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Sustainable careers within contextual boundaries

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Chapter 2

Perceived Employability as a Manifest Career Resource Caravan:

A Meta-Analysis of its Antecedents and Consequences[1]

Keywords: perceived employability; sustainable career; meta-analysis

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No man is an island entire of itself;
every man is a piece of the continent,
a part of the main

John Donne

Abstract

Perceived employability refers to an individual's perception of the possibilities of obtaining, maintaining, and changing employment. We present a comprehensive meta-analysis of the antecedents and outcome correlates of perceived employability (k =127 independent samples, n = 69.301 employees). In line with our employability framework, results indicate positive relationships between perceived employability and personal resources such as protean career orientation, career adaptability, proactive personality, psychological, human, and social capital, as well as organizational resources including HRM practices, supervisory support, autonomy, and job security. Perceived employability was also related to various outcomes that are indicative of sustainable careers, such as productivity, happiness, and health. Contrary to our expectations, we did not find significant relationships across studies between perceived employability and mobility, such as employment status, job search and turnover intentions. Finally, we explore and discuss the role of several methodological (i.e., study design and employability dimension) and contextual moderators (i.e., individual vulnerability and macroeconomic and cultural context) in the relationships between perceived employability, antecedents, and outcome correlates. Overall, the findings of this meta-analysis underscore the relevance of perceived employability to developing sustainable careers, and provide insights for further theory building, empirical research and practice.

To employability and beyond

Both the nature of work and how work is managed evolve over time. The ongoing flexibilization of labor markets, the global mobility of both production and workforce, and digitalization are accelerating the pace of change. Organizations must be increasingly flexible, which they often aim to accomplish through new organizational forms (e.g., franchising, outsourcing) and contingent work arrangements (e.g., temporary workers, independent contractors, and part-time employees; Kochan, Riordan, Kowalski, Khan, & Yang, 2019; Weil, 2014). At the employee level, these pressures have affected the typical employment relationship. People in many countries now change employment status, jobs, organizations, and professions at a faster pace than before. On average, US employees spend 4.3 years in a job and change jobs 10 - 15 times throughout their careers (US Bureau of Labor Statistics, 2018). Similar albeit more moderate trends are seen in Europe (Bachmann, Felder, Frings, Giesecke, & Rzepka, 2015). Given the rising life expectancy around the world (World Health Organization, 2016), people may also (have to) work and manage their careers for a longer duration. Thus, sustaining careers by maximizing individual chances of acquiring, maintaining, and changing jobs, in other words by fostering employability, forms a critical challenge for individuals, organizations, and societies.

Research on employability has blossomed in the last three decades, and different streams of literature have emerged, each with their own view of what constitutes employability, generally referred to as the "ability" or "chance" of being employed (Vanhercke, De Cuyper, Peeters, & De Witte, 2015). This fragmentation resulted in disparate conceptualizations of employability as a set of individual perceptions of their employment chances (Forrier, Verbruggen, & De Cuyper, 2015; Wittekind, Raeder, & Grote, 2010), as well as competences (Van der Heijde & Van der Heijden, 2006), dispositions (Fugate, Kinicki, Ashforth, 2004), skills (Dania, Bakar, & Mohamed, 2014), or attributes (Potgieter, 2012) that might determine employment chances.

As the idea that individual attitudes and behaviors tend to be determined by perceptions of reality rather than reality itself (Roskies & Louis- Guerin, 1990) has gained traction in employability research, we focus here on reviewing the literature on perceived employability, defined as the individual's perception of her or his possibilities of obtaining, maintaining, and changing employment (Berntson & Marklund, 2007; Vanhercke et al., 2015). Such perceptions derive from the cognitive appraisal of one's resources vis-à-vis employment opportunities (or the lack thereof) as well as resources and obstacles in the environment. Building on conservation of resources (COR) theory (Hobfoll, 1989), perceived employability is conceptualized

as a subjective manifestation of the 'resource caravan' (Hobfoll, 2011), defined as a 'pack' of individual and organizational resources that operate together and are indispensable for sustainable careers. According to COR theory, resources are interrelated and manifest their influence in concert. Perceived employability combines elements of both the personal and environmental resource pool (De Cuyper, Mäkikangas, Kinnunen, Mauno, & De Witte, 2012), into a subjectively aggregated reference point that employees can use as a compass to navigate dynamic internal and external labor markets (Lo Presti & Pluviano, 2016).

Research has identified many resources that relate to perceived employability, including personal resources, such as knowledge, skills, and abilities (e.g., Direnzo, Greenhaus, & Weer, 2015), and external resources, such as employment conditions (Eby, 2001) or perceived organizational support (Veld, Semeijn, & van Vuuren, 2015). Additionally, perceived employability helps explain several outcomes related to sustainable careers, such as employment, (e.g., Koen, Klehe, & Van Vianen, 2013) and career success (e.g., Akkermans & Tims, 2017). Employees high on perceived employability also report higher levels of job, career, and life satisfaction (Dacre & Qualter, 2013; Praskova, Creed, & Hood, 2014; Silla, De Cuyper, Gracia, Peiró & De Witte, 2008). Finally, perceived employability is positively related to both physical and mental health (De Cuyper, Raeder, Van der Heijden, & Wittekind, 2012; Gilardi, Ricco & Siletti, 2012). Although primary studies have thus advanced our knowledge of the antecedents and consequences of perceived employability, the evidence base is fragmented as it originated in different disciplines (e.g., public policy, education, occupational health, HRM and careers) (Rothwell, 2015). Several narrative employability reviews started to consolidate research evidence (e.g., Thijssen, Van der Heijden, & Rocco, 2008; Vanhercke et al., 2015; Rothwell, 2015; Lo Presti & Pluviano, 2016). However, a comprehensive and systematic attempt to quantitatively summarize the existing literature across disciplines has not been undertaken yet.

The current study thus sets out to do such a quantitative review and aims to provide three main contributions to the perceived employability and sustainable careers literatures. First, to date the choice to focus on particular antecedents and outcome correlates of employability in primary studies is rarely justified by explicit theoretical underpinnings (Forrier, De Cuyper, & Akkermans, 2019). Taken together with the fragmented nature of the current evidence base, this precludes deriving more general conclusions about how and why perceived employability relates to broader categories of antecedents and outcomes. Here we aim to meta-analytically

summarize the findings and reviewing the antecedents and outcome correlates of employability mapped against a conceptual framework integrating COR theory (Hobfoll, 1989, 2017) with the model of sustainable careers (De Vos, Van der Heijden, & Akkermans, 2018), which can help in estimating the true strength of relationships, and support construct refinement and parsimony in future theory building.

Second, the research literature on employability shows inconsistent findings for some antecedents (e.g., age; Silla et al., 2008) and outcome correlates (e.g., turnover intentions; Acikgoz, Sumer, & Sumer, 2016). Comparing the findings from multiple primary studies and examining moderators, may help in reconciling such inconsistencies and may yield new directions for future research. Third, despite the often-recognized importance of the external labor market as a potential co-determinant of perceived employability, the literature focuses on individual differences. Exploring variability in the relationships of perceived employability with antecedents and outcome correlates across moderators that capture the economic and cultural contexts in which the studies were conducted can contribute to the generation of more context sensitive and locally valid practical recommendations.

In sum, the current study aims to provide a meta-analysis of the relationships between perceived employability and its antecedents and outcome correlates. We do so by building on COR theory (e.g., Hobfoll, 1989, 2017) and the model of sustainable careers (De Vos et al., 2018), and offer an integrative nomological network of perceived employability. We also systematically explore the role of a variety of methodological study characteristics and contextual moderators in an effort to explain variability in relationships between employability and its antecedents and outcomes. Finally, we discuss the implications of our findings for future research, policy development, and practice.

Theoretical Background and Hypothesis Development

Employability as a construct dates back to the early twentieth century, but has gained prominence in the academic literature over the past three decades (Lo Presti & Pluviano, 2016). Originally, the term was used to differentiate between different types of unemployed people: those who are seeking work (the employable) and those, such as the retired, who are not (the unemployable) (De Grip, van Loo, & Sanders, 2004). Later, the contexts in which the term was used and its meaning shifted several times (Rothwell, 2015). From the nineties on, the notion of lifetime employability as a means of protecting individuals in the labor market replaced the

previously prevalent idea of lifetime employment (Forrier & Sels, 2003) and the term employability was predominantly used at the micro or individual level (Thijssen et al., 2008). Currently, the career research focuses on the individual as the owner of their career and defines employability as an "individual's chance of a job in the internal and/or external labour market" (Forrier & Sels, 2003, p. 106).

Despite agreement on the definition of employability (Forrier et al., 2018), different streams of employability research differ in the interpretation of what this "chance of a job" stands for. The input-based approach, accentuates the "quality of being employable" (McQuaid & Lindsay, 2005, p. 206) and aims to specify those individual differences that co-determine employment chance. The output-based approach focuses on estimating the chance itself, operationalized as the likelihood or probability of obtaining, retaining, and/or changing employment (e.g., Vanhercke et al., 2015). The current study adopts the output-based approach and focuses specifically on perceived employability.

The different conceptualizations of employability in the input-based research stream (see Table 2.1) are all multidimensional in that they delineate a set of attributes that determine ones' chance of obtaining, retaining, or changing employment. The conceptualizations differ, however, in their granularity and focus. Some are more general, whereas others are more specific and comprise longer lists of attributes that jointly reflect employability. For example, De Grip et al. (2004) define employability in terms of a capacity and a willingness of workers to remain attractive for the labor market, whereas Fugate and Kinicki (2008) focus on individual dispositions such as career identity, resilience, and work and career proactivity (Fugate & Kinicki, 2008).

In contrast to the input-based models, output-based research operationalizes employability more directly in terms of the likelihood of obtaining, retaining, or changing jobs (De Cuyper et al., 2011). This chance might be objective (e.g., number of job shifts and/or internal promotions; Akkermans et al, 2015) or self-perceived by the focal employee. We adopt an output-based approach and focus on perceived employability for four reasons. First, output-based operationalizations capture the construct more holistically than input based ones, because the former accounts for the fact that individuals with the same "input" might still evaluate their chance of employment differently, which might explain individual differences in career outcomes (Wittekind et al., 2010). Second, focusing on perceived employability as opposed to input-based conceptualizations allows for a clearer distinction between

employability and its individual level antecedents, such as knowledge, skills and other characteristics. Third, while input-based employability operationalizations are heterogeneous, those of perceived employability are more consistent across studies, resulting in a substantial body of literature that is in need of being quantitatively summarized. While there are meta-analyses related to sustainable careers (Ng, Eby, Sorensen, & Feldman, 2005) or career adaptability (Rudolph et al., 2017), a meta-analysis on perceived employability is lacking, despite the considerable research base. Fourth, as the cognitive appraisal of one's employability is likely based on personal and contextual resources, focusing on perceived employability as a resource caravan allows for a more comprehensive treatment of antecedents of both employability and sustainable career outcomes.

In addition to the distinction between input and output-based approaches, some researchers operationalize employability in terms of quantity of employment chances, whereas others propose a more restricted definition that incorporates criteria related to, for instance, fit of available employment chances to one's potential (Hillage & Pollard, 1998), job attractiveness (Thijssen et al. 2008), or appropriateness of available job opportunities to one's qualification level (Rothwell & Arnold, 2007). Given that the main focus of the current study is to provide a comprehensive quantitative review of the relationships between perceived employability, and its antecedents and outcome correlates, we focus primarily on the overall employability perceptions as our focal variable, and we classify variables that might indicate fit between individuals and available employment opportunities (e.g., employment status, career success) as outcome correlates.

Table 2.1. Representative Definitions of Employability by Conceptual Distinction

Theoretical Distinction	Focus	Definition Used	Year	Authors
Dispositional Employability	Input	"A form of work specific active adaptability that enables workers to identify and realize career opportunities."	2004	Fugate, Kinicki, & Ashforth
Dispositional Employability	Input	"A constellation of individual differences that predispose employees to (pro)actively adapt to their work and career environments."	2008	Fugate & Kinicki
Movement Capital	Input	"Individual skills, knowledge, competencies and attitudes influencing an individual's career mobility."	2009	Forrier & Sels
Employability Competence	Input	"The continuous fulfilling, acquiring or creating of work through the optimal use of competences."	2006	Van der Heijde & Van der Heijden
Employability	Input	"Capacity and willingness of workers to remain attractive for the labor market."	2004	De Grip et al.
Employability	Input	"Capability to move self-sufficiently within the labor market to realize potential through sustainable development. "	1998	Hillage & Pollard
Employability Activities	Output	"The activities employees undertake to improve and maintain their employability, such as engaging in development activities and extending their knowledge and work experiences."	2004	Van Dam
Employability Activities	Output	"A wide range of activities or practices that individuals can use to increase their employment opportunities. "	2010	Smith
Perceived Employability	Output	"An individual's chance of a job on the internal and/or external labor market.''	2003	Forrier & Sels
Perceived Employability	Output	"Self-perceived ability to keep the job one has or to get the job one wants."	2007	Rothwell & Arnold
Perceived Employability	Output	"Individual's perception of available employment opportunities."	2006; 2000; 2003; 2007	Berntson & Marklund, Eby et al.; De Fillippi et al,
Perceived Employability	Output	"The employee's perceptions of alternative job opportunities."	2008, 2011	De Cuyper & De Witte

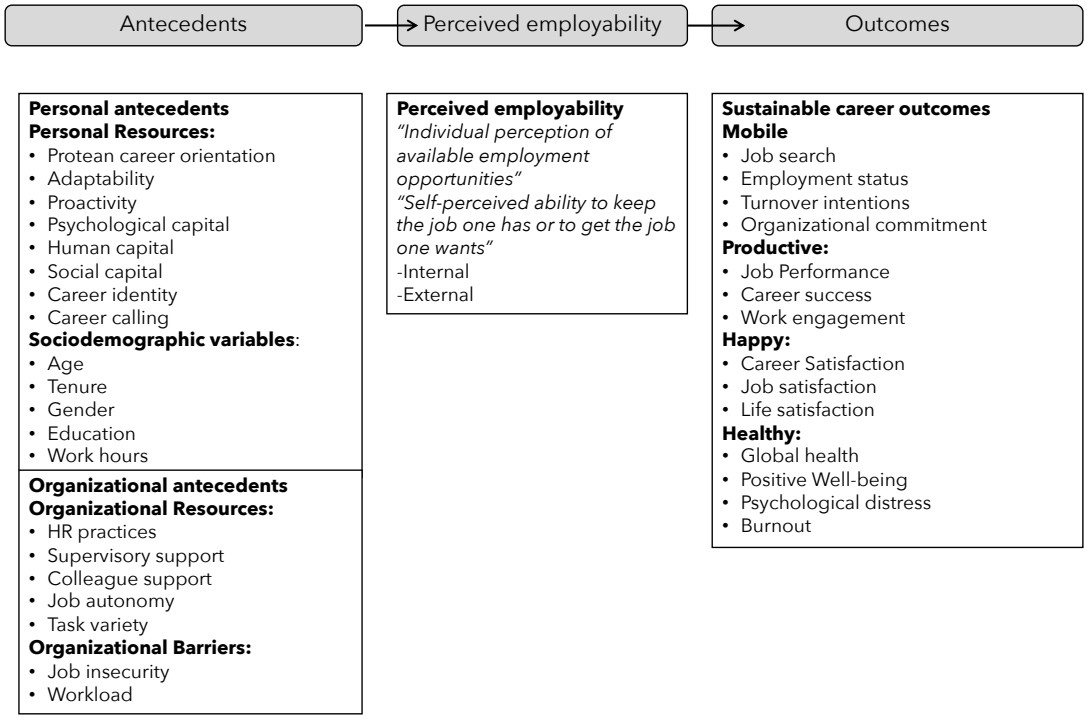
A COR Perspective on the Nomological Network of Perceived Employability

To demarcate the nomological network of perceived employability, we draw on COR theory (Hobfoll, 1989), which posits that people strive to retain, defend, and develop resources which are instrumental to coping with environmental changes, demands, and stressors. Resources are defined as objects, conditions, energies, or personal characteristics that people value and that facilitate the acquirement of further resources. COR theory distinguishes between individual resources (e.g., mastery) and environmental ones (e.g., social support) (Pearlin & Schooler, 1978). According to COR theory, resources form jointly functioning packs or caravans that reflect congruous personal and environmental resources.

