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# Perceived employability among European workers: The impact of human capital, training practices and national values

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| 2. Figure 1. Research model (SVG).svg   |   |  |  |  |  |  |  |

SCHOLARONE™ Manuscripts Perceived employability among European workers: The impact of human capital, training practices and national values

#### **Abstract**

**Purpose** – Based on the Conservation of Resources (COR) theory, this article explores how individual factors, organizational training practices and national values of masculinity and uncertainty avoidance influence workers' perceived employability.

**Design/methodology/approach** – A hierarchical linear model tested the proposed hypotheses among a sample of 26,555 workers from 29 European countries, obtained through the 6<sup>th</sup> European Work Conditions Survey.

**Findings** – Results show the influence of individual factors (i.e., level of education, work experience at the current organization, training paid for by employees, etc.), the organization's training practices and national cultural values on the European workers' perceived employability. Post-hoc analysis also shows that current "person-job fit" moderates the influence of several individual factors, organizational practices and cultural values on perceived employability.

**Originality** – This study provides a comprehensive framework based on a multi-level approach (individual, organizational and national factors) to understand the antecedents of perceived employability among individuals already employed.

**Research limitations/implications** – It would be interesting to replicate this study in non-European countries to better understand the effect of national cultural values on perceived employability. Future research should also consider a longitudinal approach to better capture the dynamics of employability over time.

**Practical/managerial implications** – As a complex and increasingly interesting phenomenon in the academic literature on management, this study contributes a deeper understanding of how several factors influence perceived employability. Individuals and organizations should invest in training and development programs that enhance employability, considering individual and cultural factors. Additionally, this research provides insights for policymakers and practitioners aiming to strengthen workforce development and adaptability in Europe.

**Keywords**: perceived employability; Europe: human capital; training practices; national values; Conservation of Resources (COR) theory.

# Introduction

Employability refers to the ability to secure and maintain a job in varying contexts and situations (Forrier *et al.*, 2015). Its relevance stems from the uncertain nature of the labor market, which presents new challenges and opportunities for both workers and employers (Park and Park, 2020; Fugate *et al.*, 2021). Indeed, employability has been recognized as a key driver of sustainable development (Comyn, 2018) and the UN's Sustainable Development Goals (SDGs). In particular, The International Labour Organization (ILO, n.d.) states that the relevant SDGs and targets related to employability skills are SDG-4 Quality education and SDG-8 Decent Work and Economic Growth. These targets emphasize education and training to enhance employability.

Significant changes in the labor market have led employers to implement more flexible HRM practices to help their workers to adapt their competences to the changing environment and mitigate job loss risk, while employees must acquire new skills to stay competitive (Fugate *et al.*, 2004; Van der Heijde and Van der Heijden, 2006; Park and Park, 2020). Remarkably, employability is associated with reduced stress, higher loyalty, productivity, job satisfaction, and lower turnover (Fugate *et al.*, 2021), all of which benefit both employers and employees.

Current labor market dynamics also require a broader perspective on employability, urging consideration of individuals already employed (Forrier *et al.*, 2015; Van Harten *et al.*, 2017; Bernstrøm *et al.*, 2019); employability becomes critical for them to maintain their current employment (internal market) or gain access to a similar one if they are facing job loss (external market). Notably, some previous studies link employability to perceptions on personal employability (Bargsted *et al.*, 2021), as it can be considered a subjective perception of obtaining and sustaining employment appropriate to their level of qualification (Vanhercke *et al.*, 2014). However, there is a lack of academic studies grounded in these perspectives (Forrier *et al.*, 2015; Van der Heijden *et al.*, 2018).

Some studies examined perceived employability and its antecedents based on the Conservation of Resources (COR) theory (Hobfoll, 1989), which views it as a personal resource

that workers strive to protect and enhance (e.g., Bargsted *et al.*, 2021; Decius *et al.*, 2024). COR theory posits that people strive to obtain, retain, and protect resources, and that their evaluation of such resources is influenced by the social and cultural context (Hobfoll, 2001). Understanding the determinants of perceived employability thus requires considering individual, organizational, and national factors.

Concerning the individual, works based on the COR theory suggest the relevance of human capital as a critical resource for employees (e.g., Bargsted *et al.*, 2021). Human capital includes the worker's skills and competences (Wright *et al.*, 2001), considered antecedents of perceived employability (Jackson and Wilton, 2017) as they enhance the perception of available job opportunities (Forrier *et al.*, 2018). This aligns with the traditional association of employability with human capital variables (Rothwell and Arnold, 2007; Jackson and Wilton, 2017; De Vos *et al.*, 2021).

Regarding organizations, and drawing on COR theory, several authors have emphasized the importance of training and work-related learning, as such training can provide employees with updated knowledge, which may impact their perceived employability. However, this relationship has not always been demonstrated (e.g., Decius *et al.*, 2024).

At the national level, according to COR theory, national culture is considered a significant aspect of the surrounding context that can affect individuals' employability (Little *et al.*, 2011; Stoffers *et al.*, 2020). Specifically, from COR theory, we can expect that individuals' own appraisal of their employability could be influenced by national cultural values, such as uncertainty avoidance (the extent to which members of a culture feel threatened by unknown situations) and masculinity (the degree to which a society emphasizes competitiveness and achievement over care and cooperation). For example, these cultural values could condition the levels to which their societies give relevance to employability, show proactivity in the process of finding a job, or prioritize resource accumulation (e.g., Niu *et al.*, 2019; Lo Presti *et al.*, 2020). However, previous studies have either not considered cultural factors or focused on only one or

a few countries (e.g., Little *et al.*, 2011; Lo Presti *et al.*, 2020). Accordingly, authors such as Stoffers *et al.*, (2020) have called for studies on employability across diverse national cultures.

Despite the importance of individual, organizational, and national variables on perceived employability, previous research has not considered all these factors together. Some academics argue that literature would benefit from a more holistic view of employability (Rothwell and Arnold, 2007; Jackson and Wilton, 2017). Our study answers this call.

Based on the aforementioned points, this study aims to explore the following research question: How do human capital variables, training practices and national cultural values influence the perceived employability of workers? Using a sample of 26,555 workers across 29 European countries, we analyze the effects of these factors on the workers' perceptions of their employability using hierarchical linear model estimations. Thus, the study's multinational scope, encompassing a group of European countries and utilizing a large dataset, allows for broader generalization of the findings across diverse national cultures, as called for by Stoffers *et al.* (2020). The primary and original contribution of our study is to provide a comprehensive framework from a multilevel approach to understand the complex and increasingly interesting phenomenon of employability among the already employed. The main findings reveal that variables such as the training practices provided by employers and the ones paid for by employees themselves, as well as national values such as uncertainty avoidance, wield a significant influence on workers perceived employability, while acknowledging that individual factors also have an impact. In countries with higher uncertainty avoidance values, employees have a lower self-perceived employability.

Lastly, in a final post-hoc analysis, we introduce the moderating effect of "person-job fit", finding that this variable conditions the influence of some individual factors, organizational practices and national values on perceived employability. This finding represents an additional innovative advance in the understanding of how skill alignment impacts employability dynamics, adding greater depth to the interpretation of the results.

# Theoretical background

# Perceived employability

There exists no singular definition of employability, as this concept has been examined through diverse disciplinary lenses and from varying perspectives (De Vos *et al.*, 2021). For example, some authors state that the term "employability" pertains to the competencies of individuals that allow them to gain and maintain employment (Neroorkar, 2022). Forrier *et al.* (2015, p. 56) define employability as "an individual's chance of [getting] a job in the internal and/or external labor market". Van der Heijde and Van der Heijden (2006, p. 453) underscore that employability involves "the continuous fulfilling, acquiring or creating of work through the optimal use of competencies". Neroorkar (2022, p. 844) adds that employability is "a combination of knowledge, personal attributes, skills and attitudes". Accordingly, employability can be seen as a holistic process that depends on individuals' qualities to find and keep a job and on the conditions of the internal and external labor markets.

Some authors recommend utilizing the concept "perceived employability" as a lens through which to study the phenomenon, as it captures the individual's perception of their chances to obtain and maintain employment appropriate to their level of qualification (Vanhercke *et al.*, 2014), considering both the *personal* and *contextual* factors (Berntson and Marklund, 2007; Clarke, 2018). This article specifically focuses on employees' self-perception of their employability.

