-Abilities Scale for higher education students (CAAS, Monteiro & Almeida, 2015), a self-report instrument, first devised by Porfeli and Savickas (2012), the CAAS International Form.

The original scale has been validated across several countries, with good reliability and validity indicators. The reliability scores (Cronbach α) of the CAAS-International Form ranged from .74 to .85 for the four subscales (Porfeli & Savickas, 2012). The version of the CAAS-Portugal Form, developed by Duarte et al. (2012), obtained scores ranging from .69 to .78. The confirmatory factor analysis of the CAAS Portuguese version for higher education used in this study confirmed a second hierarchical four-factor model (Monteiro & Almeida, 2015).

Participants answered to 24 items on a 5- point Likert type scale (1 = not strong, 5 = strongest) designed to measure four dimensions of career adaptability: concern (item example: "Thinking about what my future will be like"); control (item example "Keeping upbeat"); curiosity (item example: "Exploring my surroundings"); and confidence (item example: "Performing tasks efficiently"). Cronbach's alpha coefficients for this sample was .80 for the control subscale, .81 for the concern subscale and .85 for the confidence and curiosity subscale. As for the total, Cronbach's alpha for the study sample was .93, indicating, as good reliability indicators.

Prior to the survey, each of the participant was given an e-mail of consent that explained the purpose of the study, the importance of their participation, and confidentiality and freedom to volunteer to take the survey or withdraw from the study at any time. The career adaptability measure, before and after the intervention, was administered separately: to the control group in 2018-2019 and to the experimental group in 2019-2020, with all students in the respective group, in a single session, with an average duration 15 minutes.

#### 2.2.2. Qualitative data

In order to capture learners' thoughts and feelings more thoroughly, a focus group was conducted.

The selection of participants was carried out for convenience, according to availability in terms of day and time for participation in the focus group. Participants was informed about the objectives of the study and the rules for participation, including estimated duration.

The interview script favored a no structured approach, supported by a topic script, about the participants' perceptions and experiences in writing portfolios and about feelings and thoughts about the future life. The focus group discussion was 35 minutes. Following the focus group, students were debriefed about their experience, thanked for their involvement, and told that a summary of the research findings would be sent to them.

The interviewer was a female in her late 40s who had postgraduate qualifications in psychology as well as experience in facilitating focus groups. The focus group was transcribed in full.

The analysis of qualitative data from the focus group interview was carried out through three phases: coding, storage and interpretation. Once the text has been transcribed and (re) read, a process of assigning categories that reflect the themes present in the script, as well as the new ones that emerged from the groups' discussion, proceeded. Finally, all parts of the text in the same category were compiled for comparison and the data was interpreted.

# 2.3. Writing portfolios intervention

The intervention with the experimental group was focused on writing career portfolios and on how its systematic use could help improve students' levels of career adaptability resources. To that end, as part of the tasks of the PPDP course unit, during the time period between the pre- and the post-test survey administration, students were required to create a

portfolio that includes reflective narratives of the best artifacts that show their learning in develop a personal and professional project. The students knew the purpose of the surveys and the intervention, so they were willing to participate actively in the writing of their portfolios.

The experimental group had PDPP classes on Tuesdays (90 minutes) and Wednesdays (90 minutes). The contents were presented on Tuesday and practiced on Wednesday. The practice consisted of carrying out activities related to (i) situational analysis: what is the current situation in the main spheres of life and what is the degree of satisfaction with it; (ii) evaluation of values and life purpose, as well as establishing a personal mission and vision; (iii) SWOT matrix: strengths and weaknesses, opportunities and threats, (iv) definition of short, medium and long term objectives and goals; (v) preparation of an action plan, an instrument for monitoring and controlling planned actions. At the end of each activity, students were invited to write a narrative reflection. The narrative had no space limit. As soon as they finished writing, each student received individual feedback from the teacher.

In the control group, the PPDP course unit followed the expository teaching-learning methodology.

The entire process, including the surveys, lasted for a period of fourteen weeks.

#### 3. RESULTS

# 3.1. Quantitative results

Before proceeding with the testing of the investigation hypotheses, and because the plan of this investigation is quasi-experimental, it is necessary to carry out a pre-intervention assessment. The pre-intervention evaluation allows us to analyze the equivalence of the groups, that is, to evaluate the existence of statistically significant differences, between the experimental and control groups, regarding the CAAS dimensions, which can differentially affect the effectiveness of the intervention.