To sustain their careers in the face of the stressors and insecurities of the contemporary labor market, individuals need to maintain and replenish their resources through selective and strategic resource investment. Perceived employability may be thought of as a subjective gauge of the state of the career relevant resource caravan. Consistent with COR theory, we expect that individuals develop and protect their perceived employability by drawing upon both their personal (e.g., adaptability) and environmental resources (e.g., development opportunities). When resources are bountiful, individuals are more likely to perceive themselves to be employable, which in turn yields positive career outcomes. For example, people may invest time and energy, two important resources, in developing new skills to increase the odds of a successful career step, simultaneously enhancing their perceived employability (a valuable future resource). When resources are scarce or individuals experience challenging conditions involving the risk of resource loss (e.g., job insecurity), they may start to perceive themselves as less employable, which can have negative repercussions for future career outcomes.

As depicted in our conceptual model (Figure 1), COR theory forms the theoretical base for our investigation of how personal and organizational resources relate to individuals' employability perceptions, and how employability perceptions in turn relate to outcome correlates relevant to career sustainability (mobility, happiness, health, and productivity).

Figure 2.1. Conceptual Model Representing the Nomological Network of Antecedents and Outcomes of Perceived Employability



Personal Antecedents of Perceived Employability

Studies have investigated many personal characteristics as antecedents of perceived employability. To categorize personal resources that might be particularly relevant for developing and sustaining positive employability perceptions into broader thematic categories, we build on and the model of sustainable careers (De Vos et al, 2018), which indicates that to sustain their careers individuals need to demonstrate agency and meaning making. We thus classify personal resources in categories reflecting agency (i.e., protean career orientation, career adaptability, proactive personality, psychological, human, and social capital) and meaning making (i.e., career identity, career calling).

Protean career orientation. Protean career orientation reflects a preference to be in charge of managing one's career direction and achieving subjectively valuable career outcomes (Hall, 1996, Briscoe, & Hall, 2006). Those with a protean career orientation tend to be self-directed and demonstrate proactive career behaviors, such are networking and developmental activities (Wiernik & Kostal, 2019). Thus,

such individuals are likely more cognizant of available employment opportunities within and/or outside their current organization (Lin, 2015, Direnzo, Greenhaus, & Weer, 2015).

Career adaptability. Career adaptability denotes self-regulatory competences that allow individuals to unravel novel, unclear and multifaceted tasks and challenges in the course of their careers (Savickas & Porfeli, 2012). Adaptable individuals should have more favorable employability perceptions because they are better able to anticipate employment opportunities and explore them more, they better regulate their effort to realize opportunities, and are overall more adaptable in responding to transitions and issues in the career path.

Proactive personality. Proactive personality refers to a dispositional tendency towards future oriented action and perseverance in the face of setbacks (Bateman & Crant, 1993). Because proactive individuals tend to take more initiative in managing their own career, are oriented toward change, and focused on the future (Parker, Bindl, & Strauss, 2010), we expect them to have more favorable employability perceptions.

Psychological capital. Psychological capital denotes individuals' general positive outlook on life. It encompasses four dimensions: self-efficacy (beliefs regarding the ability to realize an action and manage tasks and situations), hope (perceived ability to motivate oneself), resilience (capacity to recover from failure or adversity), and optimism (making stable, internal attributions to positive events and unstable, external attributions to negative ones; Luthans, Youssef, & Avolio, 2007). Psychological capital dimensions are expected to boost perceived employability. For example, Lim and Loo (2003) argued that individuals with higher self-efficacy are confident that they possess the abilities to perform well in their future jobs. Such beliefs are likely to be reflected in perceived employability. Also, optimism, hope, and resilience capture a positive mindset that forms a resource in uncertain times (e.g., Kobasa, Maddi, & Kahn, 1982). For example, optimistic workers tend to perceive transitions as opportunities to learn (Scheier, Carver, & Bridges, 1994), which helps them develop employment alternatives in volatile employment conditions.

Human capital. Human capital represents "an individual's ability to meet the performance expectations of a given occupation" (Fugate et al., 2004, p. 25) and refers to the knowledge, skills and abilities relevant to one's career (Arthur, Inkson, & Pringle, 1999). Individuals greater human capital and more invested into its development are thus likely perceive more employment opportunities.

Social capital. Social capital refers to resources that individuals draw from their network, including professional and personal contacts (Parker & Arthur, 2000). Networks can provide a rich source of relevant knowledge and information (Seibert, Kraimer, & Liden, 2001) and can help reputation development and opportunity generation (Parker & Arthur, 2000). De Battisti, Gilardi, Siletti and Solari (2014) show that in the context of involuntary lay-off, individuals with a wider social network were more inclined to use outplacement services and had more positive beliefs about employment prospects.

Career identity. Career identity reflects how people define themselves in relation to their work (Meijers, 1998) characterized by a clear insight in their career aspirations and goals as well as stable awareness of their strengths and weaknesses vis-à-vis the career domain (e.g., De Vos & Soens, 2008). A strong career identity may thus motivate and guide individuals towards sustainable employment (opportunities), yielding higher perceived employability relative to those who identify less strongly with their occupation.

Career calling. Career calling reflects work characterized by a deep sense of meaning, purpose and a desire to contribute to others (Lysova, Jansen, Khapova, Plomp, & Tims, 2018). In addition to the personal meaning of the work (career identity), perceptions of employability might also relate to meaning work has for others. Although some evidence suggests calling may relate to 'career tunnel vision' (Dobrow & Tosti- Kharas, 2012), for perceived employability this possible dark side is likely offset by its motivational side.

In sum, we hypothesize positive relationships of perceived employability with personal resources overall as well as with the aforementioned specific personal resources:

Hypothesis 1: Personal resources are positively related to perceived employability; protean career orientation (H1a), career adaptability (H1b), proactive personality (H1c), psychological capital (H1d), human capital (H1e), social capital (H1f), career identity (H1g) and calling (H1h) are positively related to perceived employability.

Organizational Antecedents of Perceived Employability

Research suggests that several organizational factors might also relate to employees' perceived employability, including HR practices (training and flexibility), supervisory and colleague support, job autonomy, task variety, and job security. Researchers have used social-exchange theory to argue that perceived employability reflects reciprocal investments between employee and employer. COR theory also presumes the importance of an environmental resource pool for optimal individual functioning (Hobfoll & Wells, 1998). Organizations that provide employees with training and development opportunities, support, security, autonomy and challenge create resource abundant environments. In such environments, employees can draw from this pool of resources to cope with changes and risks associated with resource loss and to develop and nourish perceived employability. As individuals use perceptions of their current work environment to develop expectations about the future (Markus & Wurf, 1987), working in an organization that provides abundant resources likely stimulates positive expectations about other employment opportunities.

HR practices. Providing HR practices such as training signals the willingness to invest in employees. Such practices provide opportunities for knowledge acquisition and personal growth, enabling employees to further develop human capital and increase their odds of sustaining employment over time. Research shows these practices relate positively to perceived employment opportunities (e.g., Veld et al., 2015). Similarly, Van Harten, Knies and Leisink (2016) show that HR practices stimulate employability perceptions through their relationship with willingness to learn and change.

Supervisor support. Social support includes instrumental (help with practical problems), informational (helpful advice and information), and emotional support (care, empathy and encouragement) (House & Kahn, 1985). Supervisory support, such as showing concern for employees' needs and facilitating their development relates positively to employability perceptions (Wittekind et al., 2010, Van Harten et al., 2016). Such support can empower employees and make them more confident about their capabilities (Van Der Heijden, 2003), which likely manifests in more positive evaluations of employment chances.

Colleague support. Supervisor support is not only source of social support at work. Team members and coworkers can also provide help with performing work tasks, information or feedback and encouragement or understanding, which enriches the personal resource pool and might then have positive implications for employability.

As social support is the most robust single indicator of personal resources in the body of evidence built from COR theory (Schumm, Briggs-Phillips, & Hobfoll, 2006), it is important to consider the effect social support by colleagues might have on employability perceptions.

Job autonomy. Job autonomy indicates that employees take responsibility and discretion in planning and executing their work (Hackman & Oldham, 1976). Having control and taking charge of planning and executing their work makes employees feel empowered. In addition, job autonomy may stimulate the development of knowledge, skill and abilities relevant for performing job tasks, but also contribute to the development of self-regulatory strengths as having discretion requires individuals to rely more on self-management, all of which might improve perceived employment chances.

Task variety. Task variety indicates that a job requires the use of a wide range of skills and abilities (Hackman & Oldham, 1976). Having a differentiated set of knowledge, skills, and abilities likely results in increased employability perceptions. Indeed, research shows task variety related positively to perceived employability (e.g., De Cuyper, Mauno, Kinnunen, & Mäkikangas, 2011).

Job security. Job security which refers to employees' beliefs that their jobs are safe (Acikgoz et al., 2016). It is the opposite of job insecurity, the subjective perception of being at risk of losing one's job (Greenhalgh & Rosenblatt, 1984). Although job security has received a lot of attention in the employability literature, the direction of its relationship to perceived employability is still unclear. Based on COR theory, job security can be seen as a potential external resource that can result in amplified perceptions of other employment chances. Accordingly, longitudinal evidence suggests perceived job security is an antecedent of perceived employability (De Cuyper et al., 2008; Kalyal, Berntson, Baraldi, Näswall, & Sverke, 2010). We hypothesize:

Hypothesis 2: Organizational resources relate positively to perceived employability; HR practices (H2a), supervisory support (H2b), colleague support (H2c), job autonomy (H2d), task variety (H2e), and job security (H2f) relate positively to perceived employability.

Sociodemographic Factors

Studies have shown that demographic factors may affect employability in different ways. Age and tenure might relate to a growth of human capital over time, which could yield a higher perceived employability. However, if work changes, older and more tenured workers might run the risk of their human capital becoming obsolete, which might have negative ramifications for their employability perceptions. Moreover, due to lower psychological mobility among women, gender may affect employability. Also, more educated workers and those working more hours may perceive more employment opportunities. Drawing on sociology, some sociodemographic characteristics (e.g., age) might relate to institutional practices and norms that regulate access to employment (Kovalenko, & Mortelmans, 2016). As such, they may represent structural resources in the environment rather than personal resources. In sum, COR theory does not suggest when and how such factors would constitute a personal resource or a barrier to employability and overall there is also no clear other theoretical rationale as to whether and how demographics relate to perceived employability. In the literature they are usually included as control variables. Here, we explore how perceived employability relates to age, gender, education, working hours, and tenure.

Exploratory research question 1: To what extent do sociodemographic factors (i.e., gender, age, education, tenure, and work hours) relate to perceived employability?

Outcome Correlates of Perceived Employability

To review the outcome correlates of perceived employability, we develop hypotheses for four distinct outcome domains, namely more proximal mobility related outcomes and three more distal sustainable careers outcomes, i.e. productivity, happiness, and health.

Mobile employees. Perceived employability refers to perceived chances of successfully obtaining, retaining, and changing employment (e.g., Fugate et al., 2004) and we expect this to relate positively to mobility throughout careers. To explain why perceived employability should be linked to mobility among those searching for employment (i.e., job search and employment status), the COR theory argument of resource protection and generation is complemented by self-regulation theory (Kanfer, Wanberg, & Kantrowitz, 2001). Job search is a dynamic process of setting job

search goal(s), planning and executing job search activities, which are all likely to be stimulated by higher perceived employability. Perceiving few job opportunities may reduce commitment to job search, while perceiving ample prospects might stimulate it. Employability perceptions might also affect job search through motivational self-regulation. Individuals who perceive themselves as employable believe in their chances to find jobs, which motivates them to put effort into job search. In contrast, individuals low on perceived employability may be less driven to engage in job search as they do not believe effort will lead to rewarding outcomes.

Perceived employability can also relate to mobility indicators of employed individuals (turnover intentions; organizational commitment). Employees who perceive more favorable employment opportunities elsewhere might be more inclined to consider leaving their job. In other words, employees who have an employability resource caravan, might use it to pursue further resources in the form of better employment and may become less committed to their current organization (De Cuyper & De Witte, 2011; Nelissen, Forrier, & Verbruggen, 2017; Philippaers, De Cuyper, & Forrier, 2017). For organizations that invest in employees' employability this might represent a risk, which the literature labels the "employability management paradox" (Forrier et al., 2018). However, the link between employability perceptions and mobility of employees may also need to be triggered by wider unfavorable employment conditions (Acikgoz et al., 2016). We study the relationships and hypothesize:

H4: Perceived employability relates positively to job search (H4a); employment status (H4b); but also to turnover intentions (H4c) and negatively to organizational commitment (H4d).

Productive employees. Productivity refers to strong performance in one's current job and organization and to realizing one's career potential in the long run (De Vos et al., 2019). In this meta-analysis, we therefore address productivity as in-role performance in the current job and career success as an indicator of long-tern career potential. We also address work engagement as meta-analytic evidence indicates a positive relationship between engagement and task performance (Christian, Garza, & Slaughter, 2011), suggesting that they may form complementary indicators of productivity. More employable individuals are more likely to possess the resource caravan (e.g., knowledge, proactivity) critical to performing better in their job. Also, individuals with richer employability resource caravan are likely more able to actively

allocate energy, involvement and persistence into performing their jobs, which is epitomized in work engagement (Kanfer, 1990).

Where for organizations the employability resource caravan might manifest through increased performance and work engagement, for employees it should manifest in career success in terms of higher income, position or promotion (Becker, 1964). Whereas consensus exists in seeing employability as an antecedent (e.g., Haines, Hamouche, & Saba, 2014) or an indicator (e.g., De Vos, De Hauw, & Van der Heijden, 2011) of career success, it should be noted that studies have not always found the proposed positive relationships between employability and job performance (De Cuyper, & De Witte, 2011), suggesting some highly employable employees may be more persistent in their search for greater career success to the point of compromising in-role performance or engagement (e.g., De Grip et al., 2004; Pearce & Randel, 2004). We hope to offer more conclusive evidence and based on COR theory we propose positive relationships between employability and productivity outcomes:

Hypothesis 5: Perceived employability is positively related to productivity; namely to in-role performance (H5a), work engagement (H5b) and objective career success (H5c).

Happy employees. As an indicator of sustainable careers, happiness refers to subjective feelings of satisfaction with the alignment of the current state and one's goals, values, or needs across different life domains (De Vos et al., 2018). Hence, here we address the relationships of perceived employability with job, career, and life satisfaction. In line with COR theory, individuals already possessing resources are more likely to gain additional resources and reach desirable outcomes, implying that individuals with higher perceived employability are more likely to achieve satisfaction in these domains. Empirical studies support the notion that perceived employability represents an essential resource for individuals to achieve such satisfaction. For instance, perceived employability is positively related to career satisfaction among recent graduates and job satisfaction among employed individuals (e.g., Wheeler, Morley, Coleman Gallagher, Brouer, & Sablynski, 2007; De Cuyper, Notelaers, & De Witte, 2009). We expect a positive relationship between perceived employability broader outcome category of happiness, as well as specific indicators of job, career, and life satisfaction across studies and propose:

Hypothesis 6: Perceived employability is positively related to employee happiness indicators, namely to job (H6a), career (H6b) and life satisfaction (H6c)

Healthy employees. Several mechanisms link perceived employability to employee health and well-being. In line with COR theory, perceived employability may facilitate career management and thus contribute to positive health and well-being (e.g., positive affect such as feelings of calmness or enthusiasm) by virtue of the sense of control (De Cuyper et al., 2008) and self-regulation (Ryan and Deci, 2001) that it entails. Stress appraisal theory (Folkman & Lazarus, 1984) suggests that negative evaluations of external conditions and internal capacities to cope with those conditions results in psychological ill-being (the experience of unpleasant affect and psychological distress). If after taking available resources and barriers in the external environment into account, individuals estimate their employment chances as low, this might trigger psychological distress. Similarly, resource loss spirals in COR theory (Hobfoll, 1989) suggest individuals with lower employability perceptions might also be more sensitive to stressful circumstances and strenuous job demands, which might result in exhaustion. Although theory suggests a positive relationship between perceived employability and wellbeing, results across studies are not consistent as the strength of the relationship varies from very small to moderate. Therefore, here we look at the relationships between perceived employability and the broader category of health, as well as the relationships with specific indicators of psychological well-being and ill-being (burnout and psychological distress):

Hypothesis 7. Perceived employability is positively related to overall health and well-being, specifically, it is positively related to positive indicators of well-being (H7a) and negatively to the ill-being indicators of burnout (H7b) and psychological distress (H7c).

Incremental Validity and Indirect Relationships

As perceived employability represents a subjective gauge of the overall individual career resource pool, with the sum of expected to be greater than its individual parts, we expect that perceived employability will explain unique variance in indicators of sustainable careers above and beyond personal and organizational resources. Furthermore, perceived employability should be more proximally related to mobility, productivity, happiness, and health than more distal individual resources and organizational resources on their own. Therefore, we expect personal and organizational resources to have indirect relationships to these outcome correlates

through employability perceptions.