Antecedents of workers' perceived employability

Given the significance of employability, there is a considerable interest in understanding how individuals acquire it. Previous literature on this topic focuses on the antecedents of perceived employability pertaining to individuals (e.g., Berntson and Marklund, 2007; Donald *et al.*, 2017; Jackson and Wilton, 2017), whereas very few address variables at the organizational or national levels. Since the current study seeks to understand the antecedents of employability from a more

holistic approach, as authors recommend (Rothwell and Arnold, 2006; Jackson and Wilton, 2017), we turn to COR theory (Hobfoll, 1989), the appropriate basis for a more comprehensive study of this topic (Vanhercke *et al.*, 2014).

COR theory (Hobfoll, 1989) states that people strive to obtain, retain and protect their resources, the evaluation of such resources being not only an individual process, but also shaped by the surrounding social and cultural context (Hobfoll, 2001). Thus, culture, community and the nested-self are underlined as relevant in the process of conservation of resources (Hobfoll, 2001). Because, according to COR theory, perceived employability can be considered a personal resource (e.g., Bargsted *et al.*, 2021; Decius *et al.*, 2024), it can be said that the understanding of individuals' perceived employability requires consideration of individual, organizational and national factors. Specifically, and according to COR theory, individuals' human capital has been considered a key resource (e.g., Bargsted *et al.*, 2021) that impacts their perceived employability (Jackson and Wilton, 2017). Referring to organizations, training and work-related learning are said to provide employees with updated knowledge and so could also impact on their perceived employability (e.g., Veld *et al.*, 2015). Furthermore, at national level, national culture is considered a relevant part of the surrounding context that could also affect perceptions of employability (Little *et al.*, 2011; Stoffers *et al.*, 2020). We go into more depth regarding these relationships based on COR theory below.

# Workers' human capital

The term "human capital pool" refers to the set of worker's skills and competences (Wright et al., 2001) that are related to the individuals' level of education, work experience - e.g., time in the same professional field (Niu et al., 2019), time at the same organization (Becker, 1964), time at different organizations (Jackson and Wilton (2017), and so on. A considerable body of literature links individuals' human capital variables to the cultivation of personal competencies crucial for enhancing their employability (Jackson and Wilton, 2017; Forrier et al., 2018). This is because workers with a higher level of education, more work experience at the same organization, or more

work experience in general learn more quickly and are more able to use their acquired knowledge in their job (Becker, 1964), which, according to Fleischmann *et al.* (2015: p. 5), connects to the banners of "learning begets learning" or "skills beget skills".

In this regard, COR theory posits that human behavior is motivated by the need to acquire, protect and expand key resources in order to build a sustainable 'reserve of resources' for future needs (Halbesleben *et al.*, 2014; Hobfoll *et al.*, 2018). Based on this theory, a lack of investment in education and experience to obtain these resources (i.e., skills, competences) could initiate a "loss spiral", where diminished employability leads to further resource depletion (De Cuyper et al., 2012). On the contrary, success in accumulating education and work experience will give rise to the "gain spiral", which suggests that employees with higher levels of education and experience are more likely to enhance their self-perceived employability, as these resources bolster their ability to attract and secure job opportunities (Vanhercke *et al.*, 2014; Bargsted *et al.*, 2021). Thus, within COR theory, human capital is viewed as a critical personal resource that significantly influences employability (Kidron and Vinarski, 2024).

Accordingly, previous literature has shown that employability is dependent on a set of essential skills, knowledge and competencies required for effective job performance, implying that employees who score highly on these qualities will have greater potential for relocation in case of job loss (Jackson and Wilton, 2017). For example, one's level of education likely instils greater confidence in securing re-employment (Bernstrøm *et al.*, 2019), allowing more perceived opportunities with other employers (Vanhercke *et al.*, 2014). Consistently with this, previous literature shows that worker's human capital and employability are closely related (Berntson and Marklund, 2007; Donald *et al.*, 2017). Thus, the following hypothesis can be posited as a baseline on which the current study is built. Specifically, this hypothesis elucidates the baseline effect of individuals' human capital on perceived employability that further variables referring to company and country levels are supposed to complement:

H1: The higher the individuals' human capital in terms of level of education (H1a) and work experience at their current organization (H1b), the greater their perceived employability.

# Training practices

The literature on employability emphasizes the relevance of workers' competences and skills in facilitating job-finding opportunities (Vanhercke *et al.*, 2014; Bargsted et al., 2021), with training being a key practice for achieving this objective and one whose impact on employability has consistently (e.g., Veld *et al.*, 2015), although not always (e.g., Decius *et al.*, 2024), been found.

Nowadays, employment faces ongoing changes resulting from technological development, innovations and variations in the way job design is conceived of and organized (Jaiswal *et al.*, 2022). In this respect, multitasking and flexible job designs, as well as the need for more specialization, updated knowledge and digital competences, are among the novel demands individuals must meet. Thus, as workers acquire new and broader sets of skills to remain competent and employable, training activities acquire great relevance (Bozionelos *et al.*, 2020). Training can be provided by employers or accessed through workers' own efforts (e.g., studying in their free time and paying for training themselves) (Veld *et al.*, 2015; Decius *et al.*, 2024).

Concerning employers, training is a HRM practice through which the skills of their workers are developed in order to keep them updated and able to efficiently deal with their job tasks and/or assume greater responsibilities within the organization (Ehrhardt *et al.*, 2011). Consequently, organizations' investment in training not only generates better outcomes in terms of workers' effectiveness in the current job, but also increases workers' knowledge and skills (Bozionelos *et al.*, 2020), and consequently their higher level of employability (Veld *et al.*, 2015). In this regard, and from the COR perspective, training offered by employers can be considered as a valuable resource, which enhances employees' ability to achieve their goals of improving their competencies and skills. Whether through training activities paid for by the employer or on-the-job learning (e.g., from supervisors, co-workers, etc.), the worker's access to employer-provided

training is their most significant source of new knowledge, skills and competences (Hansson, 2009).

First, by providing paid training, employers contribute to workers' gaining new competencies, and so to their "gain spiral" (De Cuyper *et al.*, 2012). In this spiral, acquiring one resource, such as improving specific skills, leads to further resource gains, like increased confidence in job retention and higher perceived employability (Forrier *et al.*, 2018). Moreover, these training opportunities contribute to a "resource caravan", where the accumulation of one resource attracts further resources, such as better job prospects and career opportunities (Hobfoll, 2018). Thus, employer-provided training not only helps maintain existing resources, but also builds additional ones, enhancing perceived employability.

Second, on-the-job training provides employees with job-specific skills that enhance their performance and adaptability. This type of training serves as a continuous resource that not only addresses current job requirements but also builds confidence in managing future challenges, which is critical for maintaining employability in a dynamic labor market (Bozionelos *et al.*, 2020; Decius *et al.*, 2024). In line with COR theory's emphasis on resource conservation and growth, we can say that on-the-job training mitigates the risk of resource depletion associated with skill obsolescence, so being essential for sustaining a robust resource pool and consequently improving the perception of job employability. As Van Hootegem *et al.* (2019) suggest, continuous access to job-related resources like training significantly boosts employees' perceptions of employability, as they feel more equipped to handle the evolving demands of the labor market. All this leads us to propose the following hypothesis:

H2: The more training the company offers through their HRM practices (paid for by the employer, H2a, and on-the-job, H2b), the greater will be their workers' perception of employability.

Being aware of the potential influence of HRM practices on employability, some organizations may fear that the application of training practices to enhance employability could increase

external voluntary turnover of talented workers, and hence be unwilling to make such investments in training (van Harten *et al.*, 2017). Moreover, other employers that commit to applying those HRM practices often do not offer training opportunities to all workers –e.g., they provide fewer training opportunities to older workers (Canduela *et al.*, 2012) or to women (IILS, 2010). In these contexts, workers might choose to invest in their own training. They can pay for it (e.g., occupational courses, continuous training programs, university degrees) and spend part of their free time studying to acquire better specialization and a wider range of updated competences. Following Veld *et al.* (2015) and Akkermansj *et al.* (2019), it can be assumed that the investment in training may be a shared responsibility of both the worker and the employer. Thus, workers might choose to invest in their own training even when the employer offers some opportunities, viewing it as a necessary step to enhance their employability (Bozionelos *et al.*, 2020).

