

Perceived employability in a situation of crisis: The influence of the external context and perceived financial threat

Abstract

Purpose: This study analyses how people's perceived employability was affected during the COVID-19 pandemic. It explores individuals' perceived financial threat, age, and work situation as factors that shape perceived employability.

Design: Data were collected via a survey at three different times between October 2020 and May 2021, which were chosen to reflect the evolution of the pandemic. The participants (n = 124) reported their perceived employability and financial threat during the pandemic in Portugal. Perceived employability is a multidimensional concept, as it includes the following scales: employment protective behaviour, employment risk, job-seeking behaviour, self-control, and self-learning.

Findings: Participants' overall perceived employability failed to record significant variance over the period under analysis. Nevertheless, perceived employment protective behaviour decreased the most, especially in the case of young adults (aged 18 to 24). Individuals perceived financial threat varied according to the external context, being lower during the last moment of data collection, which corresponded to the less socially and economically restrictive period. Employees with the most stable work condition, i.e., with a permanent employment contract, were those who felt less financially threatened when compared to other respondents. A negative relationship between perceived employability and perceived financial threat was identified during the third moment of data collection.

Originality: The research informs about how individuals perceive themselves in a highly unpredictable and unstable context. The longitudinal approach shows how the external context affected people's perceived employability and financial threat throughout the pandemic.

Keywords: Perceived employability; employability; perceived financial threat; COVID-19 pandemic; crisis; Portugal.

Introduction

The COVID-19 pandemic was an unprecedented event which profoundly impacted the global economy (Shehzad *et al.*, 2021), creating serious concerns about a possible long-lasting lower curve (Aktar *et al.*, 2021). Notwithstanding the mitigating effect of public health measures on infection rates (Brammer *et al.*, 2020), emerging evidence shows the existence of profound changes in people's social life and a significant slowdown in economic activity (Czeczeli *et al.*, 2020). Unemployment and inflation rates increased, and many sectors witnessed a disruption of activity (Shehzad *et al.*, 2021). For example, the youth unemployment rate in 2020 in Portugal jumped from 18,5% in March, to 27% in June, and remained well above 20% until January 2022. Furthermore, given the economic and social implications of the pandemic, people were forced to adapt to a new normal (Brammer *et al.*, 2020) and organizations were obliged to undergo radical changes in their work practices. Organizations had to adapt to an unknown and uncertain context, which affected people physically, socially, and psychologically (Carnevale and Hatak, 2020). All these changes are likely to trigger effects at other levels, namely on how individuals think, feel, and behave towards work. The monitorization of what happened during the COVID-19 pandemic and how people perceived it can help to better understand the future, including – as in the case of this study – specifically with regards to the dimensions of employability in a post-crisis scenario, which in turn can serve as an indicator for possible changes regarding work-related behaviour.

There is a gap in the existing literature with regard to the relationship between work-related behaviour and the economic context (Berry and McDaniel, 2020). Moreover, the impact of a disruptive event can be felt differently across people (Akkermans *et al.*, 2020). Blustein *et al.* (2020) argue that it is essential for researchers to understand the experience of youth and the vulnerabilities of precarious workers in this new context since they tend to be amongst the most impacted groups. This study seeks to address these problems by analysing both employability and financial threat perceptions during a period of social and economic instability, focusing on the experiences of young adults and people in precarious work situations. More specifically, this study aims to respond to the following research questions:

(1) *How was individuals' perceived employability affected during the COVID-19 pandemic?*

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3 (2) *Was individuals' perceived employability influenced by their perceived financial*
4 *threat during the COVID-19 pandemic?*

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7 (3) *Were the employability perceptions of young adults and people in precarious work*
8 *situations the most affected during the COVID-19 pandemic?*

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11 This research adds to the body of knowledge by describing individuals' perceived
12 employability and financial threat in a scenario of social and economic instability
13 triggered by a global health crisis. It shows how people perceived themselves in different
14 stages of the pandemic, as data were collected at three different moments in time during
15 the pandemic. Such a longitudinal view contributes to deepening the understanding of
16 how external contexts influence people's perceived employability.
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25 **Perceived Employability in the COVID-19 Pandemic Context**

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27 In times of economic prosperity, perceived employability tends to be more positive
28 (Berntson *et al.*, 2006; Berglund and Wallinder, 2015). Conversely, in periods of crisis
29 and instability, employability can become a critical factor for individuals, since it can
30 offer a sense of control over one's career (Cuyper *et al.*, 2019). Perceived employability
31 can help people deal with uncertainty, as it can influence their adaptability and proactivity
32 (Fugate and Kinicki, 2008), as well as their work engagement (Wang *et al.*, 2018), self-
33 efficacy (Signore *et al.*, 2019), and job search behaviour (Fugate and Kinick, 2008;
34 Signore *et al.*, 2019). People with high perceived employability identify career
35 opportunities more easily (Fugate and Kinicki, 2008; Cesário and Feijão, 2014), and feel
36 less threatened by the risk of losing their job (Wang *et al.*, 2018), as high perceived
37 employability is moderated or negatively related to job and career insecurity (Ngo *et al.*,
38 2017; Spurk *et al.*, 2016).
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51 *Perceived Employability*

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53 Perceived employability is defined as people's perceptions about their employment
54 options, namely the possibility of finding or retaining a job (Rothwell and Arnold, 2007;
55 Gunawan *et al.*, 2019). Perceived employability is generally assumed as a dual concept,
56 integrating an internal dimension, which includes person-specific factors, such as specific
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3 skills or the potential to learn, and also an external dimension, which generally refers to
4 the perception of the state of the labour market (Kirschenbaum and Mano-Negrin, 1999;
5 Rothwell and Arnold, 2007; Rothwell *et al.*, 2008).
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9 Therefore, some proactive characteristics seem to enable people to have an active role
10 with regard to their own employability (Monteiro *et al.*, 2020), such as: career exploration
11 and relational support (Cheung *et al.*, 2018), flexibility (Gunawan *et al.*, 2019), career
12 adaptability (Spurk *et al.*, 2016; Monteiro *et al.*, 2019a), leadership skills (Priyadarshini
13 *et al.*, 2019), and self-awareness (Peeters *et al.*, 2020). Educational experiences (Pitan,
14 2016; Yaho and Tuliao, 2019), networks (Gunawan *et al.*, 2019), knowledge about the
15 labour market (Gunawan *et al.*, 2019), and even personality traits (Neneh, 2020) are also
16 relevant antecedents of employability. Furthermore, factors such as socioeconomic status,
17 health, gender, and sociodemographic characteristics also influence perceived
18 employability (Bennet *et al.*, 2022; Hu *et al.*, 2020; Wang *et al.*, 2018), albeit they are
19 more difficult to be managed by individuals alone.
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29 In addition to individual factors and micro contextual conditions, macro contextual
30 factors also seem to influence perceived employability, especially the labour market and
31 job opportunities. This holistic perspective, which integrates individual attributes with
32 social and economic conditions, has been defended in the most recent literature discussing
33 the conceptualization of employability (Clarke, 2017; Guilbert *et al.*, 2016). Some
34 empirical studies have also supported the relevance of considering the macro contextual
35 conditions affecting individuals' lives when perceived employability is studied. For
36 example, in a longitudinal study published in 2012, Mäkikangas *et al.* found that although
37 perceived employability seems to be relatively stable over time, mean-level changes can
38 occur in a short time among individuals who are facing increased conditions of
39 uncertainty about their job, which is expected to occur in times of economic crisis or
40 recession. Conversely, individuals with perceived lower levels of job insecurity tend to
41 present higher levels of perceived employability. The relevance of considering structural
42 dimensions, in addition to individual ones, was also confirmed by Bernston *et al.* (2006)
43 in a study comparing a sample representing economic recession with a sample from a
44 period of prosperity. Specifically, higher perceptions of employability were identified in
45 times of prosperity.
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58 Since perceived employability can change over time, depending on key external events,
59 the first hypothesis states that:
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3 **H1:** Perceived employability varies according to significant external events during crises.
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8 *Perceived Financial Threat* 9

10 People tend to feel and perceive financial threats during crises, which translates into
11 feelings of fear, uncertainty, and concern about their financial situation (Marjanovic *et*
12 *al.*, 2013; Marjanovic *et al.*, 2015). This perceived threat is based on the premise that
13 people's income needs to be higher than their expenses to maintain a dignified lifestyle
14 and to be able to seek growth opportunities. When this does not occur, and this balance
15 is questioned, a feeling of vulnerability arises (Marjanovic *et al.*, 2018). Perceived
16 financial threat can dictate how individuals live and feel during periods of crisis. The level
17 of this perceived threat depends on both situational factors (i.e., economic hardship,
18 income change, financial well-being, and job insecurity), as well as personality traits (i.e.,
19 worry, self-efficacy, and self-esteem) (Marjanovic *et al.*, 2013; Marjanovic *et al.*, 2015).
20 Marjanovic *et al.* (2018) state that, even during times of recession, when perceived
21 financial threat is low, people appear to feel stable and safe, reporting minimal levels of
22 anxiety, worry, or fear in the face of the economic situation.
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33 It is expected that perceived financial threat tends to increase in line with the economic
34 and social context triggered by the pandemic. This perceived threat can be reflected in
35 emotional exhaustion, anxiety, and depression (Marjanovic *et al.*, 2013; Marjanovic *et*
36 *al.*, 2015). Furthermore, crises are likely to lead to reduced levels of satisfaction, self-
37 efficacy, control, and trust, and increased stress (Alonso-Ferres *et al.*, 2020). Llinares-
38 Insa *et al.* (2018) consider that some of these behaviours influence perceived
39 employability, i.e., efficacy, control, and confidence. It is possible to observe similarities
40 between adverse outcomes during crises, the consequents of perceived financial threat,
41 and the antecedents of perceived employability. As perceived financial threat can
42 determine how individuals live in a period of crisis, the second hypothesis states that:
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50 **H2:** Perceived employability and perceived financial threat are negatively related during
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The Effects of Crisis on Youth and People in Precarious Work Situations

Previous empirical research has shown how the impact of disruptive events can be felt differently across people (Akkermans *et al.*, 2020). Young adults are of particular interest, as this group has been generally perceived to be vulnerable (International Labour Organization, 2020). Liotti (2020) advances that young adults are the first to lose their job and, if they were previously unemployed, they are less likely to find a new job. They tend to feel higher levels of instability (Caroleo *et al.*, 2020), as they are those most affected by unemployment (Chiacchia *et al.*, 2018) and by the lack of opportunities and insecure job conditions (Carmo and Matias, 2019), which makes them one of the groups that are most vulnerable to the effects of crises (Sorgente and Lanz, 2019). Such vulnerability conditions regarding youths' employment and work seem to fit the definition of precarious employment proposed by Olsthoorn (2014), which integrates two different indicators: insecurity regarding sufficient income, and insecurity regarding the job. It also includes people with fixed-term work contracts or the unemployed, who are prone to feel instability, besides being unable to make plans (Carmo and Matias, 2019).

While the effect of crises on the increase of precarious work situations seems to be relatively predictable, the magnitude of such effect seems to vary according to different labour contexts. According to Gutiérrez-Barbarusa (2017), the effect of a crisis is particularly driven by poverty in the most deregulated labour markets and by insecurity in southern European countries. In South Africa, Francis (2020) reported that almost half of the population did not have access to a paid job after the COVID-19 pandemic, with a notorious exacerbation of the most precarious situations, particularly among women. This trend of more severe consequences among those who were already most vulnerable was also found in Australia (Cook *et al.*, 2021). Therefore, people with precarious work conditions commonly appear to be those who suffer the most from uncertainty at various levels (psychological, physical, social, and economic; Blustein, 2019).

Being Portugal a southern European country, the situation is further aggravated by the aforesaid job insecurity (Gutiérrez-Barbarusa, 2017), political instability, and poor job prospects for younger workers. Shortly after the pandemic hit the country, the youth unemployment rate rose from 18,5 in March 2020, to almost 27% in June that year, and kept above 20% throughout 2020 and 2021 (Trading Economics). A reputable national

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3 newspaper reported in November 2021 that 72% of Portugal's youth earned less than
4 €950/month, and one-third were ready to leave the country (Expresso, 2021).
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7 Thus, it is expected that:
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9 **H3a:** Perceived financial threat of young adults is higher during crises than perceived
10 financial threat of older people.
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12 **H3b:** Perceived employability of young adults is more negatively affected during crises
13 than perceived employability of older people.
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15 **H4a:** Perceived financial threat of people in precarious work situations is higher during
16 crises than perceived financial threat of people in stable work situations.
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18 **H4b:** Perceived employability of people in precarious work situations is more negatively
19 affected during crises than perceived employability of people in stable work situations.
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22 **Method**

23 *Procedure*

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34 This study was developed under ISEG – Lisbon School of Economics and Management,
35 University of Lisbon, academic integrity guidelines and ethical review. Following a
36 quantitative longitudinal approach, data were collected at three distinct moments,
37 between October 2020 and May 2021. The adoption of such a longitudinal approach
38 enabled the ability to focus on the change of a particular phenomenon (Ployhart and
39 Vandenberg, 2010), which, in this case, is people's perceived employability during a
40 pandemic, while examining the relationship between variables over time (Saunders *et al.*,
41 2015), namely between perceived employability and perceived financial threat, age, and
42 professional situation. Data were collected within a twelve-week gap approximately,
43 shortly after three significant external events of public interest nationwide. The objective
44 was to collect data that reflected different phases of the pandemic and as such, the external
45 events were chosen based on their social and economic impact, considering the crisis
46 stage at each time.
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57 *Stage 1.* Data were collected between 29th October and 3rd November 2020, shortly after
58 Parliament's voting and approval of the Portuguese State Budget for 2021, which took
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3 place on 28th October 2020. 276 participants responded to the survey and agreed to
4 participate in subsequent stages of the research. Lockdown measures were in place at the
5 time of the data collection and the possibility of tightening restrictions was very much at
6 stake in the media.
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10 *Stage 2.* Data were collected between 25th and 30th January 2021, soon after the
11 Portuguese presidential elections, which took place on 24th January 2021. Of the 276
12 participants, 175 responded to the survey. A very restrictive lockdown was in place in the
13 country, and the first phase of the COVID-19 vaccination plan started early in January.
14 The worst phase of the pandemic occurred at about the same time, leading to a sharp
15 increase in the number of infections, hospitalizations, and deaths.
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21 *Stage 3.* Data were collected between 3rd and 8th May 2021, shortly after the start of the
22 last phase of the national plan to relieve COVID-19 restrictions, which happened on 1st
23 May 2021. The vaccination plan continued to be rolled out.
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27 A closed-type question survey was shared online through social media, following a non-
28 probabilistic convenience sample. When people responded, they first identified their
29 willingness to participate in the subsequent phases by registering their email (with the
30 sole objective of receiving the subsequent questionnaires) and by generating an
31 identification code – a Subject-Generated Identification Code (SGIC, after Yurek *et al.*,
32 2008) – which was used to identify the participants throughout the study, while
33 maintaining their anonymity (Lippe *et al.*, 2019).
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43 *Participants*

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45 124 participants responded to the three surveys, of which 77% were female and 23% were
46 male, with 68% aged between 18 and 24 (young adults), and 32% aged 25 or more. The
47 majority of the respondents are single (89%) and live in Greater Lisbon (82%). With
48 regards to academic qualifications, 19% finished high school, 60% hold a Bachelor's
49 degree, and 21% a Master's degree or a PhD, with 58% having a degree in Social and
50 Human Sciences, 28% in Management/Economics, 12% in Science and Technology, and
51 2% in other subjects. The participants' professional situation varies over time (Table I).
52 An increase in the number of participants employed with fixed-term contracts and self-
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employed was observed from Stages 1 to 3, while at the same time, a decrease in unemployed people was noted. These trends are also reflected in young adults.

