



The role of cognitive flexibility in job search behaviour: a research agenda

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Abstract

This conceptual paper proposes the Cognitive Flexibility Job Search Self-Efficacy (CF-JSSE) model, aimed at exploring the understudied role of cognitive flexibility in job search behaviour. Cognitive flexibility, a crucial attribute in today's complex employment market, is posited as a core intrapersonal process moderating relationships between dispositional traits, learning experiences and job search self-efficacy. This research agenda, integrating vocational, neuropsychological and personality psychology, strives to enrich our understanding of job search behaviours and career development.

Keywords Cognitive flexibility · Job search self-efficacy · Social cognitive career theory

Résumé

Ce document conceptuel propose le modèle d'Auto-Efficacité de la Recherche d'Emploi en Flexibilité Cognitive (CF-JSSE), visant à explorer le rôle peu étudié de la flexibilité cognitive dans le comportement de recherche d'emploi. La flexibilité cognitive, un attribut crucial dans le marché de l'emploi complexe d'aujourd'hui, est posée comme un processus intrapersonnel central modérant les relations entre les traits dispositionnels, les expériences d'apprentissage et l'auto-efficacité de la recherche d'emploi. Ce programme de recherche, intégrant la psychologie vocationnelle, neuropsychologique et de la personnalité, s'efforce d'enrichir notre compréhension des comportements de recherche d'emploi et du développement de carrière.

Zusammenfassung

Dieses konzeptionelle Papier schlägt das Cognitive Flexibility Job Search Self-Efficacy (CF-JSSE) Modell vor, das darauf abzielt, die wenig untersuchte Rolle der kog-

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nitiven Flexibilität im Verhalten bei der Jobsuche zu erforschen. Kognitive Flexibilität, eine entscheidende Eigenschaft auf dem heutigen komplexen Arbeitsmarkt, wird als zentraler intrapersonaler Prozess postuliert, der die Beziehungen zwischen Dispositionseigenschaften, Lernerfahrungen und der Selbstwirksamkeit bei der Jobsuche moderiert. Diese Forschungsagenda, die berufliche, neuropsychologische und Persönlichkeitspsychologie integriert, strebt danach, unser Verständnis von Verhaltensweisen bei der Jobsuche und Karriereentwicklung zu bereichern.

Resumen

Este artículo conceptual propone el modelo de Autoeficacia en la Búsqueda de Trabajo de la Flexibilidad Cognitiva (CF-JSSE, por sus siglas en inglés), destinado a explorar el papel poco estudiado de la flexibilidad cognitiva en el comportamiento de búsqueda de trabajo. Se postula que la flexibilidad cognitiva, un atributo crucial en el complejo mercado laboral de hoy, es un proceso intrapersonal central que modera las relaciones entre los rasgos disposicionales, las experiencias de aprendizaje y la autoeficacia en la búsqueda de trabajo. Esta agenda de investigación, que integra la psicología vocacional, neuropsicológica y de la personalidad, se esfuerza por enriquecer nuestra comprensión de los comportamientos de búsqueda de trabajo y el desarrollo de la carrera.

Introduction

Research into cognitive flexibility demonstrates its impact on daily functioning across various life domains, including mental health, academic achievement and workplace performance. Cognitive flexibility is an individual's ability to appropriately change cognitive sets (e.g. thoughts, goals, beliefs and expectations) and behaviours in response to a changing environment (Armbruster et al., 2012; Ionescu, 2012). Despite its significance in everyday life and burgeoning research into notions which imply capacity to efficaciously respond cognitively and behaviourally (e.g. career adaptability; Stead et al., 2021), the role of cognitive flexibility in career development remains under-explored in literature.

Navigating today's increasingly complex employment market is a psychologically complex endeavour. Aside from the impacts of the recent global pandemic, emerging technological advances and the challenges brought on by the fourth industrial revolution, the way people search for and secure employment has changed (Hirschi, 2018; World Economic Forum, 2020, 2023). Recent innovations in the theories of vocational psychology and career development have highlighted the role of structural factors and economic exigencies beyond the control of individuals. The psychology of working theory (Duffy et al., 2016), for example, posits the pernicious effects of economic constraints and marginalisation on a person's sense of work volition and career adaptability. Extended periods of uncertainty, the process of navigating the job market, and the individual experience of unemployment has significant impacts on an individuals' psychological

and physiological wellbeing (Amiri, 2022; De Witte et al., 2016; Paul and Moser, 2009). A person's sense of their own agency is essential for navigating the vicissitudes of the current world of work.