Self-investment in training is a proactive strategy that aligns with COR theory, which posits that individuals who actively seek to acquire and expand their resources are better equipped to manage potential losses and improve their employment situation (Van Hootegem *et al.*, 2019). Justifiably for the case of training offered by the organization, and based on COR Theory (Hobfoll *et al.*, 2018), we can expect that self-investment in training could trigger a "gain spiral" that benefits the accumulation of resources and the perception of employability while workers' failure to pay for their own training could initiate a "loss spiral" where reduced employability and confidence further deplete valuable resources. Furthermore, in the context of self-paid training, workers are not just acquiring new skills, they are also reinforcing their sense of control over their career and resource management. This reinforcement of control strengthens their self-confidence and perceived employability, as they feel they have more influence over their resources and future employment (Decius and Klug, 2024). This proactive approach could enable workers to build a buffer of resources - such as enhanced competencies and increased confidence - that protects against the risks of unemployment and strengthens their perceived employability. Consequently, it can be posited that:

H3: The more workers commit to training activities paid for by themselves, the greater will be their perceived employability.

National cultural values of masculinity and uncertainty avoidance

Based on COR theory (Hobfoll, 1989), it can be said that national cultural values are a relevant part of the surrounding context that can affect individuals' evaluation of their resources (Hobfoll, 2001), among them their perceived employability (e.g., Bargsted *et al.*, 2021; Decius *et al.*, 2024). Because culture influence the individuals' process of conservation of resources (Hobfoll, 2001), national values can provide a useful approach for researching employability (e.g., Little *et al.*, 2011; Stoffers *et al.*, 2020) and contribute additional arguments that increase the understanding of the antecedents of workers' perceived employability (e.g., Lo Presti *et al.*, 2020).

Specifically, Hofstede *et al.*, (2010, p. 3) conceptualizes culture as "the collective programming of the mind that distinguishes the members of a group or category of people from others". Hofstede's (2001) model of national culture includes six dimensions that distinguish countries, each dimension representing preferences for one state of affairs over another (Hofstede *et al.*, 2010): individualism/collectivism, power distance, uncertainty avoidance, masculinity/femininity, long-term/short-term orientation, and indulgence/restraint. These cultural values condition the way people perceive and interpret events and consequently choose a behavior as a response to them (Hofstede, 2001). As argued below, based on the COR theory (Hobfoll, 1989), we can expect that two out of these six cultural values will condition individuals' appraisal of their employability, specifically, values of masculinity/femininity (hereafter *masculinity*) and of *uncertainty avoidance*.

First, 'Masculinity values' reflect a preference for achievement, assertiveness and material rewards in the business context (Hofstede, 1984, 2001). This orientation involves an emphasis on workers' ruggedness and competitiveness, admiration for strength, prioritization of arduous work over personal and family life, and a resolute pursuit of economic success. In contrast, 'femininity values' that are found in societies with very low masculinity (Hofstede, 1984, 2001), prioritize

consensus, cooperation, harmony, care for the vulnerable, and quality of life over material success (Hofstede et al., 2010). Accordingly, and based on the COR theory, we can state that these cultural values may influence how workers perceive their resources in the labor market. For example, in societies with high masculinity, where success and assertiveness are heavily emphasized, workers may experience heightened pressure to safeguard their current resources, such as job status and material gains (García-Cabrera and García-Soto, 2012). This pressure aligns with the COR principle that individuals strive to protect and conserve their existing resources, especially in competitive environments where material success is paramount (Hobfoll, 1989; Bargsted, 2021). In these cultures, the constant competition and pressure for achievement can lead to a resource "loss spiral", where the fear of not meeting societal expectations exacerbates stress and reduces perceived employability. Indeed, when assessing job prospects in the external labor market, workers may find it unlikely to secure comparable employment elsewhere due to perceived advantages at their current organization and labor market competitiveness, thus perceiving lower employability. In contrast, in cultures with strong femininity values, the emphasis on work-life balance, cooperation and support within the community may reduce the perceived pressures to compete aggressively for resources and it can result in a higher perception of employability, as workers feel more supported and less threatened by potential resource loss in the labor market.

Second, uncertainty avoidance values reflect the extent to which individuals in a society feel threatened by uncertain or unknown situations, and thus prefer structured conditions with clear rules and stability (Hofstede, 1984, 2001). In cultures with high uncertainty avoidance values, this strong preference for predictability can lead to a heightened perception of threat when envisioning job loss or employment instability. This cultural value fosters a conservative view of career prospects, where individuals may overestimate potential barriers to employment and perceive the job market as riskier (Hofstede *et al.*, 2010). Consequently, workers in such cultures are likely to have a lower self-assessment of their employability, viewing themselves as less adaptable and capable of navigating uncertainties, which may be expected to undermine their

confidence in securing future employment. According to the COR theory, the anticipation of resource loss - such as the fear of losing a job - can trigger a defensive strategy focused on conserving current resources (Hobfoll, 1989). This conservative approach fosters a "loss spiral" where the avoidance of risk and change reduces the likelihood of developing adaptive skills (and so acquiring this resource), and consequently depleting their perceived employability (De Cuyper *et al.*, 2012). On the contrary, in cultures with low uncertainty avoidance values, opposite effects can be found as result of the lower degree of relevance that workers attribute to risks associated with job loss, job change or labor market volatility.

In summary, and from the perspective of COR theory, we propose:

H4: The higher the national values of masculinity (H4a) and uncertainty avoidance (H4b) in a country, the lower the perception of workers located in that country of their employability will be.

The graphical representation of our proposed theoretical model is shown in Figure 1.

# FIGURE I here

# Methods

Data sources, study context and sample

To test the hypotheses, individual-level data was combined with country-level data at an international level. Individual-level data was obtained from the 6<sup>th</sup> European Working Conditions Survey - EWCS - (Eurofound, 2017), which was conducted in 2015 by the European Foundation for the Improvement of Living and Working Conditions (Eurofound). The survey addresses issues in the general job context, including working conditions and access to training.

This edition of the EWCS employed a rigorous methodological process to collect the data, through face-to-face interviews with a representative sample of workers aged sixteen or over in 28 EU member states and 7 non-EU countries (35 countries). The survey used a multi-stage stratified random sampling design to ensure representativeness of various demographic groups

within each country. Data collection was conducted by trained interviewers using standardized questionnaires, translated and adapted to local contexts to maintain consistency and cultural relevance. To ensure the traceability and validity of the data, Eurofound implemented quality control measures such as pilot testing, continuous fieldwork monitoring and post-survey validation procedures, such as weighting adjustments, to account for sampling biases and cross-check the consistency of responses (Eurofound, 2017).

The total sample size for the 6<sup>th</sup> EWCS in all 35 countries is 43,850 interviews, and after excluding self-employed people, a sub-sample of 27,916 workers was obtained for our research.

Country-level data (the values of masculinity and uncertainty avoidance) was obtained from Hofstede and colleagues' works (Hofstede *et al.*, 2010)<sup>1</sup>, which offer country scores for six cultural dimensions referring to 76 countries, among them 29 European ones also included in the 6<sup>th</sup> EWCS and in this study's sample: Albania, Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, UK, Servia, Turkey, Norway and Switzerland. By working with the two databases and merging them, it was decided at the researcher's discretion to eliminate those countries from the EWCS for which we did not have information on the national cultural values of masculinity and uncertainty avoidance. These countries are as follows: Montenegro, Fyrom, Cyprus y Malta. Thus, the final sample is reduced to 26,555 workers. The distribution of individuals among the 29 countries, as well as the Hofstede's scores for masculinity and uncertainty avoidance of such countries are presented in Table I.

#### **TABLE I here**

From a demographic perspective, the 26,555 workers in the sample are on average 44.79 years of age, of which women constituted 52.0%. Regarding their educational level, almost half of them had reached "upper secondary education" (43.76%), 12.96% "Bachelor or equivalent", 10.01% "Master or equivalent"; 10.01% "Doctorate or equivalent"; 63.72% worked in the private

sector and 29.41% in the public sector. The largest percentage of workers (41.96%) was concentrated in small to medium-sized companies with between 10 and 249 workers, whereas 37.42% work for organizations with 250 or more workers.

#### Measures

Dependent variable. Following previous studies regarding the use of single-item scales in the field research of HRM (Nagy, 2002; Steel and Landon, 2010; Nelissen *et al.*, 2017), *perceived employability* was measured with the following question: To what extent do you agree or disagree with the following statements about your job?: "If I were to lose or quit my current job, it would be easy for me to find another job with a similar salary" (Likert scale ranging from "Strongly disagree" (1) to "Strongly agree" (6)).

