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ABSTRACT

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Emotional intelligence and career-related outcomes: A meta-analysis

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Abstract

The concept of emotional intelligence has spanned researchers' interest to a considerable extent over the last decades and is now considered as a critical resource that helps individuals to deal with career challenges. However, no empirical effort to integrate these studies has been carried out yet. The current research addresses this gap by proposing an integrated theoretical model and conducting a systematic review and meta-analysis of emotional intelligence and its associations with career-related outcomes. Out of a total of 150 independent samples from published and unpublished studies representing N = 50,894 participants, our random-effects meta-analysis showed that emotional intelligence was significantly related to career adaptability, career decision-making self-efficacy, entrepreneurial self-efficacy, salary, career commitment, career decision-making difficulties, career satisfaction, entrepreneurial intentions, and turnover intentions. However, no significant correlations were found with job search self-efficacy and self-perceived employability. Overall, our work conveys important theoretical contributions but also provides recommendations and an agenda for future research.

Keywords: emotional intelligence; career; systematic review; meta-analysis

1. Introduction

Over the last decades, a significant number of scholars have highlighted the challenging and emotional nature of individuals' career development (Hartung, 2011). Indeed, career development is an ongoing process of planning action toward personal work and life goals (Young et al., 1996). It thus involves a lot of challenges such as critical career decisions, continuous acquisition of one's skills, adaptation to a changing world of work, the development of fulfilling work and life balance, but also negotiating career transitions across the life span. In this context, increased attention has been devoted to personal resources that support individuals in coping with the difficulties and challenges they may encounter during their career development (Sullivan & Al Ariss, 2022). Among them, emotional intelligence—the extent to which individuals identify, understand, express, regulate, and use their emotions and the emotions of others—has been recognized as such a resource within the context of career development (Parmentier et al., 2019).

Although a growing corpus of empirical findings has shown the importance of emotional intelligence with regard to a wide range of career-related outcomes–such as career adaptability (Parmentier et al., 2019), career decision processes (Di Fabio & Kenny, 2011), career satisfaction (Pirsoul et al., 2021), career commitment (C. Brown et al., 2003), and employability (Nelis et al., 2011)–there exists no comprehensive emotion-focused career model that pinpoints the underlying processes at play. Indeed, emotional intelligence has been widely investigated with an apparent lack of career theoretical frameworks, limiting our comprehension of its influence regarding career and vocational processes. Furthermore, most studies have been conducted independently, lacking integrative effort to better understand the beneficial effects of emotional intelligence regarding career-related outcomes.

The present study aimed to pursue three main objectives to address these issues. First, we strived to propose an overarching picture of what we know about emotional intelligence with regard to career-related outcomes. To this end, we outlined a theoretical model that aims to clarify the underlying processes that explain the relationship between emotional intelligence and career-related outcomes. We relied upon a systematic review procedure to identify these processes and outcomes. Second, we performed a meta-analytic investigation to compare the overall effect sizes between emotional intelligence and career-related outcomes. Third, to better understand the robustness of these relationships, we performed a set of moderation analyses to examine which variables may influence the relationships between emotional intelligence and career-related outcomes. Based on the current findings, the final objective of the present research was to highlight the main limitations in the investigation of emotional intelligence in career sciences and develop a future research agenda.

The present work offers several valuable contributions to the literature. Our meta-analysis provides new directions to the career literature by proposing an integrated and process-oriented model of emotional intelligence to understand the underlying processes at play in the relationships between emotional intelligence and career-related outcomes. Shifting from an outcome-oriented research tradition toward a more process-oriented investigation is crucial to develop interventions and helping individuals with their career-related emotional difficulties. Such understanding also has implications for human resource practices and career practitioners in emphasizing the importance of emotional processes in individuals' career development.

We organize the current article as follows. First, we delineate the different conceptualizations and definitions of emotional intelligence. Second, we propose a summary of the existing career models and theories that explain the role of emotional intelligence in career sciences. Based on the contextual action theory (Young et al., 1996), the social cognitive model of career self-management (Lent & Brown, 2013), and the career construction model of adaptation (Savickas, 2013), we then proposed an integrated process-oriented model that explains how emotional intelligence predicts career-related outcomes. Then, we present our methodology and the career-related outcomes from our systematic review. Next, we describe the results of our correlational meta-analysis, including the correlation, moderator, and sensitivity analyses. Then, we summarize and interpret the main findings. We also stress the theoretical implications and the limitations of the current meta-analysis. We then focus on the practical implications for human resources. Finally, we close the current paper with concrete recommendations and an agenda for future research.

2. Emotional intelligence: Definition and operationalization

The concept of emotional intelligence was introduced in the scientific literature by Salovey and Mayer (1990), who defined the concept as the *ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions* (p. 239). However, owing to the famous book by Daniel Goleman, published in 1995, the concept has gained tremendous popularity among the scientific community and the general public. Since the nineties, the concept of emotional intelligence has given rise to a plethora of definitions and conceptualizations. These conceptualizations encompass a variety of dimensions, such as emotional functioning and treatment (e.g., emotion identification, emotion understanding, emotion expression, emotion regulation, emotion use) and other non-cognitive factors (e.g., empathy, motivation, or leadership). Table S1 proposes an overarching synthesis of the main different definitions, approaches, and conceptualizations of emotional intelligence. Overall, two approaches have influenced the literature: the ability emotional intelligence (Salovey & Mayer, 1990), considering emotional intelligence as a form of intelligence–like

cognitive intelligence-composed of a set of abilities; the trait emotional intelligence (Petrides et al., 2007), considering, emotional intelligence as a set of behavioral dispositions and self-efficacy in emotional situations. Recent integrative frameworks prefer to focus on emotionally intelligent behavior, which is the product of three components (i.e., ability emotional intelligence, trait emotional intelligence, and emotion information processing) that interact and independently predict outcomes (Fiori et al., 2021). Developmentally speaking, while emotional intelligence is more malleable from late childhood (age 10-11) to emerging adulthood (age 24-25; Dave et al., 2021; Keefer et al., 2013), high stability was demonstrated from emerging adulthood (age 17-25) to middle age (mean age of 34.5; Parker et al., 2016). However, a series of interventional studies indicate that it is possible to increase one's emotional intelligence in adulthood (for a metaanalysis, see Hodzic et al., 2018). Despite the numerous conceptualizations of emotional intelligence, the cumulative empirical efforts on the concept led authors to acknowledge it as a general factor of adaptive functioning, delineating the differences and/or abilities in the extent to which individuals identify, understand, express, regulate and use one's own and others' emotions (Mikolajczak et al., 2009; Pekaar et al., 2020).

3. Investigating emotional intelligence in dominant career theories

3.1 First theoretical considerations: The contextual action theory

The contextual action theory elaborated by Young and colleagues (1996) is one the first theory that has been proposed to explain how emotional intelligence may impact career-related outcomes. This model suggests that individuals' career is constructed via actions driven by their personal and shared goals. Action refers to a system that is composed of three levels: (1) goals settings, (2) strategies (e.g., cognitive processes), and (3) operations (e.g., self-regulatory processes). The role of emotion in this model is thus significant as emotions motivate action, regulate actions, and offer the possibility to access and develop self-narratives about career choice. Following these authors, developing awareness about one's emotions help individuals in their career trajectories. Based on these assumptions, Emmerling and Cherniss (2003) claimed the importance of emotion in career decision processes and developed a series of counseling applications regarding emotional intelligence.