Hypothesis 8. Perceived employability is positively related to sustainable careers indicators (mobility, productivity, happiness, health) above and beyond the relationships of personal and organizational resources.

Hypothesis 9. A significant indirect relationship exists between personal and organizational resources with sustainable career indicators through perceived employability.

Moderators

In addition to providing the quantitative summary perceived employability correlates, we explore whether moderators account for some of the heterogeneous and inconsistent findings. We examine two methodological moderators, study design and employability dimension. Also, in line to COR theory (Hobfoll, 1989, 2017), separating the individual from social groupings and their wider context limits predictive capacity because cultural and societal environments co-determine individual resources and responses. Hence, the socio-cultural backdrop may interact with factors at the individual and organizational levels in co-determining the relationships between perceived employability and correlates. Specifically, COR theory proposes that caravan passageways (Hobfoll, 2011) represent environmental conditions that support, enrich, and protect individual's resource caravans, or that detract, undermine, or impoverish them. Thus, positive external circumstances can aid in coping and protecting resource caravans even among individuals with less abundant resources. Negative external circumstances might incrementally increase vulnerability among those who are already low on resources, and over time might even exhaust resources of more resourceful individuals. Besides antecedent – perceived employability relationships, context is also likely to affect the strength of the relationships between perceived employability and indicators of sustainable careers (mobility, productivity, happiness, and health).

The fit of one's resource caravan with external demands determines the response to these demands, and the outcome of the response. In prolonged or chronically less favorable circumstances, personal and organizational resource pools are relied on more intensively to develop and maintain favorable employability perceptions. In other words, personal and organizational resources may play a stronger role in

forming employability perceptions among individuals who belong to less resource-endowed and more vulnerable group within a society, or who live in a society with less favorable economic conditions. However, if resources are taxed for a long time, any individuals may become less capable to further draw from their personal resource pool and more vulnerable to the risk of resource loss (Dohrenwend & Dohrenwend, 1974). Hence, less favorable external conditions over time might result in less favorable employability perceptions and impede the use of employability perceptions as a resource for achieving sustainable careers (mobility, productivity, happiness, and health). We explore both sociodemographic and country level variables as moderators of the relationships of perceived employability with its antecedents and outcome correlates.

Individual vulnerability. To assess the extent to which individual context might affect the relationships between perceived employability and antecedents and outcome correlates, we explore the role of several characteristics that we refer to as individual vulnerability (average sample age, average sample education, percentage of male participants in the sample and employment status). Previous research suggests that the personal capability to navigate labor markets might differ for labor market groups. Namely, being a lower educated (Muffels & Luijkx, 2008; Núñez & Livanos, 2010), female (Flecker, Meil, & Pollert, 1998), or older worker (Raemdonck, Tillema, de Grip, Valcke, & Segers, 2012) might result in structurally different opportunities to develop perceived employability and use it as a resource for building a sustainable career.

Exploratory research question 2: Do relationships between antecedents and perceived employability (2a) and between employability and outcome correlates (2b) vary depending on age, education, gender and employment status?

Macroeconomic context. The broader societal context might also affect the relationships between perceived employability, antecedents and outcome correlates. We explore the role of two characteristics of the macroeconomic context of the country where primary studies were performed, namely country unemployment rate and employment protection legislation. The unemployment rate indicates the inability of an economy to generate employment for individuals who are available for employment and actively seek work. When the unemployment rate is high, the country may be in recession, economic conditions may be bad, or the country somehow unable to provide jobs for the available workers (ILOSTAT, 2018). Research

relates unemployment rates to a number of negative outcomes for individual's health (Turner, 1995) and happiness (Clark & Oswald, 1994). Employment protection legislation (EPL) refers to a system of institutional measures that aim to counter imperfection in the labor market that limit workers' ability to insure themselves against job loss. EPL includes legal protection from dismissal, wage loss, and unfair treatment by employers, which relates positively to productivity growth (e.g., Storm & Naastepad, 2009), innovations (Michie & Sheehan, 2003), and skill development (Harcourt & Wood, 2007). Although unemployment and EPL have been related to labor market outcomes, here we study whether they also affect individuals perceived employability and its relationships with antecedents and outcome correlates.

Exploratory research question 3: Do the relationships between antecedents and perceived employability(3a) and between perceived employability and outcome correlates (mobility, productivity, happiness, and health) (3b) vary depending on unemployment rates and EPL in the country where the study was performed?

Cultural context. How individuals assess external conditions is also affected by the cultural context (Hobfoll & Wells, 1998; Lyons, Mickelson, Sullivan, & Coyne, 1998). Meta-analytic evidence indicates that the culture related factors of race and ethnicity do not seem to contribute a lot to explaining differences in career aspirations per se but rather relate to differences in perceptions of career opportunities and barriers (Fouad & Byars-Winston, 2005). Also, research suggests that proactive career behaviors are less important to career success in cultures characterized by low individualism and high uncertainty avoidance (Claes & Ruiz-Quintanilla, 1998) and more important in cultures characterized by high in-group collectivism, high power distance, and low uncertainty avoidance (Smale et al., 2018). However, how culture affects the relationship between employability perceptions and correlates is still to be explored. On one hand, culture can influence careers by directly affecting individual perceptions, attitudes, and beliefs (Khapova, Briscoe, & Dickmann, 2012), including employability perceptions. In addition, cultural influences might foster or constrain the value and use of personal or organizational resources, such as adaptability and social support, in shaping and protecting one's perceived employability. Perceived employability also might have different consequences for reaching sustainable career outcomes depending on how much being employable is valued, expected, or socially desirable in different cultures. Therefore, we expect that cultural norms and values at the national level might influence the relationship between personal

resources and perceived employability and between perceived employability and outcome correlates.

Because culture's influence on individuals can be multifaceted, we broadly explore the potential role of culture and selected multiple cultural indices (Brett, 2007). Specifically, we examined Hofstede's cultural values (Hofstede, 1991; Hofstede, Hofstede, & Minkov, 2010) and Schwartz's cultural value orientations (Schwartz, 2006). Hofstede's model of national culture (Hofstede 1991; Hofstede et al., 2010) that consists of six dimensions: power distance, individualism vs collectivism, masculinity vs femininity, uncertainty avoidance, future orientation and indulgence vs restraint. Power distance refers to expectations about unequal distribution of power between less and more powerful representatives of the society. Individualistic societies are characterized by loose connections between individuals and self-reliance, which is in contrast to collectivistic societies characterized by high level of interdependence among individuals. Masculine societies are driven by desire of success and competition in contrast to feminine societies where the dominant values are care for the other and quality of life. Uncertainty avoidance is the extent to which unknown and uncertain situations are perceived as a threat within a certain culture Future orientation reflects views on time. Long-term-orientation refers to cultures where the world is considered in flux so that preparing for the future and having future-oriented goals is needed. In a short-term-oriented culture, the focus is on the past and the present. The past provides a moral compass, and adhering to this is morally good. Indulgence refers to the extent in which a society values freedom, enjoyment and pleasures, in contrast to duty, hardship and lack of freedom. These dimensions represent independent preferences for one state of affairs over another that distinguish countries, rather than individuals, from each other.

Schwartz (2006) proposes three dimensions of cultural value orientation: mastery vs harmony, hierarchy vs egalitarianism, and embeddedness vs autonomy. These dimensions represent cultural ideals, which can influence how individuals imagine the ideal behaviors that they should strive to do. Harmony emphasizes fitting into the world as it is, trying to understand and appreciate rather than to change or exploit, whereas mastery stresses active self-assertion in order to master and change the environment to meet group or personal goals. Hierarchy relies on hierarchical systems of ascribed roles and considers the unequal distribution of power and resources as legitimate whereas egalitarianism induces people to recognize one another as moral equals and promotes commitment to cooperation and concern for everyone's

welfare. Autonomy reflects cultures where people are viewed as autonomous and express their own preferences, ideas, and abilities whereas embeddedness represents cultures where people are viewed as entities embedded in the collectivity. Further distinction can be made in intellectual autonomy (independent thinking) and affective autonomy (personally pursue positive affect).

Exploratory research question 4: Do relationships between antecedents and perceived employability (4a) and between perceived employability and outcome correlates (mobility, productivity, happiness, and health) (4b) vary depending on the cultural values and practices of the country where study is performed?

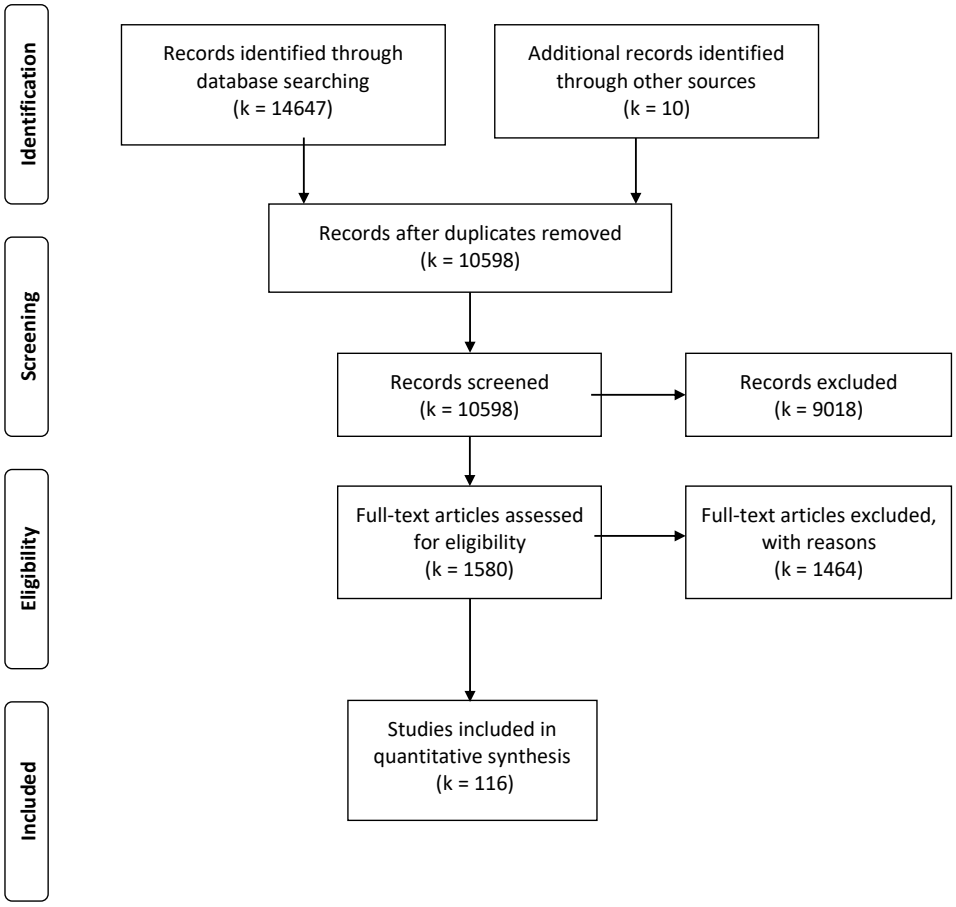
Method

Literature Search

To identify as many of the primary studies on employability and its antecedents and outcomes as possible, we used a multistage search strategy. First, we scoured PsychINFO, ERIC, PubMed, Business Source Premier, Web of science, Sociological Abstracts, and Scopus for studies in psychology, business administration, sociology, and occupational health published between 1980 and 2019. The deliberately encompassing search query was composed through an iterative process with the help of a professional librarian using keywords that are pertinent to the employability construct and correlates: employability (employab* adapt* competenc* sustainable mobility), correlate (correlate* relat* outcome* predictor* antecedent* correlat* effect* signific* associat* variable* measure* assess* conceptuali* dimension* model* explain* intervention* comparison), employee (career* job* employment* unemployment underemployment reemployment). Prior to performing the comprehensive search of all databases we evaluated the performance of the search query. Specifically, we compiled a list of ten target studies that the query ought to return and tweaked the query until it returned each of these studies. We then translated the query to comply with the formatting constraints of each database. The exact queries for each database can be found in the Supplementary Materials 1 (SM1). Second, we backward searched all references from prior review articles (i.e., Thijssen et al., 2008; Vanhercke et al., 2015; Rothwell, 2015; Lo Presti & Pluviano, 2016). Third, we manually searched the conference proceedings from the Society for Industrial and Organizational Psychology, the Academy of Management, and the European Association of Work and Organizational psychology) back to 201. Fourth, we forward searched through the citations of the most cited articles on perceived employability articles in Google

Scholar. Finally, we tried to identify unpublished studies by searching in different dissertation databases (e.g., ProQuest). After deduplication of the search results, our initial search yielded 1.598 hits. Figure 2.2 shows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Flowchart (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009) used to drill down the list of hits obtained using the different search queries. We report literature search queries within Chapter 2: Supplementary material 1.

Figure 2.2. PRISMA Flowchart Outlining Literature Search Process



*Note: K = number of studies.

Inclusion Criteria and Study Selection

Titles and abstracts of the identified studies were evaluated against the following inclusion criteria that were established prior to the literature search: (a) The study is empirical and reports on measures of perceived employability, referring to perceived

chances or opportunities of obtaining, maintaining, and changing employment and/or one of its dimensions (perceived external and/or internal employability). To assess this, we inspected items of the measures used in the study and evaluated their focus. The inspection resulted in the inclusion of some studies that assessed perceived chances of obtaining, maintaining, and changing employment, even though they did not specifically refer to this variable as "perceived employability". Specifically, studies on perceived marketability (e.g., Eby, Butts, & Lockwood (2003), sample item: "There are many jobs available for me given my skills and experience."), perceived work alternatives (e.g., Hofstetter, & Rosenblatt, 2017, sample item: "I feel I have too few options to consider leaving this organization" (reverse)) or perceived job mobility (Tepper, 2000, sample item: "I would have no problem finding an acceptable job if I quit."). (b) The study reports a correlation coefficient between perceived employability and one or more of its antecedents or outcome correlates. Studies were also included if they reported statistics that could be converted into a correlation coefficient. (c) Only studies reported in English were included. (d) Population wise, only studies reporting on healthy adults from various groups (e.g., students; neo-graduate job seekers; unemployed; employed) were included. Studies targeted at very specific or unique populations, such as people with a medical condition (e.g., schizophrenic patients) and criminal offenders were excluded. (e) We excluded studies that, even if they referred to "perceived employability" used "input" related operationalizations because these studies measure individual dispositions, skill or competences that should improve chances of finding employment, rather than employment chances perceived by the individual (e.g., van Emmerik, Schreurs, de Cuyper, Jawahar, & Peeters, 2012). We also excluded studies on "perceived work alternatives ", "perceived marketability" and "job mobility" using other operationalizations that did not focus on assessing perceived chances or opportunities of obtaining, maintaining and changing employment (e.g., Ng & Lucianetti, 2018). At the end of this stage, 116 articles satisfied the inclusion criteria whereas the rest was excluded with a rationale noted. Full list of included studies is reported within Chapter 2: Supplementary material 2.

Coding Procedure

The coding scheme included: a) authors; b) source characteristics: published vs. non published; publication year; country of data collection; c) sample size; d) sample characteristics: employee/students/unemployed/ mixed; mean and SD of sample age; percentage of male participants; e) methodological characteristics:

study design (cross-sectional/multiple time points); f) characteristics of the measure of perceived employability (measure reference, number of items, response scale, scale reliability); g) correlates (variable name, antecedent/outcome, broader variable category in conceptual framework); h) characteristics of the measure or correlate (measure reference, nr of items, response scale, scale reliability); i) effect sizes. Each of the 116 articles was double coded. The first author coded 100% of the studies, and five other coders (MSc students of Business Administration) individually coded 20%. Inter-coder agreement ranged from .90 to 1.00, indicating a high level of agreement. Coder disagreements were resolved through collaboratively re-evaluating studies on which there was disagreement, until full consensus was reached.

Some of the included studies reported on multiple samples (e.g., employees and unemployed; Vanhercke et al., 2015), in which case we coded each sample separately. For longitudinal studies, we coded the relationships between perceived employability, antecedents or outcomes reflecting the temporal ordering indicated in the presented nomological network (e.g., Yizhong, Lin, Baranchenko, Lau, Yukhanaev, & Lu, 2017). In case of intervention studies (i.e., Hodzic, S., Ripoll, Lira, Zenasni, 2015), only coefficients from the first wave or control group were included in order to rule out any effect of the intervention as an alternative explanation. When we identified multiple publications based on the same dataset, we coded the overlapping relationships only once (e.g., Praskova et al., 2014; Praskova, Creed, & Hood, 2015). This resulted in 127 coded independent samples (k = 127). Chapter 2 Supplementary material 3 provides a full overview of the coding scheme.