Independent variables. Referring to human capital, two micro-level variables from the Sixth EWCS were considered: Level of education, which has been grouped into five categories from the first Pre-primary education (0) to Doctorate or equivalent (5), and Work experience at the current organization, which is measured through the number of years the individual has been at the current company or organization. Concerning Training practices, two items were chosen as proxies for companies' HR practices (Training paid for by employer and Training-on-job) and one as a proxy for Training activities paid for by the worker. The three items were measured respectively with the following questions: "Since you started your main paid job, have you undergone any of the following types of training to improve your skills?": "Training paid for or provided by your employer", "On-the-job training", and "Training paid for by yourself". They were dummy variables (1: No; 2: Yes). Finally, and for the macro level (national values), countries' scores for the index of the cultural values of masculinity and uncertainty avoidance provided by Hofstede were used. For this model, higher scores indicate more masculinity and uncertainty avoidance values (Hofstede et al., 2010).

Control variables. This study incorporated two commonly considered control variables in employability research (e.g., Forrier et al., 2015; Bernstrøm et al., 2019): Gender (1: male; 2: female) and Age (measured by the age of the interviewee). Regarding gender, given the prevalent gender bias in the labor market, it is anticipated that men may exhibit higher perceived employability (Braun et al., 2017). As for age, it is expected that younger individuals may demonstrate higher perceived employability due to their higher level of education (Bernstrøm et al., 2019).

# Data analysis

First, we conducted a correlation analysis among the independent variables to assess the potential for multicollinearity, which could bias the significance tests of the coefficients. Second, to evaluate the proposed hypotheses within a multilevel approach, we applied Hierarchical Linear Modelling (HLM). This approach is particularly well-suited for analyzing data with a nested structure, such as individuals within countries, and it aligns with the hierarchical nature of organizations, making it a widely accepted method in organizational research (Aguinis *et al.*, 2013).

In the absence of specific company identifiers, we used company training practices as proxy variables at the individual level (Level 1) to indirectly capture company-specific effects. As a result, our model was structured with two levels: individuals nested within countries. This structure allowed us to break down variance across these levels and evaluate how Level 1 characteristics of employees and training strategies influence individual perceptions of employability, while accounting for cultural and national contexts at Level 2.

We performed the HLM analyses using the latest version of the statsmodels library in Python to ensure robust and reproducible results. The Level 1 variables included Gender, Age, Work Experience at the Current Organization, and various forms of Training (paid by the employer, paid by the worker, and on-the-job). The Level 2 variables included Masculinity and Uncertainty Avoidance. The dependent variable was External Perceived Employability (Q89h).

# Results

#### Correlations and estimations

Table II shows the descriptive statistics and the correlations among the independent variables. For example, at the  $\sigma$ =0.05 level, Masculinity and Uncertainty Avoidance are significantly negatively correlated with Training Paid for by the employer (r = -0.06\*\*\*\* and r = -0.13\*\*\*\*, respectively) and Training on-the-job (r = -0.05\*\*\*\* and r = -0.17\*\*\*\*, respectively). Additionally, Age is positively correlated with Work Experience at the Current Organization (r = 0.16\*\*\*\*). Females (Gender = 1) are associated with a higher level of education (r = 0.07\*\*\*\*). Training Onthe-Job is strongly positively correlated with Training Paid for by the Employer (r = 0.43\*\*\*\*). Regarding multicollinearity in the data, the general rule of thumb is that the correlation between independent variables should not exceed 0.75 (Tsui *et al.*, 1995). The highest significant correlation is between Training Paid for by the Employer and Training On-the-Job, at 0.43\*\*\*, suggesting that multicollinearity is not a problem.

# **TABLE II here**

The results presented in Table III provide insight into the impact of human capital, training practices and national values on workers' perceived employability. The model's marginal R<sup>2</sup> is 0.093, suggesting that the fixed effects explain about 9.3% of the variance in perceived employability. In addition, the Intraclass Correlation Coefficient (ICC) value is higher than 0.05 (Aguinis *et al.*, 2013), which indicates that a portion of the variance is attributable to differences between countries and confirms that the multilevel approach is appropriate for the analysis.

At Level 1, the analysis indicates that several individual characteristics significantly influence perceived employability. Gender shows a negative effect ( $\beta$ =-0.097\*\*\*), suggesting that being female is associated with a lower perception of employability. Age also has a small but significant negative impact ( $\beta$ =-0.002\*\*\*), while education level positively affects perceptions of employability ( $\beta$ =0.098\*\*\*). Interestingly, work experience at the current organization

negatively correlates with perceived employability ( $\beta$ =-0.030\*\*\*), indicating that longer tenure may reduce perceived external opportunities. Regarding training practices, both training activities paid for the employer ( $\beta$ =0.137\*\*\*) and training activities paid for the worker ( $\beta$ =0.159\*\*\*) positively influence perceived employability, underscoring the importance of continuous professional development. However, on-the-job training does not have a statistically significant effect ( $\beta$ =0.008). At Level 2, the national values of Masculinity and Uncertainty Avoidance were examined. The analysis shows that Uncertainty Avoidance is negatively associated with perceived employability ( $\beta$ =-0.007\*\*), indicating that in cultures with high uncertainty avoidance, workers feel less secure in their employability, whereas Masculinity does not show a significant effect ( $\beta$ =-0.003).

# TABLE III here

Concerning hypotheses testing, H1 - *i.e.*, higher human capital leads to greater perceived employability - is partially supported. While a higher level of education (H1a,  $\beta$ =0.098\*\*\*) positively influences perceived employability, greater work experience at the current organization (H1b,  $\beta$ =-0.030\*\*\*) unexpectedly shows a negative effect, which contradicts the hypothesis.

Concerning HR training practices, the results indicate that training paid for the employer has a positive and significant effect on employability, so H2a is supported. On-the-job training, however, does not show a significant effect on perceived employability, indicating that this type of training might not influence employability perceptions as strongly as other forms of training, thus H2b is not supported. Finally, and concerning training activities paid for the worker, results also show that such training increases perceived employability. Therefore, H3 is supported  $(\beta=0.159***)$ .

Regarding cultural values (H4), the results show that masculinity does not have a significant effect on perceived employability. In contrast, uncertainty avoidance has a significant negative effect on perceived employability, indicating that higher levels of uncertainty avoidance in a country are associated with lower levels of perceived employability among workers. The

results reveal that higher cultural values of masculinity would reduce perceived employability  $(\beta=-0.003)$  is not supported (H4a), as the effect is not statistically significant. Contrarily, H4b, the hypothesis that states that higher cultural values of uncertainty avoidance would lower perceived employability  $(\beta=-0.007**)$  is supported, as the results indicate a significant negative effect.

Post-hoc analysis: the moderating role of "person-job fit"

After analyzing the results, in particular the negative impact of workers' experience at the current organization on their perception of being able to obtain employment with another organization, doubts emerged about whether or not the relationship found between independent and dependent variables could be affected by the workers' current "person-job fit" (e.g., it is not the same to have accumulated experience in a job where workers feel themselves competent as it is for other jobs for which they consider themselves to be lacking the sufficient skills). Specifically, the "person-job fit" refers to the alignment between an individual's skills, qualifications and characteristics, and the specific requirements and expectations of a given job role (Edwards, 1991; Kristof-Brown *et al.*, 2005). According to the demands—abilities perspective of fit, this variable accounts for the degree to which workers have (or not) the competences necessary to perform job tasks (Edwards, 1991). Therefore, the "person-job fit" could moderate the impact of workers' human capital, training practice and national cultural values on their self-perceptions of employability.

Three scenarios were examined in this study: (1) the workers had the skills to cope with more demanding duties (Model 1: 6,978 individuals); (2) the workers had skills that correspond well with their duties (Model 2: 13,527 individuals); or (3) the workers needed further training to cope well with their duties (Model 3: 3,220 individuals).

Table IV shows the resulting hierarchical regression equations. The model's marginal R<sup>2</sup> are higher than 0.063, suggesting that the fixed effects explain 6.3% or more of the variance in perceived employability. In addition, ICC values are lower than 0.05 in Models II and III, but

higher than this threshold in Model I. So, according to Aguinis *et al.* (2013), only in the Model I the multilevel approach is appropriate because a portion of the variance is attributable to differences between countries.

Concerning the results, the control variables (i.e., age and gender) show similar - albeit not identical - effects across Models (i.e., being older does not reduce perceived employability in the case of the subsample of workers who need further training to cope well with their duties [Model I]).