3.2 From the social cognitive career theory to the model of career self-management

Initially, social cognitive career theory was created to explain and understand how individuals develop their vocational interests, the career path and work in which they engage, and their performance and persistence in educational and occupational paths (Lent et al., 1994). It thus focuses on *content* aspects. Based on Bandura's theory (1986), the social cognitive career theory emphasizes three related constructs: (1) self-efficacy, (2) outcome expectations, and (3) goals. A core tenet of this theory is also to emphasize the conditions that support or restrict human agency with regard to career development, such as other personal, contextual, and behavioral variables. Building upon the same theoretical underpinning, a second model emerged to better understand work and academic satisfaction (Lent & Brown, 2006). To extend the comprehension of *how* individuals manage their career decisions and challenges that respond to the realities of the new world of work, Lent and Brown (2013) developed the model of career self-management.

This model is particularly suited to understanding how emotional intelligence may affect career-related outcomes as it allows for identifying the underlying processes at play. From our perspective, emotional intelligence can be considered a proximal variable that simultaneously influences self-efficacy, goals, actions, and outcomes regarding career-related outcomes. Indeed, a series of studies have already shown that emotional intelligence is a predictor of career decision-making self-efficacy (Santos et al., 2018), job search self-efficacy (Pirsoul et al., 2022), and entrepreneurial self-efficacy (Miao, 2015). These studies also showed that self-efficacy

domains acted as a mediator between emotional intelligence and career decision-making difficulties or active job search behaviors (Nieto-Flores et al., 2019).

3.3 The career construction model

The career construction model is a career development model that aims to understand how individuals integrate their vocational self-concepts into their work roles (Hirschi et al., 2015; Savickas, 2013). Accordingly, a series of psychological traits that refers to individuals' readiness to cope with career-related issues, labeled Adaptivity, predict Adaptability resources (i.e., career adaptability). In turn, career adaptability-referring to a self-regulatory resource to cope with career challenges-influences individuals' development of adaptive behaviors and self-beliefs to career conditions (i.e., Adapting responses). Finally, adaptability and adapting responses influence Adaptation results (i.e., the outcomes of adapting behaviors). Over recent years, an increasing number of researchers have relied upon the career construction model to understand how emotional intelligence can predict career-related outcomes. Indeed, emotional intelligence has been demonstrated as a predictor of career adaptability (Parmentier et al., 2019), career satisfaction (Pirsoul et al., 2021), salary (Rode et al., 2017), and turnover intentions (Miao et al., 2017). Different studies also showed that emotional intelligence predicted career decision processes through the mediational effect of career decision-making self-efficacy (Santos et al., 2018) and career adaptability (Udayar et al., 2018). Other studies also showed that emotional intelligence predicted self-perceived employability through the mediational effect of career adaptability (Udayar et al., 2018).

3.4 Emotional intelligence and career-related outcomes: Proposition of an integrated and process-oriented model

Considering the contextual action theory (Young et al., 1996), the model of career selfmanagement (Lent & Brown, 2013), and the career construction model (Savickas, 2013) offered valuable insights to propose the following model (Fig. 1). We consider emotional intelligence as a self-regulatory resource that predicts different career-related outcomes, but also key mediators to understand the processes that may explain how emotional intelligence predicts career-related outcomes. It is important to note that we developed this model based on the career variables that emerged from our systematic review procedure, presented in the next section. First, we consider that emotional intelligence affects career-related outcomes through the mediational effect of career adaptability. According to the career construction model, emotional intelligence is considered a trait of willingness to face a career task. Authors support the assumption that emotional intelligence provides the motivation and self-regulatory abilities for exhibiting career adapt-abilities to plan one's career path and how to reach career goals (Coetzee & Harry, 2014; Parmentier et al., 2019). In light of the contextual action theory (Young et al., 1997), identifying and managing emotions allows individuals to better control and regulate one's actions toward their career. Emotional intelligence also has a direct effect on career-related self-efficacy domains. Indeed, a series of studies showed emotional intelligence's predictive role on career decision-making, job search, and entrepreneurial self-efficacy (Pirsoul et al., 2022; Santos et al., 2018; Wen et al., 2020). It is assumed that the ability to identify and manage one's emotions offers control over career tasks and predicts positive beliefs to achieve career goals. On the one hand, understanding and managing one's emotions help individuals rely on internal processes to make decisions (Young et al., 1996). On the other hand, Lent and Brown (2013) highlight that some personal factors may influence career adaptation and adaptive behaviors by fostering emotional coping strategies. A recent meta-analysis has demonstrated that individuals with high emotional intelligence are more likely to use adaptive emotion regulation strategies to manage difficult situations (Peña-Sarrionandia et al., 2015). In addition, different studies showed the incremental validity of emotional intelligence on career decision processes over personality

factors (Di Fabio & Palazzeschi, 2009). Furthermore, Lent and Brown (2013) also highlighted that personal resources might strengthen self-efficacy and outcomes expectations. It is in line with recent studies that showed the predictive effect of emotional intelligence on job search selfefficacy and the mediational effect between emotional intelligence and active job search behaviors (Nieto-Flores et al., 2019). We thus highlight a direct link between emotional intelligence to self-efficacy domains. We also propose a direct link between emotional intelligence and career-related outcomes that we differentiate into subjective and objective career outcomes. Based on the career construction model, we also assume that career adaptability plays a mediational role between emotional intelligence and self-efficacy domains and career-related outcomes (Rudolph et al., 2017). These indirect effects were shown with emotional intelligence and different career-related outcomes (i.e., self-perceived employability, career indecision) through career adaptability (Udayar et al., 2018). Finally, we assume that career-related outcomes are also predicted by career adaptability and the mediational effects of different self-efficacy career-related domains. A series of studies already showed the mediational effect of self-efficacy between career adaptability and career-related outcomes (Guan et al. 2013).



Fig. 1. An integrated and process-oriented model of emotional intelligence and career-related outcomes.

4. Moderators of the emotional intelligence–career-related outcomes relationships

We systematically examined theoretical and methodological moderators to understand how the relationships between emotional intelligence and career-related outcomes may vary due to covariates. Theoretical moderators refer to those that are based on the literature. Accordingly, we tested two theoretical moderators: gender and age. Methodological moderators refer to those that are considered across studies. Accordingly, we consider two methodological moderators: sample type (students vs. workers) and publication type (published vs. unpublished).

4.1. Theoretical moderators

4.1.1. Gender composition

Although some recent meta-analyses reported no differences between women and men with regard to the general score of emotional intelligence (for a meta-analysis, see Joseph & Newman, 2010), we think that considering gender as a moderator is important for many reasons. First, beyond these results that primarily considered the investigation of gender as a binary variable (women vs. men), other research claimed the importance of gender in the socialization of emotion. Although some meta-analyses did not demonstrate differences among men and women on a series of psychological variables (Hyde, 2005), it has been shown that gender stereotypes and role socialization may influence career choices. For example, some studies have shown that women are less attracted to science, technology, engineering, and mathematics careers than males (Davila Dos Santos et al., 2022). These findings stem from the hypothesis that women perceived themselves as less competent to work in a job considered "male-oriented." In addition, due to the glass ceiling, it is also possible that gender may influence career choices and, in the end, career and vocational processes (Powell & Butterfield, 2015). We thus expect that a higher proportion of men will positively moderate (negatively for career decision-making difficulties and turnover intentions) the relationship between emotional intelligence and career-related outcomes.

4.1.2. Age

While empirical evidence in the career literature did not clearly investigate associations between emotional intelligence and age, some research showed that older individuals tend to present a higher level of emotional intelligence when compared to young individuals (Kafetsios, 2004). In addition, some authors argued that older workers may present higher resources to cope with career challenges (Becker, 1975). The influence of age on the relationships between emotional intelligence and career-related outcomes may also be explained by the career stage perspective (Sullivan & Al Ariss, 2021). According to Super (1957), when individuals progress in their careers, they develop a better awareness of their skills and career interests, but also of their professional and personal needs. As a result, we expect that higher age will positively moderate (negatively for career decision-making difficulties and turnover intentions) the relationships between emotional intelligence and career-related outcomes.

