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**Career Adaptability and University-to-Work Transition:
Effects on Graduates' Employment Status**

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Career Adaptability and University-to-Work Transition:

Effects on Graduates' Employment Status

Purpose of the study - In a socioeconomic context that is undergoing continuous change, career adaptability emerges as a central construct for understanding the employability of graduates. The purposes of this study are: (i) to analyze intra-individual differences in career adaptability among graduates between the end of graduation (time 1) and integration into the labor market 18 months later (time 2); (ii) to analyze the effect of career adaptability on graduates' employment status 18 months after completing graduation.

Design/methodology - A sample of 183 graduates in four different study fields (Economics, Engineering, Social Sciences and Humanities, and Law) completed the Career Adaptabilities Scale at two different points in time: when they graduated and 18 months after graduation. To assess intra-individual differences over time and the effect of career adaptability on graduates' employment status, a repeated measures design was used.

Findings - The obtained results confirmed a positive association of the four dimensions of career adaptability, with higher scores for the group of employed graduates, in the two measurement times. No statistical differences emerged within personal variables.

Practical implications - This study evidences the relation of career adaptability and employability and demonstrates that it is possible to identify those students who are more vulnerable in terms of career adaptability resources before university-to-work transition and, on this basis, to outline specific interventions to promote their employability.

Originality/value - By adopting a design with two repeated measures of career adaptability, this study offers new insights about the specific role of adaptability in a university-to-work transition period.

Keywords: career adaptability, work transition, graduates, employment

Paper Type: Research paper

Introduction

Currently, the transition from university to the labor market represents a particularly demanding task for recent graduates, given the undergoing continuous changes in the socioeconomic context and the increase of precarious of precarious work (International Labour Office, 2017; Savickas et al., 2009). Portugal is no exception to this scenario. The economic crisis trigger in the country in 2008, similar to what occurred in several other European countries, increased job uncertainty and insecurity, especially among new graduates (Statistics Portugal, 2016; Taveira, 2017). Bearing in mind such unpredictability in the labor market, scholars are relatively unanimous about the importance of considering graduates' technical and non-technical competencies to depth understand their employability process (e.g., Bridgstock, 2009; Pool and Sewell, 2007; Sultana, 2012; Tomlinson, 2017; Yorke and Knight, 2004). Consistent with this position, there are recommendations to replace the notions of immediate employment and compatible employment, by the notion of sustainable employability, when analyzing the university-to-work transition (Van der Heijde, 2014; Oliveira, 2014; Lo Presti and Pluviano, 2016; Watts, 2006; Zheltoukhova and Baczoe, 2016). This concept goes beyond the simplistic view of "the ability to gain and retain fulfilling work" (Hillage and Pollard, 1998). Instead, it focuses on the understanding of proactive characteristics and adaptive resources that enable individuals to play an active role in their career development and success, throughout life. Career adaptability may accurately represent some of these adaptive resources (Savickas, 2005; Savickas and Porfeli, 2012). It defines "the readiness to cope with the predictable tasks of preparing for and participating in a work role and with the unpredictable adjustments prompted by changes in work and work conditions" (Savickas, 1997, p. 254). Career adaptability involves attitudes of positive concern, curiosity, confidence and control in relation to one's future career-life (Savickas