The results of the intergroup comparative analyzes, by means of a comparison of means (t-Student tests) indicate the absence of statistically significant differences, between the experimental groups and the control group, which allows attesting the equivalence groups at the pretest (Table 1).

Table 1.
Pretest CAAS dimensions in the experimental and control groups.

CAAS Dimensions	Experimental group Co		Contro	l group	t	p
Difficusions	Mean	SD	Mean	SD	•	
Concern	20.18	2.53	20.26	2.46	-0.551	.582
Control	22.76	2.41	22.51	2.38	.825	.410
Curiosity	21.88	3.06	20.98	2.98	1.210	.227
Confidence	22.06	2.46	22.77	2.29	-1.006	.315

As for the significance of the effectiveness of writing portfolios on adaptability and, its evolution in the two sampled moments, with regard to the evolution of the concern, there are high and statistically significant differences between the two evaluation moments, both in the group experimental or control. In turn, with regard to evolution in control, curiosity and confidence, there are high and statistically significant differences between the two moments of evaluation, only in the experimental group (Table 2).

Table 2.

Pretest and posttest CAAS dimensions in the intervention and control groups.

CAAS	Group	Pre-test		Post-test		F	p
Dimensions	·	Mean	SD	Mean	SD	_	
Concern	Experimental	20.18	2.53	26.24	2.46	88.846	<.001
	Control	20.26	2.06	23.45	2.34	18.968	<.001
Control	Experimental	22.76	2.41	26.71	2.14	20.564	<.001
	Control	22.51	2.38	22.99	2.56	2.040	.157
Curiosity	Experimental	21.88	3.06	26.12	2.64	44.379	<.001
	Control	20.98	2.98	21.03	2.77	0.015	.904
Confidence	Experimental	22.06	2.46	26.41	2.40	39.525	<.001
	Control	22.77	2.29	23.12	2.33	2.040	.157

We also studied the percentage of change in both groups. The results show that there is clinical improvement (Borkovec & Costello, 1993) in all dimensions of the experimental group: 17%, 19%, 20% and 30% in the dimension of control, curiosity, confidence, and concern, respectively. In the control group, there is only clinical improvement in the dimension of concern (16%).

# 3.2. Qualitative results

The analysis procedure yielded three categories, namely Confidence, Self-knowledge, and Knowledge of market opportunities, as can be observed in the summary presented in Table 3. These categories showed reflective learning and progress.

Overall, all views that deal with acquired confidence suggest that their interpretations of the process of writing portfolios were quite optimistic and assertive, making them more secure and decisive about the future. Portfolio writing also seems to have enabled students to gain self-knowledge and self-awareness of decisions made in the past and their impact on the person they are today and the decisions made regarding the future. Finally, the writing of portfolios also seems to have allowed students to have explored the academic and work opportunities of the course they attended.

Table 3. Participants' comments according to categories.

Confidence	

<sup>&</sup>quot;I am much more confident about the direction of "things" and I believe that "everything will go well."

<sup>&</sup>quot;I feel that I have more opportunities or real chances to evolve, on a personal, academic and professional level, than I thought."

<sup>&</sup>quot;I improved my confidence with myself and with others, as I often tended to be suspicious of people and to doubt my abilities."

<sup>&</sup>quot;Today I feel that I am able to do whatever I want, because I know that I have all the tools to achieve success."

# Self-knowledge

- "It allowed me to realize that I need to be with some regularity to learn something new, whether through postgraduate studies or training. Still, I need my space and I don't like being in a controlled environment where I am constantly told what I have to do, too."
- "I learned to identify my strengths and weaknesses. I already know how to answer the question "Who are you?"
- "I find it easier to name my best and worst decisions (...)."
- "I was able to become more aware that the freedom to choose a course is fundamental for us to be happy, something that I realized over time that doesn't happen with my friends."
- "I realized that I need some feedback in order to stimulate and motivate my performance."

#### Knowledge of market opportunities

- "I learned that there are more master's and job opportunities than I imagined."
- "It allowed me to classify all doubts about the different areas of activity of Psychology."
- "(...) I had no idea that the psychology course had so many different professional skills."