4.2. Methodological moderators

4.2.1. Sample type (workers vs. students)

As subgroups of the population may experience and anticipate the labour market and career development differently (Kanfer et al., 2001), we decided to examine whether the correlation effect sizes may be affected by whether participants were students or workers. Indeed, it has been demonstrated that the emotions that individuals anticipate and experience at the prospect of future transitions play an important role in how they visualize their transition and how to cope with it (Parmentier et al., 2021; Parmentier, Pirsoul, Bouchat, et al., 2022). According to the career stage perspective of Super (1957), we also think that workers have a higher level of experience in the labour market when compared to students and, in the end, are more confident in

coping with their transition and career development. We thus expect that a higher number of worker samples will positively moderate the relationships between emotional intelligence and career-related outcomes.

4.2.2. Publication type

Over recent years, increasing attention has been devoted to replication, including careers science (Rudolph, 2021). Indeed, effect sizes reported in published articles tend to consistently present higher values when compared to unpublished studies, leading to hampering confidence in research findings (Klein et al., 2018). Therefore, we tested whether the publication type influenced the effect sizes by differentiating peer-review articles from unpublished datasets, dissertations, and conference proceedings to address this issue. Given the exploratory nature of our investigation regarding publication type, we do not propose a specific hypothesis.

5. Method

5.1. Inclusion and Exclusion Criteria

We developed a set of inclusion/exclusion criteria prior to performing the systematic review. First, articles must have reported empirical findings on the relationships between emotional intelligence and career-related outcomes. To this end, we included all career-related outcomes in line with the Council of the European Union directives from November 21st, 2008. In addition, all included career-related outcomes had to correspond with the transition and career processes. This includes both physical movements and psychological transitions, including individuals' career events perception (e.g., job loss as a failure), career alternatives (e.g., turnover intentions), and outcomes (e.g., career satisfaction), aligning the Sullivan and Baruch's (2009) definition. Second, articles must have applied a quantitative approach and provided a quantitative effect size (i.e., correlation) between emotional intelligence and career-related outcomes. We thus excluded qualitative interviews, single-case studies, or reviews. If the correlation coefficient was not provided, we contacted the authors. In other cases, we converted other types of statistical tests to a correlation coefficient when possible. More specifically, we derived r_3 from standardized regression coefficients (β -statistics), which were then converted to correlation coefficients using this formula: β + .05 when β is nonnegative and β + 0 when β is negative (Peterson & Brown, 2005). Third, articles must have measured emotional intelligence with an empirical instrument. Fourth, according to Rudolph et al's recommendations (2020), only one effect size was coded for each sample when studies used the same dataset for different studies. Moreover, only the time one was included when studies provided multiple time assessments. Finally, the mean correlation effect size was performed from at least three independent samples.

5.2. Search strategy and study selection

First, we followed Harari et al.'s (2020) recommendations to search and identify the relevant articles following our inclusion criteria. Different librarians at UCLouvain helped us to develop a search equation that focused on career contexts such as "career transition" or "career development." Accordingly, we developed search equations adapted to the following databases: PsycINFO, ERIC, Scopus, Web of Science, Francis, and Google Scholar. To identify the grey literature, we also performed our search on the dissertation database NDTLT. To identify the grey literature in French, we looked into six thesis databases in Belgium (i.e., UCLouvain, ULiège, UNamur, Université Saint-Louis, VUB, UGent), one in France (i.e., Thesis.fr), one in Switzerland (i.e., Helveticat), and one in Canada (i.e., Erudit). The full search equations for each database are available in Appendix 1. An additional search was performed in the following specific journals in career development: *British Journal of Guidance & Counselling, Career Development Quarterly, Journal of Career Assessment, Journal of Career Development, Journal of Career Development, Journal of Coupseling, Journal of Occupational*

Rehabilitation, Journal of Vocational Behavior, and *L'Orientation Scolaire et Professionnelle.* Between July 31th and September 07th, 2021, we extracted citations from the first different databases. We also put out a call on the EMONET listserv to ask for unpublished data. In parallel, we contacted 34 researchers who have published articles examining the role of emotional intelligence in career development and received responses from 16 (47% response rate). These authors were contacted twice but did not provide additional data.

After the first screening of titles and abstracts, we identified 49 eligible career-related outcomes, described in Appendix 2. We observed that some career-related outcomes citations were underrepresented (e.g., entrepreneurship or turnover intentions). Hence, we decided to run a second search before analyzing full-text articles. We developed a new search equation based on the 49 career-related outcomes and conducted this search on four databases: PsychINFO, ERIC, Web of Science, and Scopus (see Appendix 3). The extracted citations were then incorporated into the first search. The current search strategy and citations are depicted in the PRISMA chart (Moher et al., 2009) in Fig. 2. The second systematic search was performed between March 19th and 21th, 2022. For the second search, we also contacted 80 additional authors. We contacted the authors twice. No additional data were provided based on 15 responses (18.75% response rate). All supplemental information and material are available in the following online appendix via our OSF link: https://osf.io/8fvra/.

5.3. Study selection

The two first authors separately examined titles, abstracts, and full texts of studies on the software Rayyan (Ouzzani et al., 2016) and included studies that fit the inclusion and exclusion criteria. For the first search, 4604 citations were extracted from the different databases. After removing duplicates (n = 1084), a total of 3520 studies were screened for titles and abstracts. We excluded 3111 records that did not fit the inclusion criteria. Indeed, 409 citations were included

for full-text screening. In parallel, the second search led to a total of 2140 citations. However, these citations overlapped with the 3520 citations from the first search. We thus removed 1001 duplicates, leading to a total of 1139 additional studies. We then retained 322 citations for full-text screening. Finally, a total of 731 were eligible for full-text screening. From these 731 citations, 28 citations were removed as they were duplicates. After analyzing the 709 articles, we added 19 additional citations from other sources (e.g., Miao et al., 2017; 2018). All disagreements were discussed until the two first authors found a solution. Finally, there were 148 articles with K = 150 independent samples and a total of N = 50,894 eligible for analysis.

5.4. Coding

Each of the effects was coded by the two first authors. All discrepancies were discussed, and a solution was reached for all coding decisions. The final coding included the following information: (1) the effect size using Pearson's correlation (r), (2) the mean sample size ranging from 31 to 1655 participants, (3) the reliabilities of emotional intelligence measures and careerrelated outcomes measures (i.e., Cronbach alphas), (4) The emotional intelligence measures (i.e., the scale name and format [performance-based vs. self-report]). As the number of the performance-based measures was smaller than three for most career-related outcomes, we only included self-report measures of emotional intelligence, (5) The percentage of female participants in each of the citations ranged from 0.04 to 100 % (coded as a continuous variable), (6) the mean age of participants (coded as a continuous variable) that ranged from 15.8 to 52, (7) the sample type (coded as a categorical variable as follows: 0 = students [i.e., 38.26 %], 1 = workers [i.e., (61.74%), (8) The publication type (coded as a categorical variable as follows: 0 = unpublished [i.e., 14 %], 1 = published [i.e., 86 %]), and (9) Information about the context of the study (coded as a categorical variable as follows: 0 = no specific transition context [i.e., 94.67 %], 1 = specific transition context [5.33 %; e.g., transition from university to the labour market]).



Fig. 2. PRISMA flow diagram outlining the literature search process.

6. Career-related correlates of emotional intelligence

In this section, we develop the career-related outcomes that emerged from our systematic review and that we retained for the meta-analysis.