Research into job search behaviours and securing employment has increased significantly over the years, and job search self-efficacy (JSSE) has been identified as a major determinant in securing employment (Kim et al., 2019). Although JSSE has been demonstrated as a notable construct in understanding job search behaviours and outcomes, there are still significant gaps in research (e.g. the role of intrapersonal processes and learning experiences) (Kim et al., 2019). Novel interdisciplinary approaches are needed to understand the intrapersonal processes associated with job seeking behaviours (Wanberg et al., 2020). Yet, there is insufficient career development research to discern the effects of cognitive flexibility on job search behaviour and outcomes.

Towards an integrative model

To address the lack of research into cognitive flexibility, in this paper, we articulate a conceptual model, the Cognitive Flexibility Job Search Self-Efficacy (CF-JSSE) model, which theorises cognitive flexibility's impact on job search behaviours. The CF-JSSE model extends from the Social Cognitive Model for Career Self-Management (SCCT-CSM; Lent and Brown, 2013), which posits connections among personal inputs, dispositional traits, self-efficacy expectations and goal-directed behaviour. SCCT is an appropriate framework to integrate cognitive abilities into a model of job search behaviour. Lent and Brown (2013) specifically addressed job search behaviour in their formulation of the hypothesised pathways of the SCCT-CSM. Lim et al. (2016) used the SCCT-SCM to explore job search intentions and found that self-efficacy and outcome expectations mediated the effects of variables that predict job search intentions. More recently, Lent et al. (2023) applied a derivation of the SCCT-CSM model to coping with job loss and found evidence of relations among coping, job search behaviour and job search progress. As an adaptation of the SCCT-CSM, our proposed CF-JSSE model integrates goals, actions and outcomes as job search behaviours and introduces cognitive flexibility as a moderator between dispositional traits, learning experiences, self-efficacy and outcome expectations.

The CF-JSSE model and proposed research agenda aim to provide a deeper understanding of the interplay among dispositional traits, cognitive processes and adaptive behaviours in response to environmental demands. Moreover, the CF-JSSE model encourages researchers and practitioners to investigate the role of cognitive flexibility in shaping self-efficacy expectations, outcome expectations and learning experiences, ultimately broadening our understanding of job search behaviours and career development.

The proposed conceptual model converges theoretical perspectives from vocational psychology, neuropsychology and personality psychology to inform theoretical and empirical studies into how cognitive flexibility affects job search behaviour. The CF-JSSE posits hypothesised pathways among five major constructs with interrelations depicted in Figure 1: cognitive flexibility, dispositional traits, job search

