St(r)uck by internal forces.

Gaining understanding on career inertia among working adults.

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by
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Prologue

With this doctoral dissertation, I aim to further the understanding of inertia in careers. In 1868, Sir Isaac Newton revolutionized science with his three laws of motion, including The Law of Inertia. This law states that "an object at rest remains at rest, and an object in motion remains in motion at constant speed and in a straight line unless acted on by an unbalanced force" (Hall, 2024). Such inertia, or resistance to change, seems to also manifest in the context of careers—perhaps even more than we would wish for.

Recent numbers show that, on average, workers are the unhappiest and the most stressed they have ever been (e.g., Smith, 2023). Gallup's 2024 global workplace report even states that about six out of ten employees worldwide do not feel engaged at work, and 52% of the global workforce is passively or actively looking for another job (Gallup, 2024). And yet, most of the people who are on the lookout believe that it is not easy to change jobs and often end up staying in their jobs (Lee, 2024). Relatedly, professional newspapers (e.g., HR Magazine, Jobat) and websites (e.g., www.robertwalters.ch) regularly report about the golden cage phenomenon: people who stay in their jobs even if they are not satisfied or motivated because they are afraid of all the benefits they will have to sacrifice when changing to another job. This tendency to not change is also apparent in labor market statistics, which show long average job tenures (i.e., 10 years in the European Union and 11 years in Belgium; www.statista.com; www.Steunpuntwerk.be) and rather low job mobility rates (i.e., 8% in European Union and 6% in Belgium; Coppin & Vandenbrande, 2006, www.Steunpuntwerk.be) in many western countries.

To summarize, quite a few people seem to stay in a position that they are unhappy or unsatisfied with, despite having a desire to change something in their careers (e.g., switching jobs). We refer to this situation as career inertia: wanting to make a change in one's career but

not realizing that change. Despite its seeming prevalence, academic researchers have only recently started to pay attention to this phenomenon. In addition, the scarce studies that have examined this phenomenon, have typically focused on contextual factors that inhibit people from realizing a desired change. The role of internal (e.g., cognitive, emotional) factors that complicate the realization of career desires has remained underexplored to date (Verbruggen & De Vos, 2020). Insight into internal factors triggering career inertia is, however, highly relevant, not only to understand situations of career inertia in which no clear external barriers are present but also because it is typically through internal processes that contextual barriers affect people's behaviors and well-being (e.g., Lent et al., 2006; Rothausen et al., 2017). Accordingly, understanding the role of internal processes in career inertia forms an important requisite to help individuals with a desire to change to get "unstuck" (Hall-Renn, 2007).

The aim of this dissertation is therefore to enhance our understanding of career inertia triggered by internal factors. In this prologue, I first explain the term career inertia a bit more and then describe the state of the art in the turnover and the career literature, with a specific focus on the growing attention to career inertia. Then, I discuss some of the (mainly contextual) explanations for career inertia that have been studied so far. Finally, I explain the overall aim of this dissertation and introduce the three empirical studies that I conducted.

Career inertia: an umbrella term

Throughout this dissertation, career inertia will be used as an umbrella term to describe the situation in which people feel a desire for change in their career (e.g., changing jobs) but do not realize that desire. In this sense, career inertia is assumed to be broader than, for example, career indecision or career inaction. Career indecision refers to not being able to choose a certain educational or career path (e.g., Osipow, 1999; Xu & Bhang, 2019), whereas career inaction captures the phenomenon that people do not succeed to take sufficient action to realize a desired change in their career (Verbruggen & De Vos, 2020). So, the first

phenomenon focuses on the career decision-making, whereas the second phenomenon focuses on the action-taking phase. However, both can impede people's career development or progress, and can thus be seen as subtypes of career inertia. Throughout this dissertation, I looked at three different types of career inertia: not changing jobs despite a desire to do so, lacking progress towards a desired career goal, and career inaction. All these types capture situations in which the realization of a desired change in one's career is obstructed in some way and can thus be seen as a form of career inertia.