6.1. Adaptability resources: Career adaptability

Career adaptability refers to a set of self-regulatory psychosocial resources that help individuals to anticipate and cope with career-related difficulties (Savickas & Porfeli, 2012). Based on the career construction model of adaptation, a handful of research showed the relationship between emotional intelligence and career adaptability. Coetzee and Harry (2014) initially showed a positive relationship between the two constructs. According to these authors, individuals with high emotional intelligence dispose of a greater capacity to manage and use one's emotions to guide their thoughts and actions, resulting in a better ability to plan their vocational future, take responsibility for one's career, and explore their environment, but also a to develop the confidence to cope with career development tasks. A series of studies supported these assumptions by demonstrating the mediating effect of career adaptability on the relationship between emotional intelligence and academic satisfaction (Celik & Storme, 2018), academic engagement (Merino-Tejedor et al., 2018), self-perceived employability, and career indecisiveness (Udayar et al., 2018). These results have been corroborated by a longitudinal cross-lagged study that demonstrated the relationship between emotional intelligence to career adaptability (Parmentier et al., 2019). A recent study also showed the predictive effect of emotional intelligence on career adaptability profiles (Parmentier, Pirsoul, & Nils, 2022). A meta-analysis also showed a positive relationship between the two constructs (r = .446, Vashisht et al., 2021). Based on these different theoretical assumptions and empirical evidence, we expected that emotional intelligence would be positively related to career adaptability.

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Hypothesis 1. Emotional intelligence is positively associated with career adaptability.

6.2. Self-efficacy domains

6.2.1. Career decision-making self-efficacy

Career decision-making self-efficacy refers to the individuals' beliefs in their ability to successfully perform the required tasks to make career decisions (Betz & Luzzo, 1996). Compared to career decision-making difficulties, it is a form of self-belief that may arise before the career decision process. Indeed, cross-sectional research has shown its relationship with emotional intelligence. First, Brown et al. (2003) showed that emotional intelligence was related to career decision-making self-efficacy as well as Jiang (2014, 2016). Di Fabio and Saklofske (2014) extended these results by showing the incremental validity of emotional intelligence over personality traits in association with career decision-making self-efficacy. Santos et al. (2018) also showed the mediating role of career decision-making difficulties. Finally, Parmentier et al. (2022) found a positive relationship between emotional intelligence and career decision self-efficacy. We thus expected that emotional intelligence would be positively related to career decision self-efficacy.

Hypothesis 2. Emotional intelligence is positively associated with career decision-making self-

efficacy.

6.2.2. Entrepreneurial self-efficacy

Entrepreneurial self-efficacy to individuals' belief in their ability to successfully launch an entrepreneurial venture (Boyd & Vozikis, 1994). Different studies have highlighted the social cognitive career theory as a relevant framework to understand the role of entrepreneurial self-efficacy on entrepreneurial intentions and venture creation, but also the role of emotional intelligence as a predictor of entrepreneurial self-efficacy (Liguori et al., 2018). Accordingly,

Fernandez et al. (2019) showed a positive relationship between emotional intelligence and entrepreneurial self-efficacy. These results stem from the hypothesis that individuals with high emotional intelligence are more able to negotiate with stakeholders thanks to their ability to identify and use others' emotions, leading to better satisfying their interlocutor. Individuals with high emotional intelligence are also better at managing one's stress related to launching and operating a new venture. Finally, high emotional intelligence allows individuals to recognize and take advantage of career opportunities.

Hypothesis 3. Emotional intelligence is positively associated with entrepreneurial self-efficacy.6.2.3. Job search self-efficacy

According to Saks and Ashforth (1999), job search self-efficacy is defined as the individuals' belief with regard to their ability to perform job search behaviors successfully. Hence, research showed the predictive effect of emotional intelligence on active job search behaviors through the mediation effect of job search self-efficacy (Nieto-Flores et al., 2019). A recent study also demonstrated that emotion regulation was a predictor of employment status via job search self-efficacy (Urquijo et al., 2019). In line with Young et al.'s (1996) assumption, emotional identification is a core process in investigating and understanding individuals' career interests and carrying out actions in agreement with their emotions. For example, an interventional study has shown that after an emotional intelligence training, students were better at managing their emotions during a recruitment interview (Nelis et al., 2011).

Hypothesis 4. Emotional intelligence is positively associated with job search self-efficacy.

6.3. Career-related outcomes

6.3.1. Objective career-related outcomes

6.3.1.1. Objective career success

Objective career success is a form of career success defined as the positive psychological or work-related achievements that individuals have developed over work experiences (Seibert et al., 1999). Objective career success may be defined as a set of indicators such as salary, promotions, or hierarchical position. Regarding the link between emotional intelligence and objective career success, cross-sectional studies indicated that a higher level of emotional intelligence was associated with a higher salary (de Haro García & Costa, 2014; Urquijo et al., 2019). Longitudinal studies corroborate these studies (Rode et al., 2017). Based on the social capital theory, authors argue that emotionally intelligent individuals tend to develop strong interpersonal relationships and networks, allowing them to access social resources and use them when needed.

Hypothesis 5. Emotional intelligence is positively associated with salary.

6.3.2. Subjective career-related outcomes

6.3.2.1. Career commitment

Career commitment refers to individuals' confidence and certainty regarding one's choice and a positive perception of one's career future (Blustein et al., 1989). Indeed, the first study investigating this association was conducted by Carson and Carson (1994), in which they demonstrated a positive relationship between emotional intelligence and career commitment. These results were corroborated by Brown et al. (2003) and Sultana et al. (2016). According to Sultana et al. (2016), emotional intelligence may help individuals identify and manage emotional experience fluctuations in the work context, leading to higher positive emotions, motivation, and enthusiasm in professional tasks. As a result, it leads to a higher level of commitment in their career. Hence, we expected a positive relationship between the two constructs.

Hypothesis 6. Emotional intelligence is positively associated with career commitment

6.3.2.2. Career decision-making difficulties

Career decision-making difficulties were initially related to the construct of career indecision, defined as the problems individuals may have in making career decisions (for a review, see Kulcsár et al., 2020). Based on decision theory, Gati et al. (1996) proposed a taxonomy of career decision-making difficulties. This taxonomy includes three major difficulty clusters: (1) lack of readiness, (2) lack of information, and (3) inconsistent information. Indeed, Di Fabio and Palazzeschi (2008) showed a negative relationship between emotional intelligence and the three aforementioned dimensions of career decision-making difficulties. Similarly, Dahl et al. (2008) demonstrated a negative relationship between emotional intelligence and negative career thoughts (i.e., decision-making confusion, commitment anxiety, and external conflict). Di Fabio et al. (2013) also showed that emotional intelligence was more related to career decisionmaking difficulties, wherein career indecisiveness was more related to personality traits such as emotional stability. In 2014, Di Fabio and Saklofske also pointed out that self-report emotional intelligence predicted career indecision and indecisiveness over cognitive intelligence, the Big Five personality traits, and ability-based emotional intelligence. Recently, based on the social cognitive career theory, Santos et al. (2018) showed the predictive effect of emotional intelligence on career decision-making difficulties. These findings align with an experimental study showing that structured emotional intelligence training decreased career decision processes (Di Fabio & Kenny, 2011). These results also echo Saka et al.'s (2008) model that stresses the complex relationship between emotional and personality aspects of career decision-making

difficulties. We thus expected that emotional intelligence would be negatively related to career decision-making difficulties.

Hypothesis 7. Emotional intelligence is negatively associated with career decision-making

difficulties.