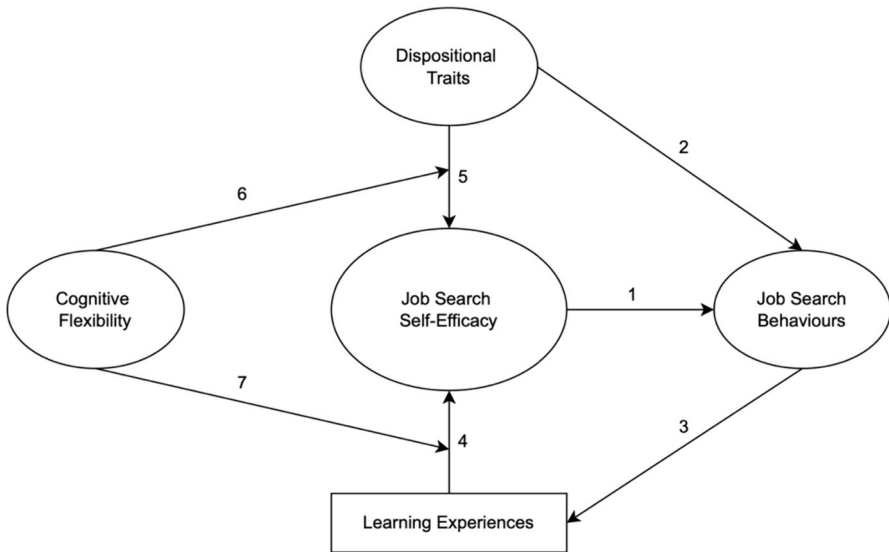


Figure 1 The cognitive flexibility job search self-efficacy model

self-efficacy, job search behaviour and learning. A summary of the research which informs the hypothesised pathways of the CF-JSSE model is presented in Table 1.

Cognitive flexibility

Cognitive flexibility is a higher order cognitive ability. It is an aspect of executive functioning that is essential when individuals must rapidly change their perspective or cognitive sets in response to changes in the environment or their individual goals (Armbruster et al., 2012; Ionescu, 2012; Scott, 1962). Shifting cognitive sets entails multiple cognitive processes and brain subdomains responsible for executive functioning, including salience detection and attention, working memory and inhibition (Dajani and Uddin, 2015; Ionescu, 2012). Upon entering the attention network, stimulus information is processed according to its relevance, intensity and alignment with the individual's goals, potential conflicts and prior knowledge (Ionescu, 2012). This process typically involves two aspects: (1) the capacity to recognise various perspectives of the presenting issue and (2) the ability to switch perspectives, altering the thoughts associated with the problem or environmental demands (Diamond, 2013). Inhibitory control and working memory are critical in altering perspectives, as they ensure that prior knowledge or experiences are suppressed, while working memory is engaged to facilitate the processing of new perspectives. This cognitive processing, in turn, enables the individual to modify cognitive sets and behaviours in response to environmental demands (Diamond, 2013).

Cognitive flexibility is assessed using two broad approaches: neuropsychological testing and self-report measures. Neuropsychological tests that evaluate cognitive

Table 1 Research evidence for hypothesised relationships for paths 1–5

Path	Description	Examples of studies
1	JSSE affects job search behaviours	Kim et al. (2019) found significant relationships between JSSE and job search intensity (ESr of 0.27), job search effort (ESr of 0.29), self-exploration (ESr of 0.31) and the number of job search activities (ESr of 0.33).
2	Dispositional traits affect job search behaviours	Rusu et al. (2014) found positive correlations between openness to experience and job search intensity ($r = 0.21$) and job search effort ($r = 0.20$). Zimmerman et al. (2011) reported a negative relationship between extraversion and job search ($r = 0.22$) and a positive relationship with neuroticism ($r = 0.24$).
3	Job search behaviours affect learning experiences	Van Hooff et al. (2021) found a positive correlation between social pressure to search ($r = 0.22$) and job search behaviours, while Lin and Flores (2011) observed a strong positive relationship between performance accomplishments ($r = 0.50$) and job search behaviours.
4	Learning experiences affect JSSE	Lent et al. (2016) found a positive relationship between mastery experiences ($r = 0.36$) and vicarious learning ($r = 0.23$) with self-efficacy.
5	Dispositional traits affect JSSE	Kim et al. (2019) investigated the relationship between dispositional traits and JSSE, and their recent meta-analysis yielded a significant finding (ESr of 0.35).

ESr effect size correlation coefficient, r correlation coefficient

flexibility include the Wisconsin Card Sorting Test (WCST) (Grant and Berg, 1948; Heaton et al., 1993), the Trail Making Test (TMT) (Reitan and Wolfson, 1995) and the Stroop Colour-Word Test (Stroop, 1992). While initially developed to be assessed in person, some neuropsychological tests have moved to computerised and online administration and sometimes also include advanced measurement using neuroimaging techniques (e.g. functional magnetic resonance imaging) while the participant completes the test (Barbey et al., 2013; Steinke et al., 2021). More recently, scholars have also shifted their attention to the development of self-report measures of cognitive flexibility including the Cognitive Flexibility Inventory (CFI) (Dennis and Vander Wal, 2009) and the Cognitive Flexibility Scale (Martin and Rubin, 1995).