[please insert Table I approximately here]

Measures

Perceived employability was measured by using the Employability Appraisal Scale (EAS; Llinares-Insa *et al.*, 2018), which defines employability as a multidimensional meta-competence, measured with a multi-domain scale that can be used with any group of individuals. It is composed of five subscales/factors: (1) employment protective behaviour (original Cronbach $\alpha = 0.87$); (2) employment risk (Cronbach $\alpha = 0.81$); (3) job-seeking behaviour (Cronbach $\alpha = 0.69$); (4) self-control (Cronbach $\alpha = 0.79$); and (5) self-learning (Cronbach $\alpha = 0.67$). It is a 35-item scale, which uses a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). In this study, the EAS and Subscales 1, 2, 3, and 4 all recorded internal consistency at all data collection times, with values above 0.70 (i.e., overall EAS Cronbach $\alpha = 0.86, 0.88, \text{ and } 0.90$, respectively), except for Subscale 5 of the EAS (self-learning), where the Cronbach α values were 0.31, 0.38 and 0.30, respectively. The concurrent validity of the EAS was examined using Llinares-Insa *et al.* (2018), which proved to be moderately related to transversal job demands, namely cooperation, agreeableness, and conscientiousness.

Perceived financial threat was measured with the Financial Threat Scale (FTS; Marjanovic *et al.*, 2013). The FTS is a 5-item scale designed to measure people's uncertainty, risk, perceived threat, worry, and cognitive preoccupation with finances in a context of crisis. The 5 items are measured on a 5-point scale (1 = *not at all*; 5 = *extremely/a great deal*). In this study, the FTS revealed internal consistency in all moments of data collection (Cronbach $\alpha = 0.90, 0.88, 0.91$), similar to the studies of Marjanovic *et al.* (2013; Cronbach $\alpha = 0.89$ in one study, and 0.90 in another one), and Marjanovic *et al.* (2015; mean Cronbach $\alpha = 0.90$). The FTS is unidimensional and relates to the following variables: situational (economic hardship, income change, financial well-being, and job insecurity), personality (worry, self-efficacy, and self-esteem), and psychological health (psychological well-being, depression, anxiety, mood disturbance, and emotional exhaustion).

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3 Both these scales were originally in English and Spanish, and therefore they were
4 translated to Portuguese according to Beaton *et al.*'s (2000) best practices, following five
5 steps: (1) translation; (2) synthesis; (3) back translation; (4) committee review; (5)
6 pretesting.
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10 11 12 13 *Data Analysis*

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16 Data were analysed with IBM SPSS Statistics 26.0, given its complex statistics analysis
17 models-options. H1 was tested by One-Way Repeated Measures ANOVA (hereinafter
18 Anova) on the EAS and its subscales individually. The goal was to assess whether
19 variations in people's perceived employability were statistically significant over time.
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24 H2 was also tested by Anova on the FTS. After assessing whether perceived financial
25 threat changed over time, Pearson correlation coefficients were calculated between the
26 FTS and the EAS.
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30 H3a and H3b were tested by Anova on the FTS and EAS and its subscales, with age as
31 the between-subject factor. In addition, Anova was used to check participants aged 18 to
32 24 ($n = 84$), and then separately for those participants who were aged 25 or older ($n = 40$).
33 The objective was to analyse whether the results showed any discrepancy when separating
34 participants by age.
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39 H4a and H4b were tested by One-Way ANOVA on the FTS and EAS and its subscales,
40 with the professional situation as the between-subject factor for all three data collection
41 moments, as people's professional situations altered over time. This procedure was
42 important to help understand whether significant differences existed for people according
43 to their professional situation at each moment. To increase understanding of whether
44 possible variations exist regarding perceived financial threat and employability over time
45 among people in diverse professional situations, Anova was computed, with the
46 professional situation being the between-subject factor, separating those participants that
47 had reported changing their professional situation during the period of analysis (i.e., the
48 professional situation labels of: student [$n = 38$], employed with fixed-term contract [$n =$
49 22], employed with permanent contract [$n = 36$], self-employed [$n = 4$], unemployed [n
50 = 4], and professional situation changed over time [$n = 20$]).
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Results

Preliminary Analyses

Table II presents the descriptive statistics of perceived employability and perceived financial threat. Participants perceived employability ($n = 124$) was positive for the mid-point of the Likert scale during all moments of the data collection, and all subscales recorded positive results as well. Perceived financial threat was positive during the first two moments of data collection, but not during the third one, where it registered a mean below the mid-point of the Likert scale. That is to say, people reported feeling less financially threatened during the last moment of data collection.

[please insert Table II approximately here]

Hypotheses Analyses

H1: Perceived employability varies according to significant external events during crises

The Anova test showed that, regarding perceived employability, statistically significant time effects were only recorded in Factor 1 of EAS – employment protective behaviour. Sphericity was rejected ($p = 0.021$) and the Huynh-Feldt correction (0.96) was used as the Greenhouse-Geisser epsilon value (0.94) is > 0.75 . The Anova using the Huynh-Feldt correction indicates statistically significant variations of employment protective behaviour over time ($F(1.9, 235.3) = 5.90; p = 0.004$). There was an effect of time for perceived employment protective behaviour, considering that the partial eta-squared indicates a small effect size ($\eta_p^2 = 0.046$) which reflects in a linear decreasing trend ($F(1, 123) = 7.89; p = 0.006$), i.e., these perceptions tend to weaken over time. The post hoc test of Pairwise Comparison showed two statistically-significant differences between moments, namely between Moments 1 and 3 ($p = 0.017$) and 2 and 3 ($p = 0.008$). The most considerable variation in Factor 1 was recorded during the third moment of data collection (-0.09 mean points compared to the first and -0.08 compared to the second).

H1 is partially confirmed, i.e., the existence of variations only regarding perceived employment protective behaviour (Factor 1 of the EAS).

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3 *H2: Perceived employability and perceived financial threat are negatively related during*
4 *crises.*
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7 The Anova procedure was repeated for perceived financial threat (measured through
8 FTS). Sphericity was confirmed by Mauchly's test ($p = 0.567$). With sphericity assumed,
9 it was shown that there was an effect of time for perceived financial threat, as its variations
10 are statistically significant ($F(2, 246) = 15.99; p = 0.000$) and the effect size is large (η_p^2
11 $= 0.115$). There is a quadratic tendency ($F(1, 123) = 6.62; p = 0.011$) as there was a slight
12 decrease in the third moment of data collection. The post hoc test of Pairwise Comparison
13 shows two statistically-significant differences between Moments 1 and 3 ($p = 0.000$) and
14 2 and 3 ($p = 0.000$). As before, the most significant variations were recorded at the third
15 moment of data collection (-0.38 mean points compared to the first, and -0.37 compared
16 to the second).
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25 Pearson correlation coefficient was computed between perceived employability, its
26 subscales, and also perceived financial threat in each moment of data collection. Table III
27 presents all the correlation values. A weak negative relationship between perceived
28 financial threat and job-seeking behaviour was recorded (Factor 3 of the EAS) at the first
29 moment of data collection. No correlations were registered at the second moment of data
30 collection. However, the third moment of data collection showed a weak negative
31 relationship between perceived financial threat and perceived employability, employment
32 protective behaviours (Factor 1 of the EAS), employment risk (Factor 2 of the EAS), job-
33 seeking behaviour (Factor 3 of the EAS), and self-learning (Factor 5 of the EAS). In sum,
34 at the last moment of data collection, only self-control (Factor 4 of the EAS) is not related
35 to perceived financial threat.
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45 H2 is partially confirmed, as perceived financial threat and perceived employability are
46 only negatively related in the third moment of data collection.
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3 *H3a: Perceived financial threat of young adults is higher during crises than perceived*
4 *financial threat of older people.*

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7 Regarding perceived financial threat (FTS), the Anova with age as a between-subjects
8 factor did not show statistically-significant results. The same test was then conducted in
9 each group separately.

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13 Variations in perceived financial threat remained significant for the youth sample (18 to
14 24; $n = 84$). Sphericity was checked by the Mauchly test ($p = 0.250$) and it was shown
15 that there was an effect of time for perceived financial threat ($F(2, 166) = 6.99$; $p =$
16 0.001), and that the effect size is medium ($\eta_p^2 = 0.078$). A linear decrease was detected
17 ($F(1, 83) = 14.67$; $p < 0.001$), and the posthoc test of Pairwise Comparison showed that
18 there is only one statistically significant difference between Moments 1 and 3 ($p < 0.001$),
19 with -0.33 mean points of difference between the first and last moment of data collection.

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23 Equally, variations remained significant in the older sample (aged 25 and older; $n = 40$).
24 Sphericity was verified by the Mauchly test ($p = 0.597$), and an effect of time for
25 perceived financial threat was confirmed ($F(2, 78) = 11.99$; $p < 0.001$). In this case, the
26 effect size is large ($\eta_p^2 = 0.235$) and there is a quadratic trend ($F(1, 39) = 12.16$; $p =$
27 0.001). The posthoc Pairwise Comparison test showed that there are two statistically-
28 significant differences between Moments 1 and 3 ($p = 0.004$), and 2 and 3 ($p < 0.001$).
29 The largest variation in FTS occurred at the third moment of data collection (-0.49 mean
30 points compared to the first and -0.63 mean points compared to the second).

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34 Although both groups registered significant changes in perceived financial threat over
35 time, the variations of the older sample had a larger size effect, with perceptions
36 increasing from the first to the second moment of data collection and then decreasing
37 again during the third moment, as visually represented in Figure 1.

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41 On the one hand, perceived financial threat of older people showed variations more in
42 line with the external context. On the other hand, in the case of young adults, these
43 reported feeling overall more financially threatened, as their perceived financial threat
44 was higher than older people's and remained above the mid-point of the Likert scale. As
45 such, H3a is confirmed.

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3 *H3b: Perceived employability of young adults is more negatively affected during crises*
4 *than perceived employability of older people.*

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7 The Anova test with age added as a between-subject factor failed to show statistically-
8 significant results regarding both perceived employability (EAS) or its subscales, despite
9 young adults reporting an overall lower level of perceived employability when compared
10 with those aged 25 or older.
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15 When analysing the youth sample (18 to 24) exclusively, only perceived employment
16 protective behaviour (Factor 1 of the EAS) changed statistically over time, similar to that
17 previously observed. When analysed by the Mauchly test, Sphericity was rejected ($p =$
18 0.032) and the Huynh-Feldt correction factor (0.96) was used, as the Greenhouse-Geisser
19 epsilon value (0.93) is > 0.75 . The test using the Huynh-Feldt correction indicates that
20 there was an effect of time in perceived employment protective behaviour ($F (1.89,$
21 $156.98) = 6.31; p = 0.003$), and that the effect size is medium ($\eta_p^2 = 0.071$). In addition,
22 there is a linear decreasing trend ($F (1, 83) = 9.396; p = 0.003$). The post hoc test of
23 Pairwise Comparison showed two statistically-significant differences between Moments
24 1 and 3 ($p = 0.009$), and 2 and 3 ($p = 0.024$). The largest variation in Factor 1 of the EAS
25 between young individuals was registered at the third moment of data collection (-0.12
26 mean points, compared to the first and -0.08 compared to the second).
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32 No statistically significant effects were reported over time in the sample of individuals
33 aged 25 or older, neither for perceived employability nor in its subscales. This indicates
34 that the significant variations in perceived employment protective behaviour (Factor 1 of
35 the EAS) that were recorded initially were mainly influenced by young adults'
36 perceptions. In fact, Figure 2 shows that the variations between groups recorded different
37 patterns, with the perceived employment protective behaviour of the older sampler even
38 slightly improving during the second moment of data collection.
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49 H3b is partially confirmed, i.e., only with regard to perceived employment protective
50 behaviour (Factor 1 of the EAS).
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53 *[please insert Figure 2 approximately here]*
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3 *H4a: Perceived financial threat of people in precarious work situations is higher during*
4 *crises than perceived financial threat of people in stable work situations.*
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7 The One-Way ANOVA test reported statistically significant discrepancies between
8 groups in each moment of data collection for perceived financial threat and participants'
9 professional situation. The homogeneity of variances condition was confirmed in all
10 moments (with all p values being > 0.05). Regarding the first moment, statistically-
11 significant differences in perceived financial threat were observed ($p = 0.010$; $F(4, 123)$
12 $= 3.51$) between employees with fixed-term employment contracts and those with
13 permanent employment contracts, as the former reported higher levels of financial threat
14 (0.70 mean points compared with the latter; $p = 0.011$). During the second moment, there
15 were no significant differences between groups. However, most differences were noticed
16 during the third moment of data collection ($p < 0.001$; $F(4, 123) = 5.07$), namely: between
17 students and employees with permanent employment contracts, as the former reported
18 higher levels of financial threat (0.75 mean points compared with the latter; $p = 0.001$);
19 between employees with fixed-term employment contracts and those with permanent
20 contracts, as the former reported higher levels of financial threat (0.68 mean points when
21 compared with the latter; $p = 0.010$); and between self-employed employees and those
22 with permanent work contracts, as the former reported higher levels of financial threat
23 (0.97 mean points when compared with the latter; $p = 0.033$). Additionally, Figure 3
24 shows that students' perceived financial threat was the one that increased in the third
25 moment of data collection, when compared with other participants who felt less
26 financially threatened. Nonetheless, the perceived financial threat of employees with
27 permanent employment contracts was the only threat that remained slightly below the
28 mid-point of the Likert scale at every moment of data collection.
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48 Apart from these differences, the Anova test with professional situation added as a
49 between-subject factor showed statistically-significant results regarding perceived
50 financial threat. Sphericity, as checked by the Mauchly test ($p = 0.753$), confirmed that
51 time was a significant effect on perceived financial threat, which changed according to
52 individuals' professional situation ($F(10) = 1.89$; $p = 0.047$). The effect size is medium
53 ($\eta_p^2 = 0.074$), with a linear decreasing trend ($F(5) = 2.345$; $p = 0.045$). Tukey posthoc
54 test showed three statistically-significant differences between groups, i.e.: between
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3 employees with permanent employment contracts and students (-0.47 mean points of
4 overall difference respectively; $p = 0.045$); between employees with permanent
5 employment contracts and those with fixed-term contracts (-0.63 mean points of overall
6 difference respectively; $p = 0.011$); and between employees with permanent employment
7 contracts and those whose professional situation changed throughout the period of
8 analysis (-0.69 mean points of overall difference respectively; $p = 0.008$). In conclusion,
9 the largest differences appear to be related to those employees with permanent
10 employment contracts feeling less financially threatened overall. H4a is thus confirmed.
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20 *H4b: Perceived employability of people in precarious work situations is more negatively*
21 *affected during crises than perceived employability of people in stable work situations.*
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24 The One-Way ANOVA test reported statistically-significant discrepancies between
25 groups regarding perceived employability during the first moment of data collection. The
26 homogeneity of variances was verified in the EAS and its subscales (with all p values $>$
27 0.05). Statistically-significant differences exist concerning perceived employability
28 (EAS; $F(4, 123) = 2.68$; $p = 0.035$), job-seeking behaviour (Factor 3 of EAS; $F(4, 123)$
29 $= 2.66$; $p = 0.036$), and self-learning (Factor 5 of the EAS, internal consistency not
30 verified; $F(4, 123) = 3.56$; $p = 0.009$). Regarding perceived employability, there was a
31 difference between students and employees with permanent employment contracts, as the
32 former perceived themselves to be less employable (-0.27 mean points compared with the
33 latter; $p = 0.013$). Regarding job-seeking behaviours (Factor 3 of the EAS), a difference
34 exists between students and employees with permanent employment contracts, as the
35 former reported lower perceptions (-0.45 mean points compared with the latter; $p =$
36 0.029). When considering self-learning (Factor 5 of the EAS), there are two differences,
37 namely: between students and employees with fixed-term employment contracts, as the
38 former reported lower perceptions (-0.36 mean points compared with the latter; $p =$
39 0.012); and between students and employees with permanent employment contracts, as
40 the former reported lower levels of perceptions (-0.30 mean points when compared with
41 the latter, $p = 0.030$).
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56 The same test regarding perceived employability during the second moment of data
57 collection showed statistically-significant discrepancies between groups. The
58 homogeneity of variances condition was once again confirmed in the EAS and its
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3 subscales (with all p values > 0.05). There were statistically-significant differences
4 regarding perceived employability ($F(4, 123) = 2.75; p = 0.031$), employment risk
5 (Factor 2 of the EAS; $F(4, 123) = 2.83; p = 0.028$), and job-seeking behaviour (Factor 3
6 of the EAS; $F(4, 123) = 2.58; p = 0.041$). Regarding perceived employability, there
7 remained a difference between students and employees with permanent employment
8 contracts, as the former perceived themselves to be less employable (-0.25 mean points
9 compared with the latter; $p = 0.034$). Regarding employment risk (Factor 2 of the EAS),
10 there is now a difference between students and employees with permanent employment
11 contracts, as the former reported lower levels of perception (-0.40 mean points compared
12 with the latter; $p = 0.029$). When considering job-seeking behaviour (Factor 3 of the
13 EAS), a difference also remains between students and employees with permanent
14 employment contracts, as the former reported lower levels of perception (-0.49 mean
15 points when compared with the latter; $p = 0.024$).
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26 Finally, the One-Way ANOVA was then repeated during the third moment of data
27 collection, but no statistical differences were reported between groups regarding
28 perceived employability.
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32 The Anova test with the addition of professional situation as a between-subject factor did
33 not show statistically-significant results regarding perceived employability (EAS) and its
34 subscales, despite the isolated differences described above. H4b is thus not confirmed.
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41 Discussion