Characteristics of the Included Studies

The 116 included studies encompassed peer reviewed journal articles (96.5%), conference papers (1.7%) and PhD dissertations (1.7%), published between 1998 and 2019, with the vast majority (78.3%) of published after 2001. Across 127 samples data was collected mostly adopting cross-sectional design (77.2%), followed by studies that included two measurement waves (16.5%), longitudinal studies (3.9%), and experiments (2.4%). The total number of participants across samples was n = 69.301 (M = 545.68, SD = 587.97). It is noteworthy that studies conducted in Europe were overrepresented (66.2%), followed by Asia (15.7%), Canada and the United States (9.4%), Africa (4.7%), Australia (2.4%) and South America (1.6%). Samples included employees (71%), students (15.5%), unemployed (7.3%), or a mix (6.2%). Within the studies among employees, the majority involved participants from a

mix of industries (39.7%) or did not specify the industry (24.4%), other studies were performed in specific industries such as the service sector (13%), education (9.2%), manufacturing (4.6%), healthcare (3.8%), business/finance (3.8%), and IT (1.5%).

Characteristics of the Measures of Perceived Employability

Despite the focus on measuring how individuals perceive their chance, ease or probability of obtaining, maintaining, or changing employment, we observed substantial heterogeneity in the adopted measures of perceived employability and its dimensions (Table 2.2). When it comes to the dimensionality, the majority of studies (50.4%) assessed only perceived external employability. An additional 25.1% assessed both internal and external employability but report only an aggregate score. Fewer studies (17.3%) measured and reported relationships between both internal and external employability and with antecedents and outcome correlates, and very few (3.1%) measured only perceived internal employability. The remaining studies (4.1%) did not provide measure descriptions specific enough to be able to judge whether they assessed both or one of the dimensions of perceived employability.

Across the included studies, the most frequently used measure (26.8%) is versions of the one developed by De Witte (1992) and refined by De Cuyper and De Witte (2008, 2010, 2010). The full measure consists of 16 items that assesses both dimensions but also makes a further distinction between perceived internal qualitative, and quantitative and perceived external qualitative and quantitative employability. Studies varied in whether they applied the entire measure, a subscale, or a shortened version of the original scale (e.g., De Cuyper et al., 2009). The second most frequently used measure (21%) was that of self-perceived employability and depending on the sample, authors opted for the employee (Rothwell & Arnold, 2007), student (Rothwell, Herbert & Rothwell, 2008), or post-graduate (Rothwell, Jewell, & Hardie, 2009) version of the scale. The next most frequently used measures of perceived employability were those developed by Berntson and Marklund in 2007 (8.7% of the studies) and Eby and colleagues in 2003 (7.1%). Both these capture the perceived prospects of getting an equivalent or better job. Other measures were used in few studies, varying between 2.4% (3 studies) and 6.3% (8 studies). 17.4% of the studies used a totally new measure developed for that study (e.g., Peiró, Sora, & Caballer, 2012) or combined items from existing measures (e.g., Kirves, De Cuyper, Kinnunen, & Natti, 2011).

Table 2.2. Overview of measures of perceived employability used across studies

Measure reference	Measure Dimensions	Number of items used[2]	Target sample	Example items	%[3]
De Witte (1992) De Cuyper & De Witte (2008, 2010, 2010)	External Internal	4-16	Employees Unemployed	"I have a good chance of getting better job here, if I looked for one" "I have a good chance of getting another job here, if I looked for one" "I have a good chance of getting better job elsewhere, if I looked for one." "I have a good chance of getting another job elsewhere, if I looked for one"	26.8
Rothwell & Arnold, 2007 Rothwell, Herbert, & Rothwell, 2008 Rothwell, Jewell, & Hardie, 2009	External Internal	16	Employees Unemployed Students Postgraduates	"If I needed to, I could easily get another job like mine in a similar organization." "My university has an outstanding reputation in my field(s) of study" "People in the career I am aiming for are in high demand in the labor market"	21
Berntson & Marklund, 2007	External	3-5	Employees Unemployed	"I know of other organizations/ companies where I could get work."	8.7
Eby et al., 2003	External Internal	3-6	Employees	"I could easily obtain a comparable job with another employer"; "There are many opportunities available for me in my company"	7.1
Griffeth, Steel, Allen, & Bryan, 2005	External	4-6	Employees	"I can think of a number of organizations that would probably offer me a job if I was looking"	6.3
Janssens, Sels, & van den Brande, 2003 Wittekind et al.,2010	External	3	Employees Students	"I'm confident that I would find another job if I started searching"	5.5
Verboon et al., 1999	External Internal	3	Employees	"I'm confident that it is easy for me to find an attractive new job in a different organization"	2.4
Groot & Maasen van den Brink ,2000 & Sanders & de Grip, 2004	External Internal	8-9	Employees	"I will easily find another job with another employer instead of my present job"	2.4
Tepper, 2000	External	2-3	Employees	"If I were to quit my job, I could find another job that is just as good"	2.4

Note.[1]Number of items of scale used across studies; [2]Percentage of the samples (k) that used this measure. The remaining 17.4% used other measures that were developed for the purposes of that study.

Meta-Analytical Strategy

We meta-analyzed the relationships between perceived employability and measures of antecedents and outcomes that were included in at least three independent samples (K ≥ 3). Where fewer than three primary studies were available for a particular relationship, we tried to classify these variables into one of the broader variable groupings using COR theory and the model of sustainable careers as a theory-based guideline. Table 2.3 summarizes this and specifies the variables subsumed in each broader variable category.

The association between employability and other variables is expressed in correlation coefficients. We corrected all observed correlations for sampling error. Also, whenever the focal constructs were assessed using multi-item measures, we corrected observed correlations for measurement error (unreliability). When a reliability coefficient was not reported in a primary study, we applied artifact distributions to estimate it (Hunter & Schmidt, 2004). To estimate meta-analytic effect sizes, we used Hunter and Schmidt's (2004) random effects model. For each result we report: sample-size weighted correlations (r), sample size weighted and reliability-corrected correlations (ρ), 95% confidence intervals for the sample size weighted and reliability-corrected correlations, 80% credibility interval for sample size weighted and reliability-corrected correlations, and heterogeneity statistics. To calculate the effect sizes and perform moderator analyses we used the 'psychmeta' package (Dahlke & Wiernik, 2018, version 2.2.0) in R (R Core Team, 2018, version 3.5.1).

Table 2.3. Summary of Antecedent and Outcome Variable Categories

Incremental Validity and Indirect Relationships

Constructs included	Variables Included
Antecedents: PERSONAL RESOURCES	
Protean career orientation	Protean Career Orientation; Self-directedness
Career Adaptability	Career adaptability Adaptability
Proactivity	Proactive personality Work and career proactivity Future orientation
Psychological capital	Psychological capital Emotion control Optimism Hope General self-efficacy Entrepreneurial self-efficacy Career decision making self-efficacy Role-Breadth Self-Efficacy Emotional self-efficacy Self-efficacy in managing changes at work
Human Capital	Human capital Career/job-related skills Practical preparation Generic skills
Social capital	Social capital Internal networks External networks Contacts
Career Identity	Self-awareness Career identity Career insight Self-analysis
Career calling	Career calling Work importance

Constructs included	Variables Included
	Age
	Gender
	Tenure
Sociodemographic Factors	Working hours
Antecedents: ORGANIZATIONAL RESOURCES	
	Training and development
	HR practices
	Tailor-made arrangements
	Career development
Human resource management practices	Career dialogue
	Supervisory support
Supervisory support	LMX
	Job autonomy
Job autonomy	Job control
	Task variety
Task variety	Job content plateau (reversed)
	Job security
Job insecurity	Job insecurity (recoded)
Outcomes: MOBILE	
Constructs included	Variables Included
	Job search intensity
Job search	Job search strategy
	Employment status
Employment status	Re-employment status
	Turnover intentions
Turnover intentions	Intentions to stay with the current employment (reverse coded)
	Organizational commitment
Organizational commitment	Affective commitment
Outcomes: PRODUCTIVE	
	Task performance
	In-role performance
Performance	Job performance
Work Engagement	Work engagement

Constructs included	Variables Included
	Income
	Bonuses
	Promotions and career advancement
	Managerial position
Career success	Career success
Outcomes: HAPPY	
	Career satisfaction
Career satisfaction	Subjective career success
Job satisfaction	Job satisfaction
	Life satisfaction
Life satisfaction	Work-life balance
Outcomes: HEALTHY	
	Global health
	Physical health
Global physical health	Subjective health
	Psychological well-being
Positive well-being	Positive affect
	Strain
	Distress
	Social dysfunction
	Anxiety
	Depression
	Psychological symptoms
Psychological distress	Depersonalization
	Emotional exhaustion
	Cynicism
Burnout	Reduced personal accomplishment

To test the extent to which perceived employability contributes to sustainable career outcomes above and beyond personal and organizational resources, and provide a more comprehensive test of our conceptual model, we used meta-analytic path analysis. First, we compiled a full meta-analytic correlation matrix that contained meta-analytic correlations among variables representative of each broader variable categories. Namely, we selected one variable from each group of resources within

the categories of personal (i.e., proactive personality) and organizational resources (i.e., supervisory support), as well as one outcome of mobility (i.e., turnover intentions), productivity (i.e., job performance), happiness (i.e., job satisfaction) and health (i.e., burnout). We selected these antecedent and outcome variables to ensure representation of each antecedent and outcome grouping because that was necessary for comprehensive test of the conceptual model, considering both the frequency in which each variable was related to perceived employability in the current meta-analysis and the availability of other meta-analytic evidence on the relationships among and between antecedent and outcome variables. As we focus principally on the relationships between perceived employability, antecedents and outcome correlates, in compiling the full meta-analytic correlation matrix we complemented the results of our meta-analysis with the results from existing meta-analyses on relationships between proactive personality, supervisory support, turnover intentions, job performance, job satisfaction and burnout. To estimate the sample size for the path analysis we computed the harmonic mean of the sample sizes across the studies included in the correlation matrix (Viswesvaran & Ones, 1995). On the basis of the full meta-analytic correlation matrix, we performed path analysis using conventional ordinary least squares regression in MPlus (Muthén & Muthén, 1998-2012). Finally, we computed the relative importance of perceived employability in explaining variance in sustainable career outcomes using RWA-Web program (Tonidandel and LeBreton, 2015).

Homogeneity and Moderator Analyses

To assess homogeneity of effect sizes across studies we inspected multiple indices. First, we computed 80% credibility intervals showing the range of values in which 80% of the population correlations lie (Whitener, 1990). Wide credibility intervals indicate the presence of meaningful moderators, while narrow credibility interval suggest moderators have little influence (Wiernik, Kostal, Wilmot, Dilchert, & Ones, 2017). Credibility intervals have advantages over other indicators of effect size heterogeneity, yet we complement the information with additional indicators. Second, in line with Borenstein (2009) we report the size and significance of Cochran's Q statistic. Third, we calculated the Var% statistic referring to the percentage of variance accounted for by statistical artefacts. According to Hunter and Schmidt (2004) moderators are likely to be present when the percentage of variance accounted for by statistical artifacts is < 75%. If the three criteria indicated substantial heterogeneity, we considered moderator analysis. Finally, given that the sample size for moderator

analyses is the number of studies (k), to ensure sufficient statistical power of the analyses we conducted these analyses only for relationships represented in at least k=10 cases (Schmidt, 2017). Based on these criteria we explored moderators of the relationships between perceived employability and broader variable groupings (personal resources, organizational resources, organizational barriers, productive, happy, healthy) as well as some of the specific variables (psychological capital, social capital, job autonomy, supervisory support, job security, psychological distress, burnout, job satisfaction and turnover intentions).

We tested the influence of possible moderators using meta-regression analysis. In addition, for categorical moderators we reported the meta-analytic estimates for each level of the categorical moderator. We considered moderator analyses only for those relationships that included, in case of categorical moderators, a minimum of two (k = 2) primary study coefficients for a given category of the moderator variable, and in case of a continuous moderator a minimum of ten (k = 10) primary study coefficients. We assessed the role of methodological moderators (i.e., study design, employability dimension), and contextual moderators grouped across three dimensions: individual vulnerability (i.e., employment status, average sample age, percentage of male participants in the sample, average sample education), employment conditions (i.e., country unemployment rates, country employment protection legislation) and cultural values (Hofstede and Schwartz dimensions).

Measures of the moderator variables. Based on the information obtained from the primary studies we coded as categorical variables: study design (cross-sectional vs multiple time points); employability dimension (internal vs external); and employment status of the sample (students vs unemployed vs employed). Also, we obtained information on mean sample age, mean sample education, and the percentage of male participants in the sample from the primary studies. In addition, unemployment rates for each country measured as the percentage of unemployed persons among the total number of persons in the labor force (sum of employed and unemployed) were obtained from the ILO database (ILOSTAT, 2018). For each country we recorded the average country unemployment rate three years prior to the study publication, accounting for the publication lag. Employment protection legislation (EPL) per country was measured as a binary variable, distinguishing between less strict / Low EPL (0) and more strict / High EPL (2) employment protection legislation based on the The Organisation for Economic Co-operation and Development (OECD) EPL database (OECD, 2013). The original measure of EPL consist of country ratings on

a scale from 1 to 6 based on a set of indicators that cover different aspects of EPL (e.g., procedures and costs involved in dismissing individuals and the procedures involved in hiring workers on fixed term or temporary work agency contracts). As the OECD database contains indicators measured up to 2013, and our meta-analysis include studies until 2019, to make use of the full sample, we used average score on EPL across years and classified countries into two broader categories (median split). For each represented country we also collected scores on all culture dimensions from Hofstede et al. (2010) and Schwartz (2008).

Results

To test hypothesized relationships, we first present meta-analytic results for relationships of perceived employability with antecedents and outcome correlates (Tables 2.4 to 2.6). To interpret these, we use Cohen (1992) and consider effects around r=.10 'small', around r=.30 'moderate', and around r=.50 'large'. Next, the meta-analytic path model results are presented. Third, we present the results of the moderator analyses. Finally, as a supplementary analysis, we provide the results of a publication bias test.

Antecedents of Perceived Employability

Personal resources. Significant positive relationships with employability perceptions were found for the overall category of personal resources (ρ = .43). More specifically, the indicators of personal agency, such are protean career orientation (ρ = .37), career adaptability (ρ = .44), proactive personality (ρ = .26), psychological capital (ρ = .52), human capital (ρ = .40), and social capital (ρ = .37), all demonstrated moderate to large positive relationships with perceived employability. Next, we related perceived employability to two indicators of meaningful careers. Perceived employability was significantly and positively related to career identity (ρ = .29) but not to career calling. Mostly, these results support Hypothesis 1 which proposed a positive relationship between broader variable category of personal resources and perceived employability as all but one of the personal resources (i.e., career calling) demonstrated moderate to strong positive relationships with employability perceptions, supporting Hypothesis 1a through 1g, but not 1h (Table 2.4).

Organizational resources. Our results indicate a moderate positive relationship between overall organizational resources and employability perceptions (ρ = .23). For specific organizational resources, moderate positive relationships are found with

training and flexibility (ρ = .25), supervisory support (ρ = .33), job autonomy (ρ = .21), and job security (ρ = .20). Contrary to expectations, the results for task variety and colleague support were not significant. Hence, results provide partial support for Hypothesis 2, supporting Hypothesis 2a, 2b, 2d and 2f, but not supporting Hypothesis 2c and 2e (Table 2.4).

Sociodemographic factors. All investigated sociodemographic factors demonstrated weak but significant relationships with perceived employability (Table 2.5). Age (ρ = -.08), tenure (ρ = -.16) and gender (ρ = -.09) were weakly negatively related to perceived employability, and education (ρ = .09) and working hours (ρ = .11) were positively related.

Table 2.5. Meta-analytic Relationships between Perceived Employability and Sociodemographic variables

Socio-demographic factors	K	n	$\bar{r}$	$SE\,\bar{r}$	95% CI Lower	95% CI Upper	80% CV Lower	80% CV Upper	Q	I^2	tau^2	%Var
Age	56	29553	-.08	.03	-.14	-.03	-.31	.14	914.80	95.41	.03	4.59
Gender	48	26427	-.09	.01	-.11	-.07	-.17	-.01	126.26	7.70	.00	29.30
Education	36	20039	.09	.02	.06	.12	.00	.19	126.92	77.94	.01	22.60
Tenure	19	3102	-.16	.06	-.29	-.03	-.40	.08	96.14	9.64	.03	9.36
Work hours	8	3371	.11	.04	.02	.20	-.02	.24	28.62	79.40	.01	2.96

Note. k=number of samples included in meta-analysis, n = total sample size, $\bar{r}$ = mean observed correlation, $\mathrm{SE}\,\bar{r}$ = standard error of correlations; 95% CI = 95% confidence interval for ρ; 80% CV = 80% credibility interval for $SE\,\bar{r}$.