6.3.2.3. Subjective career success

Subjective career success is defined as the positive psychological or work-related achievements that individuals have developed over work experiences (Seibert et al., 1999), mainly referring to career satisfaction (Ng et al., 2005). Hence, career satisfaction refers to a form of subjective career success and can be defined as the extent to which individuals perceive their career progress is in line with one's career goals, values, and preferences (Seibert et al., 2001). Pool and Qualter (2013) first showed a positive relationship between the two constructs for the relationships between career satisfaction and emotional intelligence. Some authors replicated these results using a longitudinal research design (de Haro Garcia & Costa, 2014). A recent crosssectional design extended these findings (Urquijo et al., 2019). Accordingly, Emmerling and Cherniss (2003) argue that individuals with high emotional intelligence tend to make choices in line with their needs and career aspirations, leading to better career satisfaction in the long term. Thus, we expected that emotional intelligence would be positively related to salary and career satisfaction.

Hypothesis 8. Emotional intelligence is positively associated with career satisfaction.

6.3.2.4. Employability

Employability has received a great amount of interest, leading to a wide range of different definitions. However, most definitions align with the idea that employability refers to an individual's (perceived) capacity to obtain and maintain employment throughout their career (e.g., de Cuyper & de Witte, 2011; Heijde & Van Der Heijden, 2006; Rothwell & Arnold, 2007).

Indeed, it has been demonstrated that individuals that have difficulties managing their emotions are more likely to be unemployed (Mikolajczak et al., 2007). Hence, individuals who have difficulties managing their emotions may also have difficulties finding a job and remaining employed. A handful of cross-sectional studies supported this first study by showing a positive relationship between emotional intelligence and self-perceived employability (Coetzee & Beukes, 2010; Di Fabio & Kenny, 2015; Schreuder & Coetzee, 2011; Udayar et al., 2018). These findings have also been corroborated by experimental studies in which researchers showed that a structured intervention in emotional intelligence increased the objective level of employability among undergraduate students (Nelis et al., 2011) and unemployed adults (Hodzic et al., 2015). More specifically, students that attended an emotional intelligence were less stressed during job interviews and were able to express their intentions in a more sophisticated manner.

Hypothesis 9. Emotional intelligence is positively associated with employability.

6.3.2.5. Entrepreneurial intentions

Entrepreneurial intentions refer to the individuals' level of motivation and interest in developing their own company (Zhao et al., 2010). Based on the social cognitive career theory, entrepreneurial intentions are the product of entrepreneurial self-efficacy and outcome expectations (Liguori et al., 2017). A series of studies have investigated the relationships between emotional intelligence and entrepreneurial processes. First, a recent meta-analysis conducted by Miao et al. (2018) showed that emotional intelligence was positively related to entrepreneurial intentions ($r_c = .24$). Zampetakis et al. (2009) also demonstrated a positive relationship between positive attitudes toward entrepreneurship and emotional intelligence. Accordingly, emotionally intelligent individuals are more likely to launch one's venture because they have a higher level of entrepreneurial self-efficacy but also because they are able to understand and manage one's and

others' emotions during important negotiations, as developed in the relationship between emotional intelligence and entrepreneurial self-efficacy.

Hypothesis 10. Emotional intelligence is positively associated with entrepreneurial intentions.

6.3.2.6. Turnover intentions

Turnover intentions refer to the conscious and deliberate willingness to leave the organization or the job in which individuals work (Meyer & Tett, 1993). Hence, turnover intention is a form of cognitive shift for workers as they detach progressively from the organization, which influences objective turnover. Regarding its relationship with emotional intelligence, a recent meta-analysis conducted by Miao and colleagues (2017) revealed a significant and negative association ($r_c = -.33$). Accordingly, scholars argue that individuals with a high level of emotional intelligence tend to appraise their jobs as more positively and are able to identify and regulate their one's and others' emotions in order to respond to environmental and work demands. As a consequence, they tend to choose job in accordance with their career and personal needs, leading to a lower level of turnover intention. Although prior studies did not rely upon career theories to justify the link between emotional intelligence and turnover intentions, it is crucial to consider this relationship given the changing and protean nature of the world of work (Sullivan & Al Ariss, 2022).

Hypothesis 11. Emotional intelligence is negatively associated with turnover intentions.

7. Meta-analytical Procedure

Following the recommendations of Rudolph et al. (2020), we used Hunter and Schmidt's (2004) random effects procedure. All analyses were carried out using the *"psychmeta*" package (version 2.6.2: Dahlke & Wiernik, 2019) for the R statistical environment (R Core Team, 2020). We first corrected for sampling error by calculating sample size-weighted correlations. Second,

we corrected correlations for the lack of reliability using artifact distributions (Wiernik & Dahlke, 2020). When a study did not report the global score or reported multiple effect sizes for the same construct, we calculated a composite correlation score and reliability based on the Hunter and Schmidt formula (2004, p. 442).

For each construct relationship, we provided the sample-size weighted correlation (r), the sample size-weighted and reliability correlation (r_c), the 95% confidence interval for r_c , the 80% credibility interval for r_c , and the variance attributable to statistical artifacts (%Var). The correlation refers to a significant effect size when the confidence interval does not encompass zero. In parallel, Geyskens et al. (2009) argue that the presence of moderators is suggested when the credibility interval contains zero. Hunter and Schmidt (2004) also support that when the variance attributable to statistical artifacts is inferior to 75%, a moderator is likely to be present. To account for effect sizes' heterogeneity, we also provided the standard deviation with regard to the corrected reliability correlation (SD_{rc}), as well as for the uncorrected correlations (SD_r).

For the moderator effects, we performed meta-regression analyses in the "*psychmeta*" package that is performed in parallel with the "*metafor*" package. We performed meta-regression both for continuous (i.e., mean age and percentage of women) and categorical (i.e., sample type and publication type) moderators.

Although we examined whether publication type may affect the correlation effect sizes in our meta-analysis, we also performed additional sensitivity analyses. To this end, we examined the possibility of publication bias by performing *cumulative* meta-analyses (Mcdaniel, 2009). Cumulative meta-analysis offers the possibility, by using iterative meta-analyses, to examine whether the effect sizes' precision may bias the conclusions of the present results (Borenstein et al., 2010). In this kind of sensitivity analysis, studies are added one by one, organized by standard error from low to high (lower is the standard error, higher is the sample size). In other words, studies with a higher sample size–considered as the most precise study–are introduced first, followed by the second study with the higher sample size, and so on. If studies with a smaller sample size may bias the conclusions, a so-called "drift" appears in the direction to positive or negative direction.

7.1. Results

Meta-analytic results for relationships between emotional intelligence and career-related outcomes are depicted in Table 1. The included career-related outcomes that have provided at least three studies and correlation coefficient or computable statistical information were career adaptability (K = 13), career decision-making self-efficacy (K = 23), entrepreneurial self-efficacy (K = 6), job search self-efficacy (K = 5), objective career success (i.e., salary, K = 5), career commitment (K = 12), career decision-making difficulties (K = 9), subjective career success (i.e., career satisfaction, K = 19), self-perceived employability (K = 4), entrepreneurial intentions (K = 19), and turnover intentions (K = 50).

7.1.1. Correlations

As depicted in Table 1, most of the career-related outcomes were significantly associated with emotional intelligence. Hence, emotional intelligence correlated (1) positively with career adaptability ($r_c = .56$), (2) positively with career decision-making self- efficacy ($r_c = .54$), (3) positively with entrepreneurial self-efficacy ($r_c = .36$), (4) positively with salary ($r_c = .21$), (5) positively with career commitment ($r_c = .33$), (6) negatively with career decision-making difficulties ($r_c = -.47$), (7) positively with career satisfaction ($r_c = .39$), (8) positively with entrepreneurial intentions ($r_c = .34$), and (9) negatively with turnover intentions ($r_c = -.21$). In contrast to our hypotheses, as the confidence interval included 0 for r_c with regard to selfperceived employability ($r_c = .03$) and job search self-efficacy ($r_c = .21$), these two career-related outcomes were not considered as significant correlates of emotional intelligence. Furthermore, based on the variance attributable to sampling error and the credibility intervals, most corre-

lations between emotional intelligence and career-related outcomes indicated that moderators

were likely present.