# 4. DISCUSSION

The present study was set out to examine writing portfolios as a possible device to improve learners 'levels of career adaptability resources. As in previous studies (e.g., Barak & Maskit, 2017; Slepcevic-Zach & Stock, 2018), this study also allows us to conclude about the positive effects of portfolio writing. As noted in the results, after performing the intervention, students in the experimental group reported a significant increase in career adaptability resources, thus seeming to demonstrate high levels of ability to plan how to achieve career goals and deal with challenges transition, as well as a high capacity to shape yourself and the environment for the achievement of professional goals. In addition, the differences in the pre to the post-test also seem to demonstrate a greater willingness of students to explore themselves and the environment after using the portfolio, as well as a greater curiosity about the career, which can also mean greater self-knowledge, and understanding of opportunities in the labor market that lead to a greater likelihood of finding employment. Finally, students seem to believe much more in their ability to achieve career goals and overcome barriers to the university's transition to work (Savickas, 2013).

The positive results achieved by the control group, especially in the dimension of concern, may be related to some error factors such as the context, that is, external events and concomitant to the study that can influence the dependent variable in addition to the independent variable (e.g., work in the project area on the theme of professions) and; the reactive effect of the pre-test, which indicates that the performance of the pre-test, by itself, can affect the generalization of the results obtained (e.g., learning from one moment to the next).

The general qualitative findings are congruent with the meta-analysis recently presented by Rudolph, Lavigne, Katz, and Zacher (2017) and reinforce the idea that higher levels of confidence are achieved in career-related behaviors and skills that will facilitate the university-work transition, promoting employability (Gedye & Beaumont, 2018; Rudolph et al, 2017). Thus, the results indicates likewise valuing of the portfolio experience as a learning (Cheng et al., 2018; Eskici, 2015). University students valued their portfolio experience and linked it, as indicated in several narrative reflections, to personal, technical, and professional gains.

#### 5. LIMITIONS, FUTURE RESEARCH AND IMPLICATIONS

One of the limitations of this study is the fact that the sample is quite small and the absence of random distribution from the experimental and control groups, which reduces the internal and external validity of the experiment, mainly due to the disability agent related to the selection of the subject. In the future, several variables, such as the selection of groups or different interactions, must be properly controlled.

Another limitation concerns the interval between the two measures. In fact, 14 weeks can be a long time for an accurate assessment of the pattern of career adaptability in the university-work transition situation. It may happen, for example, that in the interval of 14 weeks an increase, followed by a period of decrease in the adaptability resources, has already occurred and is not being captured with this research design. More research with more measurement times is needed to clearly understand the pattern of change in career adaptability. It would also be interesting to see the effects of writing portfolios over a long period of time within an experimental design framework.

With regard to qualitative research, although carrying out just one focus group is not wrong, it is risky. However, the performance of more than one group proved to be impractical, because of the number of potential participants. Thus, the data presented in this study must be interpreted with special care. In the future, it is recommended to create more than one focus group, either with participants in the intervention group or the control group.

Some of the implications arising from this study are that teachers can and should assess learners in different ways other than traditional tests, helping students to be active agents in their learning process, instead of just being recipients of knowledge.

Between-person differences identified in this study suggests that it is possible to indicate which students are more vulnerable in terms of career adaptability resources before a university-to-work transition. Thus, career interventions among undergraduates over several stages of their higher education studies, designed according to individual profiles, might be particularly useful. Studies (e.g., Gedye & Beaumont, 2018) have shown that university students still have a narrow view of employability, limited to the idea of "finding a job", particularly in the first stages after their graduation.

# **REFERENCES**

- Arís, N., & Fuentes, M. (2016). La elaboración del portafolio a través del trabajo cooperativo y la autoevaluación [Portfolio development through cooperative work and self-evaluation]. *Revista Iberoamericana de Educación*, 71(2), 9-28.
- Atai, M. R., & Alipour, M. (2012). The effect of the combination of small-group conferencing and portfolio procedure on EFL students' writing accuracy. *Innovation in Language Learning and Teaching*, 6(2), 97-112.
- Barak, L., & Maskit, D. (2017). Portfolio as 'documenting experience. In T. Barak & D. Maskit, (Eds.), Methodologies of mediation in professional learning (pp. 75-90). Haifa: Springer International.
- Borkovec, T. D., & Costello, E. (1993). Efficacy of applied relaxation and cognitive-behavioral therapy in the treatment of generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 61(4), 611-619.
- Canalejas, M. (2010). El portafolio como herramienta didáctica: un estudio en escuelas universitárias de enfermería [The portfolio as an educational tool: a study in schools of nursing]. *Educación Médica*, 13(1), 53-61.