Career inertia: state of the art in the turnover and career field

Making a change in one's career—or the lack of such a change—has been a topic of interest in two key literature streams: the turnover and the career literature. In both literature streams, scholars have, for a long time, focused almost exclusively on desires or intentions to change that are enacted and realized. Only recently, researchers started to call for more attention to desires that are not enacted (e.g., Hom et al., 2017; Verbruggen & De Vos, 2020). Below, I briefly describe this evolution in both literature streams.

In the turnover literature, traditional turnover models have, for many decades, dominantly looked at why people voluntarily leave their organizations. Foundational models such as the ones by, for example, March & Simon (1958), Steers & Mowday (1981), and Hom & Griffeth (1991), posited that people mainly leave because of dissatisfaction with their job, low organizational commitment, and/or the existence of attractive job alternatives (Hom et al., 2017). These factors shape people's intentions to leave, which people are then likely to enact, resulting in actual turnover. Later on, turnover researchers included additional pathways to turnover, such as via shocks or scripts (e.g., unfolding model of turnover; Lee & Mitchell, 1991, 1994). Cardinal to almost all these traditional turnover studies was the direct, rather straightforward link between turnover intentions (wanting to leave) and turnover

behaviors (actually leaving, changing jobs): specific triggers were expected to induce turnover intentions, which people were assumed to act upon and realize.

From the 21st century onwards, scholars increasingly started to criticize this rather straight-forward link between turnover intentions and behavior since empirical studies showed that turnover intentions did not predict turnover behaviors as well as commonly assumed (e.g., Cohen et al., 2016; Kirschenbaum & Weisberg, 1990). Triggered by this observation, Mitchell et al. (2001) switched the focus from "Why do people leave?" to "Why do people stay in their organization?" They introduced the concept of job embeddedness, which captures the contextual elements that enmesh people in their jobs. These elements include links with others, fit with the environment, and sacrifices one would have to make when leaving the current job that can all originate from the organization (i.e., on-the-job embeddedness; e.g., a good salary) or from the community (i.e., off-the-job embeddedness; e.g., living in a nice neighborhood). Empirical research on the concept has found that job embeddedness typically brings along positive outcomes for employees (e.g., better performance; Jiang et al., 2012), unless there is a reason to leave (e.g., an abusive supervisor; Allen et al., 2016).

Another novel turnover model that pays attention to career inertia is the proximal withdrawal state theory of Hom et al. (2012). Triggered by the empirical observation that turnover intentions are more distant from actual turnover than long assumed, they introduced "proximal withdrawal states" as temporally closer states to turnover. Proximal withdrawal states are defined as affective mindsets based on the combination of people's preference to leave or stay and their perceived control over leaving or staying. The combination of these two factors yields four different proximal withdrawal states, with one of them being 'reluctant stayers'. Reluctant stayers refer to employees who want to leave their jobs but feel they cannot (e.g., due to a lack of alternative job options). These stayers are thus in a state of career

inertia. Scholars have argued that conventional turnover models are likely to be less applicable to reluctant stayers (Lee et al., 2017), and empirical studies showed that reluctant stayers exhibit more deviant work behaviors than other types of stayers (Sheridan et al., 2019).

Also in the career literature, attention for career inertia is only a recent fact. For a long time, career researchers have focused mainly on people's initial vocational choice (De Vos et al., 2021). Since almost all people transition out of education into employment (or unemployment), it made sense that researchers focused on transitions that people actually went through. With careers becoming increasingly uncertain and unpredictable, career scholars started to study a broader range of career transitions within and beyond occupational, role, and organizational borders (De Vos et al., 2021). Scholars developed various models to explain how people (should) make career transitions and implement them. The early models focused on how people had to position themselves in the best possible way in a given work environment (e.g., analyze the environment, analyze the self, and look for the best match; Parsons, 1909), whereas later models also included the idea that people could interact with this context to shape their career (e.g., career construction theory of Savickas, 1997; Yates, 2020). With this evolution, career scholars started to put more agency and responsibility with individuals—which, for a long time, also included the assumption that people could (and would) change jobs when they wanted to.

In the past few decades, however, the strong focus on individual agency in career research has been increasingly criticized (Forrier et al., 2018; Van Laer et al., 2021). In line with this rising criticism, career scholars started to study situations in which people do not follow through on their career desires. This resulted in several new career constructs, such as occupational regret (i.e., the enduring wish that one had never entered the current occupation; Budjanovcanin et al., 2019), being locked-in (i.e., not being able to leave a non-preferred job

due to low perceived employment opportunities; Stengård et al., 2016) and career inaction (i.e., not taking sufficient action to realize a desired change in one's career; Verbruggen & De Vos, 2020).