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3 and Porfeli, 2012). These attitudes can be favored during the process of career construction,
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5 with impact in the individual's adaptation to career tasks and transitions. Actually, career
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7 adaptability emerges as a central construct of the adaptation model proposed by Savickas in
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9 his Career Construction Theory (CCT, Savickas, 2005). According to CCT's model,
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11 *adaptation results* (e.g., employability, career success, satisfaction, identity) represent the
12
13 culmination of a process of successful integration of the self into the work role. This process
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15 begins with *adaptivity* (willingness) and *adaptability* (ability) to engage in positive career-
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17 related behaviors that allow individuals to *adapt* in professional contexts (Rudolph, Lavigne,
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19 Katz, et al., 2017; Savickas, 2002). Individuals differ from each other throughout this process
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21 of adaptation (Rudolph, Lavigne, Katz, et al., 2017; Savickas, 2002), which may offer some
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23 explanation as to why different people experience different results in similar situations.
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25 Furthermore, different adaptation results seem to be preceded by different patterns of
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27 adaptation (Rudolph, Lavigne and Zacher, 2017). Therefore, the sequence of processes that
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29 occur between adaptivity and adaptation results is not clear or straightforward, and more
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31 knowledge seems necessary for a deeper understanding of the mechanisms of adaptation.
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33 Specifically, although there is evidence on some antecedents of career adaptability (e.g.,
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35 cognitive ability, personality, major self-evaluations, future time-perspective, proactivity,
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37 hope and optimism) as well as on some of its consequents (e.g., career planning, exploration,
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39 decision-making behaviors) (Rudolph, Lavigne and Zacher, 2017), we still do not know how
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41 career adaptability resources interact and develop during university-to-work transitions,
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43 largely due to the scarcity of longitudinal studies in the field with relevance for the
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45 perspective of employability under analysis. Actually, because career adaptability is a life-
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47 long process and highly context-dependent, periods of destabilization represent important
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3 opportunities for researchers to study the relevance of career adaptability to understand
4 transitions (Johnston, 2016).
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7 In light of the CCT, coping with change and managing transitions require a sequence of
8 exploration and experiences of re-establishment (Savickas, 2002). Career adaptability can be
9 described through these cycles of destabilization, which leads to the need to adjust
10 successfully to developmental tasks or job transitions. Thus, it is theoretically expected that
11 graduates who enter their first job will initially experience a period of growth in their new
12 roles, during which they will experience exploratory tasks and develop a set of expectations
13 around their new professional roles (Savickas, 2002).
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26 **Assesment of career adaptability**

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28 One of the most widely used instruments to measure career adaptability is the Career
29 Adapt-Abilities Scale (Savickas and Porfeli, 2012). This instrument comprises four distinct
30 dimensions: *concern*, describing individuals' awareness and ability to plan for a vocational
31 future; *control*, the self-discipline and responsibility to deal with what comes next; *curiosity*,
32 the tendency to explore possible selves and alternative scenarios for oneself; and *confidence*,
33 the individual's self-belief that they will attain their career goal. Although the four dimensions
34 of career adaptability share commonalities with each other, apparently they can behave
35 distinctly, depending on different career-related outcomes across different contexts (Guan et
36 al., 2013; Rudolph, Lavigne, Katz, et al., 2017). In this vein, this research is also a response
37 to the recent appeal from Rudolph and colleagues (2017) to provide greater focus on nuanced
38 and differential relationships between career adaptability and various adaptation results, in
39 this case taking graduates' employment status after transition to the labor market. Moreover,
40 taking into account existing research regarding university-to-work transition of graduates, a
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3 pertinent question is whether career adaptability resources remains stable before and after
4 graduates' transitions. Also, it may be questioned whether there are career adaptability
5 differences among graduates before and after the conclusion of higher education studies and
6 that may be related to their employment status. Lastly, it can be questioned whether the four
7 dimensions of career adaptability present a homogenous pattern of change or, on the other
8 hand, if there is differentiation among these four dimensions over the university-to-work
9 transition period. Taking such questions into consideration, this article presents a study that
10 will analyze intra- and inter-individual differences in terms of career adaptability resources
11 (concern, control, curiosity and confidence) during university-to-work transitions, as well as
12 compare their effects on graduates' employment statuses 18 months after the conclusion of
13 their graduation.
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31 **Career adaptability and employability among new graduates**

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33 One of the most significant results of adaptation among new graduates is their employability,
34 specifically, to be employed after time in higher education programs (Rudolph, Lavigne,
35 Katz, et al., 2017). Employability has been conceptualized as a specific and active form of
36 work adaptability that enables workers to identify and realize career opportunities (Fugate et
37 al., 2004). More recently, Tomlinson (2017) proposed career adaptability as a key element
38 of psychological capital, that, together with human, social, cultural and identity capital,
39 compose the new conceptual model of employability presented by this author. Therefore, in
40 theory, a positive relationship between career adaptability and employability is expected.
41 This relationship has also been demonstrated empirically. For example, several studies have
42 demonstrated the positive association between higher career adaptability scores and
43 adaptation results related to employability, such as perceptions of employability, skills or
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3 capacities (Coetzee et al., 2015; Gamboa et al., 2014; de Guzman and Choi, 2013; Rudolph,
4 Lavigne and Zacher, 2017; Rudolph, Lavigne, Katz, et al., 2017; Spurk et al., 2016) and
5 employment status, that is, the ability to find a job (Guan et al., 2013). Taking career
6 adaptability as a set of individual constructs of concern, control, curiosity, and confidence,
7 as measured by the Career Adapt-Abilities Scale, Rudolph and colleagues' review (2017)
8 suggests that higher scores for the four career adaptability dimensions are related to greater
9 confidence in the ability to manage internal and external requirements related to
10 employability. Indeed, it is the dimension of confidence that has evidenced a stronger
11 relationship with employability (Coetzee et al., 2015; Gamboa et al., 2014; de Guzman and
12 Choi, 2013; Rudolph, Lavigne, Katz, et al., 2017).