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43 *(1) How was individuals' perceived employability affected during the COVID-19*
44 *pandemic?*
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47 Individuals' perceived employability overall did not report significant changes over the
48 COVID-19 pandemic, seeming to be relatively stable over time, similar to Mäkikangas'
49 (2012) findings to this end. However, the results show variations in one of the perceived
50 employability subscales – perceived employment protective behaviour. This Factor 1 of
51 EAS covers people's perceptions regarding their persistence, responsibility, planning,
52 organization, maintenance, progress, self-efficacy, and confidence (Llinares-Insa *et al.*,
53 2020). The variations were mainly recorded at the third moment of data collection, where
54 perceived employability slightly decreased when compared with the average of the first
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3 two moments. However, this last period was characterized by the progressive lifting of
4 economic and social restrictions and the implementation of the COVID-19 vaccination
5 plan. Indeed, the third moment of data collection did not prove to be the one where the
6 greatest economic and social restrictions were recorded. As such, new questions arise
7 regarding how the external context influences this factor of perceived employability, as
8 the result indicates that it might not be a direct and short-term influence, but rather an
9 accumulation of the medium-term economic and social consequences of the pandemic.
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18 *(2) Was individuals' perceived employability influenced by their perceived financial*
19 *threat during the COVID-19 pandemic?*
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22 With regards to perceived financial threat, an effect of time was observed: during the third
23 data collection moment, people reported feeling a lower level of financial threat, which
24 corresponds to the period characterized by the suspension of lockdown restrictions and
25 the vaccination plan. However, it was also during the third moment of data collection that
26 a negative but weak relationship was recorded between perceived financial threat and
27 perceived employability and its subscales in the third moment of data collection, with
28 only the EAS subscale of self-control being excluded, which refers to the perceived ability
29 to control emotions such as anger and frustration (Llinares-Insa *et al.*, 2020). In essence,
30 although perceived financial threat impacts individuals' anxiety and depression
31 (Marjanovic *et al.*, 2013; Marjanovic *et al.*, 2015) and given that periods of crisis are
32 prone to lead to reduced satisfaction, self-efficacy, control, and trust, and increased stress
33 (Alonso-Ferres *et al.*, 2020), the moment where a relationship was established between
34 the two variables was the one characterized by improved social and economic conditions
35 and by an overall lower level of financial threat. Similar to what was previously discussed,
36 this result can also indicate that the relationship between perceived employability and
37 financial threat is an outcome of the accumulation of the medium-term economic and
38 social consequences of the pandemic.
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3 (3) *Were the employability perceptions of young adults and people in precarious work*
4 *situations the most affected during the COVID-19 pandemic?*
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7 Regarding participants' age, the variations registered in perceived employment protective
8 behaviour were mainly influenced by young adults' perceptions. Young adults are one of
9 the groups most vulnerable to the effects of crises (Sorgente and Lanz, 2019), which
10 seems consistent with the variations of perceived employment protective behaviours.
11 Such perceptions are related to maintenance, self-efficacy, and confidence (Llinares-Insa
12 *et al.*, 2020). Additionally, young adults' perceived financial threat was slightly higher
13 during all the periods of data collection, which is again consistent with the fact that they
14 are more prone to feeling higher levels of instability (Caroleo *et al.*, 2020).
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21 Concerning individuals' professional situation, although employees with permanent
22 employment contracts (i.e., those with the most stable work condition) reported feeling
23 less financially threatened overall, there is no evidence that the perceived employability
24 of people in more precarious work situations was the most affected when compared with
25 other groups, as previously hypothesized. Despite the absence of statistical differences
26 over time regarding perceived employability of individuals with various professional
27 situations, it is worth noting the differences registered between groups in Moments 1 and
28 2, where there is a persistent difference between students and employees with permanent
29 employment contracts, for students perceived themselves to be less employable overall
30 when compared with employees with employment contracts. Both Moments 1 and 2 were
31 characterized by restrictive lockdown measures, both recording factors in which students
32 and employees with permanent employment contracts reported significant differences,
33 namely: job-seeking behaviours and employment risk, both of which are somewhat
34 related to possessing sufficient skills to find or retain a job. In fact, students are the group
35 with less work experience, which in turn can affect their perceived employability
36 (Gunawan *et al.*, 2019). Nevertheless, one should not disassociate the professional
37 situation of these individuals from their age, since the lower perceived employability can
38 be explained by students' age, and not necessarily or exclusively by their professional
39 situation.
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54 The perceptions and behaviours reported in this study, which was developed in a very
55 particular period of a global crisis, corroborate a trend that was previously found in other
56 studies conducted during crises and unstable periods (Bernston *et al.*, 2006; Mäkikangas
57 *et al.*, 2012), namely that there is evidence of the relationship between external
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3 socioeconomic events and individuals work-related behaviour. In addition, this research
4 also supports that vulnerable people are the most affected by a context of labour and
5 economic disruption, as has been previously suggested in the literature (Bernston *et al.*,
6 2006; Caroleo *et al.*, 2020; Chiacchia *et al.*, 2018; Mäkikangas, 2012).
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10 11 12 13 *Limitations and Future Research*

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15 This research has three important limitations. The first is concerned with results
16 generalization. A non-probabilistic sample was used, and therefore the sample is hardly
17 representative of the study population. In fact, a methodologic limitation warrants note,
18 which is specifically related to the professional situation groups. There are groups –
19 namely the self-employed and unemployed – which were constituted by a small number
20 of participants, which should be taken into account. Additionally, this is a single-country
21 study, and thus the results should be framed in this particular reality, which, in addition
22 to the non-probabilistic sample, limits the extrapolation to other realities. Second, self-
23 learning (Factor 5 of the EAS) did not attain the internal consistency values that are
24 recommended in the literature and consequently the results obtained regarding this factor
25 could be biased, due to the low level of reliability. Lastly, the impossibility to collect data
26 for the total period of the pandemic limits the ability to obtain a full picture of the
27 variations of perceived employability and financial threat over the entire crisis period.
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31 This study can serve as a starting point for future research. There is an essential need to
32 strengthen the level of knowledge regarding the relationship between perceived
33 employability and the perceptions of the economic context, bearing in mind the
34 consequences of a crisis. The negative relationship observed between perceived
35 employability and perceived financial threat that was identified during the third moment
36 of data collection raises new questions. It would be of interest in the future to carry out
37 research to confirm this relationship, as well as to analyse perceived employability during
38 the post-pandemic period. This would thus enable the possibility to obtain a more
39 complete picture of people's perceptions when triggered by a highly volatile context.
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Conclusion

This longitudinal study analysed the perceived employability and financial threat of a group of individuals during a period of the COVID-19 pandemic. Overall, perceived employability did not show significant variations over time, with the exception of one factor – employment protective behaviour – which was mainly noted among younger respondents. Participants perceived financial threat also reported significant variation in accordance with the social and economic restrictions in place at the time. Employees with permanent employment contracts felt less financially threatened overall. A negative relationship was identified between perceived employability and perceived financial threat during the last phase of the research.

Because longitudinal studies are scarce, the results of this study stimulate the understanding of perceived employability and its evolution over time and across different groups of individuals during a period of global socioeconomic crisis. Such knowledge is relevant for policy-makers and practitioners who have an interest in defining and implementing reactive and proactive measures that have the potential to contribute to the mitigation of social inequalities related to periods of socioeconomic instability and insecurity. As other impactful global events take place, it is expected that people's perceptions will continue to be influenced by what seems to be a continuously unstable context.

References

- Akkermans, J., Richardson, J. and Kraimer, M.L. (2020), "The Covid-19 crisis as a career shock: Implications for careers and vocational behavior", *Journal of Vocational Behavior*, Vol. 119, Article 103434.
- Aktar, Most. A., Alam, Md. M. and Al-Amin, A. Q. (2021), "Global economic crisis, energy use, CO2 emissions, and policy roadmap amid COVID-19", *Sustainable Production and Consumption*, Vol. 26, pp. 770–781.
- Alonso-Ferres, M., Navarro-Carrillo, G., Garrido-Macías, M., Moreno-Bella, E. and Valor-Segura, I. (2020), "Connecting perceived economic threat and prosocial tendencies: The explanatory role of empathic concern", edited by Capraro, V. *PLOS ONE*, Vol. 15 No. 5, Article e0232608.

- 1
2
3 Beaton, D.E., Bombardier, C., Guillemin, F. and Ferraz, M.B. (2000), “Guidelines for the
4 Process of Cross-Cultural Adaptation of Self-Report Measures”, *Spine*, Vol. 25 No.
5 24, pp. 3186–3191.
6
7
8
9 Berglund, T. and Wallinder, Y. (2015), “Perceived Employability in Difficult Economic
10 Times: The significance of education systems and labour market policies”, *European*
11 *Societies*, Vol. 17 No. 5, pp. 674–699.
12
13
14
15 Bennett, D., Bawa, S., Ananthram, S. and Pitman, T. (2022), “Is there a gender difference
16 in STEM students’ perceived employability?”, *Education + Training*, Vol. ahead-of-
17 print.
18
19
20
21 Berntson, E., Sverke, M. and Marklund, S. (2006), “Predicting Perceived Employability:
22 Human Capital or Labour Market Opportunities?”, *Economic and Industrial*
23 *Democracy*, Vol. 27 No. 2, pp. 223-244.
24
25
26
27 Berry, C. and McDaniel, S. (2022), “Post-crisis precarity: Understanding attitudes to
28 work and industrial relations among young people in the UK”, *Economic and*
29 *Industrial Democracy*, Vol. 43 No. 1, pp. 322–343.
30
31
32
33 Blustein, D.L. (2019), *The Importance of Work in an Age of Uncertainty: The Eroding*
34 *Work Experience in America*, Oxford University Press, New York.
35
36
37 Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G. and Allan, B.
38 A. (2020), “Unemployment in the time of COVID-19: A research agenda”, *Journal*
39 *of Vocational Behavior*, Vol. 119, Article 103436.
40
41
42
43 Brammer, S., Branicki, L. and Linnenluecke, M. K. (2020), “Covid-19, societalization,
44 and the future of business in society”, *Academy of Management Perspectives*, Vol.
45 34 No. 4, pp. 493–507.
46
47
48
49 Broeck, A., De Cuyper, N., Baillien, E., Vanbelle, E., Vanhercke, D. and De Witte, H.
50 (2014), “Perception of organization’s value support and perceived employability:
51 insights from self-determination theory”, *The International Journal of Human*
52 *Resource Management*, Vol. 25 No. 13, pp. 1904–1918.
53
54
55
56 Carmo, R.M. do and Matias, A.R. (2019), “As dimensões existenciais da precariedade:
57 jovens trabalhadores e os seus modos de vida*”, *Revista Crítica de Ciências Sociais*,
58 No. 118, pp. 53–78.
59
60

- 1
2
3 Carnevale, J.B. and Hatak, I. (2020), “Employee adjustment and well-being in the era of
4 COVID-19: Implications for human resource management”, *Journal of Business*
5 *Research*, Vol. 116, pp. 183–187.
6
7
8
9 Caroleo, F.E., Rocca, A., Mazzocchi, P. and Quintano, C. (2020), “Being NEET in
10 Europe Before and After the Economic Crisis: An Analysis of the Micro and Macro
11 Determinants”, *Social Indicators Research*, Vol. 149 No. 3, pp. 991–1024.
12
13
14
15 Cesário, F.S. and Feijão, A.M.P. (2014), “Impacto das perceções de empregabilidade num
16 contexto de insegurança laboral”, *Conferência - Investigação e Intervenção em*
17 *Recursos Humanos*, No. 4 (2013): IV Conferência em Investigação e Intervenção em
18 RH.
19
20
21
22 Cheung, R., Jin, Q. and Cheung, C. (2018), “Perceived Employability of Nonlocal
23 Chinese University Students in Hong Kong: The Impact of Acculturative and
24 Vocational Variables”, *Journal of Career Assessment*, Vol. 26 No. 1, pp. 137–153.
25
26
27
28 Chiacchia, D.J., Greenglass, E.R., Katter, J.K.Q. and Fiksenbaum, L. (2018), “The role
29 of self-compassion during difficult economic times”, *Anxiety, Stress, & Coping*, Vol.
30 31 No. 6, pp. 611–625.
31
32
33
34 Clarke, M. (2017), “Rethinking Graduate Employability: The Role of Capital, Individual
35 Attributes and Context”, *Studies in Higher Education*, Vol. 43 No. 11, pp. 1923-
36 1937.
37
38
39
40 Cook, J., Threadgold, S., Farrugia, D. and Coffey, J. (2021), “Youth, Precarious Work
41 and the Pandemic”, *YOUNG*, Vol. 29 No. 4, pp. 331–348.
42
43
44
45 Cuyper, N.D., Piccoli, B., Fontinha, R. and De Witte, H. (2019), “Job insecurity,
46 employability and satisfaction among temporary and permanent employees in post-
47 crisis Europe”, *Economic and Industrial Democracy*, Vol. 40 No. 2, pp. 173–192.
48
49
50
51 Czegezeli, V., Kolozsi, P. P., Kutasi, G. and Marton, Á. (2020), “Economic exposure and
52 crisis resilience in exogenous shock: The short-term economic impact of the covid-
53 19 pandemic in the EU”, *Public Finance Quarterly*, Vol. 65 No. 3, pp. 321–347.
54
55
56
57 Expresso, Jornal (12 November 2021). O retrato cru de uma geração desiludida: Três em
58 cada quatro jovens ganham menos de €950 e um terço quer sair de Portugal. Assessed
59 in February 2023, from <https://expresso.pt/sociedade/2021-11-26-O-retrato-cru-de->
60

[uma-geracao-desiludida-tres-em-cada-quatro-jovens-ganham-menos-de-950-e-um-terco-quer-sair-de-Portugal-c38d354a](#)

Forstenlechner, I., Selim, H., Baruch, Y. and Madi, M. (2014), “Career Exploration and Perceived Employability within an Emerging Economy Context”, *Human Resource Management*, Vol. 53 No. 1, pp. 45–66.

Francis, D. (2020), “Unemployment and the gendered economy in South Africa after Covid-19”, *Transformation: Critical Perspectives on Southern Africa*, Vol. 104 No. 1, pp. 103–112.

Fugate, M. and Kinicki, A.J. (2008), “A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change”, *Journal of Occupational and Organizational Psychology*, Vol. 81 No. 3, pp. 503–527.

Gunawan, W., Creed, P.A. and Glendon, A.I. (2019), “Development and Initial Validation of a Perceived Future Employability Scale for Young Adults”, *Journal of Career Assessment*, Vol. 27 No. 4, pp. 610–627.

Gutiérrez-Barbarrusa, T. (2016), “The growth of precarious employment in Europe: Concepts, indicators and the effects of the global economic crisis”, *International Labour Review*, Vol. 155 No. 4, pp. 477–508.

Hu, S., Hood, M., Creed, P. A. and Shen, X. (2022), “The Relationship Between Family Socioeconomic Status and Career Outcomes: A Life History Perspective”, *Journal of Career Development*, Vol. 49 No. 3, pp. 600–615.

ILO. (2020). *Global employment trends for youth 2020: Technology and the future of jobs*. International Labour Organization, Geneva.

Kirschenbaum, A., and R. Mano-Negrin. (1999), “Underlying Labour Market Dimensions of “Opportunities”: The Case of Employee Turnover”, *Human Relations*, Vol. 52 No. 10, pp. 1233–1255.