Outcome Correlates of Perceived Employability

Mobile employees. We related employability perceptions to four indicators of employee mobility. For this indicator of career sustainability, we did not compute the meta-analytic correlation between perceived employability and the broader category, as individual indicators of mobility (employment status, job search, turnover intentions, commitment) seem too divergent and distinctively relevant for different groups (unemployed versus employed individuals) to be combined. Therefore, we wanted to examine the possibility that different indicators of employee mobility might relate differently to employability perceptions. Specifically, we conducted meta-analyses on the relationships of perceived employability with job search,

Table 2.4. Meta-analytic Relationships between Perceived Employability and Antecedents

	K	n	$\bar{r}$	SE $\bar{r}$	$\hat{\rho}$	SD_ρ	95% CI Lower	95% CI Upper	80% CV Lower	80% CV Upper	Q	I^2	tau^2	%Var
Personal resources	45	23831	.36	.02	**.43**	.20	.37	0.5	.18	.69	842.59	94.78	.04	5.22
Protean career orientation	8	5380	.31	.06	**.37**	.21	.19	.56	.08	.67	177.37	96.05	.05	3.95
Career adaptability	8	2802	.37	.06	**.44**	.18	.28	0.6	.18	.69	8.80	91.34	.04	8.66
Proactive personality	7	1623	.21	.05	**.26**	.16	.10	.42	.03	.48	3.28	8.19	.02	19.81
Psychological capital	24	13637	.43	.04	**.52**	.22	.43	.61	.23	.81	729.77	96.71	.05	3.29
Self-efficacy	17	9544	.43	.05	**.53**	.27	.39	.67	.17	.88	638.19	97.49	.70	2.51
Human capital	9	5157	.33	.05	**.40**	.20	.24	.55	.12	.67	162.67	95.08	.04	4.92
Social capital	11	4878	.31	.04	**.37**	.16	.26	.49	.15	.59	101.57	9.15	.03	9.85
Career identity	7	3302	.23	.07	**.29**	.22	.07	.50	-.03	.60	112.84	94.68	.05	5.32
Career calling	4	2703	.30	.13	**.37**	.29	-.10	.83	-.11	.84	151.18	98.02	.09	1.98
Organizational resources	43	32043	.19	.02	**.23**	.18	.17	.29	-.01	.46	755.4	94.44	.03	5.56
HR practices	8	5511	.20	.03	**.25**	.09	.17	.33	.13	.37	31.91	78.06	.01	21.94
Supervisory support	11	8374	.27	.05	**.33**	.20	.19	.46	.05	.60	247.97	95.97	.04	4.03
Colleague support	5	3378	.17	.13	**.17**	.30	-.21	.55	-.30	.64	239.28	98.33	.09	1.67
Job autonomy	10	8647	.17	.04	**.21**	.14	.01	.31	.01	.40	663.51	98.64	.11	1.36
Task variety	7	5453	.19	.09	**.26**	.28	.00	.53	-.15	.67	177.94	97.75	.09	2.25
Job security	22	17405	.17	.03	**.20**	.18	.11	.23	-.44	.04	403.54	94.80	.03	5.20

Note. k=number of samples included in meta-analysis, n = total sample size, $\bar{r}$ = mean observed correlation, SE $\bar{r}$ =standard error of correlations, ρ=mean correlation corrected for unreliability in both measures (in bold), SDρ= observed standard deviation of corrected correlations; 95% CI = 95% confidence interval for ρ; 80% CV = 80% credibility interval for ρ

employment status, turnover intentions and organizational commitment. Contrary to our expectations, none of the relationships between perceived employability and the indicators of employee mobility were significant. The relationships across studies were very small for all four outcome correlates: job search (ρ = .14), employment status (ρ = .10), turnover intentions (ρ = .00) and organizational commitment (ρ = .080). In conclusion, the results did not support Hypotheses 4a, 4b, 4c and 4d.

Productive employees. Perceived employability related positively and significantly to the group of outcome correlates that indicate employee productivity (ρ = .25), and specifically for job performance (ρ = .17), work engagement (ρ = .41) and career success (ρ = .20). Thus, the results support Hypothesis 5, and specifically Hypotheses 5a, 5b, and 5c.

Happy employees. Perceived employability related positively and significantly to the broader category of employee happiness (ρ = .21). Within this category, perceived employability was positively and significantly related to life satisfaction (ρ = .27). However, the relationships of perceived employability with career satisfaction (ρ = .18) and job satisfaction (ρ = .16) were not significant. Therefore, the evidence is marginally supportive of Hypothesis 6, as Hypotheses 6a and b are not supported, while hypothesis 6c is.

Healthy employees. Perceived employability was significantly related to the broader variable group of employee health (ρ = .18). More specifically, employability perceptions had significant positive relationships with positive indicators of health such as global health (ρ = .14) and psychological well-being (ρ = .20), and significant negative relationships with indicators of ill-being such as employee burnout (ρ = -.17) and psychological distress (ρ = -.16). These results support Hypothesis 7 and 7a, 7b, 7c and 7d. See Table 2.6.

Table 2.6. Meta-analytic Relationships between Perceived Employability and Outcomes.

	k	n	$\bar{r}$	SE $\bar{r}$	$\widehat{\rho}$	SD_ρ	95% CI Lower	95% CI Upper	80% CV Lower	80% CV Upper	Q	I^2	tau^2	%Var
MOBILE														
Job search	6	4388	.11	.07	**.14**	.21	-.09	.36	-.17	.44	117.05	95.73	.04	4.27
Employment status	5	2597	.09	.04	**.10**	.07	-.01	.20	-.01	.21	13.65	7.71	.01	29.30
Turnover intentions	12	5722	.00	.06	**.00**	.24	-.15	.15	-.31	.31	201.70	94.55	.05	5.45
Organizational commitment	9	3112	.07	.06	**.08**	.2	-.08	.24	-.20	.36	84.64	9.55	.04	9.45
PRODUCTIVE	23	13413	.21	.03	**.25**	.18	.17	.34	.01	.50	33.66	93.35	.03	6.65
Job performance	9	4290	.15	.03	**.17**	.10	.08	.26	.03	.31	37.09	78.43	.01	21.57
Work engagement	7	3157	.37	.08	**.41**	.25	.17	.64	.05	.77	181.84	96.70	.06	3.30
Objective career success	11	7166	.15	.03	**.20**	.13	.10	.29	.02	.37	7.68	9.10	.01	9.90
HAPPY	20	10571	.18	.05	**.21**	.26	.09	.34	-.14	.56	537.44	96.47	.07	3.54
Career satisfaction	7	3155	.10	.08	**.18**	.25	-.06	.42	-.18	.55	88.25	93.20	.06	6.80
Job satisfaction	10	5647	.13	.08	**.16**	.30	-.06	.38	-.26	.58	343.71	97.38	.09	2.62
Life satisfaction	7	3862	.23	.07	**.27**	.21	.07	.47	-.03	.58	13.81	95.41	.03	4.59
HEALTHY	27	12906	.16	.02	**.18**	.09	.14	.22	.06	.30	105.09	75.26	.01	24.75
Psychological well-being	5	3285	.18	.06	**.20**	.14	.02	.38	-.02	.41	46.60	91.42	.02	8.58
Global physical health	4	2576	.12	.02	**.14**	.03	.06	.22	.09	.18	4.17	28.02	.00	71.98
Burnout	13	5755	-.14	.03	**-.16**	.11	-.24	-.09	-.31	-.02	176.60	92.64	.05	7.36
Psychological distress (symptoms of anxiety and depression)	14	5552	-.14	.05	**-.17**	.21	-.29	-.04	-.45	.12	59.62	79.87	.01	2.13

Note. k=number of samples included in meta-analysis, n = total sample size, $\bar{r}$=Emrean observed correlationr, SE $\bar{r}$ = standard error of correlations, ρ=mean correlation corrected for unreliability in both measures (in bold), SDρ= observed standard deviation of corrected correlations; 95% CI = 95% confidence interval for ρ; 80% CV = 80% credibility interval for ρ.

Incremental Validity and Indirect Relationships

In addition to main meta-analytic relationships, we also tested for incremental relationship between perceived employability and indicators of sustainable careers, above and beyond the effects of important personal (i.e., proactive personality) and organizational (i.e., supervisory support) resources (Table 7 and Table 8).

Table 2.7. Meta-analytic correlation matrix

	Proactive personality	Supervisory Support	Burnout	Job Satisfaction	Job Performance	Turnover Intentions	Perceived Employability
Proactive personality	1	789	1087	7243	6963	2650	1623
Supervisory Support	.26[1]	1	19397	32339	32770	5333	8374
Burnout	-.18[2]	-.24[4]	1	76260	5558	12607	5755
Job Satisfaction	.24[1]	.44[5]	-.42[6]	1	54471	35494	5647
Job Performance	.24[1]	.27[12]	-.16[7]	.19[9]	1	8361	4290
Turnover Intentions	-.02[12]	-.31[5]	.34[8]	-.58[10]	-.10[11]	1	5722
Perceived Employability	.21	.27	-.14	.13	.15	.00	1

Note. Pooled sample size n=4019.169; Values below diagonal represent meta-analytic correlations; Values above the diagonal present sample sizes attributable to each meta-analytic correlation; [1]Fuller & Marler. 2009; [2]Alarcon, Eschelman, Bowling, 2009; [4]Halbesberen 2006; [5]Ng & Sorensen, 2008; [6]Faragher, Cass, & Cooper, 2005; [7]Swider, & Zimmerman, 2010; [8]Alarcon, 2011; [9]Judge, Thoresen, Bono, & Patton, 2001; [10]Tett, & Meyer, 1993; [11]Zimmerman, & Darnold, 2009; [12]Supplementary meta-analysis performed via metaBUS ;Bosco, Steel, Oswald, Uggerslev, & Field, 2015; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016

Multivariate, multiple regression (path) analysis is performed in several steps. First, perceived employability was regressed proactive personality and supervisory support. Second, outcome correlates were also regressed on these two antecedents and perceived employability. Third estimates of the indirect effects of proactive personality and supervisory support on sustainable career outcomes through perceived employability are computed. Finally, we computed the relative importance of perceived employability in explaining variance in indicators of sustainable careers.

To employability and beyond

The results indicate significant positive relationships of proactive personality ($\beta = .15$, $p < .001$) and supervisory support ($\beta = .22$, $p < .001$) to perceived employability, explaining a significant amount of its variance ($R^2 = .09$). Corroborating our initial meta-analytic results, perceived employability was not significantly related to job satisfaction and turnover intentions, after accounting for proactive personality and supervisory support. Perceived employability related positively to job performance ($\beta = .06$, $p < .001$) and negatively to burnout ($\beta = -.06$, $p < .001$) above and beyond the relationships of proactive personality and supervisory support. The relative weights analyses suggest that out of total variance in each outcome variables explained by the proposed antecedents, perceived employability can uniquely account for 13.93% explained variance in burnout ($R^2 = .08$) and 10.53% explained variance in job performance ($R^2 = .11$). Finally, the indirect relationships of proactive personality and supervisory support to job performance, burnout and turnover intentions through perceived employability were significant and in expected directions. These results partially support Hypothesis 8 and 9 on the relationships between antecedents, perceived employability, productivity and health, but not mobility and happiness.

Table 2.8. Results of the model test

Outcome	Predictor	β	S.E. β	Est./ S.E.	p	Raw RW	RS RW %	Indirect effects through PE			
								β	S.E. β	Est./S.E.	p
Perceived employability	Proactive personality	.15	.01	9.66	<.001	.03	33.84	-	-	-	-
	Supervisory support	.22	.01	15.50	<.001	.06	66.12	-	-	-	-
Turnover intentions	Proactive personality	.07	.01	4.31	<.001	.00	1.94	.00	.00	-1.91	.060
	Supervisory support	-.31	.01	-20.52	<.001	.09	92.01	-.01	.00	-1.94	.050
	Perceived employability	-.03	.02	-1.95	0,051	.00	5.85	-	-	-	-
Job performance	Proactive personality	.17	.01	11.45	<.001	.04	38.63	.01	.00	3.36	<.001
	Supervisory support	.21	.01	13.67	<.001	.05	50.84	.01	.00	3.49	<.001
	Perceived employability	.06	.01	3.59	<.001	.01	10.53	-	-	-	-
Job satisfaction	Proactive personality	.14	.01	9.60	<.001	.04	17.89	.00	.00	-.52	.600
	Supervisory support	.40	.01	28.83	<.001	.16	78.84	.00	.00	-.52	.600
	Perceived employability	-.01	.01	-.52	0,601	.01	3.27	-	-	-	-
Burnout	Proactive personality	-.12	.02	-7.50	<.001	.02	28.20	-.01	.00	-3.75	<.001
	Supervisory support	-.20	.02	-12.30	<.001	.04	57.87	-.02	.00	-3.94	<.001
	Perceived employability	-.06	.02	-4.08	<.001	.01	13.93	-	-	-	-

Table 2.8 note. β = standardized regression weight, SE β = standard error Raw RW=Raw relative weights, which represent the proportion of variance explained in an outcome variable that can be uniquely attributed to each of the predictor variables; $RS\ RW\ \%$ = rescaled relative weights, which represent the percentage of the variance explained that is accounted for by each predictor variable (i.e., computed by dividing the relative weights by the model R^2

Moderator Analyses: Antecedents and Perceived Employability

Next, we present the results for methodological and contextual moderators. We report the test of moderator analyses for each broader variable category, and when possible (k > 10) for specific variables. In each subsection, we first report on methodological moderators. Next, we assess the moderating role of individual vulnerability characteristics. Third, we provide the results for the macroeconomic context, and fourth for the cultural context. As we explored an extensive number of moderators (Table 2.8), we focus on presenting the main findings, the full results including tables can be found in Chapter 2: Supplementary Material 4. For significant numerical moderator we present the interaction plot to visualize the interaction (Plot 2.1 to Plot 2.25)

Table 2.9. Overview of the performed moderator analyses

	Personal Resources			Organizational Resources			
Moderator	Overall	Social Capital	Psychological Capital	Overall	Job Authonomy	Supervisory Support	Job Security
Design	●	●	●	●	●	●	●
Dimension	●	●	●	●	●	●	●
Age	●	●	●	●	●	●	●
Gender	●	●	●	●	●	●	●
Education	●	●	●	●	●	●	●
Work Status	●	●	●	●	●	●	●
Unemployment Rates	●	●	●	●	●	●	●
Employment Protection Legislation	●	●	●	●	●	●	●
Long Term Orientation	●	●	●	●	●	●	●
Power Distance	●	●	●	●	●	●	●
Uncertainty Avoidance	●	●	●	●	●	●	●
Individualism	●	●	●	●	●	●	●
Masculinity	●	●	●	●	●	●	●
Indulgance	●	●	●	●	●	●	●
Harmony	●	●	●	●	●	●	●
Embeddedness	●	●	●	●	●	●	●
Hierarchy	●	●	●	●	●	●	●
Mastery	●	●	●	●	●	●	●
Affective authonomy	●	●	●	●	●	●	●
Intelectual authonomy	●	●	●	●	●	●	●
Egalitarianism	●	●	●	●	●	●	●

Note. ● = Moderation analysis not performed because $k < 10$ for numerical moderators or $k < 2$ for categorical moderators; ● = Indicates non-significant moderator; ● = Indicates a significant moderator

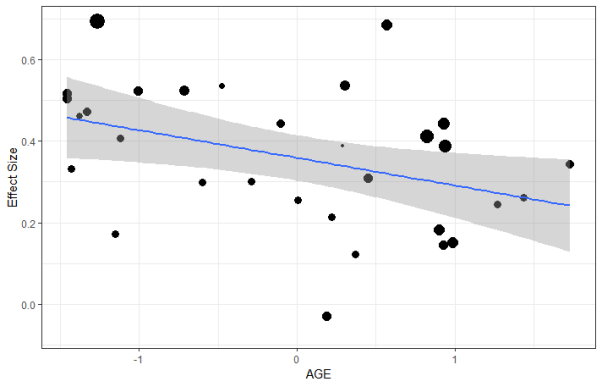
	Mobile	Productive		Happy		Healthy		
Moderator	Turnover Intentions	Overall	Success	Overall	Job Satisfaction	Overall	Psychological Distress	Burnout
Design								
Dimension								
Age								
Gender								
Education								
Work Status								
Unemployment Rates								
Employment Protection Legislation								
Long Term Orientation								
Power Distance								
Uncertainty Avoidance								
Individualism								
Masculinity								
Indulgance								
Harmony								
Embeddedness								
Hierarchy								
Mastery								
Affective authonomy								
Intelectual authonomy								
Egalitarianism								

Moderators of the relationships between personal resources and perceived employability. We were able to explore moderators of the relationship with overall personal resources (k = 45), and for psychological (k = 24) and social capital (k = 11).