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Taking it to be the case that career adaptability is integrated into the theoretical concept of
employability and also considering there is significant empirical evidence suggesting a
positive relationship between career adaptability and employability skills and the ability to
find a job, either as a uniform construct, or as a construct composed of four distinct
dimensions, we hypothesis that career adaptability dimensions will be positively related to
graduates' employment status.

Career adaptability over university-to-work transition time

Current research on career adaptability is mainly focused on a between-person level, while
within-person changes in career adaptability over time and during specific developmental or
professional tasks are still somewhat scarce (Zacher, 2014). Tolentino and colleagues (2014)
reported excellent test-retest reliability between the four dimensions of career adaptability,
confirming the stability of the construct over a 4-week period. However, there is no
knowledge of the stability of the construct over longer periods, nor is there knowledge

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3 concerning the period during career transitions. Beyond the current evidence of the positive
4 impact of career adaptability resources on career outcomes, some studies have also
5 demonstrated that different professional situations may stimulate or deplete career
6 adaptability resources. In her systematic review of the career adaptability literature, Johnston
7 (2016) draws attention to the need to understand the different patterns of results found
8 according to different contextual factors. For example, this author refers to an elevation of
9 career adaptability resources among individuals who experience professional transitions and
10 unemployment situations (Duarte et al., 2012; Johnston et al., 2016; McMahon et al., 2012),
11 and a decrease of career adaptability resources when facing job insecurity and job strain
12 (Klehe et al., 2011; Maggiori et al., 2013). Previously published research on within-person
13 changes in terms of career adaptability with adolescents (Hirschi, 2009; Negru-Subtirica et
14 al., 2015) and employee samples (Zacher, 2014, 2015) also suggests intra-individual
15 variations of the dimensions of career adaptability over time, related to different individual
16 (e.g., age, gender, family background, personality, emotional dispositions) or contextual
17 factors (e.g., education, perceived social support). To our knowledge, no other research has
18 analyzed the relationship between career adaptability changes over university-to-work
19 transition time and employability among new graduates. Specifically, it is still not clear if
20 university-to-work transition activates or depletes career adaptability resources (Johnston,
21 2016).

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24 Considering the current literature, the university-to-work transition represents an
25 environmental “changing situation”, which is expected to stimulate individual “changing
26 self”, so that a better fit can take place between graduates and their new job roles. Therefore,
27 we hypothesize that university-to-work transitions will trigger the need to activate career
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3 adaptability resources, which will manifest itself in an increase of career adaptability
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5 resources, through its four dimensions, between time 1 and time 2.
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10 **Method**

11 12 13 14 *Participants*

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19 Participants of this study were college students from a Portuguese public university, enrolled
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21 in the final year of their Master's degree program (at wave 1). The reason for the choice of
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23 Master's degree students is because, in contrast with what happens in most other countries,
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25 in Portugal, people currently enrolled in a Master's or equivalent degree account for the
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27 largest share of tertiary-educated 25-64 year-olds in tertiary education (OECD, 2016). This
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29 was a result of the restructuring of the Bologna process, which brought with it the idea that a
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31 short-cycle tertiary degree might not be enough to ensure preparation for the labor market,
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33 so people with a bachelor's or equivalent degree are residual. Therefore, the majority of these
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35 students expect to enter the labor market upon completion of their Master's degree.
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40 In the first wave, 744 students participated in the study. Thirty-two participants were
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42 unidentifiable in the assessment protocol, which would not allow data comparison between
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44 wave 1 and wave 2. For this reason, these participants were not considered. Sixteen
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46 participants did not complete the protocol and were not considered, either. As a result, there
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48 were a total of 696 valid cases from wave 1. The fields of study represented in this second
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50 wave were: Economics (24%); Social Sciences (20%); Law (8%); and Engineering (48%).
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54 Fifty-six percent of the participants were women and 44% were men. Twenty-two percent of
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3 the participants reported having the status of student worker. The average age was 24.86
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5 years ($SD= 6.13$).