Regarding the independent variables, it was found that while work experience at the current organization, on-the-job training and uncertainty avoidance values have similar impacts on perceived employability, irrespective of the workers' current "person-job fit", education level, training paid for by the employer, training paid for by the worker, and masculinity values see a change in impact across Models. Specifically, training activities paid for by the worker does not increase worker's perceived employability in Model III (i.e., workers with skills to cope with more demanding duties) but does increase in Models I and II. In addition, education level, training paid for by the employer and masculinity values impact on workers' perceived employability in Models II and III, but not in the case of Model I (i.e., the subsample of workers who need further training to cope well with their duties). As a result, post-hoc analysis found that the influence on perceived employability of these variables is moderated by the worker's "person-job fit".

# **TABLE IV here**

# Discussion

This study, grounded in the Conservation of Resources (COR) theory, examines factors influencing workers' perceived employability at individual, organizational and national levels

using HLM. Perceived employability, reflecting workers' self-assessment of their ability to secure similar jobs, is shaped by individual human capital (Jackson & Wilton, 2017), organizational practices and national cultural values, particularly those of *masculinity* and *uncertainty* avoidance.

Firstly, the study confirms that higher levels of education enhance employability as previous authors state (Vanhercke *et al.*, 2014; Bernstrøm *et al.*, 2019). Additionally, this effect occurs only in cases where workers have skills that align with their current job duties (Model II) or to cope with more demanding duties (Model III). Workers who feel overwhelmed by their current job due to a lack of skills would find that their academic level is not enough to increase their perceived employability.

Furthermore, the results show that more experience at the same organization consistently reduces perceived employability. This finding contradicts previous literature on human capital (e.g., Becker, 1964) and COR theory, which considers experience as a resource that gives rise to a "gain spiral" (Vanhercke *et al.*, 2014; Bargsted *et al.*, 2021). Our results suggest that when workers accumulate significant experience at a single company, they may feel overly specialized and perceive a lack of up-to-date skills required by other organizations, so they feel a loss of personal resources that gives rise to a "loss spiral" that lessens perceived employability. Thus, according to our results, the impact of experience on perceived employability should be revisited.

Secondly, concerning training practices, the study revealed that employer-funded training enhances perceived employability, while on-the-job training has no significant effect - coherently with Decius *et al.* (2024). In addition, if considering the moderating role of "person-job fit", our results indicate that employer-funded training only enhances employability for those workers whose skills align well with their current job duties or who are overqualified. This suggests that workers well-suited for the roles they are in benefit most from employer-provided training, while those who lack the resources to cope with their job duties will not increase their perceived employability as result of training paid for their employers. The results also show that self-funded

training positively influences perceived employability, which is again in line with Decius *et al.* 's (2024) findings. However, according to our results in the three subsamples, such impacts diminish and are not significant for overqualified workers, likely due to a reduced incentive to invest further in their development.

Thirdly, regarding national cultural values, our study finds that uncertainty avoidance negatively impacts perceived employability, suggesting that workers in cultures that prioritize stability may feel too lowly skilled to find a new job, which is consistent with expectations from the Hofstede's model (Hofstede *et al.*, 2010), and the COR theory (Hobfoll, 1989). Remarkably, we found this effect irrespective of the worker's current "person-job fit", suggesting that this national value may act on all the employees in a country.

Interestingly, masculinity values do not hinder perceived employability in the full sample. This could be due to the relatively slight differences in masculinity scores across European countries. However, when considering "person-job fit", we found that masculinity values negatively impact the perceived employability of individuals who are well-suited or overqualified for their roles. In particular, in highly competitive cultures, overqualified workers may perceive themselves as less employable due to the societal pressures for achievement and assertiveness, as suggested by Lo Presti *et al.* (2020).

In the comparative analysis of the antecedents of perceived employability across the three levels, our findings suggest that training has a greater influence than human capital, though this needs further verification. This comparison sheds light on the most influential factors at each level, providing a nuanced understanding that can be useful for both researchers and practitioners in the field. In summary, training—whether funded by the employer or the employee—is the most significant factor influencing perceived employability, followed by educational level. Although national cultural values have a lesser impact, high uncertainty avoidance notably decreases perceived employability, while work experience within the same organization significantly

reduces employability in 'person-job fit' scenarios. However, extensive experience within the same organization may reduce adaptability, thus lowering perceived employability.

# **Conclusions and recommendations**

# Theoretical Implications

This research addresses a gap in the management literature by showing how the integration of the COR theory demonstrates the influence of diverse levels of factors on self-perceived employability. Our study on the antecedents of *perceived employability* includes variables at the individual, organizational and national levels and examines how factors at these three levels influence the perceived employability of European workers. The study makes three main contributions:

First, it demonstrates that country-level variables, such as cultural values, are important in understanding factors that affect workers' perceptions of employability. Social values shape how workers perceive and interpret reality, particularly in regard to material success and achievement (Hofstede, 1984, 2001). National cultural tendencies can alter labor market conditions and, in turn, impact individual perceptions of employability. The integration of *uncertainty avoidance* as a new independent variable expands our understanding of employability, particularly in countries that prioritize stability and avoid risk.

Second, we introduce "person-job fit" as a moderating variable that affects employability perceptions among employed individuals, supporting earlier conclusions, such as those by Akkermans *et al.* (2019), highlighting the mutual benefits for both employers and employees when organizations invest in employability.

Finally, regarding training practices, our results reveal the differing effects of training paid for by workers versus by the employer. These differences become more evident when "personjob fit" is considered. Companies should be aware that they may lose highly employable workers,

especially those who feel under-skilled for more demanding tasks, as these individuals tend to seek better employment opportunities (Fugate *et al.*, 2004; Fuller and Marler, 2009).

# **Practical Implications**

This study provides valuable insights for workers, employers and policymakers. Workers are encouraged to invest in their education, both through self-paid initiatives and employer-provided programs, to enhance their employability. This is particularly important when their skills only meet the minimum needed to perform their duties. Additionally, they should recognize how their country's culture influences their employability expectations, potentially enrolling in courses that address the cultural context and its impact on career progression.

Employers should prioritize offering training opportunities, particularly to those employees with low "person-job fit". They should also adapt their human resource practices to align with their country's cultural values regarding employability. These practices are consistent with the UN's Agenda 2030 goals, specifically SDG-4 (Quality Education) and SDG-8 (Decent Work and Economic Growth). By offering these opportunities, employers not only support workers who aspire to keep their current job and advance their careers (Berntson *et al.*, 2006), but they also foster greater employee loyalty, enhance productivity and increase satisfaction, while simultaneously reducing turnover intentions - ultimately benefiting the organization (Fugate *et al.*, 2021).

For policymakers, the multilevel insight of our study highlights the need to design national and organizational training programs that align with workers' specific skill levels and organizational fit. Tailored interventions aimed at improving "person-job fit", should address adaptability and employability. Additionally, governments should consider national cultural differences when implementing policies to promote employability across diverse labor markets. These policies should foster a more inclusive and egalitarian work culture that supports employability for all workers, regardless of gender, age or seniority. Policymakers could implement programs that promote gender equality, offer family-supportive policies and provide

access to child and elderly care services or continuous education courses. This continuous and customized training for enhancing employability is of great relevance due to the demands for new skills required by emerging trends in the labor market (e.g., artificial intelligence technologies, robotics and so on).

#### Limitations and Future Research

This study has several limitations that should be acknowledged. First, the sample consists of 29 European countries, primarily reflecting "Western culture." To broaden the understanding of perceived employability, future studies should be conducted in regions such as the Arab world or Asia, where cultural values differ significantly. This would be particularly valuable in exploring the influence of social values, such as masculinity or uncertainty avoidance, on employability.

Second, the cross-sectional design limits the ability to infer causality. The findings do not account for how workers might perceive their own employability after losing their jobs. Future research should adopt a longitudinal approach to address these dynamics over time. Additionally, it is important to recognize that perceptions of employability may differ between those who are employed and those who are unemployed, making longitudinal studies even more relevant.

Moreover, future studies should consider other factors related to the worker that could potentially contribute to understanding perceived employability. For example, holding a leadership position (e.g., being a supervisor who supports other employees) could influence a worker's perception of employability, as leadership skills may be more easily transferable to other organizations than highly specialized practical skills. Furthermore, psychological factors such as self-confidence, narcissism and other similar traits could influence, regardless of training and national culture, workers' perceptions of their opportunities to find a new job and, consequently, their perceived employability.

# **Endnotes**

<sup>1</sup> Available on: https://www.hofstede-insights.com/product/compare-countries.