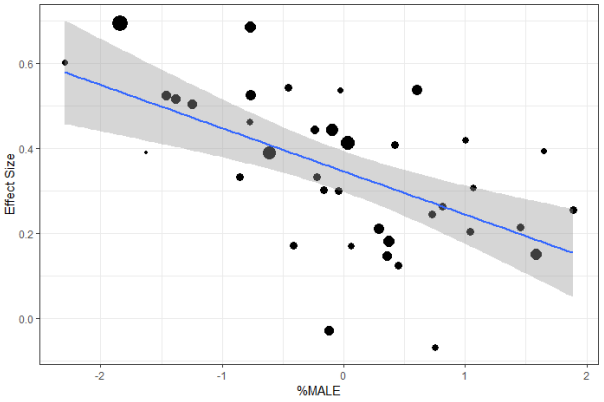
Methodological moderators. Results indicated the relationships between personal resources and perceived employability to vary depending on study design, with the relationship being significantly more positive in cross-sectional studies (k = 38, ρ = .46) than in studies performed across multiple time points (k = 7, ρ = .31). For psychological capital too, this positive relationship was stronger in cross-sectional studies (k = 19, ρ = .56) compared to studies across multiple time points (k = 4, ρ = .33). The distinction between internal and external employability did not account for variability in effect sizes across studies.

Individual vulnerability. Average sample age significantly moderated the relationship between overall personal resources and perceived employability (B = -.07, p = .017, Plot 2.1). Specifically, the positive relationship was weaker in samples with a higher average age. Second, gender moderated (B = -.09, p = .011, Plot 2.2) such that overall personal resources exhibited a stronger positive relationship with perceived employability in samples with a larger percentage of female participants. Third, the relationship between personal resources and perceived employability varied as a function of the employment status of participants. Specifically, the positive relationship was significantly stronger among unemployed (k = 7, ρ = .56) as compared to working participants (k = 23, ρ = .37). Finally, education, as a sample characteristic, did not affect the positive relationship between any of the personal resources and employability perceptions. In case of psychological capital, we can observe similar pattern of relationships like in the case of personal resources. First, psychological capital had a stronger positive relationship with perceived employability in samples with a larger percentage of female participants (B = -.10, p = .004, Plot 2.3). Second, positive relationship between psychological capital and perceived employability was stronger among unemployed (k=8, ρ=.67) as compared to working participants (k = 10, ρ = .44). The relationship between social capital and perceived employability was only affected by education, with the positive relationship being stronger among the samples of with the greater percentage of highly educated individuals (B = .08, p = .001, Plot 2.4).

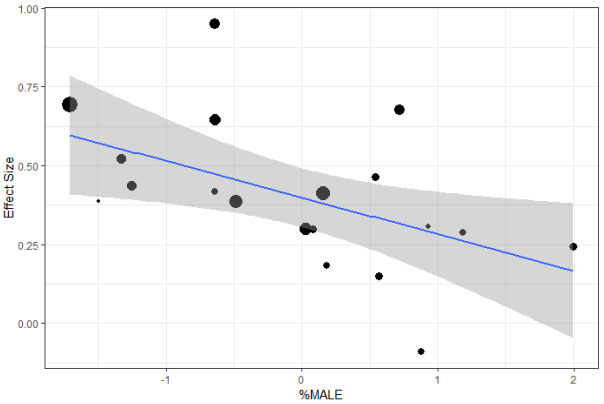
Plot 2.1. The relationship between Personal resources and PE moderated by Age



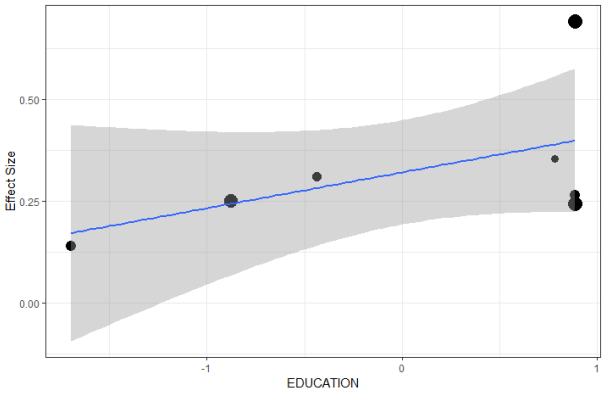
Plot 2.2. The relationship between Personal resources and PE moderated by % Male



Plot 2.3. The relationship between Psych. Capital and PE moderated by % Male

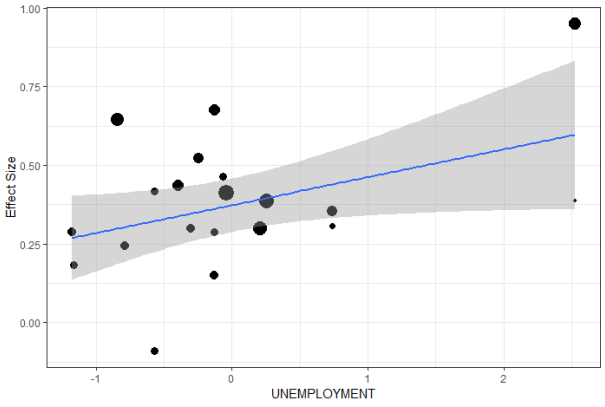


Plot 2.4. The relationship between Social Capital and PE moderated by Education



Macroeconomic context. None of the dimension of the macroeconomic context affected the relationship between overall personal resources and perceived employability, nor between social capital and perceived employability. The relationships of psychological capital with perceived employability were stronger when country unemployment was higher (B = .08, p = .040, Plot 2.5). In other words, the positive relationship of this resource and perceptions of available employment opportunities were stronger in countries with higher unemployment.

Plot 2.5. The relationship between Psych. Capital and PE moderated by Unemployment rates



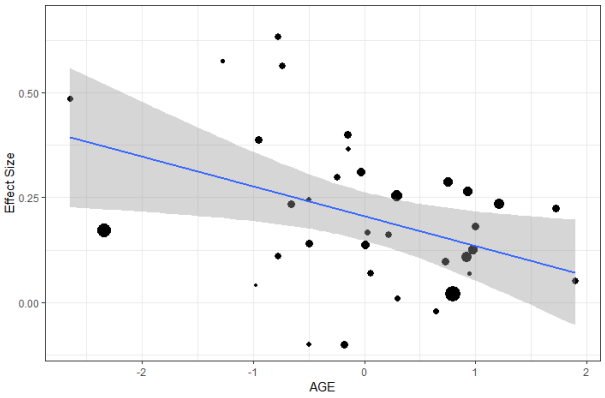
Cultural context. None of the culture dimensions affected the relationships between overall personal resources, psychological capital or social capital to perceived employability.

Moderators of the relationship between organizational resources and perceived employability. The available data allowed moderator tests for the relationship of overall category of organizational resources (k = 43), as well as specific resources of job autonomy (k = 10), supervisory support (k = 11) and job security (k = 22) with perceived employability.

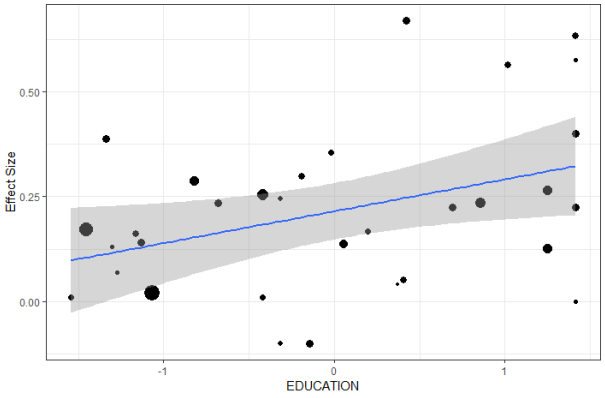
Methodological moderators. The results indicate non-significant differences in the relationship between overall organizational resources and perceived employability for cross-sectional studies as compared to ones with multiple measurement waves. For specific resources, only the relationship between job autonomy and employability perceptions is significantly stronger in cross-sectional studies (k = 6, ρ = .24) than in those with multiple waves (k = 4, ρ = .18). The relationship of overall organizational resources with perceived internal employability (k = 7, ρ = .45) were higher than with external employability (k = 27, ρ = .17). Job security also had a stronger positive relationship with perceived internal employability (k = 4, ρ= .51) than with external employability (k = 18, ρ = .15).

Individual vulnerability. Average sample age significantly moderated the relationship between the overall category of organizational resources and perceived employability, with the positive relationship being weaker in samples with higher average age (B = -.02, p = .018, Plot 2.6). Average age also significantly affected the positive relationship between job autonomy and perceived employability, with the relationship being weaker in older samples (B = -.14, p = .005, Plot 2.8). When it comes to education, somewhat surprisingly, the relationship between overall category of organizational resources and perceived employability was significantly stronger among samples of individuals with higher average education (B = .07, p = .026, Plot 2.7), whereas education weakened the positive relationship between job autonomy and perceived employability, such that the positive relationship was stronger in samples with lower as compared to higher education (B = -.18, p < .001, Plot 2.9).

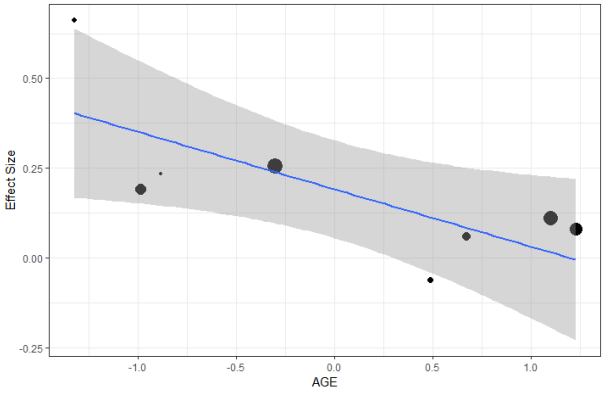
Plot 2.6. The relationship between Organizational resources and PE moderated by Age



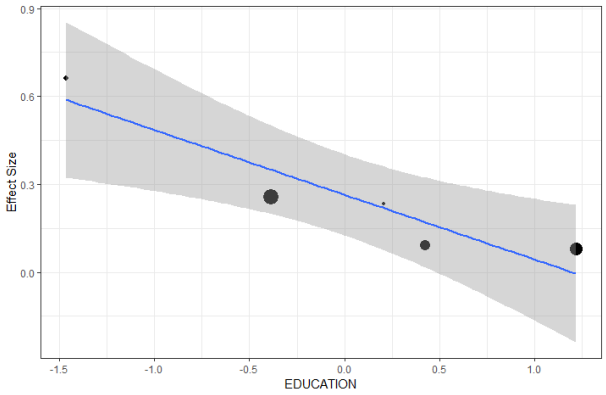
Plot 2.7. The relationship between Organizational resources and PE moderated by Education



Plot 2.8. The relationship between Authonomy and PE moderated by Age

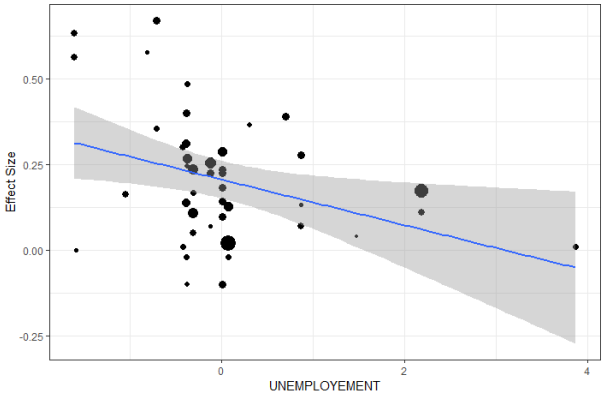


Plot 2.9. The relationship between Authonomy and PE moderated by Education



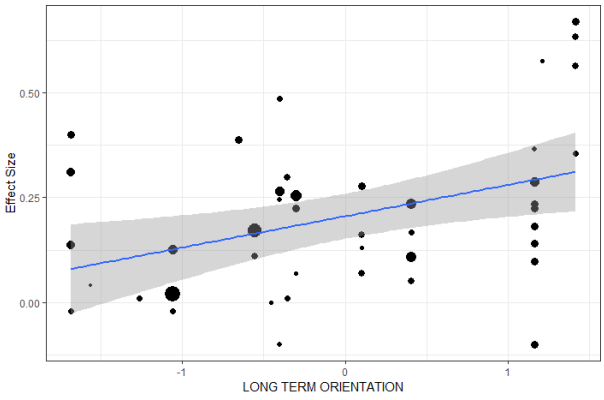
Macroeconomic context. Country level unemployment significantly weakened positive relationships of organizational resources (B = -.06, p = .020, Plot 2.10) with employability perceptions. Strictness of employment protection legislation also significantly moderated the relationship between broader variable category of organizational resources and employability perceptions (B = .12, p = .018), as well as job security and employability perceptions (B = .22, p = .003). The direction of this relationship indicates stronger positive relationships between organizational resources and employability perceptions in countries with stricter employment protection legislation (k = 18, ρ = .33) compared to countries with less strict employment protection legislation (k = 21, ρ = .17). Relationships between job security and perceived employability were also stronger in countries with stricter (k = 9, ρ = .39) compared to countries with less strict (k = 9, ρ = .13) employment protection legislation. In addition, we observe slightly but not significantly stronger positive relationships between job autonomy and perceived employability in countries with stricter employment protection (B = .11, p = .065) with effect sizes being somewhat higher in countries with stricter employment protection legislation (k = 5, ρ = .23) compared to countries with less strict employment protection legislation (k = 4, ρ = .12).

Plot 2.10. The relationship between Org. Resources and PE moderated by Unemployment rates

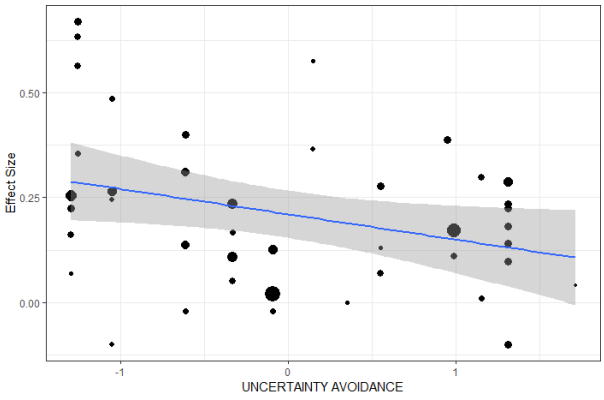


Cultural context. Among Hofstede's cultural dimensions, long-term orientation (B = .06, p = .011, Plot 2.11), uncertainty avoidance (B = -.05, p = .034, Plot 2.12) significantly and masculinity (B = .05, p = .054, Plot 2.13) marginally significantly affected relationship between overall organizational resources and employability perceptions. The relationships between organizational resources and perceived employability were stronger in countries higher in long-term orientation and masculinity, but lower in countries with high uncertainty avoidance. Among Schwartz's cultural value orientation hierarchy (B = .09, p < .001, Plot 2.14) and mastery (B = .09, p < .001, Plot 2.15) significantly affected relationships between overall organizational resources and perceived employability. Positive relationships were stronger in countries higher on hierarchy and mastery. Specific organizational resources show a similar pattern of relationships for job security. Namely, positive relationships between job security and perceived employability were stronger in countries higher in hierarchy (B = .10, p = .004, Plot 2.17) and mastery (B = .10, p = .005, Plot 2.16). Additionally, the relationship between job security and employability was weaker in cultures higher on egalitarism (B = -.10, p=.003, Plot 2.18) and marginally weaker in countries higher on individualism (B = -.07, p = .054, Plot 2.19). Finally, hierarchy also strengthened the positive relationship between supervisory support and perceived employability (B = .12, p = .021, Plot 2.20).