Liotti, G. (2020), “Labour market flexibility, economic crisis and youth unemployment in Italy”, *Structural Change and Economic Dynamics*, Vol. 54, pp. 150–162.

- 1
2
3 Lippe, M., Johnson, B. and Carter, P. (2019), “Protecting Student Anonymity in Research
4 Using a Subject-Generated Identification Code”, *Journal of Professional Nursing*,
5 Vol. 35 No. 2, pp. 120–123.
6
7
8
- 9 Llinares-Insa, L.I., González-Navarro, P., Zacarés-González, J.J. and Córdoba-Iñesta,
10 A.I. (2018), “Employability Appraisal Scale (EAS): Development and Validation in
11 a Spanish Sample”, *Frontiers in Psychology*, Vol. 9, Article 1437.
12
13
- 14 Llinares-Insa, L.I., Roldán-Pardo, M., González-Navarro, P. and Benedito-Monleón,
15 M.D. (2020), “Well-Being without Employment? Promoting the Employability of
16 Refugees”, *International Journal of Environmental Research and Public Health*,
17 Vol. 17 No. 21, Article 7775.
18
19
20
21
- 22 Mäkikangas, Cuyper, N., Mauno, S. and Kinnunen, U. (2013), “A Longitudinal Person-
23 Centred View on Perceived Employability: The Role of Job Insecurity”, *European*
24 *Journal of Work and Organizational Psychology*, Vol. 22 No. 4, pp. 490-503.
25
26
27
- 28 Marjanovic, Z., Fiksenbaum, L. and Greenglass, E. (2018), “Financial threat correlates
29 with acute economic hardship and behavioral intentions that can improve one’s
30 personal finances and health”, *Journal of Behavioral and Experimental Economics*,
31 Vol. 77, pp. 151–157.
32
33
34
35
- 36 Marjanovic, Z., Greenglass, E.R., Fiksenbaum, L. and Bell, C.M. (2013), “Psychometric
37 evaluation of the Financial Threat Scale (FTS) in the context of the great
38 recession”, *Journal of Economic Psychology*, Vol. 36, pp. 1–10.
39
40
41
- 42 Marjanovic, Z., Greenglass, E.R., Fiksenbaum, L., De Witte, H., Garcia-Santos, F.,
43 Buchwald, P., Peiró, J.M., *et al.* (2015), “Evaluation of the Financial Threat Scale
44 (FTS) in four European, non-student samples”, *Journal of Behavioral and*
45 *Experimental Economics*, Vol. 55, pp. 72–80.
46
47
48
- 49 Monteiro, S., García-Aracil, A. and Almeida, L.S. (2019b), “Adaptation and Initial
50 Validation of the Perceived Employability Scale”, *Paidéia (Ribeirão Preto)*, Vol. 29,
51 Article e2935.
52
53
54
- 55 Monteiro, S., Taveira, M. do C. and Almeida, L. (2019a), “Career adaptability and
56 university-to-work transition: Effects on graduates’ employment status”, *Education*
57 *+ Training*, Vol. 61 No. 9, pp. 1187–1199.
58
59
60

- 1
2
3 Monteiro, S., Almeida, L. and García-Aracil, A. (2020), “‘It’s a very different world’:
4 work transition and employability of higher education graduates”, *Higher Education,
5 Skills and Work-Based Learning*, Vol. 11 No. 1, pp. 164–181.
6
7
8
9 Neneh, B. N. (2020), “An empirical study of personality traits, job market appraisal and
10 self-perceived employability in an uncertain environment”, *Higher Education, Skills
11 and Work-Based Learning*, Vol. 10 No. 1, pp. 255–274.
12
13
14
15
16 Ngo, H., Liu, H. and Cheung, F. (2017), “Perceived employability of Hong Kong
17 employees: its antecedents, moderator and outcomes”, *Personnel Review*, Vol. 46
18 No. 1, pp. 17–35.
19
20
21
22 Olsthoorn, M. (2014), “Measuring Precarious Employment: A Proposal for Two
23 Indicators of Precarious Employment Based on Set-Theory and Tested with Dutch
24 Labor Market-Data”, *Social Indicators Research*, Vol. 119 No. 1, pp. 421–441.
25
26
27
28 Peeters, E.R., Akkermans, J. and Cuyper, N.D. (2020), “The Only Constant Is Change?
29 Movement Capital and Perceived Employability”, *Journal of Career Assessment*,
30 Vol. 28 No. 4, pp. 674–692.
31
32
33
34
35 Pitan, O. S. (2016), “Employability development opportunities (EDOs) as measures of
36 students’ enhanced employability”, *Higher Education, Skills and Work-Based
37 Learning*, Vol. 6 No. 3, pp. 288–304.
38
39
40
41 Ployhart, R. E. and Vandenberg, R. J. (2010), “Longitudinal research: The theory, design,
42 and analysis of change”, *Journal of Management*, Vol. 36 No. 1, pp. 94–120.
43
44
45
46 Priyadarshini, C., Singh, S., David, R., and Sayeed, O. B. (2019), “Effect of student
47 leadership on academic performance and perceived employability: a longitudinal
48 study on scale development and validation in the Indian context”, *South Asian
49 Journal of Management*, Vol. 26 No. 2, pp. 106–134.
50
51
52
53 Rothwell, A. and Arnold, J. (2007), “Self-perceived employability: development and
54 validation of a scale”, *Personnel Review*, Vol. 36 No. 1, pp. 23–41.
55
56
57
58
59
60

- 1
2
3 Rothwell, A., I. Herbert, and F. Rothwell. (2008), “Self-Perceived Employability:
4 Construction and Initial Validation of a Scale for University Students”, *Journal of*
5 *Vocational Behavior*, Vol. 73 No. 1, pp. 1–12.
6
7
8
9 Saunders, M., Lewis, P. and Thornhill, A. (2015), *Research Methods for Business*
10 *Students*, Pearson, New York.
11
12
13 Shehzad, K., Xiaoxing, L., Bilgili, F. and Koçak, E. (2021), “COVID-19 and Spillover
14 Effect of Global Economic Crisis on the United States’ Financial
15 Stability”, *Frontiers in Psychology*, Vol. 12, Article 632175.
16
17
18
19 Signore, F., Catalano, A., De Carlo, E., Madaro, A., and Ingusci, E. (2019), “ The role of
20 employability in students during academic experience: a preliminary study through
21 PLS-PM technique”, *Electronic Journal of Applied Statistical Analysis*, Vol. 12 No.
22 4, pp. 720-747.
23
24
25
26 Sorgente, A. and Lanz, M. (2019), “The multidimensional subjective financial well-being
27 scale for emerging adults: Development and validation studies”, *International*
28 *Journal of Behavioral Development*, Vol. 43 No. 5, pp. 466–478.
29
30
31
32 Spurk, D., Kauffeld, S., Meinecke, A.L. and Ebner, K. (2016), “Why Do Adaptable
33 People Feel Less Insecure? Indirect Effects of Career Adaptability on Job and Career
34 Insecurity via Two Types of Perceived Marketability”, *Journal of Career*
35 *Assessment*, Vol. 24 No. 2, pp. 289–306.
36
37
38
39
40 Trading Economics, Portugal Youth Unemployment Rate. Assessed in February 2023,
41 from <https://tradingeconomics.com/portugal/youth-unemployment-rate>
42
43
44 Wang, X., Zheng, Q., Huang, Z. and Chen, H. (2018), “Effect of Construal Level and Job
45 Insecurity on Responses to Perceived External Employability”, *Social Behavior and*
46 *Personality: An International Journal*, Vol. 46 No. 8, pp. 1359–1372.
47
48
49
50 Yao, C. W. and Tuliao, M. D. (2019), “Soft skill development for employability”, *Higher*
51 *Education, Skills and Work-Based Learning*, Vol. 9 No. 3, pp. 250–263.
52
53
54
55 Yurek, L.A., Vasey, J. and Sullivan Havens, D. (2008), “The Use of Self-Generated
56 Identification Codes in Longitudinal Research”, *Evaluation Review*, Vol. 32 No. 5,
57 pp. 435–452.
58
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Perceived employability in a situation of crisis: The influence of the external context and perceived financial threat

Abstract

Purpose: This study analyses how people's perceived employability was affected during the COVID-19 pandemic. It explores individuals' perceived financial threat, age, and work situation as factors that shape perceived employability.

Design: Data were collected via a survey at three different times between October 2020 and May 2021, which were chosen to reflect the evolution of the pandemic. The participants (n = 124) reported their perceived employability and financial threat during the pandemic in Portugal. Perceived employability is a multidimensional concept, as it includes the following scales: employment protective ~~behavior~~behaviour, employment risk, job-seeking ~~behavior~~behaviour, self-control, and self-learning.

Findings: Participants' overall perceived employability failed to record significant variance over the period under analysis. Nevertheless, perceived employment protective ~~behavior~~behaviour decreased the most, especially in the case of young adults (aged 18 to 24). Individuals perceived financial threat varied according to the external context, being lower during the last moment of data collection, which corresponded to the less ~~social~~socially and economically restrictive period. Employees with the most stable work condition. i.e., with a permanent employment contract, were those who felt less financially threatened when compared to other respondents. A negative relationship between perceived employability and perceived financial threat was identified during the third moment of data collection.

Originality: The research informs about how individuals perceive themselves ~~during~~in a highly unpredictable and unstable context. The longitudinal approach shows how the external context affected people's perceived employability and financial threat ~~were affected by the external context~~ throughout the pandemic.

Keywords: Perceived employability; employability; perceived financial threat; COVID-19 pandemic; crisis; Portugal.

Introduction

The COVID-19 pandemic was an ~~unprecedented~~~~unprecedented~~ event which profoundly impacted the global economy (Shehzad *et al.*, 2021), creating serious concerns about a possible long-lasting lower-curve (Aktar *et al.*, 2021). Notwithstanding the mitigating effect of public health measures on infection rates (Brammer *et al.*, 2020), emerging evidence shows the existence of profound changes in people's social life and a significant slowdown in economic activity (Czeczeli *et al.*, 2020). Unemployment and inflation rates increased, and many sectors witnessed a disruption of activity (Shehzad *et al.*, 2021). For example, the youth unemployment rate in 2020 in Portugal jumped from 18,5% in March, to 27% in June, and remained well above 20% until January 2022. Furthermore, given the economic and social implications of the pandemic, people were forced to adapt to a new normal (Brammer *et al.*, 2020) and organizations were obliged to undergo radical changes in their work practices. Organizations had to adapt to an unknown and uncertain context, which affected people physically, socially, and psychologically (Carnevale and Hatak, 2020). All these changes are likely to trigger effects at other levels, namely on how individuals think, feel, and behave towards work. The monitorization of what happened during the COVID-19 pandemic and how people perceived it can help to better understand the future, including – as in the case of this study – specifically with regards to the dimensions of employability in a post-crisis scenario, which in turn can serve as an indicator for possible changes regarding work-related ~~behavior~~behaviour.

There is a gap in the existing literature with regard to the relationship between work-related ~~behavior~~behaviour and the economic context (Berry and McDaniel, 2020). Moreover, the impact of a disruptive event can be felt differently across people (Akkermans *et al.*, 2020). Blustein *et al.* (2020) argue that it is essential for researchers to understand the experience of youth and the vulnerabilities of precarious workers in this new context, since they tend to be amongst the most impacted groups. This study seeks to address these problems by analysing both employability and financial threat perceptions during a period of social and economic instability, focusing on the experiences of young adults and people in precarious work situations. More specifically, this study aims to respond to the following research questions:

(1) *How was individuals' perceived employability affected during the COVID-19 pandemic?*

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3 (2) Was individuals' perceived employability influenced by their perceived financial
4 threat during the COVID-19 pandemic?
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7 (3) Were the employability perceptions of young adults and people in precarious work
8 situations the most affected during the COVID-19 pandemic?
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11 This research adds to the body of knowledge by describing individuals' perceived
12 employability and financial threat in a scenario of social and economic instability
13 triggered by a global health crisis. It shows how people perceived themselves in different
14 stages of the pandemic, as data were collected ~~inat~~ three different moments in time during
15 the pandemic. Such a longitudinal view contributes to deepening the understanding
16 ~~aboutof~~ how external contexts influence people's perceived employability.
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23 24 25 **Perceived Employability in the COVID-19 Pandemic Context**

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27 In times of economic prosperity, perceived employability tends to be more positive
28 (Berntson *et al.*, 2006; Berglund and Wallinder, 2015). Conversely, in periods of crisis
29 and instability, employability can become a critical factor for individuals, since it can
30 offer a sense of control over one's career (Cuyper *et al.*, 2019). Perceived employability
31 can help people deal with uncertainty, as it can influence their adaptability and proactivity
32 (Fugate and Kinicki, 2008), as well as their work engagement (Wang *et al.*, 2018), self-
33 efficacy (Signore *et al.*, 2019), and job search ~~behavior~~behaviour (Fugate and Kinick,
34 2008; Signore *et al.*, 2019). People with high perceived employability identify career
35 opportunities more easily (Fugate and Kinicki, 2008; Cesário and Feijão, 2014), and feel
36 less threatened by the risk of losing their job (Wang *et al.*, 2018), as high perceived
37 employability is moderated or negatively related to job and career insecurity (Ngo *et al.*,
38 2017; Spurk *et al.*, 2016).
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51 *Perceived Employability*

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53 Perceived employability is defined as people's perceptions about their employment
54 options, namely the possibility of finding or retaining a job (Rothwell and Arnold, 2007;
55 Gunawan *et al.*, 2019). Perceived employability is generally assumed as a dual concept,
56 integrating an internal dimension, which includes person-specific factors, such as specific
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3 skills or the potential to learn, and also an external dimension, which ~~is~~ generally refers
4 to the perception of the state of the ~~labor~~labour market (Kirschenbaum and Mano-Negrin,
5 1999; Rothwell and Arnold, 2007; Rothwell *et al.*, 2008).
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9 Therefore, some proactive characteristics seem to enable people to have an active role
10 with ~~regards~~regard to their own employability (Monteiro *et al.*, 2020), such as: career
11 exploration and relational support (Cheung *et al.*, 2018), flexibility (Gunawan *et al.*,
12 2019), career adaptability (Spurk *et al.*, 2016; Monteiro *et al.*, 2019a), leadership skills
13 (Priyadarshini *et al.*, 2019), and self-awareness (Peeters *et al.*, 2020). Educational
14 experiences (Pitan, 2016; Yaho and Tuliao, 2019), networks (Gunawan *et al.*, 2019),
15 knowledge about the ~~labor~~labour market (Gunawan *et al.*, 2019), and even personality
16 traits (Neneh, 2020) are also relevant antecedents of employability. Furthermore, factors
17 such as socioeconomic status, health, gender, and sociodemographic characteristics also
18 influence perceived employability (Bennet *et al.*, 2022; Hu *et al.*, 2020; Wang *et al.*,
19 2018), albeit they are more difficult to be managed by individuals alone.
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29 In addition to individual factors and micro contextual conditions, macro contextual
30 factors also seem to influence perceived employability, especially ~~labor~~the labour market
31 and job opportunities. This holistic perspective, which integrates individual attributes
32 with social and economic conditions, has been defended in the most recent literature
33 discussing the conceptualization of employability (Clarke, 2017; Guilbert *et al.*, 2016).
34 Some empirical studies have also supported the relevance of considering the macro
35 contextual conditions affecting individuals' lives when perceived employability is
36 studied. For example, in a longitudinal study published in 2012, Mäkikangas *et al.* found
37 that although perceived employability seems to be relatively stable over time, mean-level
38 changes can occur in a short time among individuals who are facing increased conditions
39 of uncertainty about their job, which is expected to occur in times of economic crisis or
40 recession. Conversely, individuals with perceived lower levels of job insecurity tend to
41 present higher levels of perceived employability. The relevance of considering structural
42 dimensions, in addition to individual ones, was also confirmed by Bernston *et al.* (2006)
43 in a study comparing a sample representing economic recession with a sample from a
44 period of prosperity. Specifically, higher perceptions of employability were identified in
45 times of prosperity.
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58 Since perceived employability can change over time, depending on key external events,
59 the first hypothesis states that:
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3 **H1:** Perceived employability varies according to significant external events during crises.
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8 *Perceived Financial Threat*