# References

- Aguinis, H., Gottfredson, R. K., and Culpepper, S.A. (2013), "Best-practice recommendations for estimating cross-level interaction effects using multilevel modelling", *Journal of Management*, Vol. 39 No. 6, pp. 1490-1528, doi: 10.1177/0149206313478188.
- Akkermans, J., Tims, M., Beijer, S., and De Cuyper, N. (2019), "Should Employers Invest in Employability? Examining Employability as a Mediator in the HRM-Commitment Relationship", *Frontiers in Psychology*, Vol. 10, pp. 1-10, doi: 10.3389/fpsyg.2019.00717.
- Bargsted, M., Yeves, J., Merino, C. and Venegas-Muggli, J.I. (2021), "Career success is not always an outcome: its mediating role between competence employability model and perceived employability", *Career Development International*, Vol. 26 No. 2, pp. 119-139, doi: 10.1108/CDI-06-2020-0141.
- Becker, G.S. (1964), Human capital, New York, NY: National Bureau of Economic Research.
- Bernstrøm, V.H., Drange, I., and Mamelund, S.E. (2019), "Employability as an alternative to job security", *Personnel Review*, Vol. 48 No. 1, pp. 234-248, doi: 10.1108/PR-09-2017-0279.
- Berntson, E., and Marklund, S. (2007), "The relationship between perceived employability and subsequent health", *Work & Stress*, Vol. 21 No. 3, pp. 279-292, doi: 10.1080/02678370701659215.
- Berntson, E., Sverke, M., and Marklund, S. (2006), "Predicting Perceived Employability: Human Capital or Labour Market Opportunities?", *Economic and Industrial Democracy*, Vol. 27 No. 2, pp. 223-244, doi: 10.1177/0143831X06063098.
- Bozionelos, N., Lin, C.-H., and Lee, K.Y. (2020), "Enhancing the sustainability of employees' careers through training: The roles of career actors' openness and of supervisor support", *Journal of Vocational Behavior*, Vol. 117, pp. 103333, doi: 10.1016/j.jvb.2019.103333.
- Braun, S., Stegmann, S., Hernandez, A.S., Junker, N.M., and van Dick, R. (2017), "Think manager—think male, think follower—think female: Gender bias in implicit followership

- theories", *Journal of Applied Social Psychology*, Vol. 47 No 7, pp. 377–388, doi: 10.1111/jasp.12445.
- Canduela, J., Dutton, M., Johnson, S., Lindsay, C., McQuaid, R.W., and Raeside, R. (2012), "Ageing, skills and participation in work-related training in Britain: assessing the position of older workers", *Work, Employment and Society*, Vol. 26 No. 1, pp. 42-60, doi: 10.1177/0950017011426303.
- Clarke, M. (2018), "Rethinking graduate employability: the role of capital, individual attributes and context", *Studies in Higher Education*, Vol. 43 No. 11, pp. 1923-1937, doi: 10.1080/03075079.2017.1294152.
- De Cuyper, N., Mäkikangas, A., Kinnunen, U., Mauno, S., and De Witte, H. (2012), "Crosslagged associations between perceived external employability, job insecurity, and exhaustion: Testing gain and loss spirals according to the conservation of resources theory", Vol. 33 No. 6, pp. 770–788, doi: 10.1002/job.1800.
- De Vos, A., Jacobs, S., and Verbruggen, M. (2021) "Career transitions and employability", *Journal of Vocational Behavior*, Vol. 126, 103475, doi: 10.1016/j.jvb.2020.103475.
- Decius, M.K., and Klug, K. (2024), "Which way of learning benefits your career? The role of different forms of work-related learning for different types of perceived employability", European Journal of Work and Organizational Psychology, Vol. 33 No. 1, pp. 24-39, doi: 10.1080/1359432X.2023.2191846.
- Donald, W.E., Baruch, Y., and Ashleigh, M. (2017), "The undergraduate self-perception of employability: human capital, careers advice, and career ownership", *Studies in Higher Education*, Vol. 44, pp. 1-16, doi: 10.1080/03075079.2017.1387107.
- Edwards, J.R. (1991), "Person-job fit: A conceptual integration, literature review, and methodological critique", in Cooper, C.L. and Robertson, I.T. (Ed.s), *International review of industrial and organizational psychology*, John Wiley & Sons, pp. 283-357.

- Ehrhardt, K., Miller, J.S., Freeman, S.J., and Hom, P.W. (2011), "An examination of the relationship between training comprehensiveness and organizational commitment: Further exploration of training perceptions and employee attitudes", *Human Resource Development Ouarterly*, Vol. 22 No. 4, pp. 459-489, doi: 10.1002/hrdq.20086.
- Eurofound (2017), Sixth European Working Conditions Survey Overview report (2017 update).

  Luxembourg: Publications Office of the European Union.
- Fleischmann, M., Koster, F., and Schippers, J. (2015), "Nothing ventured, nothing gained! How and under which conditions employers provide employability enhancing practices to their older workers", *The International Journal of Human Resource Management*, Vol. 26 No 22, pp. 2908–2925, doi: 10.1080/09585192.2015.1004100.
- Forrier, A., De Cuyper, N., and Akkermans, J. (2018), "The winner takes it all, the loser has to fall: Provoking the agency perspective in employability research", *Human Resource Management Journal*, Vol. 28 No. 4, pp. 511-523, doi: 10.1111/1748-8583.12206.
- Forrier, A., Verbruggen, M., and De Cuyper, N. (2015). "Integrating different notions of employability in a dynamic chain: The relationship between job transitions, movement capital and perceived employability", *Journal of Vocational Behavior*, Vol. 89, pp. 56-64, doi: 10.1016/j.jvb.2015.04.007.
- Fugate, M., Kinicki, A.J., and Ashforth, B.E. (2004), "Employability: A psycho-social construct, its dimensions, and applications", *Journal of Vocational Behavior*, Vol. 65, pp. 14-38, doi: 10.1016/j.jvb.2003.10.005.
- Fugate, M., Van der Heijden, B., De Vos, A., Forrier, A., and De Cuyper, N. (2021), "Is What's Past Prologue? A Review and Agenda for Contemporary Employability Research", *Academy of Management Annals*, Vol. 15 No. 1, pp. 266-298, doi: 10.5465/annals.2018.0171.
- Fuller, B., and Marler, L.E. (2009), "Change driven by nature: A meta-analytic review of the proactive personality literature", *Journal of Vocational Behavior*, Vol. 75, pp. 329-345, doi: 10.1016/j.jvb.2009.05.008.

- García-Cabrera, A.M., and García-Soto, M.G. (2012), "Organizational commitment in MNC subsidiary top managers: antecedents and consequences", *The International Journal of Human Resource Management*, Vol. 23 No. 15, pp. 3151-3177, doi: 10.1080/09585192.2011.637057.
- Halbesleben, J.R.B., Neveu, J.-P., Paustian-Underdahl, S.C., and Westman, M. (2014), "Getting to the 'COR': Understanding the Role of Resources in Conservation of Resources Theory", Journal of Management, Vol. 40 No. 5, pp. 1334-1364, doi: 10.1177/0149206314527130.
- Hansson, B. (2009), "Job-related training and benefits for individuals: A review of evidence and explanations", *OECD Education Working Papers*, Vol. 19, available at SSRN: <a href="https://ssrn.com/abstract=1347622">https://ssrn.com/abstract=1347622</a>.
- Hobfoll, S.E. (1989), "Conservation of resources: A new attempt at conceptualizing stress", *American Psychologist*, Vol. 44, pp. 513–524, doi: 10.1037/0003-066X.44.3.513.
- Hobfoll, S.E. (2001), "The influence of culture, community, and the nested-self in the stress process: Advancing Conservation of Resources theory". *Applied Psychology: An International Review*, Vol. 50 No. 3, pp. 337–370, doi: 10.1111/1464-0597.00062.
- Hobfoll, S.E., Halbesleben, J., Neveu, J.P. and Westman, M. (2018), "Conservation of resources in the organizational context: the reality of resources and their consequences", Annual Review of Organizational Psychology and Organizational Behavior, Vol. 5 No. 1, pp. 103-128, doi: 10.1146/annurev-orgpsych-032117-104640.
- Hofstede, G. (1984), *Culture's consequences: International differences in work-related values*, Sage publications.
- Hofstede, G. (2001), Culture's consequences: Comparing values, behaviors, institutions and organizations across nations, Sage publications.
- Hofstede, G., Hofstede, G.J., and Minkov, M. (2010), *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival*, McGraw-Hill.