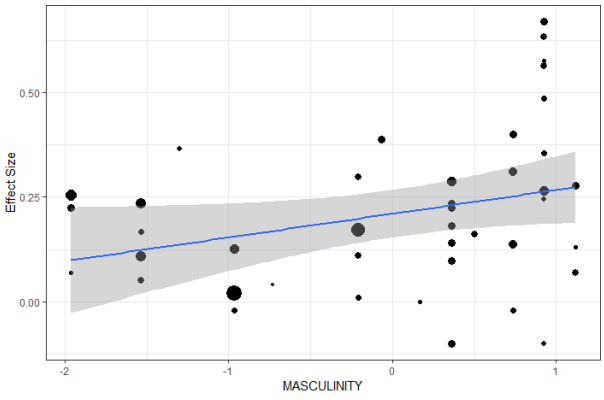
Plot 2.11. The relationship between Org. Resources and PE moderated by LTO



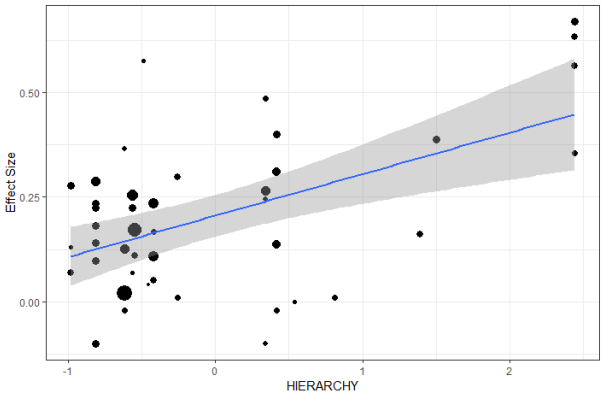
Plot 2.12. The relationship between Org. Resources and PE moderated by UA



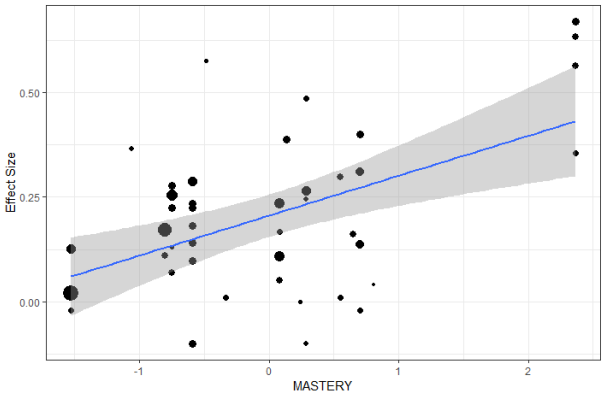
Plot 2.13. The relationship between Org. Resources and PE moderated by Masculinity



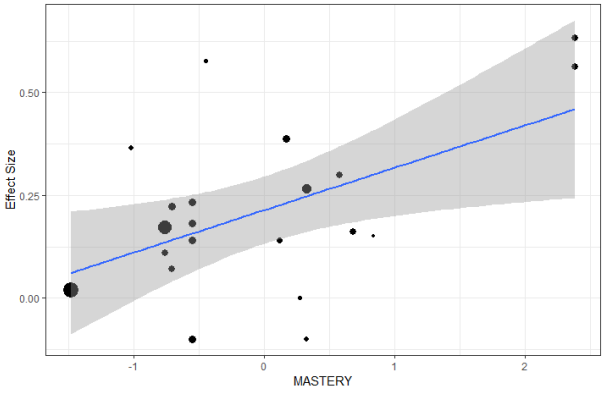
Plot 2.14. The relationship between Org. Resources and PE moderated by Hierarchy



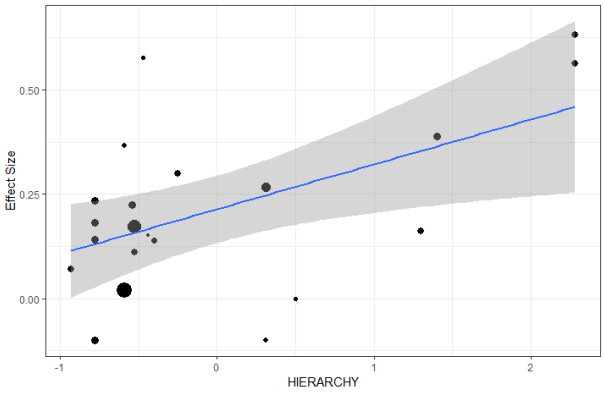
Plot 2.15. The relationship between Org. Resources and PE moderated by Mastery



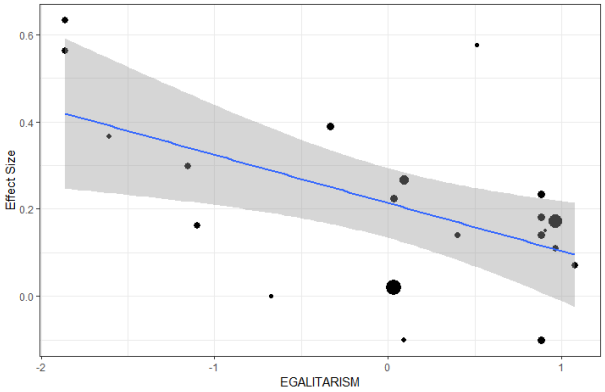
Plot 2.16. The relationship between Security and PE moderated by Mastery



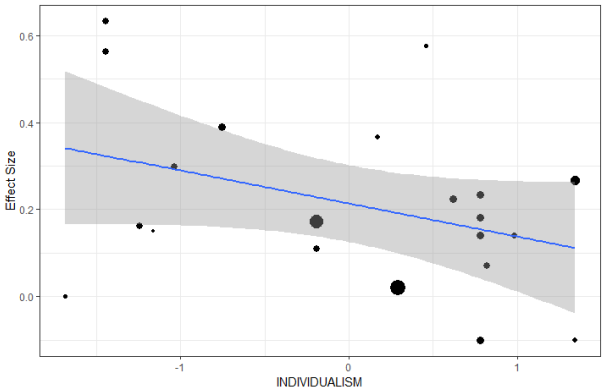
Plot 2.17. The relationship between Security and PE moderated by Hierarchy



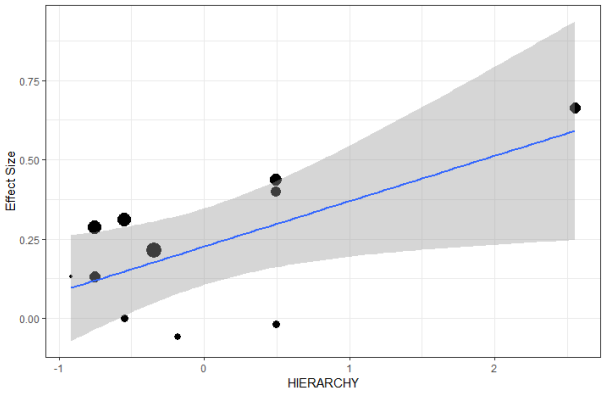
Plot 2.18. The relationship between Security and PE moderated by Egalitarism



Plot 2.19. The relationship between Security and PE moderated by Individualism



Plot 2.20. The relationship between Support and PE moderated by Hierarchy



Moderator Analyses: Perceived Employability and Outcome Correlates

Moderators of the relationship between perceived employability and turnover intentions (mobility). As the relationship between employability perceptions and turnover intention was investigated across substantial number of studies (k = 12, n = 5722) we explored whether it varied across the different moderators we coded.

Methodological moderators. Our results potentially strengthen the construct validity of the perceived employability construct as they suggest a negative relationship between perceived internal employability and turnover intentions (k = 2, ρ = -.23) but a positive relationship between perceived external employability and turnover intentions (k = 9, ρ = .12). However, due fairly small number of studies that examined perceived internal employability, this result requires further research to substantiate it.

Individual vulnerability, macroeconomic and cultural context. None of the indicators of individual vulnerability, or macroeconomic and cultural context moderated the relationship between perceived employability and turnover intentions.

Moderators of the relationship between perceived employability and productivity. We explore the role of moderators on the relationship between broader category of productivity (k = 23), and the specific outcome of objective career success (k = 11).

Methodological moderators. Although none of the methodological moderators significantly affected the relationship between perceived employability and overall employee productivity, the results of subgroup analyses show significant positive relationship between perceived internal employability and overall productivity to be somewhat higher ($k = 5$, $\rho = .32$), compared to that of perceived external employability ($k = 15$, $\rho = .24$). Moreover, the relationship between perceived internal employability and career success ($k = 4$, $\rho = .36$) was significantly higher than the relationship between perceived external employability and career success ($k = 5$, $\rho = .11$).

Individual vulnerability, macroeconomic and cultural context. None of the indicators of individual vulnerability, or macroeconomic and cultural context moderated the relationship between perceived employability and productive employees or career success.

Moderators of the relationship between perceived employability and happiness. We looked into the role of moderators in the relationship between perceived employability and the broader category of employee happiness ($k = 20$), as well as job satisfaction ($k = 10$).

Methodological moderators. Our results potentially stronger relationship between perceived internal employability and job satisfaction ($k = 2$, $\rho = .47$), compared to perceived external employability and job satisfaction ($k = 7$, $\rho = .10$). However, due fairly small number of studies that examined perceived internal employability, this result requires further evidence.

None of the indicators of individual vulnerability, or macroeconomic and cultural context affected the relationship of perceived employability with the overall category of happy employees or job satisfaction.

Moderators of the relationship between perceived employability and health. We addressed whether moderators affected the relationship between perceived employability and overall health ($k = 27$), psychological distress ($k = 14$) and burnout ($k = 13$).

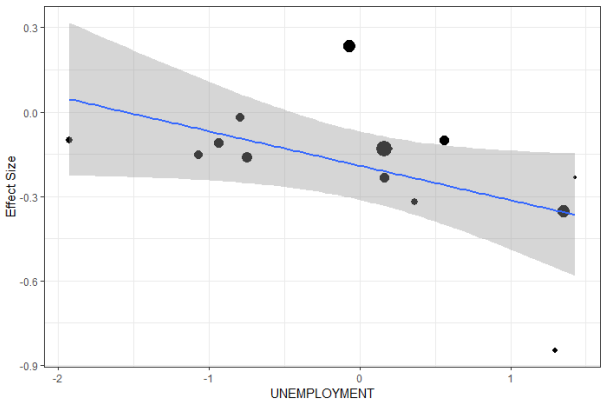
Methodological moderators. Study design did not significantly affect the relationship between perceived employability and health. We couldn't test the differences between perceived internal and perceived internal employability due

to lack of studies that reported on the relationships between perceived internal employability and indicators of health.

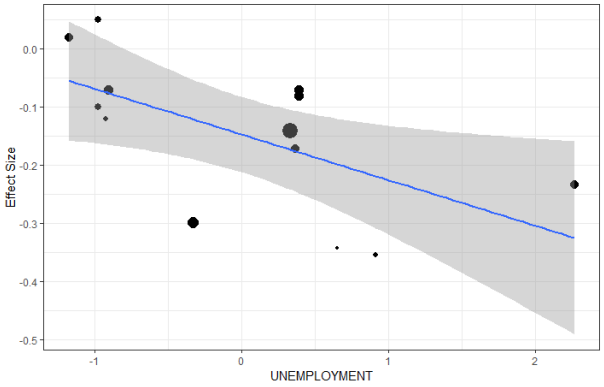
Individual vulnerability. The relationship between perceived employability and health was affected by employment status. Overall, perceived employability exhibited a stronger positive relationship with health among samples unemployed individuals (k = 2, ρ = .32) than for employees (k = 19, ρ = .16). Also, perceived employability had a significantly stronger negative relationship with symptoms of psychological distress, such as anxiety and depression, among samples of unemployed (k = 3, ρ = -.48) compared with samples of employed individuals (k = 10, ρ = -.14).

Macroeconomic context. The relationship between perceived employability and psychological distress (B = -.10, p = .039, Plot 2.21) as well as perceived employability and burnout (B = -.07, p = .031, Plot 2.22) was moderated by country level unemployment rates. Specifically, the negative relationship was stronger in countries with higher unemployment rates. Strictness of employment protection legislation moderated the relationships between perceived employability and overall health (B = .08, p = .034), with the positive relationships being stronger in countries characterized by stricter employment protection legislation (k = 12, ρ = .23) compared to countries with less strict employment protection legislation (k = 14, ρ = .15).

Plot 2.21. The relationship between Disstress and PE moderated by Unemployment rates

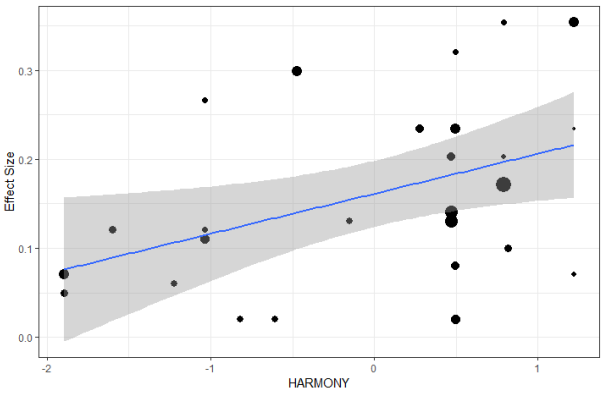


Plot 2.22. The relationship between Burnout and PE moderated by Unemployment rates

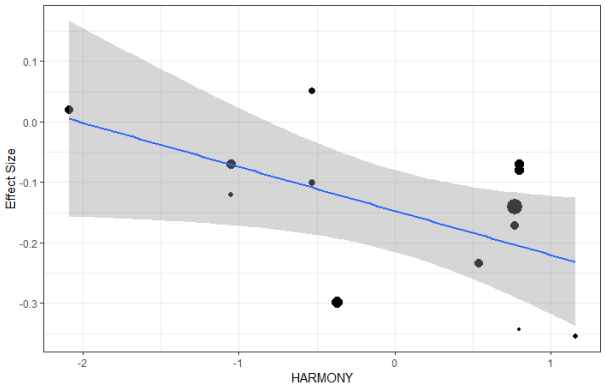


Cultural context. Positive relationship between perceived employability and overall category of health and wellbeing was significantly higher in countries with higher score on Schwartz's dimension of harmony (B = .04, p = .018, Plot 2.23). For employee burnout, we found that in countries higher on masculinity (Hofstede), negative relationship between perceived employability and burnout weaken (B = .06, p = .046, Plot 2.25), whereas in countries with higher harmony (Schwarz), the negative relationship with burnout was stronger (B = -.07, p = .035, Plot 2.24).

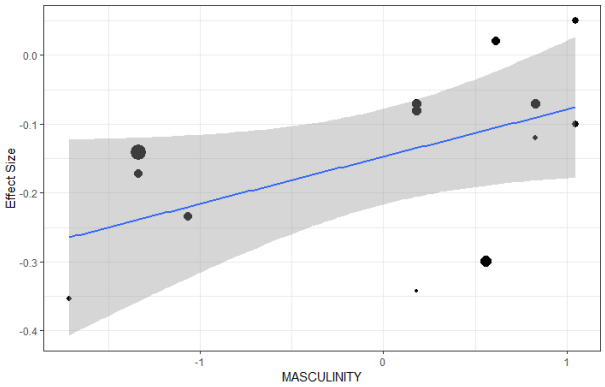
Plot 2.23. The relationship between Health and PE moderated by Harmony



Plot 2.24. The relationship between Burnout and and PE moderated by Harmony



Plot 2.25. The relationship between Burnout and and PE moderated by Masculinity



Publication Bias. To test whether publication bias might have affected the results, we performed cumulative meta-analyses (Kepes, Banks, McDaniel, & Whetzel, 2012). We sorted studies by sample size as an indicator of precision of an estimate and, subsequently, estimated effect sizes through multiple iterations. First, the effect size of the studies with the largest sample size was estimated, and then re-estimated after adding each study with a smaller sample size. The results of the analysis yield a set of effect size estimates displayed in a caterpillar plot which is inspected for evidence of "drift". If unpublished studies bias the findings, the cumulative results are expected to "drift" in either the positive or negative direction as studies with smaller sample sizes are added. This may happen because studies with smaller sample sizes tend to report larger effect sizes (Banks et al, 2012). We performed cumulative meta-analysis for the broader construct categories of antecedents and outcome correlates.

Overall, the results indicate no dramatic "drift" in the estimates of effect sizes. The meta-analytic estimates do not change substantially, and the estimated parameter is situated within 95% confidence interval of the full model. These results provide some indirect evidence that publication bias is unlikely to have affected the results. To save space, the caterpillar plots are presented in the Chapter 2 Supplementary material 5.