- Carina, C. (2015). Aprendizaje reflexivo en la Carrera de Medicina: un estudio acerca del portafolio en la adquisición de competencias profesionales [Reflective learning in the Medicine career: A study about the portfolio in the acquisition of professional competences]. Buenos Aires: Teseo.
- Carvalho, L., Moreira, T., & Ambiel, R. (2017). Relações entre adaptabilidade de carreira e traços patológicos da personalidade em trabalhadores brasileiros [Relationships between career adaptability and pathological personality traits in brazilian workers]. Revista Psicologia: Organizações e Trabalho, 17(3), 159-164.
- Cevik, A. A., Shaban, S., Zubeir, M., & Abu-Zidan, F. M. (2018). The role of emergency medicine clerkship e-Portfolio to monitor the learning experience of students in different settings: A prospective cohort study. *International Journal Emergency Medicine*, 11(24), 1-8.
- Cheng, Y., Cheng, L., Chang, Y., & Li, T. (2018). The effectiveness of learning portfolios in learning participation and learners 'perceptions of skills and confidence in the mother of preterm infant. *Midwifery*, 62, 86-91.
- Creswell, J. W. (2014). Research design: qualitative, quantitative, and mixed approaches. California: Sage Publications.
- De Vos, A., & Dries, N. (2013). Applying a talent management lens to career management: The role of human capital composition and continuity. *International Journal of Human Resource Management*, 24(9), 1816-1831.
- Duarte, M. E. (2019). Histórico do campo de aconselhamento de carreira e do Life Design. [Historic field of career counseling and Life Design]. In M. Ribeiro, Teixeira, M. A., & M. E. Duarte (Eds.), Life Design: um paradigma contemporâneo em orientação profissional e de carreira [Life Design: a contemporary paradigm in professional orientation and career] (pp. 135-158). São Paulo: Vetor.
- Duarte, M. E., Soares, M., Fraga, S., Rafael, M., Lima, M., Paredes, I., Agostinho, R., & Djaló, A. (2012). Career Adapt-Abilities Scale-Portugal Form: Psychometric properties and relationships to employment status. *Journal of Vocational Behavior*, 80(3), 725-729.
- Escalante, M., Toro, C., & Mena, P. (2017). Implementación de un portafolio por competencias CanMEDS en la rotación de neonatología como instrumento de evaluación y aprendizaje: resultados preliminares [Implementation of a portfolio by CanMEDS competencies in the rotation of neonatology as an instrument assessment and learning: preliminaries results]. *Investigación en Educación Médica*, 6(22), 136.
- Eskici, M. (2015). University students' opinions on application of portfolio in higher education. *Procedia - Social and Behavioral Sciences*, 174, 2946 -2955.
- García, E. (2017). El portafolio como metodología de enseñanza-aprendizaje y evaluación en el practicum: percepciones de los estudiantes [The portfolio as a teaching-learning and evaluation methodology in the practicum: students' perceptions]. Revista de Docencia Universitaria, 15(1), 241-257.
- Gedye, S., & Beaumont, E. (2018). The ability to get a job': student understandings and definitions of employability". *Education + Training*, 60(5), 406-420.
- Koen, J., Klehe, U-C, & Vianen, A. (2012). Training career adaptability to facilitate a successful school-to-work transition. *Journal of Vocational Behavior*, 81(3), 395-408.
- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557-568.
- Maldonado, J., & Portillo L. (2013). El portafolio. La evaluación de su aplicación en la enseñanza de medicina por competencias [The portfolio. The evaluation of its application in the teaching of medicine by competences]. *Investigación en Educación Médica*, 2(7), 148-153.
- Mckenna, G., Baxter, G., & Hainey, T. (2017). E-portfolios and personal development: A higher educational perspective. *Journal of Applied Research in Higher Education*, 9(1), 147-171.
- Monteiro, S., & Almeida, L. (2015). The relation of career adaptability to work experience, extracurricular activities, and work transition in Portuguese graduate students. *Journal of Vocational Behavior*, 91, 106-112.