Cognitive flexibility has garnered increasing attention across various research domains, extending beyond its origins in investigating frontal lobe damage (Barbey et al., 2013; Milner, 1963). Diminished cognitive flexibility is associated with several psychopathologies, such as schizophrenia (Laere et al., 2018; Thoma et al., 2007), autism spectrum disorder (Leung and Zakzanis, 2014) and depression and anxiety (Ahern and Semkowska, 2017; Lee and Orsillo, 2014). In contrast, higher cognitive flexibility has been associated with greater resilience and recovery following adverse life events (Ben-Zion et al., 2018; Murphy et al., 2012; Zhou et al., 2020), a unique contributor to academic achievement (Magalhães et al., 2020), entrepreneurial risk taking (Dheer and Lenartowicz, 2019) and workplace performance (Laureiro-Martínez and Brusoni, 2018).

Despite the extensive body of research on executive functioning and dispositional traits, few studies have directly explored the relationship between cognitive flexibility, dispositional traits and job search self-efficacy. Campbell et al. (2011) conducted a comparative analysis of executive functioning between introverts and extroverts using set-shifting tests, revealing that introverts outperformed extroverts in set shifting tasks. Murdock et al. (2013) examined cognitive flexibility as a predictor of the Big Five personality traits, finding a significant relationship only with openness, whereas Odacı and Cikrikci (2018) explored the mediating role of cognitive flexibility between personality traits and life satisfaction using self-report measures such as the Five Factor Personality Inventory, the Cognitive Flexibility Inventory (CFI) and the Satisfaction with Life Scale. Their findings demonstrated that cognitive flexibility significantly mediated the relationship between personality traits and life satisfaction. Smith and Konik (2021) also investigated similar variables but employed a different methodological approach, using alternative measures for personality and the Cognitive Flexibility Scale (CFS) for self-reporting, and their results supported the existence of a mediating relationship and significant associations between personality traits and cognitive flexibility.

The existing literature exploring the association between career development constructs (such as career adaptability, career optimism and job search self-efficacy) and cognitive flexibility is limited. Regarding career adaptability, Creed et al. (2009) found significant relationship between self-regulation function (represented as goal setting and impulse control) with career adaptability. In their meta-analysis, Rudolph et al. (2017) found significant relationships between cognitive abilities and career adaptability (r of 0.17) and the Big Five personality traits: agreeableness

(r_c of 0.15), conscientiousness (r_c of 0.49), extraversion (r_c of 0.37), emotional stability (r_c of 0.35) and openness (r_c of 0.37). Chong and Leong (2015) reported a strong association between career adaptability and cognitive flexibility, using a 12-item attitudinal measure of cognitive flexibility, whereas a recent systematic review only identified 14 papers related to brain functioning and optimism (Erthal et al., 2021). Few studies have explored the relationship between cognitive flexibility and domains of self-efficacy. Martin and Anderson (1998) identified a relationship between a self-report of cognitive flexibility and confidence assertiveness and responsiveness. Nevertheless, there is insufficient research to indicate a direction in this relationship.

Broader flexibility constructs, such as job flexibility (Peiro et al., 2002; Van den Broeck et al., 2010) and psychological mobility (Forret et al., 2010; Vansteenkiste et al., 2013) have received some attention. Job flexibility refers to an individual's willingness to deviate from their career path and accept any available job, while psychological mobility denotes the ability to envision a variety of career options (Arthur, 1994; Forret et al., 2010; Van den Broeck et al., 2010; Vansteenkiste et al., 2013). Although research on psychological mobility and job flexibility focuses on how these constructs are shaped by beliefs that influence job search behaviours, they do not explore or account for the underlying cognitive processes essential for navigating the constantly changing job search environment.

In summary, cognitive flexibility is one of the key cognitive abilities required for daily functioning and involves changing cognitive sets by rapidly altering perspectives or cognitive sets in response to environmental changes. The role of cognitive flexibility has been investigated in various domains, such as clinical psychology, academic achievement and workplace performance, with some studies showing that it mediates the effects of personality traits on life satisfaction. There is emerging research in a broadened definition of flexibility, mobility and career development; however, the role of cognitive flexibility—defined as a cognitive ability—remains absent in career development research and literature.