Discussion

Overall, from a theoretical point of view, the main aim of the current meta-analysis was to comprehensively portray the nomological network of perceived employability by systematically and quantitatively summarizing the relationships with its antecedents and outcome correlates, and to explore the role of potential methodological and contextual moderators. We suggested an integrative model built upon the COR theory (Hobfoll, 1989), and positioned perceived employability as a subjective manifestation of a 'resource caravan' referring to a 'pack' of individual and organizational resources that individuals deploy in concert to craft sustainable careers. COR theory suggests resources are interrelated and we proposed that individuals in possession of higher personal and organizational resources would be more likely to perceive better employment opportunities. Overall, the results of the meta-analysis supported many but not all of the hypotheses developed on the basis COR theory (Hobfoll, 1989, 2017) and the model of sustainable careers (De Vos et al, 2018). Below we summarize the key findings and discuss their theoretical implications.

Interpreting the Findings

Antecedents. To cope with the tasks and transitions that comprise the career, individual employees draw upon both their own personal pool of resources and those provided by the environment. In line with the expectations, the results indicate moderate to strong relationships between personal resources and perceived employability. Specifically, in line with the model of sustainable careers, personal resources that reflect agency (i.e., protean career orientation, career adaptability, proactive personality, psychological, human-, and social capital) and meaning making (i.e., career identity) related positively to employability perceptions. Relationships were moderate or strong but not exceptionally high for any specific personal resource. The strongest relationship was found for psychological capital, suggesting that motivational resources which reflect confidence in realizing and managing different actions (i.e., self-efficacy) and a positive life stance (i.e., hope,

optimism, resilience) form the most relevant personal resources to support favorable employability perceptions. The large number of individual resources related to employability perceptions across primary studies suggests construct condensation and refinement may be needed in the antecedent domain, and the investigation of relationships and interactions among different resources.

The results of the moderator analyses for the relationships between personal resources antecedents and perceived employability suggest that the relationships are principally conditioned by individual vulnerability (age, gender, work status), suggesting personal resources are more valuable for positive employability perceptions among younger employees, unemployed, and women. The relationships were similar across contexts varying in macroeconomic conditions and culture. Only for psychological capital we found stronger positive relationships in countries with higher unemployment rates. This might indicate that for individuals who have fewer external resources to rely on, either because they are at the beginning of their career, belong to less resource-endowed group within a society, or live in a society with more challenging economic conditions, personal resources might have a compensatory role in shaping employability perceptions.

Organizational resources also exhibited moderately strong relationships with employability perceptions. In line with the notion of the resource gain spiral (Hobfoll, 1989), employees who work in resource abundant organizational environments, had more positive perceptions of available employment opportunities both within and outside of their current organizations. Employees reported more favorable employability perceptions when they experienced support from their organizations for increasing their knowledge, skills and abilities, and support from their supervisors in the form of feedback, development, and responsiveness to their needs. Having job security and autonomy in planning and executing work demonstrated positive relationship with employability perceptions, which may be due to these creating better opportunities to leverage personal resources such as proactivity or human capital. Additionally, having control and freedom within daily work and job security may also mean that employees have more time and effort to invest in developing and sustaining their employability. Task variety did not appear to contribute to the positive resource gain spiral, as performing a wider variety of tasks did not relate positively to higher perceptions of employment alternatives. A potential explanation could be that the requirement to perform different tasks within one's job might contribute to building a combination of individual skills and abilities that are tailored to that

specific position, and that might not necessarily yield more positive perceptions of alternative employment opportunities. Also, jobs characterized by high variety and complexity might be characterized by a higher workload, leaving fewer individual resources for the identification of employment alternatives.

In contrast to personal resources, the relationships between organizational resources and perceived employability appear to be more affected by macroeconomic conditions and culture. Overall organizational resources had stronger positive relationship with perceptions of employment opportunities in countries with lower unemployment and higher protection, and culturally in countries that are characterized by stronger orientation towards future, more reliance on hierarchical systems in the distribution of power, and an active mastery of the environment. There were also certain differences in how cultural dimensions affected the relationships of specific organizational resources with perceived employability. Specifically, whereas the relationship between security and employability was stronger in countries that score higher on mastery and hierarchy, the relationship between supervisory support and perceived employability was stronger in countries that score higher on hierarchy. This suggests that resources provided by the organization will have a stronger role in shaping individual employability perceptions when they are complementary with cultural values and beliefs.

Sociodemographic factors. The sociodemographic factors demonstrated weak but significant relationships with perceived employability. The relationship between gender and perceived employability indicated lower perceptions of available employment opportunities among women compared to men. Age and tenure had a negative relationship, indicating that older and more experienced workers report less favorable employability perceptions. This opposes the idea that over the course of their careers workers might acquire resources in the form of human and social capital which then results in greater perceived employability. In contrast, we found a positive relationship between education and perceived employability. This finding is in line with both COR and human capital theories as education might stimulate the acquisition of human capital (e.g., job related knowledge and expertise), which should contribute to having more employment options. Being less educated might indicate belonging to a group with lower socioeconomic status, which might come with threats to other resources relevant for employability, such as lower access to information on job vacancies. Finally, working hours were weakly but positively related to employability perceptions. Employees who work more hours may have

more resources, such as income and learning opportunities, which might foster their employability perceptions.

Outcome correlates. Moving onto the criterion domain, based on COR theory, we expected positive relationships between employability and all indicators of sustainable careers because those individuals who are have more abundant resource caravans are more likely to secure further resource gain (Hobfoll, 2011). Results indicated positive relationships between employability perceptions and two out of four indicators of sustainable careers (productivity and health), partially supported expectations for happiness, and did not support expectations about relationship between employability and mobility.

First, contrary to our hypotheses we did not find significant relationships between perceived employability and job search, employment status, turnover intentions and organizational commitment (employee mobility). A potential explanation related to searching employment comes from control theory (Powers, 1991), which proposes that confidence in being able to reach a certain goal might translate into being overly optimistic about the possible outcomes. Thus, individuals with more favorable perceptions of available employment opportunities might underestimate what it takes to reach the goal of finding (alternative) employment, and exert less effort in pursuing this goal. This idea received some support in studies on the relationship between self-efficacy and job search (Vancouver, Thompson, & Williams, 2001), and might also be relevant for perceived employability. Perhaps the extent to which the perception of employment opportunities relates to mobility more generally depends upon interactions between individual and organizational factors. For example, drawing on the investment model of interpersonal relationships (Rusbult & Buunk, 1993), the extent to which perceptions of attractive job opportunities relates to a lack of commitment to the current organization and the intention to leave may be contingent upon investments. Even in presence of multiple and attractive employment options, employees might not consider leaving if they invested a lot of resources in their current organization or job, especially if they perceive such resource investment as reciprocal. Further research is needed on how employed individuals process information about available alternative job opportunities and on the individual and contextual factors that affect mobility decisions.

Second, for employee productivity, the results were fully in line with the expectations based on COR theory as perceived employability related weakly but significantly positively to performance, engagement, and indicators of objective career success (referring to realizing one's career potential in the long run through achieving a better income and job position). The results of the moderator analyses indicate perceived internal employability is more prominently related to productivity than perceived external employability. Why is not yet clear, perhaps their higher performance and success make employees perceive higher internal employability as they realize their continued value to the organization.

Third, perceived employability relates positively to overall employee happiness. However, for specific correlates in this category, perceived employability related positively only to life satisfaction, not job- or career satisfaction. Although we expected positive relationships with career and job satisfaction, a potential explanation may be that in situations where people have many opportunities, they might not pursue the optimal one but rather stop choosing when they find an alternative that seems "satisfactory enough" (cf. Iyenga & Lepper, 2000). Also, an abundance of alternatives may decrease the satisfaction with the chosen alternative later (Diehl & Poynor, 2010) and employees who perceive themselves as highly employable might be more critical when rating their job satisfaction as they might ponder over potentially better alternatives. Also, perhaps once a person starts working, factors more tied to job content and the immediate work environment become more important for satisfaction than the perception of available employment alternatives elsewhere.

Fourth, perceived employability related to employee health outcomes. As expected, perceived employability related positively to psychological well-being as well as general health, and related negatively to indicators of ill-being within the work domain (such as burnout, including emotional exhaustion and reduced personal accomplishment), and as well as to more general and long-term distress (i.e., anxiety, depression, and psychological symptoms). This is in line with research that links a sense of control to physical and psychological health (Rodin & Timko, 1992). Perceiving employment options provides a feeling of control and security within the employment domain, which protects against psychological distress. Even though there is no guarantee that these employment chances will be realized (i.e., no significant relationship between employability and mobility), the perception of having options seems useful for preserving health and wellbeing.

A number of moderators affect the relationship of perceived employability and health. Specifically, the relationships with positive and negative health indicators are stronger among more vulnerable individuals (i.e., unemployed or students, and those in countries with higher unemployment rates). The results corroborate findings of the main meta-analytic relationships suggesting that, even in more disadvantaged circumstances, a sense of control that derived from perceiving better (or at least existing) employment opportunities can have positive impact on individual wellbeing and combat a sense of hopelessness, helplessness, and apathy. Finally, for employed individuals, employability perceptions have a stronger negative relationship with burnout in masculine cultures and those that value harmony less.

Theoretical Implications

The study findings have three main theoretical implications. First, regarding the construct validity and operationalization of perceived employability, our review showed that some researchers operationalize employability in terms of mere quantity of employment chances, whereas others distinguish employment possibilities within the current organization (i.e., in the internal labor market) from those outside the organization (i.e., in the external labor market, e.g. De Cuyper & De Witte, 2008, 2010; Eby et al., 2003). While studies assessing external employability are more numerous, the results of moderator analyses indicated some differences in how external and internal employability relate to organizationally relevant outcomes (productivity) suggesting potential differences in the predictive validity of these dimensions for some sustainable career outcomes. Future research should thus disentangle internal and external employability perceptions.

Second, the results generally supported the idea of COR theory that perceived employability might be viewed as the subjective manifestation of a career related resource caravan (Hobfoll, 2011), but the exploratory results of the moderator analyses suggest that a more precise understanding of relationships requires complementing the broader theoretical framework of COR theory with assumptions that specify whether and how caravan passageways (contextual conditions) affect relationships of perceived employability with specific anteceding resources and outcome correlates. For instance, whether resources from the individual resource pool affect perceptions of available employment opportunities may depend on the circumstances. We propose that under challenging external conditions personal resources (and most notably psychological capital) might have compensatory role

and help individuals to overcome the scarcity of environmental resources, while organizational resources may have a more supplementary role, complementing the pool of resources available to individuals who live in more advantageous economic circumstances. These findings support the concern that employability might be being polarizing (Forrier, De Cuyper, & Akkermans, 2019) and suggest the need to further investigate the long-term impact of relying on personal resources under challenging conditions. Also, factors that stimulate organizations to invest resources in employees who belong to vulnerable groups or live in less abundant economic conditions are important to investigate.

Third, employability perceptions are related to productivity and health, and we tentatively suggest two main mechanisms here. On the one hand, higher perceived employability might have enabling role for individuals as it signals a more abundant career resource caravan that individuals can use in the realization of productive careers in terms of performance, success, and engagement. On the other hand, perceived employability might have a protective role due to the subjective sense of control in the career domain among individuals who perceive more employment opportunities. This protective role might be particularly valuable under challenging conditions.

Practical Implications

Our meta-analytic findings have a number of implications for policy makers and practitioners. For example, our results contribute to resolving the so-called "employability management paradox" concern that organizational investment in employees' employability might result in attractiveness of those employees not only within but also outside the current organization, resulting in higher turnover. We found that while perceived employability indeed relates positively to employee performance and career success, it does not relate to their turnover intentions or their job search. Thus, organizations' purported reservations of investing in the employability of their employees do not seem substantiated by the current knowledge base. On the contrary, perceived employability related positively to several critically important outcome correlates, including employee mental health and work engagement, indicating benefits of creating working conditions that strengthen employees' employability perceptions. A growing body of research underlines the link between employee health and productivity and indicates that effective management of one might exhibit positive influence on the other

(Goetzel, Guindon, & Ozminkowski, 2001). The results of the current study highlight the importance of employability for both health and productivity, indicating that organizational investment in resources that stimulate employability (e.g., supervisory support and job security) might help decreasing both direct costs (e.g., health insurance) and indirect ones (e.g., productivity losses due to unscheduled absences) associated with health care and increase gains through better employee performance. In addition, the positive relationship between supervisory support and perceived employability indicates that not only systematic investment in human capital development through training, but also strengthening relational resources at work through fostering positive relationships between employees and supervisors can contribute to positive employability perceptions. This might be particularly valuable for lower skilled employees, who might not receive as much training or be provided with job autonomy as often as their more highly educated counterparts.

Limitations and Future Research

This study has several limitations. First, our meta-analysis focuses exclusively on perceived employability and not on other conceptualizations of employability, such as employability competences (Van der Heijde & Van Der Heijden, 2006), dispositional employability (Fugate & Kinicki, 2008) or employability orientation (van Dam, 2004). This not only served to narrow the scope of the current study, but also reduced the risk of mixing apples and oranges, because different conceptualizations of employability, although related, focus on different aspects. In addition, although certain theoretical models within the employability literature propose relationships among different conceptualizations of employability (e.g., Forrier & Sels, 2003), the current literature does not allow for a meta-analytic test of these relationships. More primary studies are needed first.

Second, as the purpose of meta-analysis is to provide a quantitative summary of the relationships studied in the primary studies, the current meta-analysis could include only antecedents and outcome correlates of perceived employability that have been investigated frequently enough ($k>3$) in the existing body of quantitative employability research. Some variables that would be interesting to relate to employability perceptions (e.g., person-organization fit) have not yet been studied frequently enough to include them. Furthermore, the current quantitative approach implies neglecting noteworthy qualitative work, such as for instance the mixed methods study on antecedents of employability by Finch, Hamilton, Baldwin and

Zehner (2013). Nevertheless, we did include both personal and organizational resources as antecedents of perceived employability, and all main indicators of sustainable careers as indicated in the De Vos et al. (2018) model as outcome correlates.

Third, the design of the studies included in this meta-analysis guides the types of conclusions that can be drawn. As most included studies used correlational, cross-sectional designs, we cannot support causal inferences. Even though we built our conceptual model by arranging correlates of employability perceptions into antecedents and outcomes, we did not test causal relationships between these variables. Hence, the possibility of third variable problems, and/or reverse or reciprocal relationships remains. For example, while we proposed job security as an antecedent of perceived employability, some primary studies saw it as an outcome or as an independent factor that interacts with employability in affecting career outcomes. Only four primary studies adopted longitudinal designs with even fewer (two) assessing employability perceptions at more than two points in time. This points out a severe limitation of the ability of the current body of research on perceived employability to explain sustainable career outcomes, as this forms an inherently time-bound criterion domain. Hence, more longitudinal research and intervention studies are sorely needed.

Fourth, the majority of the studies included in our meta-analysis relied on self-report measures to assess perceived employability, antecedents, and outcome correlates, which implies common source and common method variance may affect results. As perceived employability refers to the chances of available employment opportunities as appraised by the individual, it is inherently subjective. However, future studies could relate these subjective evaluations to more objective outcomes. One of the most surprising findings of the current study was that of the non-significant relationship between perceived employability and employment status. However, we have to note that this relationship has been tested in only five primary studies, not enabling us to empirically test potential moderators. To gain more insight in the circumstances under which employability perceptions might or might not relate to obtaining actual employment, more primary studies are needed.

Fifth, due to the limited number of studies that separately reported correlations for perceived internal and external employability, we could not always test for differences between the two in relation to antecedents and outcome correlates.

As most frequently used measures of perceived employability do encompass both aspects, we urge employability researchers to use the full scales and report both overall and dimension scores.

Our findings highlight several opportunities and needs for future research. A first avenue for advancing employability research refers to a more extensive investigation of the role of context in shaping employability perceptions. To date, with the exception of job security, contextual antecedents are studied less often than personal ones. Specific personal and organizational barriers to employability should also be investigated as understanding factors that might challenge or prevent positive employability perceptions are equally informative for employees and organizations and we suggest more extensive research efforts in this direction. Additionally, the examination of the role of context might require studies that employ multilevel designs and assess how occupational, organizational and job design characteristics interact with personal resources in shaping employability perceptions. Finally, more longitudinal research is needed to examine the causal paths between perceived employability, antecedents, and especially outcomes. Because "career" as noted by definition represents a time-bound concept which concerns a sequence of employment experiences over time (Arthur & Rousseau, 1996), longitudinal studies are the key means for understanding how employability perceptions relate to mobility, productivity, happiness and health as indicators of sustainable careers in the long run. Longitudinal research on how employability perceptions fluctuate across time and over career transitions and shocks are needed. Finally, experimental studies that evaluate interventions targeted at enhancing employability perceptions might also offer insight on how malleable these perceptions are, and to what extent they improve mobility, productivity, happiness and health outcomes.