- Monteiro, S., Taveira, M. C., & Almeida, L. (2019). Career adaptability and university-to-work transition. *Education + Training*, 61(9), 1187-1199.
- Porfeli, E. J., & Savickas, M. L. (2012). Career Adapt-Abilities Scale-USA Form: Psychometric properties and relation to vocational identity. *Journal of Vocational Behavior*, 80(3), 748-753.
- Ribeiro, M., & Duarte, M. E. (2019). O paradigma Life Design: teoria, investigação e intervenção [The Life Design paradigm: theory, research and intervention]. In M. Ribeiro, M. A., Teixeira, & M. E. Duarte (Eds.), *Life Design: um paradigma contemporâneo em orientação profissional e de carreira* [Life Design: a contemporary paradigm in professional orientation and career] (pp. 49-66). São Paulo: Vetor.
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior*, 102, 112-138.
- Salazar, S., & Arévalo, M. (2019). Implementación del portafolio como herramienta didáctica en educación superior: revisión de literatura [Implementation of portfolio as a didactic tool in higher education: literature review.]. *Revista Complutense de Educación*, 30(4), 965-981.
- Sartori, M. (2016). El portfolio como herramienta de aprendizaje: percepciones de los estudiantes de medicina [The portfolio as a learning tool: perceptions of medical students.]. Revista Argentina de Educación Médica, 7(1), 26-34.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *Career Development Quarterly*, 45(3), 247-259.
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: putting theory and research to work* (pp. 42-70). New Jersey: John Wiley & Sons Inc.
- Savickas, M. L. (2011). New questions for vocational psychology: premises, paradigms, and practices. Journal of Career Assessment, 19(3), 251-258.
- 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 (pp. 147-183). New Jersey: John Wiley & Sons Inc.
- Savickas, M. L., & Porfeli, E. J. (2012). Career adaptabilities scale: construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661-673.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J.-P., Duarte, M.E., Guichard, J., ... van Vianen, A.E.M. (2009). Life designing: A paradigm for career construction in the 21<sup>st</sup> century. *Journal of Vocational Behavior*, 75(3), 239-250.
- Slepcevic-Zach, P., & Stock, M. (2018). ePortfolio as a tool for reflection and self-reflection. International and Multidisciplinary Perspectives, 19(3), 291-307.
- Swanson, J. L., & Fouad, N. (1999). Career theory and practice. Learning through case studies. California: Sage Publications.
- Tolentino, L. R., Garcia, P. R., Lu, V. N., Restubog, S. L., Bordia, P., & Plewa, C. (2014). Career adaptation: The relation of adaptability to goal orientation, proactive personality, and career optimism. *Journal of Vocational Behavior*, 84(1), 39-48.
- Vieira, D., Caires, S., & Coimbra, J. (2011). Do ensino superior para o trabalho: Contributo dos estágios para inserção profissional [From higher education to work: Contributions of practicum training to job insertion]. Revista Brasileira de Orientação Profissional, 12(1), 29-36.
- Vieira, D., Maia, J., & Coimbra, J. L. (2007). Do ensino superior para o trabalho: Análise factorial confirmatória da escala de Auto-eficácia na Transição para o Trabalho (AETT) [School-to-work transition: confirmatory factorial analysis of transition-to-work self-efficacy scale (TWSE)]. Avaliação Psicológica, 6(1), 3-12.
- Volmer, D., & Sarv, A. (2018). E-portfolio as an effective tool for self-directed and reflective learning in social pharmacy. *Research in Social and Administrative Pharmacy*, 14(8), 43-44.
- Yang, S. H., Tien, H. L., Wu, H. L., & Chu, H. (2015). The relationship among career self-efficacy, career adaptability and work adjustment of adult workers in Taiwan. *Chinese Journal of Guidance*, 37(1), 21-42.
- Zacher, H. (2015) Daily manifestations of career adaptability: Relationships with job and career outcomes. *Journal of Vocational Behavior*, 91, 76-86.

# **AUTHOR INFORMATION**

Full name: Liliana Faria

Institutional affiliation: Universidade Europeia & Socius/CSG, ISEG-Universidade de Lisboa,

Portugal

Institutional address: Universidade Europeia. Campus Lispolis, Rua Laura Ayres, nº 4, lote 17,

1600-510 Lisboa, Portugal

Email address: liliana.faria@universidadeeuropeia.pt

**Short biographical sketch:** Assistant professor at the Universidade Europeia. PhD in Psychology, in the Vocational Psychology knowledge area. Researcher at CSG - Research in Social Sciences at the Higher Institute of Economics and Management (ISEG), University of Lisbon, being part of the research group Science, Technology, Health and Professions and collaborates with the research group "Career Development and Counseling", from the School of Psychology at the University of Minho. Her research activity has focused on the domains of School Psychology and Education and, more specifically, on the themes of development throughout the life cycle, personal career management and evaluation of the effectiveness of vocational interventions.