Job search and social cognitive career theory

Within the SCCT-CSM model (Lent and Brown, 2013) self-efficacy is described as an individual's confidence in their ability to successfully perform specific career-related behaviours. Outcome expectations refers to an individual's belief about the outcome or consequence of performing the required behaviours (e.g. perform specific job search behaviours and their confidence to obtain employment outcomes). An individual's self-efficacy and outcome expectations influence their goals, and their goals predict their behaviours and, ultimately, the outcomes achieved. Outcomes achieved then provides a platform for learning experiences which, in turn, influences self-efficacy-and outcome expectations. Therefore, in accordance with this model, if an individual's goals, self-efficacy or outcome expectations change their actions and the ultimate outcome will also change (Lent and Brown, 2013; Lent et al., 2016). Goals focus on an individual's intention to perform behaviours

such as applying for a specific job or achieving a certain level of performance (Lent and Brown, 2013; Lent et al., 1994, 2016).

Efficacy expectations are derived from four major sources of information including mastery (the confidence to complete a task successfully, learned through experience, trial and error), vicarious learning (witnessing others, similar to oneself, successfully complete a task), social persuasion (encouragement received from others to adopt the belief that they have the capability to complete the required tasks and achieve the desired outcome) and affective responses (the ability to manage emotional reactions while completing a task) (Bandura, 2010). Within the SCCT-CSM model, contextual affordances are posited as influences learning experiences as the sources of self-efficacy and outcome expectations. “People are more likely to set and implement goals to engage in adaptive career behaviors when they are buoyed by environmental (e.g., social, financial) supports and relatively free of barriers that can constrain their exercise of agency” (Lent and Brown, 2013). Thus, the development of job search efficacy must be considered contextually in terms of structural and economic inhibitors that may limit learning experiences.

The SCCT-CSM has extensive research literature to support its core tenets regarding the relations among self-efficacy, outcome expectations and goal-directed behaviour (Brown and Lent, 2019; Lent and Brown, 2019). However, the model is not as well articulated regarding dispositional traits and cognitive processes. Therefore, this conceptual article focuses on person inputs within the SSCT-CSM, specifically dispositional traits and cognitive processes that affect job search behaviour.

Job search self-efficacy

JSSE is an individual’s confidence in their ability to successfully perform specific job search behaviours (e.g. developing a resume, creating and arranging a weekly job search agenda or inquiring about job vacancies) and their confidence in achieving employment outcomes (Brown et al., 2006; Saks and Ashforth, 1999). Therefore, when considering an example of a person who has a desired outcome or goal to find a job, an outcome expectation could be “to find a job I need to follow the directions presented by my parents” and an efficacy expectation could be that “I am confident in my abilities to find a job as per the directions provided by my parents, therefore I believe I will find one.”

JSSE plays a crucial role in job search intentions (Deer et al., 2018; Saks et al., 2015; van Hooft et al., 2005; Van Hoyer et al., 2015), how individuals manage their emotional responses during the job seeking process (Deer et al., 2018; Pirsoul et al., 2022; Urquijo et al., 2019) and job search behaviours and employment outcomes obtained (Brown et al., 2006; Côté et al., 2006; Kanfer et al., 2001; Lent et al., 2017; Moynihan et al., 2003; Saks, 2006; Saks and Ashforth, 1999).

Conversely, some studies have found inconsistent results about the relationship between JSSE, job search intentions and behaviours. For example, JSSE has been found not to be related to job search intentions and behaviours (Song et al., 2006; van Hooft et al., 2005; Wanberg et al., 1996). Similarly, non-significant relations were found in several studies comparing JSSE and job search effort (Brown et al.,

2006; Saks and Ashforth, 2000). Nonetheless, more recent meta-analyses continue to highlight JSSE as a critical component in job search interventions (Kim et al., 2019; Liu et al., 2014). For example, a meta-analysis of 47 experimental or quasi-experimental job search interventions completed by Liu et al. (2014) revealed that JSSE had a positive mediated effect on job search interventions (between-group $Q = 4.39, p < 0.1$). The study also revealed that participants who completed job search interventions that included JSSE were 3.25 times more likely to obtain employment when compared with a control group.