So, both turnover and career research have already touched upon career-related inertia. But which explanations have already been proposed for individuals to not be able to make a change in their career when they want to?

Explanations for career inertia in research to date

Research trying to understand incidences of career inertia (e.g., reluctant stayers, being locked-in) refers to various types of career barriers (i.e., factors or events that hinder the attainment of career goals; Lent et al., 2002; Urbanaviciute et al., 2016). These barriers can be both contextual or external factors (e.g., lack of employment opportunities) and personal or internal factors (e.g., a lack of career decision-making skills). The importance of perceived career barriers in the process of career decision-making has been recognized for several decades now (Hee Lee et al., 2008), for instance in theories such as the social cognitive career theory (Lent & Brown, 1996) and the career construction theory (Savickas, 2013). Below, I will briefly discuss a number of the previously studied factors from the turnover and the career field that could explain why people who want to change do not do so. I do not intend to give an exhaustive overview but rather illustrate the dominant focus in both the turnover and the career literature.

Contextual factors

Bad economic conditions

In the context of career decisions and transitions, it is imperative to consider the labor market. In labor markets with high unemployment rates (also called "loose labor markets"), for instance due to an economic crisis, it is harder for individuals to realize a change in their career because there are only a limited amount of opportunities for change. This low chance

for people to find a job in the labor market (both internal and external) has also been referred to as low (objective) employability (e.g., Forrier & Sels, 2003). Although an (objective) lack of labor market opportunities without doubt complicates the realization of a career change desire, reality shows us that even when people have enough alternatives to change jobs—as is the case in many "tight" Western labor markets—, they might still stay (e.g., because of the golden cage phenomenon) or have a hard time changing jobs (e.g., Oelberger, 2024).

Perceptions of contextual factors

Social norms

Social norms refer to an individual's perceptions of what others believe is acceptable behavior in a specific social context (i.e., injunctive norms) or of what the most typical behavior of others is (i.e., descriptive norms) (Ajzen, 1991; Cialdini et al., 1991; Ham et al., 2015). Overall, research on norms states that people tend to behave in line with prevailing norms (Cialdini & Trost, 1998). When deviating from what others do or think should be done, individuals may provoke negative emotional reactions or reprimands from others (e.g., Molho et al., 2020). Research has, for example, already looked at how gendered norms may limit career progression for academic women in STEM fields (O' Connell et al., 2021). Moreover, since many Western labor markets are characterized by long average tenure (see earlier) and thus by the (at least descriptive) norm of not changing jobs, individuals with a desire for change might feel uncomfortable with actually changing jobs and end up staying rather than following through on their intent to change.

Job embeddedness

As mentioned above, job embeddedness refers to (the perceived) organizational or community-related features that embed people in their jobs (Mitchell et al., 2001). Overall, job embeddedness is considered a positive construct because it is related to lower turnover intentions, more job satisfaction, and higher performance (Jiang et al., 2012; Lee et al., 2014).

However, job embeddedness also has a dark side. People might be so strongly embedded in their organizations that they do not leave even if they have a desire for change—with negative implications for those people. Scholars found that job embeddedness can have detrimental consequences such as worsened health and emotional exhaustion for people in suboptimal, dissatisfying positions who would actually prefer to leave their jobs (Allen et al., 2016; Peltokorpi, 2022).

Perceived employability

Self-perceived employability refers to the chance or likelihood with which people think that they will find another job in the internal or external labor market (Forrier et al., 2015). Overall, people with higher perceived employability are more likely to make career transitions (De Vos et al., 2021). Conversely, when people perceive that there are only a few opportunities for them to change jobs, this can withhold them from actually changing jobs. Stengård et al. (2016; 2017) labeled the situation of wanting to leave your job but not perceiving enough chances to change as "being locked-in", and showed how this can decrease people's well-being. So, also low perceived employability has been put forward as an antecedent for career inertia.