- IILS, International Institute for Labour Studies (2010), *World of Work Report 2010*, Switzerland, International Labour Office.
- ILO, International Labour Organization (n.d.), *Relevant SDG Targets related to Skills and Employability*.

  Available at: https://www.ilo.org/global/topics/dw4sd/themes/skills/WCMS 558582/lang--en/index.htm.
- Jackson, D., and Wilton, N. (2017), "Perceived employability among undergraduates and the importance of career self-management, work experience and individual characteristics", Higher Education Research & Development, Vol. 36 No. 4, pp. 747-762, doi: 10.1080/07294360.2016.1229270.
- Jaiswal, A., Arun, C.J., and Varma, A. (2022), "Rebooting employees: Upskilling for artificial intelligence in multinational corporations", *The International Journal of Human Resource Management*, Vol. 33 No. 6, pp. 1179-1208, doi: 10.1080/09585192.2021.1891114.
- Kidron, A., and Vinarski-Peretz, H. (2024), "Linking psychological and social capital to organizational performance: A moderated mediation of organizational trust and proactive behavior", *European Management Journal*, Vol. 42 No. 2, pp. 245-254, doi: 10.1016/j.emj.2022.11.008.
- Kristof-Brown, A.L., Zimmerman, R.D., and Johnson, E.C. (2005), "Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit", *Personnel psychology*, Vol. 58 No. 2, pp. 281-342, doi: 10.1111/j.1744-6570.2005.00672.x.
- Little, L.M., Nelson, D.L., Quade, M.J., and Ward, A. (2011), "Stressful demands or helpful guidance? The role of display rules in Indian call centers", Journal of Vocational Behavior, Vol. 79 No. 3, pp. 724-733, doi: 10.1016/j.jvb.2011.03.017.
- Lo Presti, A.L., Törnroos, K., and Pluviano, S. (2020), "Because I am worth it and employable':

  A cross-cultural study on self-esteem and employability orientation as personal resources for

- psychological well-being at work, *Current Psychology*, Vol. 39 No. 3, pp. 1-13, doi: 10.1007/s12144-018-9883-x.
- Nagy, M.S. (2002), "Using a single-item approach to measure facet job satisfaction", *Journal of Occupational and Organizational Psychology*, Vol. 75, pp. 77-86, doi: 10.1348/096317902167658.
- Nelissen, J., Forrier, A., and Verbruggen, M. (2017), "Employee development and voluntary turnover: Testing the employability paradox", *Human Resource Management Journal*, Vol. 27 No. 1, pp. 152-168, doi: 10.1111/1748-8583.12136.
- Neroorkar, S. (2022), "A systematic review of measures of employability", *Education+ Training*, Vol. 64 No. 6, pp. 844-867, doi: 10.1108/ET-08-2020-0243.
- Niu, Y., Hunter-Johnson, Y., Xu, X., and Liu, T. (2019), "Self-Perceived Employability and Subjective Career Success: Graduates of a Workforce Education and Development Program", *The Journal of Continuing Higher Education*, Vol. 67, pp. 55–71, doi: 10.1080/07377363.2019.1660843.
- Park, S., and Park, S. (2020), "How can employees adapt to change? Clarifying the adaptive performance concepts", *Human Resource Development Quarterly*, Vol. 30 No. 1, pp. E1-E15, doi: 10.1002/hrdq.21411.
- Rothwell, A., and Arnold, J. (2007), "Self-perceived employability: Development and validation of a scale", *Personnel Review*, Vol. 36 No. 1, pp. 23-41, doi: 10.1108/00483480710716704.
- Steel, R.P., Landon, T.E. (2010), "Internal employment opportunity and external employment opportunity: independent or interactive retention effects?", *Military Psychology*, Vol. 22 No. 3, pp. 282-300, doi: 10.1080/08995605.2010.492692.
- Stoffers, J., Hendrikx, K., Habets, O. and van der Heijden, B. (2020), "Employability and innovative work behaviours in SMEs in a Euroregion: A cross-national comparison between Belgium and the Netherlands", *Personnel Review*, Vol. 49 No. 1, pp. 167-187, doi: 10.1108/PR-10-2018-0387.

- Tsui, A.S., Ashford, S.J., Clair, L.S., and Xin, K.R. (1995), "Dealing with discrepant expectations: Response strategies and managerial effectiveness", *Academy of Management journal*, Vol. 38 No. 6, pp. 1515-1543, doi: 10.2307/256842.
- Van der Heijde, C.M., Van Der Heijden, B.I. (2006), "A competence-based and multidimensional operationalization and measurement of employability", *Human Resource Management*, Vol. 45 No. 3, pp. 449-476, doi: 10.1002/hrm.20119.
- Van der Heijden, B.I.J.M., Notelaers, G., Peters, P., Stoffers, J.M.M., De Lange, A.H., Froehlich, D.E., and Van der Heijde, C.M. (2018), "Development and validation of the short-form employability five-factor instrument", *Journal of Vocational Behavior*, Vol. 106, pp. 236-248, doi: 10.1016/j.jvb.2018.02.003.
- Van Harten, J., De Cuyper, N., Guest, D., Fugate, M., Knies, E., and Forrier, A. (2017), "Special issue of international human resource management journal HRM and employability: an international perspective", *International Journal of Human Resource Management*, Vol. 28 No. 19, pp. 2831-2835, doi: 10.1080/09585192.2017.1377866.
- Van Hootegem, A., De Witte, H., De Cuyper, N. Vander Elst, T. (2019), "Job Insecurity and the Willingness to Undertake Training: The Moderating Role of Perceived Employability", Journal of Career Development, Vol. 46 No. 4, pp 395-409, doi: 10.1177/0894845318763893.
- Vanhercke, D., De Cuyper, N., Peeters, E., and De Witte, H. (2014), "Defining perceived employability: a psychological approach", *Personnel Review*, Vol. 43 No. 4, pp. 592-605, doi: 10.1108/PR-07-2012-0110.
- Veld, M., Semeijn, J., and Vuuren, T.V. (2015). "Enhancing perceived employability: an interactionist perspective on responsibilities of organizations and employees", *Personnel Review*, Vol. 44 No. 6, pp. 866-882, doi: 10.1108/PR-05-2014-0100.

Wright, P.M., Dunford, B.B., and Snell, S.A. (2001), "Human resources and the resource based view of the firm", *Journal of management*, Vol. 27 No. 6, pp. 701-721, doi: 10.1177/014920630102700607.



Table I. Sample distribution by country and Hofstede cultural dimensions scores for Masculinity and Uncertainty Avoidance. N=26,555

| Country       | N    | %      | Masculinity | <b>Uncertainty Avoidance</b> |  |  |
|---------------|------|--------|-------------|------------------------------|--|--|
| Country       | IN.  | 70     | Index       | Index                        |  |  |
| Albania       | 802  | 2.876% | 80          | 70                           |  |  |
| Austria       | 746  | 2.968% | 79          | 70                           |  |  |
| Belgium       | 1894 | 7.535% | 54          | 94                           |  |  |
| Bulgaria      | 773  | 2.876% | 40          | 85                           |  |  |
| Croatia       | 712  | 2.833% | 40          | 80                           |  |  |
| Czech Rep     | 741  | 2.948% | 57          | 74                           |  |  |
| Denmark       | 815  | 3.242% | 16          | 23                           |  |  |
| Estonia       | 769  | 2.861% | 30          | 60                           |  |  |
| Finland       | 725  | 2.884% | 26          | 59                           |  |  |
| France        | 1227 | 4.882% | 43          | 86                           |  |  |
| Germany       | 1591 | 6.330% | 66          | 65                           |  |  |
| Great Britain | 1167 | 4.643% | 66          | 35                           |  |  |
| Greece        | 548  | 2.180% | 57          | 112                          |  |  |
| Hungary       | 735  | 2.924% | 88          | 82                           |  |  |
| Ireland       | 723  | 2.876% | 68          | 35                           |  |  |
| Italy         | 787  | 3.131% | 70          | 75                           |  |  |
| Lithuania     | 764  | 3.040% | 19          | 65                           |  |  |
| Luxembourg    | 833  | 3.314% | 50          | 70                           |  |  |
| Netherlands   | 756  | 3.008% | 14          | 53                           |  |  |
| Norway        | 830  | 3.302% | 8           | 50                           |  |  |
| Poland        | 725  | 2.884% | 64          | 93                           |  |  |
| Portugal      | 619  | 2.391% | 31          | 99                           |  |  |
| Romania       | 740  | 2.944% | 42          | 90                           |  |  |
| Slovak Rep    | 745  | 2.964% | 100         | 51                           |  |  |
| Slovenia      | 1219 | 4.850% | 19          | 88                           |  |  |
| Spain         | 2225 | 8.852% | 42          | 86                           |  |  |
| Sweden        | 826  | 3.286% | 5           | 29                           |  |  |
| Switzerland   | 400  | 1.436% | 70          | 58                           |  |  |
| Turkey        | 1118 | 4.050% | 45          | 85                           |  |  |