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8 In the second wave, 299 participants began the response to the protocol. Fifty-four
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10 participants reported they did not conclude their Master's program and so did not proceed
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12 with the assessment. Thirty-five participants started the protocol but did not complete it.
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14 Twenty-seven participants were unidentifiable. In the end, there were 183 valid cases from
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16 wave 2.
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19 The sample represented in the second wave is similar to the first, with the following
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21 distribution in terms of study fields: Economics (30%); Social Sciences (36%); Law (6%);
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23 and Engineering (28%). Sixty-four percent of the participants were women and 36% were
24
25 men. The average age was 25 years ($SD= 6.03$). At time 2, 119 participants (65%) were
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27 employed and 64 were unemployed (35%). Twenty-one percent of the participants reported
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29 having the status of student worker. The average course rate of participants at the end of their
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31 Master's degree is 14.46 values, with a standard deviation of 1.42 values.
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38 *Procedures*

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42 Participants were initially recruited in the classroom context, during class time (wave 1). At
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44 that time, participants completed a sociodemographic questionnaire, together with the
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46 CAAS. The participating sample for wave 1 is representative of three of the four study fields
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48 contemplated in the study (Economics, Social Sciences and Engineering). Because of the
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50 natural and uncontrollable dropout of participants between waves 1 and 2, the participants of
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52 wave 2 are considered a convenience sample. Data presented in this paper represent part of
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3 a broader research project, which sought to identify and understand the impact factors for
4 graduate employability from this sample universe.
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7 After the presentation of the research project aims, students decided to participate voluntarily,
8 without any reward, and signed an informed consent form. Because of the need to compare
9 data from the first and second collection, the protocols were identified with a student number
10 in both data collection periods. Confidentiality of the collected information was assured by
11 the principal researcher of the project. After the conclusion of their higher education studies,
12 it became difficult to physically access the participants of wave 1. For this reason, they were
13 invited by email to fill out an online survey, eighteen months after the first data collection.
14 Qualtrics (Qualtrics, Provo, UT), an online software solution, was used for this purpose.
15 Participants again completed the CAAS, together with a sociodemographic questionnaire
16 related to professional status. No monetary compensation or other kind of reward was offered
17 for participating in the study.
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35 *Measures*

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40 *Career-Adapt-Abilities.* A Portuguese version of the Career-Adapt-Abilities Scale for
41 higher education students (CAAS, Monteiro & Almeida, 2015), adapted from the CAAS-
42 International Form (Porfeli and Savickas, 2012) was used. Participants responded on a 5-
43 point Likert type scale (1 = not strong, 5 = strongest) designed to measure four dimensions
44 of career adaptability: concern (item example: “Thinking about what my future will be like”);
45 control (item example “Keeping upbeat”); curiosity (item example: “Exploring my
46 surroundings”); and confidence (item example: “Performing tasks efficiently”).
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3 The original scale has been validated across several countries, with good reliability and
4 validity indicators. The reliability scores (Cronbach α) of the CAAS-International Form
5 ranged from .74 to .85 for the four subscales (Porfeli and Savickas, 2012). The 28-item
6 version of the CAAS-Portugal Form, developed by Duarte and colleagues (2012), obtained
7 scores ranging from .69 to .78. In the present study, reliability estimates of the subscales
8 were, for wave 1 (n = 696): Concern = .80; control = .78; curiosity = .85; confidence = .85;
9 and for wave 2 (n = 183): Concern = .76; control = .80; curiosity = .86; confidence = .91.
10 The confirmatory factor analysis of the CAAS Portuguese version for higher education used
11 in this study confirmed a second hierarchical four-factor model, with adequate fit indices
12 ($X^2/df = 2.41$, $p < .001$; GFI = .89; CFI = .92; RMSEA = .06) (Monteiro and Almeida, 2015).
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28 *Sociodemographic questionnaires.* In wave 1, participants completed a
29 sociodemographic questionnaire, indicating gender, age, and field of studies. In wave 2,
30 participants completed a questionnaire related to their professional situations (employment
31 status, type/number of professional activity/activities, characterization employer, region of
32 work, among other aspects).
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42 *Analyses*