Internal factors

Decision-making difficulties

Also, the knowledge and motivation of individual decision makers may hinder the realization of a desire for change in one's career (Amir et al., 2008). This is no surprise since career decisions are among the most important, impactful, and oftentimes complex decisions we make in our lives (Bimrose & Mulvey, 2015; Verbruggen & De Vos, 2020). The framework of Gati et al. (1996) was the first to categorize these motivational and informational difficulties into three types of career decision-making difficulties: a lack of readiness (e.g., not being motivated enough), lack of information (e.g., about labor market opportunities or about

oneself, their preferences or capabilities), and inconsistent information (e.g., a bad match or no match at all between individuals' preferences and their capabilities). Most of the research on career decision-making difficulties has been done with student samples and focused on factors that made the career decision-making process harder (e.g., Gati & Saka, 2001; Mau, 2001; Willner et al., 2015). As of today, not much attention has been paid to how these difficulties may influence the enactment of the decisions (Gati & Kulcsár, 2021).

Low self-efficacy

Another internal barrier to career decisions that has been regularly studied is low process-related self-efficacy (Wang et al., 2023). Career researchers have dominantly focused on career decision-making self-efficacy, which refers to people's self-perceived ability to successfully navigate the career decision-making process (Betz & Hackett, 2006; Ozlem, 2019). People low on career decision-making self-efficacy tend to be less satisfied with their career, are less able to adapt to changes, and realize their career interests (Wang et al., 2023). Yet, just like career decision-making difficulties, career decision-making self-efficacy is mainly studied among students and focuses more on the career decision-making process than on the career transition process (Gati & Kulcsár, 2021). Accordingly, we know little about the role of self-efficacy in the realization of career desires among adults (for a notable exception, see Verbruggen & Sels, 2010).

Internal inertial forces

In 2020, when I started my PhD research, Verbruggen and De Vos (2020) published their theory of career inaction. This theory focuses on adults who experience career inertia due to internal inertial forces. In particular, Verbruggen and De Vos (2020) posited that when people think about making a career change, several internal mechanisms are activated which tend to have a paralyzing effect on people and may in that way explain why they do not take sufficient action to realize their career desire (i.e., career inaction). Examples of these internal

inertial forces include experiencing fear or anxiety over the unknown outcome of the career change, experiencing biasing effects due to our bounded rationality as human beings (Simon, 1990; e.g., attributing a disproportionate weight to short-term costs over longer-term, and potentially larger, benefits), and cognitive overload caused by the complexity that is inherent to (uncertain) career decisions.

To summarize, the turnover and career literature have mostly pointed at external, contextual factors to explain inertia in careers, and *when* internal factors are studied, it has been mainly done among student samples. Therefore, with this dissertation, I decided to take a better look at internal factors that could explain why workers stay (or not change) when they actually want to leave (or change). Thereby, I was strongly inspired by the theory of career inaction since this was a novel theory that specifically focuses on workers and on internal forces that, according to the theory, almost all workers are in some way susceptible to.

Overall aim and structure of this dissertation

The main aim of this dissertation is to further the understanding of internal factors that could explain career inertia. Throughout this dissertation, I built on insights from the theory of career inaction (Verbruggen & De Vos, 2020) and from the broader behavioral economics literature. The latter stream of literature aims to unravel the influence of cognitive shortcuts and emotions, which are likely to trigger biased or suboptimal decision-making (Payne et al., 1998). Put simply, behavioral economics state that people do not always act like the rational, utility-driven 'homo economicus' assumed in many decision-making models (Kahneman, 2003). Scholars from the field identified some general, often irrational human tendencies that could explain why people prefer to stay with the status quo (i.e. status quo bias; Samuelson & Zeckhauser, 1988) or choose to not act (i.e., omission bias; Ritov & Baron, 1992) even when they experience strong triggers to act. In other words, already decades ago, behavioral

economics looked into potential internal factors that inhibit change or action, and that may therefore be interesting to explore in relation to career inertia.