Table 1.											
Summary of meta-analytic relationships between emotional intelligence and career-related outcomes											
Correlate	K	N	r	SD_r	r _c	SD_{rc}	CIL	CIU	%Var	CVL	CVU
Adaptability resources											
Career adaptability	13	4,249	.50	.07	.56	.08	.51	.61	30.97	.47	.66
Self-efficacy											
Career decision-making self-	23	6,836	.47	.14	.54	.15	.47	.61	10.90	.34	.73
efficacy											
Entrepreneurial self-efficacy	6	2,607	.33	.12	.36	.12	.22	.49	12.91	.18	.53
Job search self-efficacy	5	4,678	.20	.28	.21	.30	16	.59	1.25	24	.67
Objective career outcomes											
Salary	5	1,446	.20	.08	.21	.06	.11	.31	53.00	.13	.30
Subjective career outcomes											
Career commitment	12	2,915	.27	.11	.33	.15	.23	.42	23.78	.16	.50
Career decision-making	9	3,003	41	.15	47	.16	60	34	9.04	34	70
difficulties											
Career satisfaction	19	5,566	.36	.12	.39	.12	.32	.45	16.55	.22	.55
Self-perceived employability	4	1,521	.03	.31	.03	.33	49	.56	2.78	50	.57
Entrepreneurial intentions	19	6,690	.31	.21	.34	.22	.23	.45	5.12	.04	.64
Turnover intentions	50	17,449	19	.16	21	.16	26	16	10.78	41	01
		-									

Note. K = number of studies contributing to meta-analysis; N = total sample size; r = mean observed correlation; SD_r = observed standard deviation of r; r_c = mean corrected correlation; SD_{rc} = observed standard deviation of corrected correlations (r_c); CI = 95% confidence interval for r_c ; %Var = variance attributable to sampling error; CV = 80 % credibility interval for r_c distribution.

7.1.2. Meta-analytic regression models

The second main objective of the present meta-analysis was to investigate the presence of moderators that may affect the results of the current correlation effect sizes. We thus performed, when the information was available, a set of meta-regressions to examine the effect of four moderators: (1) the mean age, (3) the proportion of women participants, (3) the sample type (i.e., students vs. workers), and (4) the publication type (i.e., published vs. unpublished).

A summary of all-meta regression models is provided in Appendix 4. Overall, age did not moderate the relationships between emotional intelligence and career-related outcomes, except for salary (B = .010, SE = .004, p < .05). For gender composition, the percentage of female participants moderated the relationships between emotional intelligence and salary (B = .020, SE = .009, p < .05), career commitment (B = ..129, SE = .189, p < .05), career decision-making difficulties (B = .009, SE = .003, p < .05), self-perceived employability (B = ..016, SE = .006, p < .01), and entrepreneurial intentions (B = ..006, SE = .003 p = < .05). A higher proportion of female participants for career decision-making difficulties was associated with a higher effect size. Regarding salary, career commitment, self-perceived employability and entrepreneurial intentions, we found the opposite results. For sample type, we only found a significant moderation for career decision-making difficulties (B = .337, SE = .166, p < .05), which indicated that a higher level of workers was associated with a higher effect size. Finally, we did not find a significant effect of publication type on correlation effect sizes.

7.1.3. Additional sensitivity analyses using cumulative meta-analysis

The final objective of the present meta-analysis was to investigate the presence of publication bias using additional sensitivity analyses. To this end, we performed cumulative sensitivity analyses on all relationships between emotional intelligence and career-related outcomes. To avoid redundancy in the interpretation of our results, a description of the cumulative analysis can be found in Appendix 5.

Overall, most cumulative meta-analyses indicated no significant influence of the publication status. However, we observed the presence of substantial publication bias for five career-related outcomes: career decision-making self-efficacy, job search self-efficacy, career satisfaction, self-perceived employability, and turnover intentions.

For career decision-making self-efficacy, the cumulative meta-analysis included 9 studies. The correlation of the most precise study was r = .397 [95% CI: .239; .466], whereas the last overall cumulative correlation effect size was r = .539 [95% CI: .471; .608]. Even if the drift was not very substantial, it however indicated a potential publication bias.

For job search self-efficacy, the cumulative meta-analysis included five studies. The correlation of the most precise study was r = .328 [95% CI: .276; .380], whereas the last overall cumulative correlation effect size was r = .233 [95% CI: -.175; .642]. Although the change in correlation coefficient was not considered problematic, we observed a negative change with regard to the confidence interval, which suggests a significant bias. As for self-perceived employability, one citation reported a negative correlation that contrasted with other citations.

For subjective career success (i.e., career satisfaction), the cumulative meta-analysis included 19 studies. The correlation of the most precise study was r = .266 [95% CI: .180; .352], whereas the last overall cumulative correlation effect size was r = .414 [95% CI: .344; .484]. Even if the drift was not very substantial, it however indicated a potential publication bias.

Regarding self-perceived employability, the cumulative meta-analysis included four studies. The correlation of the most precise study was r = -.349 [95% CI: -.438; -.030], whereas the last overall cumulative correlation effect size was r = .038 [95% CI: -.550; .626]. In contrast with a small drift for the two prior career-related outcomes, these results indicated an important publication bias. It is not surprising given that one study reported a negative correlation coefficient compared to the three other studies.

Regarding turnover intentions, the cumulative meta-analysis included 32 studies. The correlation of the most precise study was r = -.021 [95% CI: -.076; .035], whereas the last overall cumulative correlation effect size was r = -.220 [95% CI: -.284; -.155]. Hence, a potential publication bias was potentially present.

8. Discussion

Over recent years, an increasing interest in the concept of emotional intelligence has emerged in the context of career development (Parmentier et al., 2019). Despite more than a hundred studies dedicated to its investigation, no integrative effort has simultaneously investigated the relationships between emotional intelligence and career-related outcomes. The main aim of the present meta-analysis was thus to offer an overall quantitative picture of what we know about emotional intelligence in career development. To this end, we proposed an integrated theoretical framework that disentangles the underlying mechanisms between emotional intelligence and career-related outcomes. We also examined the quantitative relationship between these variables and investigated the presence of potential theoretical and methodological moderators that may influence the different relationships. In order to ascertain the quality of the research findings, we also performed additional cumulative sensitivity analyses to detect potential publication bias. In the following sections, we first summarize and interpret the main findings. We also stress the main limitations of the present meta-analysis. Next, we highlight theoretical implications and implications for human resource practices. Finally, we propose a series of recommendations and an agenda for future research.

8.1. Summary and interpretation of findings

According to the career construction model that posits emotional intelligence as a psychological trait of readiness to cope with career-related difficulties (i.e., adaptivity or adaptive readiness, Hirschi et al., 2015), we first showed that emotional intelligence was positively associated with career adaptability (i.e., adaptability resources). These results thus aligned with Coetzee and Harry's (2014) assumptions, arguing that high emotional intelligence provides the abilities, self-regulatory resources, and readiness to activate specific behavioral and cognitive

domains to cope with career-related tasks such as exploring, planning, and taking responsibility for one's career goals.

Furthermore, emotional intelligence was also associated with a set of self-efficacy domains. Indeed, emotional intelligence was positively associated with career decision-making self-efficacy and entrepreneurial self-efficacy. These results align with the model of career selfmanagement (Lent & Brown, 2013), outlining the importance of personal variables as key predictors of self-efficacy expectations. These results are also understood in light of the career construction model, denoting emotional intelligence as a predictor of career decision-making self-efficacy (i.e., adapting responses) and career decision-making difficulties (i.e., adaptation results).