43 *Sociodemographic characteristics*

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45 According to previous empirical evidence suggesting the influence of individual factors on
46 career adaptability development (Zacher, 2014), and the relationship between fields of study
47 and employment opportunities in the Portuguese context (Direção Geral de Estatística da
48 Educação e Ciência, 2015), data analyses were conducted controlling for sociodemographic
49 variables, namely gender (1 = female; 2 = male), age (in years) and Master's field of study
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3 (which was recoded into four subject fields: 1 = Economics; 2 = Social Sciences; 3 = Law; 4
4 = Engineering). In this way, it was possible to examine career adaptability's unique
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6 contribution to the employment status of the graduates, 18 months after the conclusion of
7
8 their higher education studies.
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11 12 13 14 *Employment status*

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17 The employment status was defined in this study by a multiple-choice question as to
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19 whether graduates defined their situation regarding professional activity. Participants who
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21 reported they have not finished the Master's program were excluded. The employment status
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23 was defined in this study by a multiple-choice question whether graduates defined their
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25 situation regarding professional activity, namely: "I have not developed a professional
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27 activity since I finished my Master's program in ..."; "I have already developed a
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29 professional activity since I finished my Master's program in ..., but currently I am
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31 unemployed"; "I am currently developing a professional activity that I did not have before
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33 finishing my Master's program"; "I maintain the same professional activity that I had before
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35 finishing my Master's program in..."; or "I still have not finished my Master's program".
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37 For this study, the results were then recoded into a single variable designated "employment
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39 status" (0 = "unemployed" or 1 = "employed"). Participants who reported they have not
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41 finished the Master's program were excluded.
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Missing data and dropouts

The total missing data in the CAAS in waves 1 and 2 was less than 10%. To determine if this missing data was completely random, Little 's MCAR test was used. The obtained results for wave 1 were: $\chi^2(408) = 425.609; p = .264$; and for wave 2 were: $\chi^2(46) = 62.054; p = .057$. The absence of significant results indicates that, in this case, missing data does not depend on the variables in the data set (Little, 1988). After conducted this test and verified the assumption that pattern of missing values does not depend on the data values, the expectation–maximization (EM) algorithm of the SPSS was used to replace missing values. Because participants withdrew between wave 1 and wave 2, significant differences were tested between participants who maintained their participation and participants who dropped out in wave 2, for gender, age, student worker status and career adaptability dimensions. Pearson Chi-square test was firstly conducted for the analysis of gender differences and significant differences emerged between wave 1 and wave 2: $\chi^2(1) = 4.633, p = .031$, which suggests the importance of including this as covariate in further analysis. The obtained results for the comparison of student worker status indicate that no differences emerged between the two waves: $\chi^2(1) = .065, p = .798$. Independent samples t-tests were conducted for age and the four dimensions of the CAAS. Concerning age, the independent samples t-test did not show significant differences: $t(694) = .755, p = .450$. Also, no statistical differences were found in any of the four dimensions of career adaptability: concern: $t(694) = .932; p = .351$; control: $t(694) = -.223; p = .824$; curiosity: $t(694) = -.966; p = .334$; and confidence: $t(694) = 1.733; p = .083$. This means that both groups of wave 1 and wave 2 are equivalent in terms of the four dimensions of career, which minimize the impact of dropout in the second wave.

Results

Table 1 presents means and standard deviations for the employed and unemployed groups, from wave 1 and wave 2, minimum and maximum values, skewness and kurtosis. In general, career adaptability scores in the four dimensions are considerably high, always being above the midpoint of the scale (3). Also, there are lower dispersion of scores in the four assessed dimensions ($SD < 1.0$), for both waves, in both groups. Analyzing scores distribution in the 5 values of the likert scale, it was verified that for all the subscales the minimum value was higher than 2.0. In self-report scales, this occurrence might reflect some answers biases, namely central tendency and social desirability errors. All the values of kurtosis and skewness values range between -2 and 2, which indicates that it is a normal univariate distribution (George and Mallery, 2010). It is also observed that the group of employed graduates scored higher than their unemployed peers in both the assessed periods, while scores within groups evidence low variance.