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11 People tend to feel and perceive financial ~~threat~~threats during crises, which translates into
12 feelings of fear, uncertainty, and concern about ~~one's~~their financial situation (Marjanovic
13 *et al.*, 2013; Marjanovic *et al.*, 2015). This perceived threat is based on the premise that
14 people's income needs to be higher than their expenses to maintain a dignified lifestyle
15 and to be able to seek growth opportunities. When this does not occur, and this balance
16 is questioned, a feeling of vulnerability arises (Marjanovic *et al.*, 2018). Perceived
17 financial threat can dictate how individuals live and feel during periods of crisis. The level
18 of this perceived threat depends on both situational factors (i.e., economic hardship,
19 income change, financial well-being, and job insecurity), as well as personality traits (i.e.,
20 worry, self-efficacy, and self-esteem) (Marjanovic *et al.*, 2013; Marjanovic *et al.*, 2015).
21 Marjanovic *et al.* (2018) state that, even during times of recession, when perceived
22 financial threat is low, people appear to feel stable and safe, reporting minimal levels of
23 anxiety, worry, or fear in the face of the economic situation.
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34 It is expected that perceived financial threat tends to increase in line with the economic
35 and social context triggered by the pandemic. This perceived threat can be reflected in
36 emotional exhaustion, anxiety, and depression (Marjanovic *et al.*, 2013; Marjanovic *et*
37 *al.*, 2015). Furthermore, crises are likely to lead to reduced levels of satisfaction, self-
38 efficacy, control, and trust, and increased stress (Alonso-Ferres *et al.*, 2020). Llinares-
39 Insa *et al.* (2018) consider that some of these ~~behaviors~~behaviours influence perceived
40 employability, i.e., efficacy, control, and confidence. It is possible to observe similarities
41 between adverse outcomes during crises, the consequents of perceived financial threat,
42 and the antecedents of perceived employability. As perceived financial threat can
43 determine how individuals live in a period of crisis, the second hypothesis states that:
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51 **H2:** Perceived employability and perceived financial threat are negatively related during
52 crises.
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The Effects of Crisis on Youth and People in Precarious Work Situations

Previous empirical research has shown how the impact of disruptive events can be felt differently across people (Akkermans *et al.*, 2020). Young adults are of particular interest, as this group has been generally perceived to be vulnerable (International Labour Organization, 2020). Liotti (2020) advances that young adults are the first to lose their job and, if they were previously unemployed, they are less likely to find a new job. They tend to feel higher levels of instability (Caroleo *et al.*, 2020), as they are those most affected by unemployment (Chiacchia *et al.*, 2018) and by the lack of opportunities and insecure job conditions (Carmo and Matias, 2019), which makes them one of the groups that isare most vulnerable to the effects of crises (Sorgente and Lanz, 2019). Such vulnerability conditions regarding youths' employment and work seem to fit the definition of precarious employment proposed by Olsthoorn (2014), which integrates two different indicators: insecurity regarding sufficient income, and insecurity regarding the job. It also includes people with fixed-term work contracts or the unemployed, who are prone to feel instability, besides being unable to make plans (Carmo and Matias, 2019).

While the effect of erisiscrises on the increase of precarious work situations seems to be relatively predictable, the magnitude of such effect seems to vary according to different laborlabour contexts. According to Gutiérrez-Barbarusa (2017), the effect of a crisis is particularly driven by poverty in the most deregulated laborlabour markets and by insecurity in southern European countries. In South Africa, Francis (2020) reported that almost half of the population did not have access to a paid job after the COVID-19 pandemic, with a notorious exacerbation of the most precarious situations, particularly among women. This trend of more severe consequences among those who were already most vulnerable was also found in Australia (Cook *et al.*, 2021). Therefore, people with precarious work conditions commonly appear to be those who suffer the most from uncertainty at various levels (psychological, physical, social, and economic; Blustein, 2019).

Being Portugal a southern European country, the situation is further aggravated by the aforesaid job insecurity (Gutiérrez-Barbarusa, 2017), political instability, and poor job prospects for younger workers. Shortly after the pandemic hit the country, the youth unemployment rate rose from 18,5 in March 2020, to almost 27% in June that year, and kept above 20% throughout 2020 and 2021 (Trading Economics). A reputable national

newspaper reported in November 2021 that 72% of ~~Portugal's~~Portugal's youth earned less than €950/month, and one-third ~~was~~were ready to leave the country (Expresso, 2021).

Thus, it is expected that:

H3a: Perceived financial threat of young adults is higher during crises than perceived financial threat of older people.

H3b: Perceived employability of young adults is more negatively affected during crises than perceived employability of older people.

H4a: Perceived financial threat of people in precarious work situations is higher during crises than perceived financial threat of people in stable work situations.

H4b: Perceived employability of people in precarious work situations is more negatively affected during crises than perceived employability of people in stable work situations.

Method

Procedure

This study was developed under ISEG – Lisbon School of Economics and Management, University of Lisbon, academic integrity guidelines and ethical review. Following a quantitative longitudinal approach, data were collected at three distinct moments, between October 2020 and May 2021. The adoption of such a longitudinal approach enabled the ability to focus on the change of a particular phenomenon (Ployhart and Vandenberg, 2010), which, in this case, is people's perceived employability during a pandemic, while examining the relationship between variables over time (Saunders *et al.*, 2015), namely between perceived employability and perceived financial threat, age, and professional situation. Data were collected within a twelve-week gap approximately, shortly after three significant external events of public interest nationwide. The objective was to collect data that reflected different phases of the pandemic and as such, the external events were chosen based on their social and economic impact, considering the ~~erisis~~crisis stage at each time.

Stage 1. Data were collected between 29th October and 3rd November 2020, shortly after Parliament's voting and approval of the Portuguese State Budget for 2021, which took

place on ~~the~~ 28th October 2020. 276 participants responded to the survey and agreed to participate in subsequent stages of the research. Lockdown measures were in place at the time of the data collection and the possibility of tightening restrictions was very much at stake in the media.

Stage 2. Data were collected between 25th and 30th January 2021, soon after the Portuguese presidential elections, which took place on 24th January 2021. ~~From~~Of the 276 participants, 175 responded to the survey. A very restrictive lockdown was in place in the country, and the first phase of the COVID-19 vaccination plan ~~had~~ started early in January. The worst phase of the pandemic occurred at about the same time, leading to a sharp increase in the number of infections, hospitalizations, and deaths.

Stage 3. Data were collected between 3rd and 8th May 2021, shortly after the start of the last phase of the national plan to relieve COVID-19 restrictions, which happened on 1st May 2021. The vaccination plan continued to be rolled out.

A closed-type question survey was shared online through social media, following a non-probabilistic convenience sample. When people responded, they first identified their willingness to participate in the subsequent phases by registering their email (with the sole objective of receiving the subsequent questionnaires) and by generating an identification code – a Subject-Generated Identification Code (SGIC, after Yurek *et al.*, 2008) – which was used to identify the participants throughout the study, while maintaining their anonymity (Lippe *et al.*, 2019).

Participants

124 participants responded to the three surveys, of which 77% were female and 23% were male, with 68% aged between 18 and 24 (young adults), and 32% aged 25 or more. The majority of the respondents are single (89%) and live in Greater Lisbon (82%). With regards to academic qualifications, 19% finished high school, 60% hold a Bachelor's degree, and 21% a Master's degree or a ~~Ph.D.~~PhD, with 58% having a degree in Social and Human Sciences, 28% in Management/Economics, 12% in Science and Technology, and 2% in other subjects. The participants' professional situation varies over time (Table I). An increase in the number of participants employed with fixed-~~term~~ contracts and

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3 self-employed was observed from Stages 1 to 3, while at the same time, ~~there~~ a decrease
4 ~~of~~ unemployed people was noted. These trends are also reflected in young adults.

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10 11 12 *Measures*

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15 *Perceived employability* was measured by using the Employability Appraisal Scale (EAS;
16 Llinares-Insa *et al.*, 2018), which defines employability as a multidimensional meta-
17 competence, measured with a multi-domain scale that can be used with any group of
18 individuals. It is composed of five subscales/factors: (1) employment protective
19 ~~behavior~~behaviour (original Cronbach $\alpha = 0.87$); (2) employment risk (Cronbach $\alpha =$
20 0.81); (3) job-seeking ~~behavior~~behaviour (Cronbach $\alpha = 0.69$); (4) self-control (Cronbach
21 $\alpha = 0.79$); and (5) self-learning (Cronbach $\alpha = 0.67$). It is a 35-item scale, which uses a 5-
22 point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). In this study, the EAS and
23 Subscales 1, 2, 3, and 4 all recorded internal consistency at all data collection times, with
24 values above 0.70 (i.e., overall EAS Cronbach $\alpha = 0.86, 0.88, \text{ and } 0.90$, respectively),
25 except for Subscale 5 of the EAS (self-learning), where the Cronbach α values were 0.31,
26 0.38 and 0.30, respectively. The concurrent validity of the EAS was examined using
27 Llinares-Insa *et al.* (2018), which proved to be moderately related to transversal job
28 demands, namely cooperation, agreeableness, and conscientiousness.
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40 *Perceived financial threat* was measured with the Financial Threat Scale (FTS;
41 Marjanovic *et al.*, 2013). The FTS is a 5-item scale designed to measure people's
42 uncertainty, risk, perceived threat, worry, and cognitive preoccupation with finances in a
43 context of crisis. The 5 items are measured ~~throughon~~ a 5-point scale (1 = *not at all*; 5 =
44 *extremely/a great deal*). In this study, the FTS revealed internal consistency in all
45 moments of data collection (Cronbach $\alpha = 0.90, 0.88, 0.91$), ~~similarly~~similar to the studies
46 of Marjanovic *et al.* (2013; Cronbach $\alpha = 0.89$ in one study, and 0.90 in another one), and
47 Marjanovic *et al.* (2015; mean Cronbach $\alpha = 0.90$). The FTS is unidimensional and relates
48 to the following variables: situational (economic hardship, income change, financial well-
49 being, and job insecurity), personality (worry, self-efficacy, and self-esteem), and
50 psychological health (psychological well-being, depression, anxiety, mood disturbance,
51 and emotional exhaustion).
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Both these scales were originally in English and Spanish, and therefore they were translated to Portuguese according to Beaton *et al.*'s (2000) best practices, following five steps: (1) translation; (2) synthesis; (3) back translation; (4) committee review; (5) pretesting.

Data Analysis

Data were analysed with IBM SPSS Statistics 26.0, given its complex statistics analysis models-options. H1 was tested by One-Way Repeated Measures ANOVA (hereinafter Anova) on the EAS and its subscales individually. The goal was to assess whether variations in people's perceived employability were statistically significant over time.

H2 was also tested by Anova on the FTS. After assessing whether perceived financial threat changed over time, Pearson correlation coefficients were calculated between the FTS and the EAS.

H3a and H3b were tested by Anova on the FTS and EAS and its subscales, with age as the between-subject factor. In addition, Anova was used to check participants aged 18 to 24 ($n = 84$), and then separately for those participants who were aged 25 or older ($n = 40$). The objective was to analyse whether the results showed any discrepancy when separating participants by age.

H4a and H4b were tested by One-Way ANOVA on the FTS and EAS and its subscales, with the professional situation as the between-subject factor for all ~~the~~ three data collection moments, as people's professional ~~situations~~situations altered over time. This procedure was important to help understand whether significant differences existed for people according to their professional situation at each moment. To increase understanding of whether possible variations exist regarding perceived financial threat and employability over time among people in diverse professional situations, Anova was computed, with the professional situation being the between-subject factor, separating those participants that had reported changing their professional situation during the period of analysis (i.e., the professional situation labels of: student [$n = 38$], employed with fixed-term contract [$n = 22$], employed with permanent contract [$n = 36$], self-employed [$n = 4$], unemployed [$n = 4$], and professional situation changed over time [$n = 20$]).

Results

Preliminary Analyses

Table II presents the descriptive statistics of perceived employability and perceived financial threat. ~~Participants~~²~~Participants~~ perceived employability (n = 124) was positive for the mid-point of the Likert scale during all moments of the data collection, and all subscales recorded positive results as well. Perceived financial threat was positive during the first two moments of data collection, but not during the third one, where it registered a mean below the mid-point of the Likert scale. That is to say, people reported feeling less financially threatened during the last moment of data collection.

[please insert Table II approximately here]

Hypotheses Analyses

H1: Perceived employability varies according to significant external events during crises

The Anova test showed that, regarding perceived employability, statistically significant time effects were only recorded in Factor 1 of EAS – employment protective ~~behavior~~^{behavior}. Sphericity was rejected ($p = 0.021$) and the Huynh-Feldt correction (0.96) was used as the Greenhouse-Geisser epsilon value (0.94) is > 0.75 . The Anova using the Huynh-Feldt correction indicates statistically significant variations of employment protective ~~behavior~~^{behavior} over time ($F(1.9, 235.3) = 5.90; p = 0.004$). There was an effect of time for perceived employment protective ~~behavior~~^{behavior}, considering that the partial eta-squared indicates a small effect size ($\eta_p^2 = 0.046$) which reflects in a linear decreasing trend ($F(1, 123) = 7.89; p = 0.006$), i.e., these perceptions tend to weaken over time. The ~~posthoc~~^{post hoc} test of Pairwise Comparison showed two statistically-significant differences between moments, namely between Moments 1 and 3 ($p = 0.017$) and 2 and 3 ($p = 0.008$). The most considerable variation in Factor 1 was recorded during the third moment of data collection (-0.09 mean points compared to the first and -0.08 compared to the second).

H1 is partially confirmed, i.e., the existence of variations only regarding perceived employment protective ~~behavior~~^{behavior} (Factor 1 of the EAS).

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3 *H2: Perceived employability and perceived financial threat are negatively related during*
4 *crises.*

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7 The Anova procedure was repeated for perceived financial threat (measured through
8 FTS). Sphericity was confirmed by Mauchly's test ($p = 0.567$). With sphericity assumed,
9 it was shown that there was an effect of time for perceived financial threat, as its variations
10 are statistically significant ($F(2, 246) = 15.99; p = 0.000$) and the effect size is large (η_p^2
11 $= 0.115$). There is a quadratic tendency ($F(1, 123) = 6.62; p = 0.011$) as there was a slight
12 decrease in the third moment of data collection. The posthoc test of Pairwise
13 Comparison shows two statistically-significant differences between Moments 1 and 3 (p
14 $= 0.000$) and 2 and 3 ($p = 0.000$). As before, the most significant variations were recorded
15 at the third moment of data collection (-0.38 mean points compared to the first, and -0.37
16 compared to the second).

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19 Pearson correlation coefficient was computed between perceived employability, its
20 subscales, and also perceived financial threat in each moment of data collection. Table III
21 presents all the correlation values. A weak negative relationship between perceived
22 financial threat and job-seeking behavior was recorded (Factor 3 of the EAS)
23 at the first moment of data collection. No correlations were registered at the second
24 moment of data collection. However, the third moment of data collection showed a weak
25 negative relationship between perceived financial threat and perceived employability,
26 employment protective behaviors (Factor 1 of the EAS), employment risk
27 (Factor 2 of the EAS), job-seeking behavior (Factor 3 of the EAS), and self-
28 learning (Factor 5 of the EAS). In sum, at the last moment of data collection, only self-
29 control (Factor 4 of the EAS) is not related with perceived financial threat.

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45 H2 is partially confirmed, as perceived financial threat and perceived employability are
46 only negatively related in the third moment of data collection.

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3 *H3a: Perceived financial threat of young adults is higher during crises than perceived*
4 *financial threat of older people.*

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7 Regarding perceived financial threat (FTS), the Anova with age as a between-subjects
8 factor did not show statistically-significant results. The same test was then conducted in
9 each group separately.

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13 Variations in perceived financial threat remained significant for the youth sample (18 to
14 24; $n = 84$). Sphericity was checked by the Mauchly test ($p = 0.250$) and it was shown
15 that there was an effect of time for perceived financial threat ($F(2, 166) = 6.99$; $p =$
16 0.001), and that the effect size is medium ($\eta_p^2 = 0.078$). A linear decrease was detected
17 ($F(1, 83) = 14.67$; $p < 0.001$), and the posthoc test of Pairwise Comparison showed that
18 there is only one statistically significant difference between Moments 1 and 3 ($p < 0.001$),
19 with -0.33 mean points of difference between the first and last moment of data collection.