The meta-analytic results suggested that emotional intelligence was positively associated with salary. According to different authors, this relationship may be explained by the fact that individuals with high emotional intelligence are able to develop strong interpersonal relationships and networking skills, leading to finding a job with a higher status level. However, the relationship between emotional intelligence was higher for career satisfaction when compared to individuals with low emotional intelligence. Being aware of one's emotions may convey a better understanding of one's career aspirations and needs. As a result, individuals with high emotional intelligence make better career decision-making with regard to their career goals, leading to better general career satisfaction. Overall, individuals with high emotional intelligence are not inevitably oriented to find a job with high pay but a job that aligns with their career objectives.

Moreover, results showed positive relationships between emotional intelligence and entrepreneurial intentions. These results extended the prior meta-analysis of Miao et al. (2018), which demonstrated a positive correlation between emotional intelligence and entrepreneurial intentions. Individuals with high emotional intelligence thus seem to be more confident and engaged at the prospect of creating a new venture. These results aligned with the idea that high emotional intelligence is associated with better emotion regulation strategies, such as perceiving new opportunities as a challenge rather than a threat, and the confidence to manage interpersonal relations during negotiation processes, which are particularly important when creating one's own business (Peña-Sarrionandia et al., 2015).

Finally, results also indicated that emotional intelligence was negatively associated with turnover intentions. These results extended a prior meta-analysis of Miao et al. (2017) that supported the same conclusions. However, our coefficient correlation (i.e., $r_c = -.21$) was lower than Miao and colleagues ($r_c = -.33$). Individuals with higher emotional intelligence are probably less likely to quit their organization for different reasons. First, it is possible that they choose a job that fits their career and personal needs better. Second, as they identify and regulate better one's own and others' emotions, they have fewer difficulties in the work context. Although the negative and significant relationship, we noticed the coefficient was low. Thus, we think that it is also possible that individuals with higher emotional intelligence are more able to decide to quit the organization when the work context does not meet their personal and professional aspirations. This assumption is a potential explanation for why some studies found no relationship between emotional intelligence and turnover intentions.

Beyond these relationships, we found non-significant relationships between emotional intelligence, job search self-efficacy, and self-perceived employability. We hypothesized that effect size correlations were biased due to two main reasons. First, the number of studies for the two outcomes was low. Therefore, the total effect size was highly influenced. Secondly, and in line with the first reason, we observed—in the same study (i.e., Kasler et al., 2017)—negative correlations between emotional intelligence and self-perceived employability (r = -.29), as well as for job search self-efficacy (r = -.44). Unsurprisingly, the cumulative meta-analyses showed

potential publication bias and statistical artifacts. Nevertheless, although confidence intervals did include zero, the overall correlations were in the direction of our hypotheses for job search selfefficacy. A higher number of future studies is needed to better understand the underlying processes that may explain these results.

Overall, age did not moderate the correlation effect sizes, except for salary. Indeed, participants with a higher mean age presented a higher effect size. Regarding gender composition, the percentage of female participants moderated the relationships between emotional intelligence, career commitment, career decision-making difficulties, self-perceived employability, and entrepreneurial intentions. A higher proportion of female participants for career decision-making difficulties was associated with a higher effect size. Regarding selfperceived employability and entrepreneurial intentions, we found the opposite results. For the sample type, we only found a significant moderation for career decision-making difficulties, which indicated that a higher level of workers was associated with a higher effect size. Finally, we did not find a significant effect of publication type on correlation effect sizes.

8.2. Limitations

The current meta-analysis presents a series of limitations that could affect the generalization of our findings. First, the present findings are built upon a transversal point of view, limiting our ability to conclude the causal effects between the different variables present in the model. Second, most studies in the present meta-analysis relied upon cross-sectional research designs with self-report measures of emotional intelligence and career-related outcomes, probably affected by common method and endogeneity biases (Antonakis, 2017; Podsakoff et al., 2003). Third, we relied upon a general score of emotional intelligence. Due to a limited number of studies that investigated the dimensions of emotional intelligence, we were not able to test the

associations among all career-related variables. To address these issues, we propose an agenda for future research at the end of the present article.

8.3. Theoretical implications and broader theoretical considerations

The current paper brings critical theoretical contributions to the flourishing literature on emotional intelligence in career development. First, and to the best of our knowledge, our research is the first to provide an overall picture and a proposition of a theoretical model of the existing relationships between emotional intelligence and the broad array of career-related outcomes. By doing so, we extend prior meta-analyses that independently examined the relationships between emotional intelligence and turnover intentions (Miao et al., 2017), entrepreneurial intentions (Miao et al., 2018), and career adaptability (Vashisht et al., 2021). Compared to these meta-analyses, we thus updated and included the emergence of new studies. In the same vein, we also leverage the most significant number of studies for each relationship to date (K = 150; total N = 50,894). Finally, we not only provided a series of correlations but also proposed a theoretical model that explains *how* emotional intelligence is related to career-related outcomes by proposing a series of mediators and paths.

Second, we contribute to the contextualist action theory (Young et al., 1996). Hence, a series of authors relied upon this theory to explain the role of emotion and emotional intelligence in career development. Indeed, we integrated these assumptions by showing that emotional processes are related to a wide range of career-related outcomes and mediated by internal and cognitive processes (i.e., career adaptability and self-efficacy domains).

Third, we contribute to Lent's social cognitive career theory (Lent et al., 2002). Indeed, some authors demonstrated and explained how emotional intelligence as an ability predicts selfefficacy expectations and career outcomes. More specifically, Santos et al. (2018) showed that emotional intelligence (i.e., personal resource) predicted career decision-making difficulties (i.e., career outcomes) through the mediating effect of career decision-making self-efficacy (i.e., self-efficacy expectations).

Fourth, based on the career construction model, we enriched the theoretical development of emotional intelligence by integrating its influence and positioning in the career construction model and depicting emotional intelligence as a central self-regulatory resource and adaptive readiness with regard to other career outcomes (Rudolph et al., 2017). Indeed, Rudolph et al. (2017) could not include emotional intelligence in their recent career adaptability meta-analytic investigation due to the small number of studies.

Notwithstanding the theoretical contributions of the present paper, our meta-analysis also emphasizes several theoretical considerations about the scattered nature of career theories used to explain the underlying processes between emotional intelligence and career-related outcomes. Indeed, a series of studies also proposed investigating the relationships between emotional intelligence and career-related outcomes with an apparent lack of theoretical framework and/or explicit theoretical assumptions. This kind of research is problematic as it compromises the credibility and reproducibility of research findings. Accordingly, in section 9, we propose a series of recommendations that identify promising future directions in the investigation and integration of emotional intelligence in career sciences.

8.4. Implications for human resources practice

The current world of work has become more uncertain and unpredictable, leading to a higher level of complex emotional experiences with regard to career transitions. As a result, human resource domains have to help and prevent individuals and workers from the dark side of such a new configuration of the labor market (Sullivan & Al Ariss, 2022). It is essential to better understand which personal resources, such as emotional intelligence, may help individuals with their career development. Then, our findings suggest the importance of emotional processes and

emotional intelligence with regard to career-related processes and open new avenues for human resources practices.

First, it has been demonstrated that emotional intelligence is a malleable resource that can be improved or increased (for a meta-analysis, see Hodzic et al., 2018). Thus, organizations and vocational guidance institutions could propose training in emotional intelligence. In the same vein, even if emotional intelligence training or training related to career development has been proposed (e.g., career adaptability training, Koen et al., 2012), specific training that simultaneously includes emotional and career-related aspects does not exist yet. Thus, future interventions should focus on developing emotional intelligence and individuals' career-related resources.