[Please insert Table 1 here]

Repeated measures analysis of variance were conducted to identify the effect of university-to-work transition time in the four dimensions of the CAAS in graduates' employment status (being employed or unemployed in wave 2), maintaining as covariates gender, field of study, and student worker status. Because this study only contemplates two measures in time, the assumption of sphericity is not applicable to this design and so is not described.

There was no significant effect of university-to-work time within the subject variables over any of the four dimensions of the CAAS (concern: $F(1, 129) = .159$; $p = .691$; $\eta_p^2 = .001$;

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3 control: $F(1, 129) = .028$; $p = .868$; $\eta_p^2 = .000$; curiosity: $F(1, 129) = .159$; $p = .691$; $\eta_p^2 =$
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control: $F(1, 129) = .028$; $p = .868$; $\eta_p^2 = .000$; curiosity: $F(1, 129) = .159$; $p = .691$; $\eta_p^2 =$
.001; confidence: ($F(1, 129) = .175$; $p = .677$; $\eta_p^2 = .001$). However, the between-subject
test of the effect of university-to-work time was significant for the four dimensions of the
CAAS: (i) concern ($F(1, 129) = 3.854$; $p = .052$; $\eta_p^2 = .029$); (ii) control ($F(1, 130) = 9.025$;
 $p = .003$, $\eta_p^2 = .065$); (iii) curiosity ($F(1, 132) = 7.099$; $p = .009$; $\eta_p^2 = .051$); and (iv)
confidence ($F(1, 131) = 12.043$; $p = .001$; $\eta_p^2 = .084$). In other words, the four dimensions
of career adaptability are different for employed and unemployed graduates between wave 1
and wave 2, with no significant effect of any of the covariates. No differences emerged over
time within the same groups, which suggests some stability of career resources throughout
the transition process.

Figure 1 presents the graphical representation of the mean response for each dimension,
adjusted for the covariates.

[Please insert Figure 1 here]

Discussion

This study analyzed intra- and inter-individual differences in career adaptability resources
during university-to-work transition time and compare its effect on the graduates'
employment status 18 months after the conclusion of higher education studies. To our
knowledge, this is the first study with repeated measures of career adaptability in university-
to-work transition. The obtained results are partially in agreement with previous research,
because only inter-individual differences between the two compared groups were confirmed
(Savickas, 2002). No statistical differences emerged for the within-person variables, which
suggests that, apparently, university-to-work transition did not carry any observable change

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3 in career adaptability resources of the graduates participating in this study. That is, career
4 adaptability resources differentiating graduates who attain employment are similar before
5 and after the university-to-work transition, which indicates that the shape of an individual's
6 career adaptability profile does not change in the university-to-work transition time. A
7 possible explanation for such results might be related to the Portuguese socioeconomic
8 context that coincided with the participants' work transitions. At that time, Portugal was still
9 in a period of economic recovery from the economic crisis in Europe in 2012, and this had
10 repercussions in terms of unemployment rates, which were particularly higher for newcomers
11 to the labor market (OECD, 2016). Previous research suggests that a decrease of career
12 adaptability resources may derive from job insecurity (Maggiori et al., 2013). Hence, a
13 climate of uncertainty in the labor market might have affected the new graduates in terms of
14 their activation of career adaptability resources. If on one hand, the situation of university-
15 to-work transition should have stimulated new graduates to an increase in career adaptability,
16 on the other hand, facing job insecurity might have mitigated this expected process. This
17 possibility was recently proposed by Johnston (2016), when she suggested that career
18 adaptability may be depleted in situations that are appraised as threatening, which is
19 compatible with the socioeconomic scenario these new graduates faced, even in the cases of
20 those who have already found a job.