Job search and dispositional traits

The SSCT-CSM posits important connections between dispositional traits and self-efficacy and goal-related behaviours. The five-factor model has proven effective in understanding individual differences when exploring the different facets of vocational behaviours including vocational interests (Larson et al., 2002; Mount et al., 2005), academic achievement (Poropat, 2009; Richardson et al., 2012), career decision making (Lent et al., 2016; Penn and Lent, 2018) and job performance (Barrick and Mount, 1991; Barrick et al., 2001; Mount and Barrick, 1998).

More recently, research into vocational behaviours expanded into job search behaviours with personality traits identified as a significant antecedent to JSSE and, therefore, a contributing predictor of job search behaviours (Kim et al., 2019). For example, past research reveals that individuals with high extraversion tendencies (confidence, sociable and assertive) are likely to have increased JSSE, whereas individuals with high neuroticism (anxious, lack of confidence and insecurity) are likely to have lower JSSE and, therefore, reduced job search behaviours and outcomes (Mount et al., 2005; Zimmerman et al., 2011). Similarly, Rusu et al. (2014) found that individuals with higher openness to experience exhibited higher JSSE and suggest that they are highly adaptable and able to respond more appropriately to job search activities in a rapidly changing employment market. While Kanfer et al. (2001) report close alignment of personality attributes found in job search behaviours and job performance, noting both behaviours as a self-regulatory process involving goal setting, motivation, monitoring and performance.

Conversely, Zimmerman et al. (2011) highlighted that past job search research predominantly focused on incremental effects of dispositional traits on job search behaviours, however, “fails to explain how dispositional traits affect job search behaviour” (p. 1451). Interestingly, although Zimmerman et al. found that individuals with high extraversion traits have high JSSE, some individuals were less likely to engage in job search behaviours and that this behaviour was influenced by broader characteristic adaptations including, ambitions, motivations and goals to advance, perceived job challenge and job satisfaction. Similarly, Kanfer et al. (2001) found that while neuroticism was positively related to subjective job search effort, it was negatively related with job search intensity outlining that job search effort could be linked to distress management rather than active job search behaviours. More recently, Sansale et al. (2019) examined the effects of personality and the length of unemployment among young adult workers. They discovered that those with higher

levels of conscientiousness were more likely to find employment when faced with unemployment, those with higher levels of agreeableness were more likely to return to education and those with higher levels of neuroticism were more likely to remain unemployed and less likely to return to education.

Although personality traits have been recognised as an important antecedent to potential moderators and mediators of behaviours and outcomes, there is a lack of clarity on the significance, scope and potential relationship of person inputs in the career development literature (Kim et al., 2019). Similarly, while there is considerable research exploring the importance of abilities and aptitudes in career and vocational development (Metz and Gardner, 2020), less attention is given towards investigating the relationship between cognitive functions and processes involved in explaining or bridging the gap between person inputs (e.g. predispositions, abilities and aptitudes) and several characteristic adaptations including JSSE. Finally, theoretically, it is agreed that person inputs and cognitive processes are fundamental to accurately measure, understand, predict or influence job search behaviour; yet, in a rapidly changing economic environment, the construct cognitive flexibility is underdeveloped in vocational and career development literature.

The proposed Cognitive Flexibility Job Search Self-Efficacy model

Cognitive flexibility is posited as one of the underlying processes involved in explaining the relationship between several career development constructs and job search behaviours and outcomes. The Cognitive Flexibility JSSE (CF-JSSE) conceptual model is depicted in Figure 1. The CF-JSSE model is derived from the SCCT-CSM (Lent and Brown, 2013); however, it is contextualised by placing JSSE at the centre of the model, bringing together goals, actions and outcomes as job search behaviours and adding cognitive flexibility as a moderator between dispositional traits and learning experiences to self-efficacy and outcomes expectations. Notwithstanding, the importance of other person inputs and background contextual influences this model aims to magnify key components of the SCCT-CSM model and introduce cognitive flexibility as a fundamental construct in broadening our understanding of job search behaviours.