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23 Equally, variations remained significant in the older sample (aged 25 and older; $n = 40$).
24 Sphericity was verified by the Mauchly test ($p = 0.597$), and an effect of time for
25 perceived financial threat was confirmed ($F(2, 78) = 11.99$; $p < 0.001$). In this case, the
26 effect size is large ($\eta_p^2 = 0.235$) and there is a quadratic trend ($F(1, 39) = 12.16$; $p =$
27 0.001). The posthoc Pairwise Comparison test showed that there are two statistically-
28 significant differences between Moments 1 and 3 ($p = 0.004$), and 2 and 3 ($p < 0.001$).
29 The largest variation in FTS occurred at the third moment of data collection (-0.49 mean
30 points compared to the first and -0.63 mean points compared to the second).

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33 Although both groups registered significant changes in perceived financial threat over
34 time, the variations of the older sample **havinghad** a larger size effect, with perceptions
35 increasing from the first to the second moment of data collection and then decreasing
36 again during the third moment, as visually represented in Figure 1.

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48 On the one hand, perceived financial threat of older people showed variations more in
49 line with the external context. **However, on** the other hand, in the case of young adults,
50 these reported feeling overall more financially threatened, as their perceived financial
51 threat was higher than older people's and remained above the mid-point of the Likert
52 scale. As such, H3a is confirmed.

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3 *H3b: Perceived employability of young adults is more negatively affected during crises*
4 *than perceived employability of older people.*

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7 The Anova test with age added as a between-subject factor failed to show statistically-
8 significant results regarding both perceived employability (EAS) or its subscales, despite
9 young adults reporting an overall lower level of perceived employability when compared
10 with those aged 25 or older.
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15 When analysing the youth sample (18 to 24) exclusively, only perceived employment
16 protective ~~behavior~~behaviour (Factor 1 of the EAS) changed statistically over time,
17 similar to that previously observed. When analysed by the Mauchly test, Sphericity was
18 rejected ($p = 0.032$) and the Huynh-Feldt correction factor (0.96) was used, as the
19 Greenhouse-Geisser epsilon value (0.93) is > 0.75 . The test using the Huynh-Feldt
20 correction indicates that there was an effect of time in perceived employment protective
21 ~~behavior~~behaviour ($F(1.89, 156.98) = 6.31; p = 0.003$), and that the effect size is medium
22 ($\eta_p^2 = 0.071$). In addition, there is a linear decreasing trend ($F(1, 83) = 9.396; p = 0.003$).
23 The ~~posthoc~~post hoc test of Pairwise Comparison showed two statistically-significant
24 differences between Moments 1 and 3 ($p = 0.009$), and 2 and 3 ($p = 0.024$). The largest
25 variation in Factor 1 of the EAS between young individuals was registered at the third
26 moment of data collection (-0.12 mean points, compared to the first and -0.08 compared
27 to the second).
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32 No statistically significant effects were reported over time in the sample of individuals
33 aged 25 or older, neither for perceived employability, nor in its subscales. This indicates
34 that the significant variations in perceived employment protective ~~behavior~~behaviour
35 (Factor 1 of the EAS) that were recorded initially were mainly influenced by young
36 adults' perceptions. In fact, Figure 2 shows that the variations between groups recorded
37 different patterns, with the perceived employment protective ~~behavior~~behaviour of the
38 older sampler even slightly improving during the second moment of data collection.
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43 H3b is partially confirmed, i.e., only with ~~regards~~regard to perceived employment
44 protective ~~behavior~~behaviour (Factor 1 of the EAS).
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3 *H4a: Perceived financial threat of people in precarious work situations is higher during*
4 *crises than perceived financial threat of people in stable work situations.*
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7 The One-Way ANOVA test reported statistically significant discrepancies between
8 groups in each moment of data collection for perceived financial threat and participants'
9 professional situation. The homogeneity of variances condition was confirmed in all
10 moments (with all p values being > 0.05). Regarding the first moment, statistically-
11 significant differences in perceived financial threat were observed ($p = 0.010$; $F(4, 123)$
12 $= 3.51$) between employees with fixed-term employment contracts and those with
13 permanent employment contracts, as the former reported higher levels of financial threat
14 (0.70 mean points compared with the latter; $p = 0.011$). During the second moment, there
15 were no significant differences between groups. However, most differences were noticed
16 during the third moment of data collection ($p < 0.001$; $F(4, 123) = 5.07$), namely: between
17 students and employees with permanent employment contracts, as the former reported
18 higher levels of financial threat (0.75 mean points compared with the latter; $p = 0.001$);
19 between employees with fixed-term employment contracts and those with permanent
20 contracts, as the former reported higher levels of financial threat (0.68 mean points when
21 compared with the latter; $p = 0.010$); and between self-employed employees and those
22 with permanent work contracts, as the former reported higher levels of financial threat
23 (0.97 mean points when compared with the latter; $p = 0.033$). Additionally, Figure 3
24 shows that ~~students~~students' perceived financial threat was the ~~only threat~~one that
25 increased in the third moment of data collection, when compared with other participants
26 who felt less financially threatened. Nonetheless, the perceived financial threat of
27 employees with permanent employment contracts was the only threat that remained
28 slightly below the mid-point of the Likert-scale ~~in~~at every moment of data collection.
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46 *[please insert Figure 3 approximately here]*
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48 Apart from these differences, the Anova test with professional situation added as a
49 between-subject factor showed statistically-significant results regarding perceived
50 financial threat. Sphericity, as checked by the Mauchly test ($p = 0.753$), confirmed that
51 time was a significant effect ~~for~~on perceived financial threat ~~that, which~~ changed
52 according to ~~individuals'~~individuals' professional situation ($F(10) = 1.89$; $p = 0.047$).
53 The effect size is medium ($\eta_p^2 = 0.074$), with a linear decreasing trend ($F(5) = 2.345$; p
54 $= 0.045$). Tukey posthoc test showed three statistically-significant differences between
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groups, i.e.: between employees with permanent employment contracts and students (-0.47 mean points of overall difference respectively; $p = 0.045$); between employees with permanent employment contracts and those with fixed-term contracts (-0.63 mean points of overall difference respectively; $p = 0.011$); and between employees with permanent employment contracts and those whose professional situation changed throughout the period of analysis (-0.69 mean points of overall difference respectively; $p = 0.008$). In conclusion, the largest differences appear to be related ~~with~~to those employees with permanent employment contracts feeling less financially threatened overall. H4a is thus confirmed.

H4b: Perceived employability of people in precarious work situations is more negatively affected during crises than perceived employability of people in stable work situations.

The One-Way ANOVA test reported statistically-significant discrepancies between groups regarding perceived employability during the first moment of data collection. The homogeneity of variances was verified in the EAS and ~~in~~ its subscales (with all p values > 0.05). Statistically-significant differences exist concerning perceived employability (EAS; ~~$p = 0.035$~~ ; $F(4, 123) = 2.68$; $p = 0.035$), job-seeking ~~behavior~~behaviour (Factor 3 of EAS; ~~$p = 0.036$~~ ; $F(4, 123) = 2.66$; $p = 0.036$), and self-learning (Factor 5 of the EAS, internal consistency not verified; ~~$p = 0.009$~~ ; $F(4, 123) = 3.56$; $p = 0.009$). Regarding perceived employability, there was a difference between students and employees with permanent employment contracts, as the former perceived themselves to be less employable (-0.27 mean points compared with the latter; $p = 0.013$). Regarding job-seeking ~~behaviors~~behaviours (Factor 3 of the EAS), a difference exists between students and employees with permanent employment contracts, as the former reported lower perceptions (-0.45 mean points compared with the latter; $p = 0.029$). When considering self-learning (Factor 5 of the EAS), there are two differences, namely: between students and employees with fixed-term employment contracts, as the former reported lower perceptions (-0.36 mean points compared with the latter; $p = 0.012$); and between students and employees with permanent employment contracts, as the former reported lower levels of ~~perception~~perceptions (-0.30 mean points when compared with the latter, $p = 0.030$).

The same test regarding perceived employability during the second moment of data collection showed statistically-significant discrepancies between groups. The

homogeneity of variances condition was once again confirmed in the EAS and its subscales (with all p values > 0.05). There were statistically-significant differences regarding perceived employability ($p=0.031$; $F(4, 123) = 2.75$; $p = 0.031$), employment risk (Factor 2 of the EAS; $p=0.028$; $F(4, 123) = 2.83$; $p = 0.028$), and job-seeking ~~behavior~~behaviour (Factor 3 of the EAS; $p=0.041$; $F(4, 123) = 2.58$; $p = 0.041$). Regarding perceived employability, there remained a difference between students and employees with permanent employment contracts, as the former perceived themselves to be less employable (-0.25 mean points compared with the latter; $p = 0.034$). Regarding employment risk (Factor 2 of the EAS), there is now a difference between students and employees with permanent employment contracts, as the former reported lower levels of perception (-0.40 mean points compared with the latter; $p = 0.029$). When considering job-seeking ~~behavior~~behaviour (Factor 3 of the EAS), a difference also remains between students and employees with permanent employment contracts, as the former reported lower levels of perception (-0.49 mean points when compared with the latter; $p = 0.024$).

Finally, the One-Way ANOVA was then repeated during the third moment of data collection, but no statistical differences were reported between groups regarding perceived employability.

The Anova test with the addition of professional situation as a between-subject factor did not show statistically-significant results regarding perceived employability (EAS) and its subscales, despite the isolated differences described above. H4b is thus not confirmed.

Discussion

(1) How was individuals' perceived employability affected during the COVID-19 pandemic?

Individuals' perceived employability overall did not report significant changes over the COVID-19 pandemic, seeming to be relatively stable over time, similar to Mäkikangas' (2012) findings to this end. However, the results show variations in one of the perceived employability subscales – perceived employment protective ~~behavior~~behaviour. This Factor 1 of EAS covers people's perceptions regarding their persistence, responsibility, planning, organization, maintenance, progress, self-efficacy, and confidence (Llinares-Insa *et al.*, 2020). The variations were mainly recorded at the third moment of data

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3 collection, where perceived employability slightly decreased when compared with the
4 average of the first two moments. However, this last period was characterized by the
5 progressive lifting of economic and social restrictions and the implementation of the
6 COVID-19 vaccination plan. Indeed, the third moment of data collection did not prove to
7 be the one where the greatest economic and social restrictions were recorded. As such,
8 new questions arise regarding how the external context influences this factor of perceived
9 employability, as the result ~~indicate~~indicates that it might not be a direct and short-term
10 influence, but rather an accumulation of the medium-term economic and social
11 consequences of the pandemic.
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24 *(2) Was individuals' perceived employability influenced by their perceived financial*
25 *threat during the COVID-19 pandemic?*
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28 With regards to perceived financial threat, an effect of time was observed: during the third
29 data collection moment, people reported feeling a lower level of financial threat, which
30 corresponds to the period characterized by the suspension of lockdown restrictions and
31 the vaccination plan. However, it ~~is~~was also during the third moment of data collection
32 that a negative but weak relationship was recorded between perceived financial threat and
33 perceived employability and its subscales in the third moment of data collection, with
34 only the EAS subscale of self-control being excluded, which refers to the perceived ability
35 to control emotions such as anger and frustration (Llinares-Insa *et al.*, 2020). In essence,
36 although perceived financial threat impacts individuals' anxiety and depression
37 (Marjanovic *et al.*, 2013; Marjanovic *et al.*, 2015) and given that periods of crisis are
38 prone to lead to reduced satisfaction, self-efficacy, control, and trust, and increased stress
39 (Alonso-Ferres *et al.*, 2020), the moment where a relationship was established between
40 the two variables was the one characterized by improved social and economic conditions
41 and by an overall lower level of financial threat. Similar to what was previously discussed,
42 this result can also indicate that the relationship between perceived employability and
43 financial threat is an outcome of the accumulation of the medium-term economic and
44 social consequences of the pandemic.
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8 (3) *Were the employability perceptions of young adults and people in precarious work*
9 *situations the most affected during the COVID-19 pandemic?*

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12 Regarding participants' age, the variations registered in perceived employment protective
13 ~~behavior~~behaviour were mainly influenced by young adults' perceptions. Young adults
14 are one of the groups most vulnerable to the effects of crises (Sorgente and Lanz, 2019),
15 which seems consistent with the variations of perceived employment protective
16 ~~behaviors~~behaviours. Such perceptions are related to maintenance, self-efficacy, and
17 confidence (Llinares-Insa *et al.*, 2020). Additionally, young adults' perceived financial
18 threat was slightly higher during all the periods of data collection, which is again
19 consistent with the fact that they are more prone to feeling higher levels of instability
20 (Caroleo *et al.*, 2020).
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28 Concerning individuals' professional situation, although employees with permanent
29 employment contracts (i.e., those with the most stable work condition) reported feeling
30 less financially threatened overall, there is no evidence that the perceived employability
31 of people in more precarious work situations was the most affected when compared with
32 other groups, as previously hypothesized. Despite the absence of statistical differences
33 over time regarding perceived employability of individuals with various professional
34 situations, it is worth noting the differences registered between groups in Moments 1 and
35 2, where there is a persistent difference between students and employees with permanent
36 employment contracts, for students perceived themselves to be less employable overall
37 when compared with employees with employment contracts. Both Moments 1 and 2 were
38 characterized by restrictive lockdown measures, both recording factors in which students
39 and employees with permanent employment contracts reported significant differences,
40 namely: job-seeking ~~behaviors~~behaviours and employment risk, both of which are
41 somewhat related to possessing sufficient skills to find or retain a job. In fact, students
42 are the group with less work experience, which in turn can affect their perceived
43 employability (Gunawan *et al.*, 2019). Nevertheless, one should not disassociate the
44 professional situation of these individuals from their age, since the lower perceived
45 employability can be explained by students' age, and not necessarily or exclusively by
46 their professional situation.
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The perceptions and ~~behaviors~~behaviours reported in this study, which was developed in a very particular period of a global crisis, corroborate a trend that was previously found in other studies conducted during crises and unstable periods (Bernston *et al.*, 2006; Mäkikangas *et al.*, 2012), namely that there is evidence of the ~~relation~~relationship between external socioeconomic events and individuals work-related ~~behavior~~behaviour. In addition, this research also supports that vulnerable people are the most affected by a context of ~~labor~~labour and economic disruption, as has been previously suggested in the literature (Bernston *et al.*, 2006; Caroleo *et al.*, 2020; Chiacchia *et al.*, 2018; Mäkikangas, 2012).

Limitations and Future Research

This research has three important limitations. The first is concerned with results generalization. ~~For a~~A non-probabilistic sample was used, and therefore the sample is hardly representative of the study population. In fact, a methodologic limitation warrants note, which is specifically related to the professional situation groups. There are groups – namely the self-employed and unemployed – which were constituted by a small number of participants, which should be taken into account. Additionally, this is a single-~~country~~ study, and thus the results should be framed in this particular reality, which, in addition to the non-probabilistic sample, limits the extrapolation to other realities. Second, self-learning (Factor 5 of the EAS) did not attain the internal consistency values that are recommended in the literature and consequently the results obtained regarding this factor could be biased, due to the low level of reliability. Lastly, the impossibility to collect data for the total period of the pandemic limits the ability to obtain a full picture of the variations of perceived employability and financial threat over the entire crisis period.