Table II. Correlations, means and SD, N= 26,555

| Table 11. Correlations, in                     | 1        | 2        | 3        | 4        | 5        | 6        | 7    | 8       | 9     |
|--|----------|----------|----------|----------|----------|----------|------|---------|-------|
| 1. Gender (Male,0; Female, 1)                  | 1.00     |          |          |          |          |          |      |         |       |
| 2. Age   | 0.04***  | 1.00     |          |          |          |          |      |         |       |
| 3. Level of education                          | 0.07***  | -0.01    | 1.00     |          |          |          |      |         |       |
| 4. Work experience in the current organization | -0.03*** | 0.016*** | -0.01    | 1.00     |          |          |      |         |       |
| 5. Training paid for by the employer           | 0.02**   | -0.01    | 0.12***  | 0.08***  | 1.00     |          |      |         |       |
| 6. Training on-the-job                         | 0.01*    | -0.02**  | 0.12***  | 0.03***  | 0.43***  | 1.00     |      |         |       |
| 7. Training paid for by the worker             | 0.03***  | -0.01*   | 0.06***  | -0.02*** | 0.09***  | 0.11***  | 1.00 |         |       |
| 8. Masculinity                                 | -0.01    | -0.00    | 0.01     | -0.05*** | -0.06*** | -0.05*** | 0.01 | 1.00    |       |
| 9. Uncertainty Avoidance                       | -0.01*   | -0.03*** | -0.07*** | 0.03***  | -0.13*** | -0.17*** | 0.01 | 0.12*** | 1.00  |
| Mean   | 0.52     | 44.79    | 2.65     | 11.00    | 1.40     | 1.37     | 1.07 | 46.35   | 71.93 |
| SD   | 0.52     | 38.03    | 1.13     | 9.59     | 0.49     | 0.48     | 0.25 | 21.96   | 20.79 |
| *p < .05, **p < .01, ***p < .001               |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |
|  |          |          |          |          |          |          |      |         |       |

<sup>\*</sup>p < .05, \*\*p < .01, \*\*\*p < .001.

Table III. The effect of Human capital, Training practices and National cultural values on workers' perceived employability: hierarchical linear model estimations. N=26,555

| Variable  | Estimate         | SE.   | z-statistic | p-value |
|---|------------------|-------|-------------|---------|
| Fixed effects   |                  |       |             |         |
| Intercept   | 3.195***         | 0.182 | 17.576      | 0.000   |
| Level 1 - individual level: Human capital and Tr        | aining practices |       |             |         |
| Gender  | -0.097***        | 0.016 | -5.917      | 0.000   |
| Age   | -0.002***        | 0.000 | -7.353      | 0.000   |
| Education level   | 0.098***         | 0.011 | 8.341       | 0.000   |
| Work experience in the current organization             | -0.030***        | 0.001 | -32.934     | 0.000   |
| Training activities paid for by the employer            | 0.137***         | 0.020 | 6.941       | 0.000   |
| Training activities paid for by the worker              | 0.159***         | 0.034 | 4.624       | 0.000   |
| On-the-job training                                     | 0.008            | 0.020 | 0.424       | 0.671   |
| Level 2 - country level: National cultural values       |                  |       |             |         |
| Masculinity   | -0.003           | 0.002 | -1.565      | 0.118   |
| Uncertainty Avoidance                                   | -0.007**         | 0.002 | -3.167      | 0.002   |
| Marginal R <sup>2</sup>                                 |                  | 0.09  | 3           |         |
| P-value   |                  | <0.00 |             |         |
| Root Mean Squared Error (RMSE)                          |                  | 1.33  | 9           |         |
| R-Squared   |                  | 0.523 | 39          |         |
| Adjusted R-squared<br>*p < .05, **p < .01, ***p < .001. |                  | 0.523 | 35          |         |
|   |                  |       |             |         |
|   |                  |       |             |         |

<sup>\*</sup>p < .05, \*\*p < .01, \*\*\*p < .001.

Table IV. The moderating role of person-job fit in the effect of human capital, training practices and national cultural values on perceived employability: hierarchical linear model estimations, N=26,555

|  | Model I I need further training to cope well with my duties N=3,220 |       |                 |             | Model II  My present skills correspond well with my duties N= 13,527 |           |                 |             | Model III  I have the skills to cope with more demanding duties  N=6,978 |       |                 |             |
|--|---|-------|-----------------|-------------|--|-----------|-----------------|-------------|--|-------|-----------------|-------------|
| Variable   | Estimate  | SE    | z-<br>statistic | p-<br>value | Estimate   | SE        | z-<br>statistic | p-<br>value | Estimate   | SE    | z-<br>statistic | p-<br>value |
| Fixed effects  |   |       |                 |             |  |           |                 |             |  |       |                 |             |
| Intercept  | 2.835***  | 0.026 | 110.830         | 0.000       | 2.677***   | 0.182     | 14.711          | 0.000       | 2.836***   | 0.388 | 7.311           | 0.000       |
| Level 1 - individual level: Human capital and Training practices |   |       |                 |             |  |           |                 |             |  |       |                 |             |
| Gender   | -0.013  | 0.022 | -0.563          | 0.523       | -0.013   | 0.041     | -0.336          | 0.737       | -0.1108  | 0.072 | -1.534          | 0.125       |
| Age  | -0.025  | 0.025 | -1.000          | 0.317       | -0.062***  | 0.011     | -5.627          | 0.000       | -0.104***  | 0.017 | -6.114          | 0.000       |
| Education level  | 0.025   | 0.025 | 1.011           | 0.312       | 0.086***   | 0.011     | 7.651           | 0.000       | 0.053**  | 0.017 | 3.059           | 0.002       |
| Work experience in the current organization                      | -0.303***   | 0.025 | -12.161         | 0.000       | -0.304***  | 0.011     | -27.411         | 0.000       | -0.297***  | 0.017 | -17.279         | 0.000       |
| Training activities paid for by the employer                     | 0.021   | 0.026 | 0.793           | 0.427       | 0.064***   | 0.012     | 5.248           | 0.000       | 0.088***   | 0.018 | 4.693           | 0.000       |
| On-the-job training  | -0.002  | 0.026 | -0.073          | 0.941       | 0.0183   | 0.012     | 1.506           | 0.132       | -0.0099  | 0.018 | -0.527          | 0.598       |
| Training activities paid for by the worker                       | 0.049*  | 0.025 | 1.998           | 0.046       | 0.050***   | 0.011     | 4.549           | 0.000       | 0.0132   | 0.017 | 0.768           | 0.443       |
|  |   | Lei   | vel 2 - counti  | ry level: N | ational cultura  | ıl values |                 |             |  |       |                 |             |
| Masculinity  | -0.006  | 0.025 | -0.236          | 0.813       | -0.056***  | 0.011     | -5.090          | 0.000       | -0.076***  | 0.016 | -4.523          | 0.000       |
| Uncertainty Avoidance  | -0.143***   | 0.025 | -5.742          | 0.000       | -0.109***  | 0.011     | -9.703          | 0.000       | -0.174***  | 0.017 | -10.142         | 0.000       |
| Marginal R <sup>2</sup>  | 0.063   |       |                 | 0.075       |  |           |                 | 0.080       |  |       |                 |             |
| P-value  | <0.001  |       |                 | <0.001      |  |           |                 | <0.001      |  |       |                 |             |
| Root Mean Squared Error (RMSE)                                   | 1.373   |       |                 | 1.331       |  |           | 1.403           |             |  |       |                 |             |
| R-squared  | 0.3917  |       |                 | 0.4572      |  |           | 0.5422          |             |  |       |                 |             |
| Adjusted R-squared *n < 05 **n < 01 ***n < 001                   | 0.3910  |       |                 |             | 0.4569   |           |                 |             | 0.5418   |       |                 |             |

<sup>\*</sup>p < .05, \*\*p < .01, \*\*\*p < .001.