The CF-JSSE model emphasises the importance of cognitive processes in job search behaviours and proposes a structure for how these cognitive processes can be studied in the future using the construct cognitive flexibility. Hypothesised pathways of effects are labelled in Figure 1. Job search behaviours are directly affected by JSSE (path 1). Dispositional traits directly affect job search behaviours (path 2) and indirectly through JSSE. Through a social cognitive learning lens, job search behaviours affect learning experiences (path 3), and learning experiences affects JSSE (path 4), whereas path 5 show how dispositional traits affect JSSE. Over the past few decades, paths 1–5 in the model have been thoroughly considered either conceptually and/or empirically; however, the role of cognitive flexibility has not yet been considered. Finally, this model aims to address the gaps identified in literature and proposes that cognitive flexibility moderates the relationship between dispositional

traits and JSSE (path 6) and that cognitive flexibility moderates the relationship between learning experiences and JSSE (path 7).

Pathway 6: cognitive flexibility as a moderator between dispositional traits and JSSE

Dispositional traits do not account for contextualised adaptations across different social roles and environmental demands nor does it explain how beliefs (e.g. self-efficacy expectations and outcome expectations) are operationalised through several processes as part of human functioning (Kim et al., 2019; McAdams, 2010). As such, dispositional traits are considered as the baseline tendencies and the underlying potential of an individual, whereas cognitive flexibility is part of the brain's executive functioning and the ability to appropriately change an individual's cognitive sets (e.g. thoughts, goals, beliefs and expectations) and behaviours in response to a rapidly changing environment (Armbruster et al., 2012; Ionescu, 2012). Therefore, the model proposed that cognitive flexibility plays an important role in understanding the relationship between dispositional traits and JSSE.

For example, research related to self-efficacy expectations and dispositional traits reveal conflicting results. Mount et al. (2005) and Zimmerman et al. (2011) found that individuals with high extraversion tendencies (confident, sociable, assertive and excitement seeking) are likely to have increased JSSE, while Petruzzello et al. (2021) found an insignificant relationship between JSSE and extraversion noting that further research is needed to understand the relationship between dispositional traits and JSSE. Therefore, it is likely that two individuals with similar levels of extraversion scores could present with varying levels of JSSE scores and ultimate behavioural responses explained by cognitive flexibility. In this context, higher cognitive flexibility would enable individuals to be open to a broadened perspective and change or switch their cognitive sets (e.g. self-efficacy expectations), and then, behaviours to respond to environmental demands. Whereas individuals with lower cognitive flexibility are characterised as rigid thinkers who emphasise existing knowledge as the premise to responding to changing demands, therefore, regardless of their underlying dispositional trait their belief and consequent behaviour is less likely to change (Diamond, 2013; Ionescu, 2012).

Pathway 7: cognitive flexibility as a moderator between learning experiences and JSSE

Further, it is proposed that cognitive flexibility moderates the relationship between learning experiences and JSSE. As such, it is proposed that an individual with lower cognitive flexibility will find it more difficult to change their perspective in a particular situation and/or learn from it. Lower cognitive flexibility is associated with difficulties in changing cognitive sets (e.g. thoughts, beliefs and perspectives) and, therefore, affects learning regardless of the context. This is evident given that the subdomains of the brain responsible for changing cognitive sets and learning both include functions such as salience detection and attention, working memory and

inhibition (Armbruster et al., 2012; Diamond, 2013). Therefore, in the context of job search behaviours, if an individual holds a particular belief around their confidence to be perform specific job search behaviours (e.g. JSSE) and engage in several job search behaviours (e.g. sets goals, completes the required behaviours and obtain feedback from outcomes), the learning and the formation of new beliefs (e.g. JSSE) will be moderated by cognitive flexibility. Finally, while other person inputs, background and environmental context are not represented on the model, their affects are acknowledged; however, this model focuses on intrapersonal constructs and aim to address the gaps highlighted in the context of cognitive processes as it relates to JSSE.