This study can serve as a starting point for future research. There is an essential need to strengthen the level of knowledge regarding the relationship between perceived employability and the perceptions of the economic context, bearing in mind the consequences of a crisis. The negative relationship observed between perceived employability and perceived financial threat that was identified during the third moment of data collection raises new questions. It would be of interest in the future to carry out research to confirm this relationship, as well as to analyse perceived employability during ~~other moments of the pandemic, or during~~ the post-pandemic period. This would thus

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3 enable the possibility to obtain a more complete picture of people's perceptions when
4 triggered by a highly volatile context.
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10 11 12 13 14 *Conclusion*

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17 This longitudinal study analysed the perceived employability and financial threat of a
18 group of individuals during a period of the COVID-19 pandemic. Overall, perceived
19 employability did not show significant variations over time, with the exception of one
20 factor – employment protective ~~behavior~~behaviour – which was mainly noted among
21 younger respondents. ~~Participants~~²Participants perceived financial threat also reported
22 significant variation in accordance with the social and economic restrictions in place at
23 the time. Employees with permanent employment contracts felt less financially
24 threatened overall. A negative relationship was identified between perceived
25 employability and perceived financial threat during the last phase of the research.
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33 Because longitudinal studies are scarce, the results of this study stimulate the
34 understanding of perceived employability and its evolution over time and across different
35 groups of individuals during a period of global socioeconomic crisis. Such knowledge is
36 relevant for policy-makers and practitioners who have an interest in defining and
37 implementing reactive and proactive measures that have the potential to contribute to the
38 mitigation of social inequalities related to periods of socioeconomic instability and
39 insecurity. As other impactful global events take place, it is expected that people's
40 perceptions will continue to be influenced by what seems to be a continuously unstable
41 context.
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51 52 **References**

53
54 Akkermans, J., Richardson, J. and Kraimer, M.L. (2020), "The Covid-19 crisis as a career
55 shock: Implications for careers and vocational behavior", *Journal of Vocational*
56 *Behavior*, Vol. 119, Article 103434.
57
58
59
60

- 1
2
3 Aktar, Most. A., Alam, Md. M. and Al-Amin, A. Q. (2021), “Global economic crisis,
4 energy use, CO2 emissions, and policy roadmap amid COVID-19”, *Sustainable*
5 *Production and Consumption*, Vol. 26, pp. 770–781.
6
7
8
9 Alonso-Ferres, M., Navarro-Carrillo, G., Garrido-Macías, M., Moreno-Bella, E. and
10 Valor-Segura, I. (2020), “Connecting perceived economic threat and prosocial
11 tendencies: The explanatory role of empathic concern”, edited by Capraro, V. *PLOS*
12 *ONE*, Vol. 15 No. 5, Article e0232608.
13
14
15
16 Beaton, D.E., Bombardier, C., Guillemin, F. and Ferraz, M.B. (2000), “Guidelines for the
17 Process of Cross-Cultural Adaptation of Self-Report Measures”, *Spine*, Vol. 25 No.
18 24, pp. 3186–3191.
19
20
21
22 Berglund, T. and Wallinder, Y. (2015), “Perceived Employability in Difficult Economic
23 Times: The significance of education systems and labour market policies”, *European*
24 *Societies*, Vol. 17 No. 5, pp. 674–699.
25
26
27
28 Bennett, D., Bawa, S., Ananthram, S. and Pitman, T. (2022), “Is there a gender difference
29 in STEM students’ perceived employability?”, *Education + Training*, Vol. ahead-of-
30 print.
31
32
33
34 Berntson, E., Sverke, M. and Marklund, S. (2006), “Predicting Perceived Employability:
35 Human Capital or Labour Market Opportunities?”, *Economic and Industrial*
36 *Democracy*, Vol. 27 No. 2, pp. 223-244.
37
38
39
40 Berry, C. and McDaniel, S. (2022), “Post-crisis precarity: Understanding attitudes to
41 work and industrial relations among young people in the UK”, *Economic and*
42 *Industrial Democracy*, Vol. 43 No. 1, pp. 322–343.
43
44
45
46 Blustein, D.L. (2019), *The Importance of Work in an Age of Uncertainty: The Eroding*
47 *Work Experience in America*, Oxford University Press, New York.
48
49
50 Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G. and Allan, B.
51 A. (2020), “Unemployment in the time of COVID-19: A research agenda”, *Journal*
52 *of Vocational Behavior*, Vol. 119, Article 103436.
53
54
55
56 Brammer, S., Branicki, L. and Linnenluecke, M. K. (2020), “Covid-19, societalization,
57 and the future of business in society”, *Academy of Management Perspectives*, Vol.
58 34 No. 4, pp. 493–507.
59
60

- 1
2
3 Broeck, A., De Cuyper, N., Baillien, E., Vanbelle, E., Vanhercke, D. and De Witte, H.
4
5 (2014), “Perception of organization’s value support and perceived employability:
6
7 insights from self-determination theory”, *The International Journal of Human*
8
9 *Resource Management*, Vol. 25 No. 13, pp. 1904–1918.
- 10
11 Carmo, R.M. do and Matias, A.R. (2019), “As dimensões existenciais da precariedade:
12
13 jovens trabalhadores e os seus modos de vida*”, *Revista Crítica de Ciências Sociais*,
14
15 No. 118, pp. 53–78.
- 16
17 Carnevale, J.B. and Hatak, I. (2020), “Employee adjustment and well-being in the era of
18
19 COVID-19: Implications for human resource management”, *Journal of Business*
20
21 *Research*, Vol. 116, pp. 183–187.
- 22
23 Caroleo, F.E., Rocca, A., Mazzocchi, P. and Quintano, C. (2020), “Being NEET in
24
25 Europe Before and After the Economic Crisis: An Analysis of the Micro and Macro
26
27 Determinants”, *Social Indicators Research*, Vol. 149 No. 3, pp. 991–1024.
- 28
29 Cesário, F.S. and Feijão, A.M.P. (2014), “Impacto das perceções de empregabilidade num
30
31 contexto de insegurança laboral”, *Conferência - Investigação e Intervenção em*
32
33 *Recursos Humanos*, No. 4 (2013): IV Conferência em Investigação e Intervenção em
34
35 RH.
- 36
37 Cheung, R., Jin, Q. and Cheung, C. (2018), “Perceived Employability of Nonlocal
38
39 Chinese University Students in Hong Kong: The Impact of Acculturative and
40
41 Vocational Variables”, *Journal of Career Assessment*, Vol. 26 No. 1, pp. 137–153.
- 42
43 Chiacchia, D.J., Greenglass, E.R., Katter, J.K.Q. and Fiksenbaum, L. (2018), “The role
44
45 of self-compassion during difficult economic times”, *Anxiety, Stress, & Coping*, Vol.
46
47 31 No. 6, pp. 611–625.
- 48
49 Clarke, M. (2017), “Rethinking Graduate Employability: The Role of Capital, Individual
50
51 Attributes and Context”, *Studies in Higher Education*, Vol. 43 No. 11, pp. 1923-
52
53 1937.
- 54
55 Cook, J., Threadgold, S., Farrugia, D. and Coffey, J. (2021), “Youth, Precarious Work
56
57 and the Pandemic”, *YOUNG*, Vol. 29 No. 4, pp. 331–348.
58
59
60

- 1
2
3 Cuyper, N.D., Piccoli, B., Fontinha, R. and De Witte, H. (2019), “Job insecurity,
4 employability and satisfaction among temporary and permanent employees in post-
5 crisis Europe”, *Economic and Industrial Democracy*, Vol. 40 No. 2, pp. 173–192.
6
7
8
9 Czezeli, V., Kolozsi, P. P., Kutasi, G. and Marton, Á. (2020), “Economic exposure and
10 crisis resilience in exogenous shock: The short-term economic impact of the covid-
11 19 pandemic in the EU”, *Public Finance Quarterly*, Vol. 65 No. 3, pp. 321–347.
12
13
14
15 Expresso, Jornal (12 November 2021). O retrato cru de uma geração desiludida: Três em
16 cada quatro jovens ganham menos de €950 e um terço quer sair de Portugal. Assessed
17 in February 2023, from [https://expresso.pt/sociedade/2021-11-26-O-retrato-cru-de-](https://expresso.pt/sociedade/2021-11-26-O-retrato-cru-de-uma-geracao-desiludida-tres-em-cada-quatro-jovens-ganham-menos-de-950-e-um-terco-quer-sair-de-Portugal-c38d354a)
18 [uma-geracao-desiludida-tres-em-cada-quatro-jovens-ganham-menos-de-950-e-um-](https://expresso.pt/sociedade/2021-11-26-O-retrato-cru-de-uma-geracao-desiludida-tres-em-cada-quatro-jovens-ganham-menos-de-950-e-um-terco-quer-sair-de-Portugal-c38d354a)
19 [terco-quer-sair-de-Portugal-c38d354a](https://expresso.pt/sociedade/2021-11-26-O-retrato-cru-de-uma-geracao-desiludida-tres-em-cada-quatro-jovens-ganham-menos-de-950-e-um-terco-quer-sair-de-Portugal-c38d354a)
20
21
22
23
24
25 Forstenlechner, I., Selim, H., Baruch, Y. and Madi, M. (2014), “Career Exploration and
26 Perceived Employability within an Emerging Economy Context”, *Human*
27 *Resource Management*, Vol. 53 No. 1, pp. 45–66.
28
29
30
31 Francis, D. (2020), “Unemployment and the gendered economy in South Africa after
32 Covid-19”, *Transformation: Critical Perspectives on Southern Africa*, Vol. 104
33 No. 1, pp. 103–112.
34
35
36
37 Fugate, M. and Kinicki, A.J. (2008), “A dispositional approach to employability:
38 Development of a measure and test of implications for employee reactions to
39 organizational change”, *Journal of Occupational and Organizational Psychology*,
40 Vol. 81 No. 3, pp. 503–527.
41
42
43
44
45 Gunawan, W., Creed, P.A. and Glendon, A.I. (2019), “Development and Initial
46 Validation of a Perceived Future Employability Scale for Young Adults”, *Journal of*
47 *Career Assessment*, Vol. 27 No. 4, pp. 610–627.
48
49
50
51 Gutiérrez-Barbarrusa, T. (2016), “The growth of precarious employment in Europe:
52 Concepts, indicators and the effects of the global economic crisis”, *International*
53 *Labour Review*, Vol. 155 No. 4, pp. 477–508.
54
55
56
57
58
59
60

- 1
2
3 Hu, S., Hood, M., Creed, P. A. and Shen, X. (2022), “The Relationship Between Family
4 Socioeconomic Status and Career Outcomes: A Life History Perspective”, *Journal*
5 *of Career Development*, Vol. 49 No. 3, pp. 600–615.
6
7
8
9 ILO. (2020). *Global employment trends for youth 2020: Technology and the future of*
10 *jobs*. International Labour Organization, Geneva.
11
12
13 Kirschenbaum, A., and R. Mano-Negrin. (1999), “Underlying Labour Market
14 Dimensions of “Opportunities”: The Case of Employee Turnover”, *Human*
15 *Relations*, Vol. 52 No. 10, pp. 1233–1255.
16
17
18
19 Liotti, G. (2020), “Labour market flexibility, economic crisis and youth unemployment
20 in Italy”, *Structural Change and Economic Dynamics*, Vol. 54, pp. 150–162.
21
22
23 Lippe, M., Johnson, B. and Carter, P. (2019), “Protecting Student Anonymity in Research
24 Using a Subject-Generated Identification Code”, *Journal of Professional Nursing*,
25 Vol. 35 No. 2, pp. 120–123.
26
27
28
29 Llinares-Insa, L.I., González-Navarro, P., Zacarés-González, J.J. and Córdoba-Iñesta,
30 A.I. (2018), “Employability Appraisal Scale (EAS): Development and Validation in
31 a Spanish Sample”, *Frontiers in Psychology*, Vol. 9, Article 1437.
32
33
34
35 Llinares-Insa, L.I., Roldán-Pardo, M., González-Navarro, P. and Benedito-Monleón,
36 M.D. (2020), “Well-Being without Employment? Promoting the Employability of
37 Refugees”, *International Journal of Environmental Research and Public Health*,
38 Vol. 17 No. 21, Article 7775.
39
40
41
42
43 Mäkikangas, Cuyper, N., Mauno, S. and Kinnunen, U. (2013), “A Longitudinal Person-
44 Centred View on Perceived Employability: The Role of Job Insecurity”, *European*
45 *Journal of Work and Organizational Psychology*, Vol. 22 No. 4, pp. 490-503.
46
47
48
49 Marjanovic, Z., Fiksenbaum, L. and Greenglass, E. (2018), “Financial threat correlates
50 with acute economic hardship and behavioral intentions that can improve one’s
51 personal finances and health”, *Journal of Behavioral and Experimental Economics*,
52 Vol. 77, pp. 151–157.
53
54
55
56 Marjanovic, Z., Greenglass, E.R., Fiksenbaum, L. and Bell, C.M. (2013), “Psychometric
57 evaluation of the Financial Threat Scale (FTS) in the context of the great
58 recession”, *Journal of Economic Psychology*, Vol. 36, pp. 1–10.
59
60

- 1
2
3 Marjanovic, Z., Greenglass, E.R., Fiksenbaum, L., De Witte, H., Garcia-Santos, F.,
4 Buchwald, P., Peiró, J.M., *et al.* (2015), “Evaluation of the Financial Threat Scale
5 (FTS) in four European, non-student samples”, *Journal of Behavioral and*
6 *Experimental Economics*, Vol. 55, pp. 72–80.
7
8
9
10
11 Monteiro, S., García-Aracil, A. and Almeida, L.S. (2019b), “Adaptation and Initial
12 Validation of the Perceived Employability Scale”, *Paidéia (Ribeirão Preto)*, Vol. 29,
13 Article e2935.
14
15
16 Monteiro, S., Taveira, M. do C. and Almeida, L. (2019a), “Career adaptability and
17 university-to-work transition: Effects on graduates’ employment status”, *Education*
18 *+ Training*, Vol. 61 No. 9, pp. 1187–1199.
19
20
21
22 Monteiro, S., Almeida, L. and García-Aracil, A. (2020), “‘It’s a very different world’:
23 work transition and employability of higher education graduates”, *Higher Education,*
24 *Skills and Work-Based Learning*, Vol. 11 No. 1, pp. 164–181.
25
26
27
28
29 Neneh, B. N. (2020), “An empirical study of personality traits, job market appraisal and
30 self-perceived employability in an uncertain environment”, *Higher Education, Skills*
31 *and Work-Based Learning*, Vol. 10 No. 1, pp. 255–274.
32
33
34
35 Ngo, H., Liu, H. and Cheung, F. (2017), “Perceived employability of Hong Kong
36 employees: its antecedents, moderator and outcomes”, *Personnel Review*, Vol. 46
37 No. 1, pp. 17–35.
38
39
40
41
42 Olsthoorn, M. (2014), “Measuring Precarious Employment: A Proposal for Two
43 Indicators of Precarious Employment Based on Set-Theory and Tested with Dutch
44 Labor Market-Data”, *Social Indicators Research*, Vol. 119 No. 1, pp. 421–441.
45
46
47
48 Peeters, E.R., Akkermans, J. and Cuyper, N.D. (2020), “The Only Constant Is Change?
49 Movement Capital and Perceived Employability”, *Journal of Career Assessment*,
50 Vol. 28 No. 4, pp. 674–692.
51
52
53
54 Pitan, O. S. (2016), “Employability development opportunities (EDOs) as measures of
55 students’ enhanced employability”, *Higher Education, Skills and Work-Based*
56 *Learning*, Vol. 6 No. 3, pp. 288–304.
57
58
59
60

- 1
2
3 Ployhart, R. E. and Vandenberg, R. J. (2010), “Longitudinal research: The theory, design,
4 and analysis of change”, *Journal of Management*, Vol. 36 No. 1, pp. 94–120.
5
6
7
8 Priyadarshini, C., Singh, S., David, R., and Sayeed, O. B. (2019), “Effect of student
9 leadership on academic performance and perceived employability: a longitudinal
10 study on scale development and validation in the Indian context”, *South Asian
11 Journal of Management*, Vol. 26 No. 2, pp. 106–134.
12
13
14
15 Rothwell, A. and Arnold, J. (2007), “Self-perceived employability: development and
16 validation of a scale”, *Personnel Review*, Vol. 36 No. 1, pp. 23–41.
17
18
19 Rothwell, A., I. Herbert, and F. Rothwell. (2008), “Self-Perceived Employability:
20 Construction and Initial Validation of a Scale for University Students”, *Journal of
21 Vocational Behavior*, Vol. 73 No. 1, pp. 1–12.
22
23
24
25 Saunders, M., Lewis, P. and Thornhill, A. (2015), *Research Methods for Business
26 Students*, Pearson, New York.
27
28
29 Shehzad, K., Xiaoxing, L., Bilgili, F. and Koçak, E. (2021), “COVID-19 and Spillover
30 Effect of Global Economic Crisis on the United States’ Financial
31 Stability”, *Frontiers in Psychology*, Vol. 12, Article 632175.
32
33
34
35 Signore, F., Catalano, A., De Carlo, E., Madaro, A., and Ingusci, E. (2019), “The role of
36 employability in students during academic experience: a preliminary study through
37 PLS-PM technique”, *Electronic Journal of Applied Statistical Analysis*, Vol. 12 No.
38 4, pp. 720-747.
39
40
41
42
43 Sorgente, A. and Lanz, M. (2019), “The multidimensional subjective financial well-being
44 scale for emerging adults: Development and validation studies”, *International
45 Journal of Behavioral Development*, Vol. 43 No. 5, pp. 466–478.
46
47
48
49 Spurk, D., Kauffeld, S., Meinecke, A.L. and Ebner, K. (2016), “Why Do Adaptable
50 People Feel Less Insecure? Indirect Effects of Career Adaptability on Job and Career
51 Insecurity via Two Types of Perceived Marketability”, *Journal of Career
52 Assessment*, Vol. 24 No. 2, pp. 289–306.
53
54
55
56 Trading Economics, Portugal Youth Unemployment Rate. Assessed in February 2023,
57 from <https://tradingeconomics.com/portugal/youth-unemployment-rate>
58
59
60