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44 At the between-person level, our expectation of the positive association between career
45 adaptability and employment status was confirmed. Apparently, students with higher levels
46 of concern, control, curiosity and confidence are more likely to be employed 18 months after
47 the labor market transition. Career concern refers to individuals' awareness of future
48 possibilities. Differences among groups probably reflect higher ability levels to plan how to
49 achieve career goals and to cope with transition challenges from the employed graduates.
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3 Career control reflects the responsibility for one's vocational future. In this case, although
4 both groups of graduates have manifested a slight decrease of control levels after leaving
5 university, the employed graduates maintained superior scores, compared to their
6 unemployed colleagues. This suggests a greater ability to shape the self and the environment
7 for the achievement of career goals by the graduates who find a job 18 months after
8 concluding their Master's degree. Between-person differences in career curiosity indicates a
9 greater predisposition for exploration of the self and environment for the group of employed
10 graduates. Greater career curiosity, in this case, might mean greater self-knowledge and
11 understanding of labor market opportunities that lead to a greater likelihood of finding
12 employment. Lastly, career confidence refers to individual's belief in his/her ability to
13 achieve career goals. In our case, "finding a job" represents a measure of success and it
14 evidences graduates' ability to overcome the barriers of university-to-work transition. These
15 general findings are congruent with the meta-analysis recently presented by Rudolph,
16 Lavigne, Katz and colleagues (2017) and reinforces the idea that higher levels of confidence
17 are realized in career-related behaviors and competencies that will facilitate university-to-
18 work transition, fostering employability (Lent et al., 1999, 2002; Rudolph, Lavigne, Katz, et
19 al., 2017).

20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 **Limitations and further research**

45 The limitations of the study should also be referred as a way to more accurately frame the
46 obtained results and to inform further research in the field. A first consideration relates to the
47 sample used in this study, which is relatively small because of the sample loss between wave
48 1 and wave 2, and provide from one single university context. Further research should
49 attempt to increase sample variance by enlarging the sample size and increasing the diversity
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3 of university contexts. A second consideration relates to the interval between the two
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5 measurements. Indeed, 18 months might be too much time for precise evaluation of career
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7 adaptability pattern in the situation of university-to-work transition. It might happen, for
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9 example, that in the 18-month interval an increase, followed by a period of decreasing
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11 adaptability resources, has already occurred and is not being captured with this research
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13 design. In that case, further research with more measure moments in time is need to clearly
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15 understanding the pattern of change in career adaptability.
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21 **Implications**