Discussion and implications for future research

The CF-JSSE is a conceptual model that draws concepts from various schools of thought and underline the importance of the cognitive processes involved in broadening our understanding of an individuals' engagement in job seeking behaviours. By integrating perspectives from vocational psychology, neuropsychology and personality psychology, the CF-JSSE model not only fills a critical gap in existing literature but also provides valuable insights for both researchers and practitioners. Further investigations into the complex interplay between cognitive flexibility, dispositional traits and learning experiences may lead to the development of targeted assessments, interventions and strategies that enhance JSSE and improve career outcomes.

The CF-JSSE model, while in alignment with the SCCT-CSM frameworks' emphasis on the four sources of self-efficacy (mastery, vicarious learning, social persuasion and affective responses) and their impact on self-efficacy and outcome expectations, takes a unique approach to learning experiences by considering how learning occurs as part of human functioning and the cognitive processes involved (Bandura, 1977, 2010; Lent and Brown, 2013). Previous research have laid solid groundwork for understanding job search behaviours, highlighting JSSE (Kim et al., 2019), the effects of learning experiences on self-efficacy (Lent et al., 2016), the relations between sources of self-efficacy and outcomes expectations and career exploration and decision-making activities (Lent et al., 2017) and the role of dispositional traits (Rusu et al., 2014; Zimmerman et al., 2011). The CF-JSSE model proposed approach is not dependent on the weighting of different sources of efficacy information; instead, the premise is focussed on the cognitive processes involved in learning experiences. Beyond dispositional traits (e.g. conscientiousness) and characteristic adaptations (e.g. self-efficacy belief and outcome expectation), the CF-JSSE model proposes that cognitive flexibility provides a deeper understanding of the cognitive processes involved when an individual is required to change their cognitive sets (e.g. thoughts, goals, beliefs and expectations) and behaviours in response to an ever-changing environment (Armbruster et al., 2012; Ionescu, 2012). Therefore, by including the CF-JSSE model within the broader remit of the SCCT-SCM model and career development research, the following research questions arise:

1. How does cognitive flexibility affect self-efficacy expectations impact on job search behaviour?
 - a. How does cognitive flexibility affect the relation between dispositional traits and self-efficacy expectations?
 - b. How does cognitive flexibility affect learning experiences (i.e. sources of efficacy) from a social cognitive learning and traditional learning approach?
2. How does cognitive flexibility affect the relation between dispositional traits and job search behaviour?
3. How does cognitive flexibility moderate the effect of the background context and environmental demands on self-efficacy expectations?
4. How do other intrapersonal person inputs affect cognitive flexibility's effects (e.g. cognitive abilities, disability and education)?

This article aims to address the existing gaps raised in career development literature and set a foundation for future research in exploring the role of cognitive flexibility in understanding job search behaviours. This research agenda must be concurrently informed by the findings of research and development drawn from cognitive science and neuropsychology which offer potential directions for training cognitive flexibility (e.g. Wen et al., 2023) and putative limitations on its capacity for training (e.g. Braem et al., 2024; Egner and Siqi-Liu, 2024). These findings may usefully inform interventions to enhance individuals' cognitive flexibility or to adjust for their limitations by strengthening the positive effects of other contributors to job search self-efficacy and behaviour. As the employment landscape continues to evolve, a deeper understanding of cognitive flexibility and its impact on job search behaviour is crucial for supporting individual in their pursuit of fulfilling careers in an increasingly dynamic and competitive job market.

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Declarations

Conflict of interest The authors affirm that there are no financial or non-financial interests to disclose. No relationships, conditions or circumstances are present that could potentially manifest as a conflict of interest or be perceived as influencing the objectivity, integrity or interpretation of the manuscript. There are no impediments to publication, including timing or intellectual property considerations. This work is purely conceptual and did not involve the collection or use of empirical data. Thus, requirements for ethics approval, participant consent and declarations on the availability of data, materials or code are not applicable to this manuscript. All authors have made substantial contributions to the conceptualisation and writing of the manuscript and have given their approval for its publication.

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