In addition, it is important not only to empower individuals' agency but also to consider the importance of emotions at the organizational level. Hence, human resource managers can play an important role in (1) ascertaining a positive emotional climate, (2) fostering individuals' motivation, and (3) decreasing the non-adaptive turnover phenomenon. Hence, prior studies showed that managers' emotional intelligence was positively associated with employees' job satisfaction (Sy et al., 2006). Organizations can thus provide emotional intelligence training and prevention regarding the importance of emotion to manager positions.

Third, our meta-analysis has important implications for employment policies. Policymakers should consider the importance of emotion and emotional intelligence in career transitions and inform vocational guidance institutions and employment services with regard to these aspects. Recent studies have demonstrated that interventions in emotional intelligence for unemployed individuals increase their probability of finding a job after intervention in emotional intelligence (Hodzic et al., 2015). Similarly, government programs could be promoted to assist individuals regarding their emotional difficulties during their career transitions or job search. To sum up, integrating different theoretical models brings theoretical clarity and offers the possibility to better disentangle the beneficial effects of emotional intelligence in career sciences. Furthermore, the present findings offer robustness for intervention and policy decisions based on emotional intelligence. Finally, our proposition and recommendations allow practitioners to better apprehend with more perspectives what remains to investigate and the limitations of the current knowledge.

9. An agenda for future research on emotional intelligence in career development

9.1. Recommendation #1: Test the integrated and process-oriented model of emotional intelligence in career sciences

The first recommendation we propose is based on the accumulating calls that emerged in the career literature to develop the investigation of emotional processes at play in the career literature (Hartung, 2011; Kidd, 1998). Hence, we proposed a theoretical model that explains how emotional intelligence affects career-related outcomes through the mediational effects of career adaptability and self-efficacy variables. Future research should evaluate the relative weights of each variable and test the direct and indirect effects between emotional intelligence and careerrelated variables. Future research should also differentiate the affective, cognitive, and behavioral processes responsible for these effects.

9.2. Recommendation #2: Develop longitudinal and interventional studies

Our second recommendation relates to the necessity of developing more longitudinal and interventional studies. Indeed, the present meta-analysis was based on cross-sectional and correlational analysis. This form of approach does not offer the possibility of determining the developmental effects and directionality with regard to emotional intelligence and career-related outcomes. It is unfortunate as a handful of longitudinal and interventional studies showed the directional effects of emotional intelligence on career adaptability (Parmentier et al., 2019), career decision processes (Di Fabio & Kenny, 2011), and employability (Nelis et al., 2011). The present work is thus a call for developing longitudinal and experimental research designs to determine causality effects between emotional intelligence and career-related outcomes. Furthermore, as empirical evidence shows the malleability of emotional intelligence and the beneficial effects of emotional intelligence training with regard to a variety of individuals' life outcomes (Hodzic et al., 2018), we argue that interventions will also offer practical implications for beneficiaries and guidance counselors.

9.3. Recommendation #3: Use more meaningful samples

Our second recommendation stresses the necessity to extend investigations to meaningful samples. Hence, most studies on career decision-making self-efficacy mainly focused on student samples. Being confident at the prospect of making career decisions is not restricted to the student population. In the same vein, examining career satisfaction among graduate students tends to be unrealistic. Future research should recruit participants from various context sources with larger sample sizes.

9.4. Recommendation #4: Extend (objective) career-related outcomes

Due to the insufficient number of studies, we could not investigate how emotional intelligence was related to career indecisiveness, career maturity, or job search outcomes (e.g., the number of job offers). Therefore, additional evidence and career outcomes are needed to determine and extend the overall role of emotional intelligence in these facets of career development.

9.5. Recommendation #5: Develop an integrative investigation of emotional intelligence

Most studies in the present empirical effort relied on a single source of emotional intelligence measures: self-report measures. Indeed, due to the small number of studies that used performance-based measures, we were not able to consider the ability approach to emotional intelligence. Accordingly, we think that there is a necessity to enrich our comprehension of the role of emotional intelligence by developing an integrative approach. To this end, recent authors proposed the PAT framework, positing emotional intelligence competence as the interaction of ability emotional intelligence, emotion information processing, and trait emotional intelligence (Vesely Maillefer et al., 2018). By using various forms of measures, this framework offers the possibility to examine the factual information that individuals possess about emotions (ability-emotional intelligence), how they process emotion information (emotion information processing), and the individuals' tendency to behave in emotional situations. In addition, it is essential to understand and disentangle the interactive and predictive effects of ability emotional intelligence from trait emotional intelligence.

9.6. Recommendation #6: Understand the specific effects of emotional intelligence dimensions

Due to the various measures used to evaluate emotional intelligence, we decided to focus on the general factor of emotional intelligence. We are aware that is an important limitation of the current investigation as recent studies showed the predictive effects of emotional intelligence dimensions over and above the general factor of emotional intelligence (Pirsoul et al., 2021). We thus encouraged future research to better disentangle the underlying mechanisms explaining the relationships between emotional intelligence and career-related outcomes by examining the specific effects of emotional intelligence dimensions. Hence, there is a need, for instance, to better understand the differential effects between the intrapersonal and interpersonal components of emotional intelligence.

9.7. Recommendation #7: Unravel the incremental validity of emotional intelligence

Through our coding, we observed that very few studies examined the incremental validity and predictive effect of emotional intelligence over and above cognitive intelligence and personality traits (e.g., Di Fabio & Sakfloske, 2014; Udayar et al., 2018). Indeed, given the overlap between emotional intelligence, the Big Five personality traits (Sakflofske et al., 2003), and cognitive intelligence (Udayar et al., 2018), future research should include such control variables to investigate the added value of emotional intelligence.

9.8. Recommendation #8: Understand the dynamic interplay between emotional intelligence and career-related events

Our eighth recommendation highlights the importance of developing a *dynamic* investigation between emotional intelligence, career-related outcomes, and career events. Indeed, most studies set a "static" investigation using cross-sectional research designs with a lack of investigation during specific career tasks and transitions (i.e., 5.33% of all studies). It is unfortunate, as Pekaar et al. (2020) argued, that emotional intelligence tends to present a day-to-day fluctuation. Hence, self-regulatory resources such as emotional intelligence are a form of psychological capital that can be activated during specific challenging periods or events. Hence, there is a need to better understand how emotional intelligence is activated adjustments. To this end, experiencing sampling study designs are an excellent candidate to address this issue (Gabriel et al., 2019). The present work is thus a call to examine how emotional intelligence may activate or predict other career-related outcomes during specific career contexts (e.g., school-to-work transition, unemployment period).

9.9. Recommendation #9: Extend our comprehension of interpersonal and contextual variables

Throughout our analyses, we observed that most variables that have been related to emotional intelligence were mainly intrapersonal. In other words, very few studies examined how emotional intelligence may interact with the environment and how it may facilitate individuals' career development through their environment. However, research has demonstrated that emotionally intelligent individuals benefit from a more qualitative and extensive social network (Lopes et al., 2003). In addition, some scholars have highlighted that individuals with a high level of emotional intelligence communicate their vocational interests more easily during career counseling sessions (Emmerling & Cherniss, 2003). Finally, recent studies have demonstrated the impact of labor market demand perception as a predictor of job search regulation (van Hooft et al., 2021). There is thus a necessity to develop and extend a better comprehension of how emotional intelligence may predict a better adaptation and preparation with regard to individuals' vocational development through the environment and social network.

10. Conclusion

Emotional intelligence tends to receive a tremendous amount of interest in the career and vocational literature. By presenting an integrated theoretical model, this meta-analysis aimed to propose a meaningful integration between emotional intelligence and career-related outcomes. The cumulative body of research fosters the necessity to develop and refine how we investigate emotional intelligence in career development. The current meta-analysis serves as a first integrative and overall picture of what we know about emotional intelligence in career development, as well as a call for extending and questioning how we know what we know.

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