22 This study contributes to the literature on graduates' employability by adopting a design with
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24 two repeated measures of career adaptability in a university-to-work transition period.
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26 Although our study is not conclusive as to how individuals adapt and regulate in response to
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28 university-to-work transitions, the hypothesis that was established concerning the obtained
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30 data might lead further researchers to outline other research designs that may clarify our
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32 findings. Empirical studies with more measurements in time and in different socioeconomic
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34 contexts would offer more sustained explanations concerning how graduates adapt and
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36 regulate in this transition.
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41 The findings of current research also carry practical implications for higher education.
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43 Between-person differences identified in this study suggests that it is possible to indicate
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45 which students are more vulnerable in terms of career adaptability resources before a
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47 university-to-work transition. Thus, career interventions among undergraduates over several
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49 stages of their higher education studies, designed according to individual profiles, might be
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51 particularly useful. Studies have shown that university students still have a narrow view of
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53 employability, limited to the idea of "finding a job", particularly in the first stages after their
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3 graduation (Gedye and Beaumont, 2018; Tymon, 2013). Those findings reinforce the
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5 relevance of the promotion of a broader view of employability, fostering exploration of the
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7 self and environment, together with training concerning job interviews or role-playing in
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9 overcoming possible obstacles, for example.
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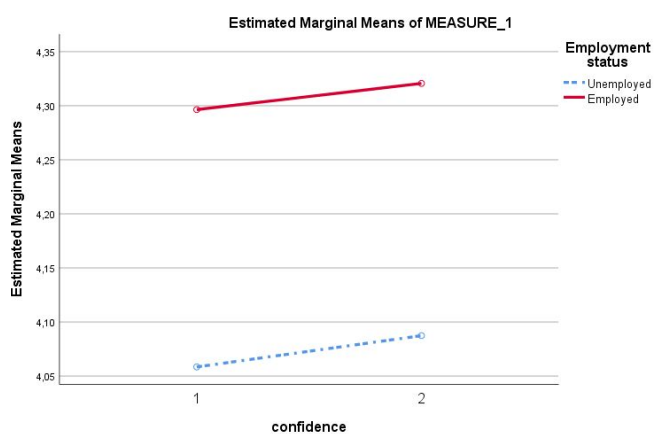
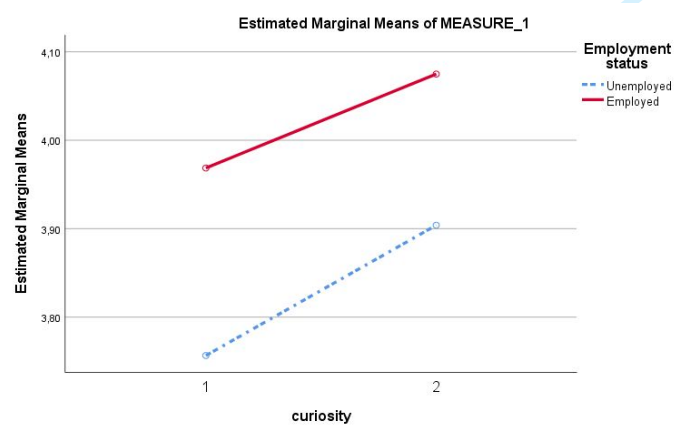
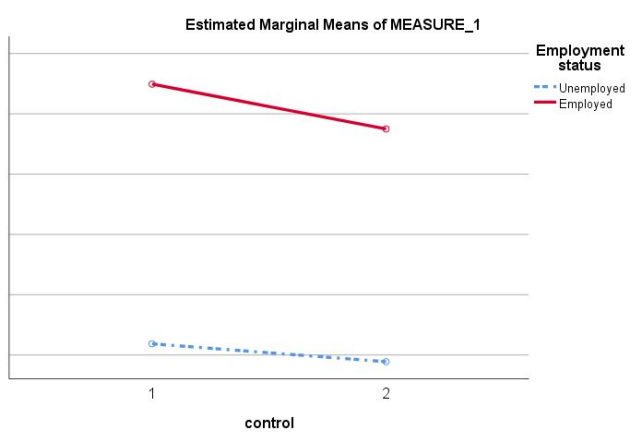
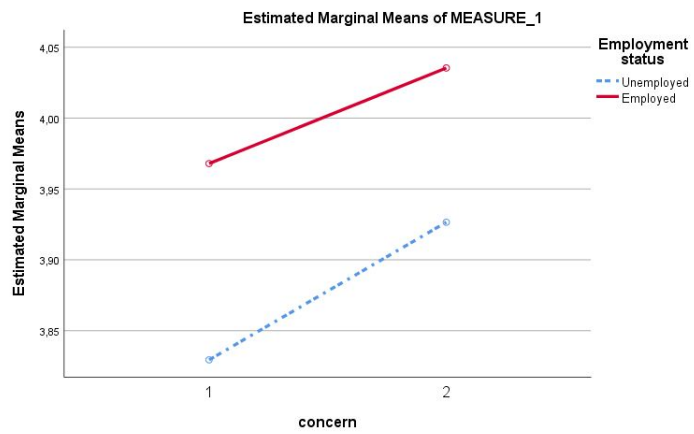


Table 1

Descriptive statistics of the CAAS dimensions in wave 1 and wave 2 for the employed and unemployed groups

Dimensions	Employment status (wave 2)	Wave 1						Wave 2					
		<i>Mean</i>	<i>Standard Deviation</i>	<i>Min.</i>	<i>Max.</i>	<i>Kurtosis</i>	<i>Skewness</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Min.</i>	<i>Max.</i>	<i>Kurtosis</i>	<i>Skewness</i>
Concern	Employed (n=119)	3.97	.56	2.17	5.00	1.14	-.07	4.03	.42	2.33	5.00	.87	-.14
	Unemployed (n=64)	3.83	.51	2.67	5.00	-.08	-.03	3.94	.49	2.67	5.00	.68	-.14
Control	Employed (n=119)	4.22	.48	3.00	5.00	-.60	-.11	4.18	.50	2.50	5.00	-.40	-.20
	Unemployed (n=64)	4.02	.49	2.50	5.00	-.39	-.37	4.00	.50	2.83	5.00	-.62	-.15
Curiosity	Employed (n=119)	3.97	.54	3.00	5.00	-.75	.01	4.06	.50	2.67	5.00	-.07	-.04
	Unemployed (n=64)	3.76	.51	2.83	5.00	-.20	.36	3.93	.57	2.33	5.00	.05	-.20
Confidence	Employed (n=119)	4.30	.443	3.33	5.00	-.92	-.03	4.31	.48	3.00	5.00	-.31	-.28
	Unemployed (n=64)	4.06	.47	2.83	5.00	-.41	-.09	4.10	.54	2.50	5.00	.93	-.65

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