1
2
3 Wang, X., Zheng, Q., Huang, Z. and Chen, H. (2018), “Effect of Construal Level and Job
4 Insecurity on Responses to Perceived External Employability”, *Social Behavior and*
5 *Personality: An International Journal*, Vol. 46 No. 8, pp. 1359–1372.
6
7

8
9 Yao, C. W. and Tuliao, M. D. (2019), “Soft skill development for employability”, *Higher*
10 *Education, Skills and Work-Based Learning*, Vol. 9 No. 3, pp. 250–263.
11
12

13
14 Yurek, L.A., Vasey, J. and Sullivan Havens, D. (2008), “The Use of Self-Generated
15 Identification Codes in Longitudinal Research”, *Evaluation Review*, Vol. 32 No. 5,
16 pp. 435–452.
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
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Figure 1 - Estimated Marginal Means of Perceived Financial Threat according to Age

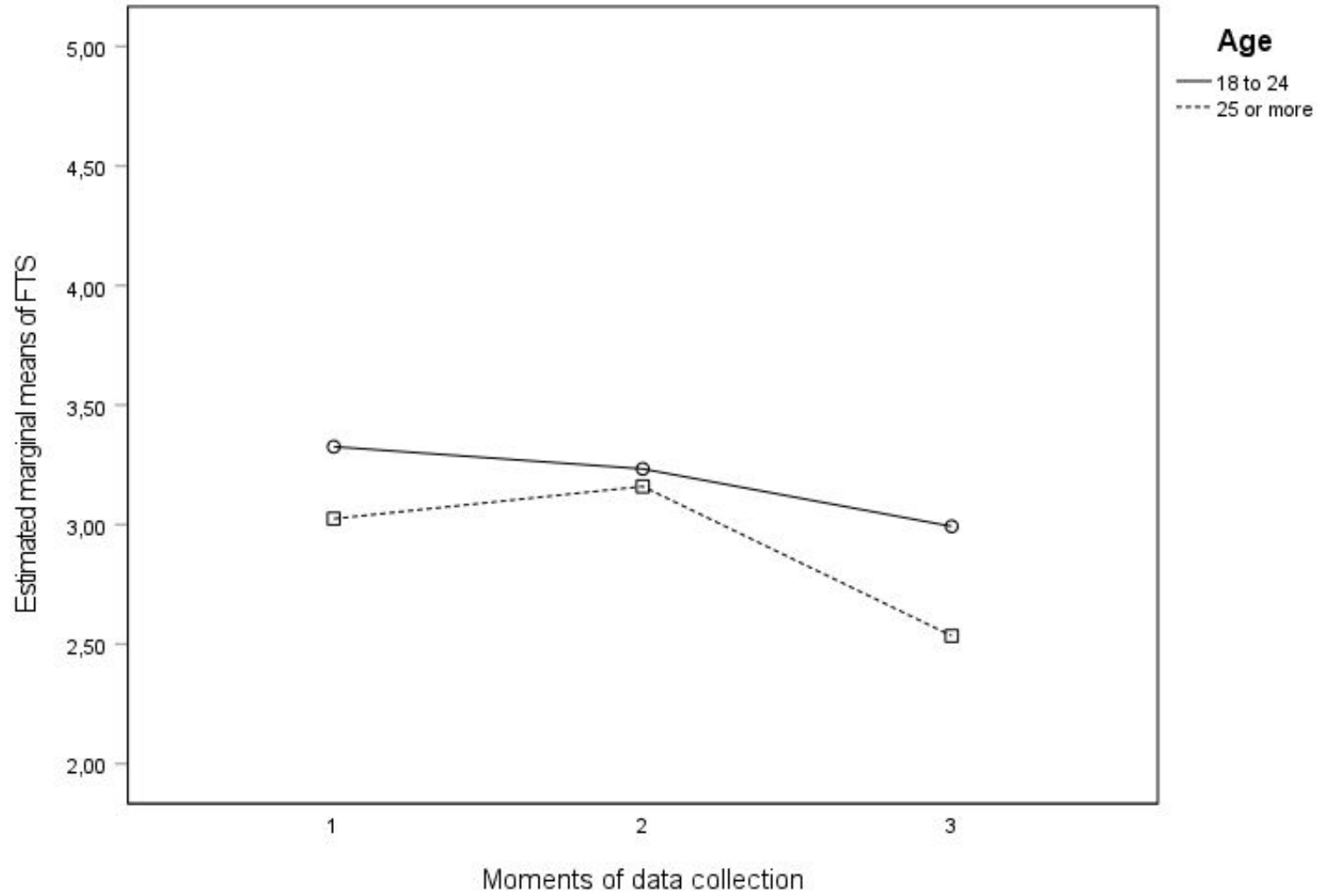


Figure 2 - Estimated Marginal Means of Employment Protective Behavior according to Age

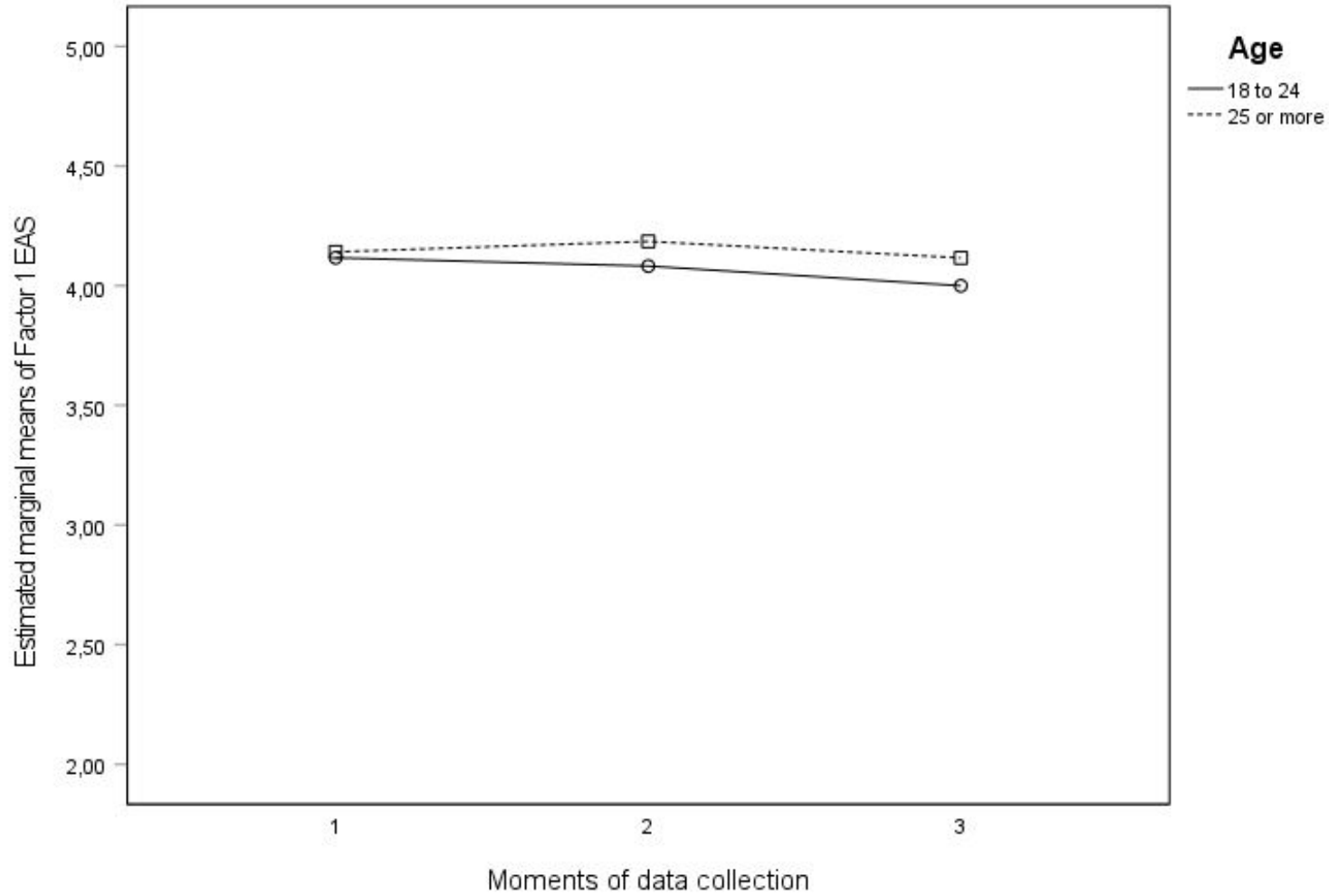


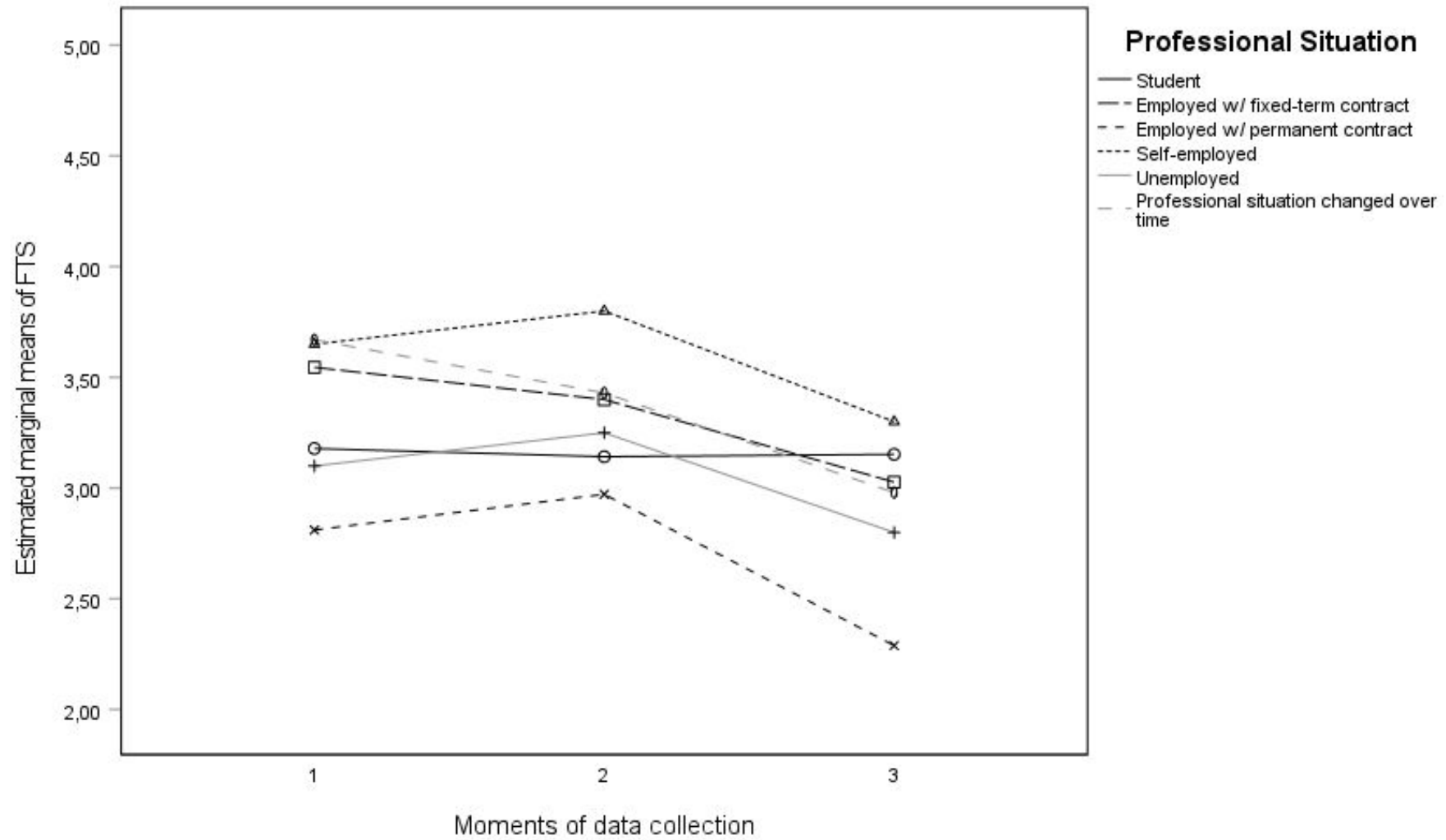
Figure 3 - Estimated Marginal Means of Perceived Financial Threat according to Professional Situation

Table I - Participants' Professional Situation

Professional Situation	1		2		3	
	N	%	N	%	N	%
Student	44	36	44	35	42	34
Employed (fixed-term contract)	29	23	31	25	32	26
Employed (permanent contract)	36	29	37	30	37	30
Self-employed	4	3	5	4	8	6
Unemployed	11	9	7	6	5	4

^a Total N = 124.

Table II - Means, Standard Deviation, Skewness, and Kurtosis of the Study Variables

Variables	<i>M</i>			<i>SD</i>			<i>G₁</i>			<i>K</i>		
	1	2	3	1	2	3	1	2	3	1	2	3
Perceived Employability	3.87	3.86	3.84	0.38	0.39	0.43	-0.30	-0.52	-0.64	0.41	0.23	0.31
Employment Protective Behavior	4.13	4.12	4.04	0.37	0.35	0.40	0.00	-0.32	-0.19	-0.57	0.38	0.11
Employment Risk	3.45	3.42	3.44	0.63	0.62	0.61	-0.61	-0.53	-0.51	-0.09	-0.20	0.00
Job-seeking Behavior	4.17	4.15	4.17	0.70	0.74	0.74	-0.58	-0.68	-0.75	-0.39	-0.33	-0.33
Self-control	3.46	3.49	3.50	0.81	0.80	0.86	-0.48	-0.62	-0.71	-0.31	0.31	0.38
Self-learning	4.21	4.23	4.18	0.47	0.51	0.50	-0.40	-0.20	-0.52	0.29	-0.48	0.73
Perceived Financial Threat	3.23	3.21	2.85	0.89	0.84	0.90	-0.48	-0.21	-0.50	-0.23	-0.19	-0.73

Table III - Pearson Correlation Coefficient between Perceived Employability and Perceived Financial Threat

Variables by Moments of Data Collection		1 FTS*		2 FTS*		3 FTS*	
		<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
1	Perceived Employability	-0.017	0.854				
	Employment Protective Behavior	0.124	0.171				
	Employment Risk	0.030	0.740				
	Job-seeking Behavior	-0.201	0.025				
	Self-control	-0.083	0.357				
	Self-learning	0.102	0.259				
2	Perceived Employability			-0.106	0.243		
	Employment Protective Behavior			0.033	0.716		
	Employment Risk			-0.118	0.190		
	Job-seeking Behavior			-0.095	0.294		
	Self-control			-0.151	0.093		
	Self-learning			0.033	0.719		
3	Perceived Employability					-0.347	0.000
	Employment Protective Behavior					-0.272	0.002
	Employment Risk					-0.246	0.000
	Job-seeking Behavior					-0.436	0.000
	Self-control					-0.044	0.631
	Self-learning					-0.207	0.021

^a *(Perceived Financial Threat).

^e Correlation is significant at the 0.05 level ($p < 0.05$).