I conducted three empirical studies to better understand the role of internal forces linked to career inertia, each with its specific aim. Table 1 gives an overview of which internal force and which type of career inertia I focused on in each study. The first study examined whether the internal inertial forces put forward in the theory of career inaction (Verbruggen & De Vos, 2020) could explain the influence of job embeddedness on the perceived likelihood of leaving, and explored whether this depended on personal characteristics. In doing so, we shed light on the internal processes through which job embeddedness affects individuals and tested some of the assumptions underlying the theory of career inaction. This study contributes to the overall aim of this dissertation by looking at how contextual factors like job embeddedness trigger internal inertial forces, and in turn, lower people's perceived likelihood of leaving. In the second study, we examined how anticipated regret about changing jobs affected workers' subsequent goal progress and well-being (i.e., career-related regret and career satisfaction). In this study, we build on action/inaction, goal-striving and career research to challenge the generally assumed functional role of anticipated regret when it relates to changing jobs. Hence, Study 2 contributes to the overall aim of this dissertation by examining anticipated regret as an internal force that hinders progress towards a desired career goal with detrimental outcomes for people's career-related well-being. Finally, in the third study, we focused on career inaction – a form of career inertia where people do not take sufficient action due to internal inertial forces – by developing and validating a scale that assesses the degree to which people perceive that they are not taking sufficient action to realize their career desire. This study contributes to the overall aim of this dissertation by providing a reliable, validated tool that can assist researchers to further their understanding on career inaction as a specific type of career inertia, and by, again, (indirectly)

assessing several assumptions of the theory of career inaction. Below, I briefly delve deeper into the focus of each study.

Study 1: "Why can't I get out? The mediating Role of Internal Inertial Forces in the Relationship between Job Embeddedness and the Perceived Likelihood of Leaving: a Test of the Theory of Career Inaction."

Inspired and motivated by the theory of career inaction (Verbruggen & De Vos, 2020) and recent career/labor market evolutions, this study focuses on the questions of *when* and *why* people with a desire for change in their careers oftentimes do not succeed in undertaking sufficient action to realize that desired change—here: leaving their current organization. In particular, we tested whether the internal inertial forces that lie at the core of career inaction mediated the relationship between job embeddedness and the perceived likelihood of leaving. Moreover, we examined the potential moderation effect of personal characteristics (i.e., age, gender, education, having children, and proactive personality). We tested our research model via three experimental vignettes (N_1 = 179, N_2 = 148, N_3 = 351) and one survey study (N = 426) with Belgian workers. This study is one of the first—if not the first—to test several of the assumptions underlying the theory of career inaction.

Study 2: "Thinking regret, feeling regret. A longitudinal study on the relationship between anticipated regret, experienced regret, and career satisfaction via goal commitment and goal progress."

In a second study, we focused on anticipated regret related to changing jobs as a potentially irrational internal force that could inhibit career goal striving and career-related well-being. Regret is a negative cognitive emotion in which people compare the situation "as is" with "what could have been" if they had decided differently (Zeelenberg & Pieters, 2007). According to research, career choices form one of the biggest sources of regret in people's lives (Roese & Summerville, 2005). Aside from regretting career choices after they were

made, people may also anticipate regret beforehand. Generally speaking, regret theories assume that anticipated regret serves a beneficial function: steering people to better or less regrettable future choices (Zeelenberg, 1999). We challenged this assumption by looking at the potential negative effect that anticipated regret over changing jobs may have on individuals' goal striving and well-being. Using two-wave data collected among Belgian workers interested in following career counseling, we tested how anticipated regret affected career satisfaction and experienced regret, and whether this effect arose via a goal commitment – goal progress path. By doing so, we put forward anticipated regret as another internal factor that may lead people to career inertia.

Study 3: "Development and validation of the career inaction scale."

Finally, the third study describes the process via which we developed and validated a scale for career inaction. Although inaction in careers seems highly prevalent in society and has been linked with several risks for individuals and their organizations (e.g., lower career satisfaction, well-being, and performance), research on it has remained limited to date. The fact that career inaction remained understudied so far is partly due to the lack of a measurement instrument to assess the phenomenon. To address this issue, we developed and validated a scale that assesses the degree to which people feel to be in the inaction phase—i.e., the second and core phase of career inaction in which people are paralyzed by internal inertial forces such as fear of the unknown career outcome or cognitive overload (Verbruggen & De Vos, 2020). We validated the Dutch version of the scale in three studies with Belgian workers and the English version in one study with US workers. With this scale, we hope to facilitate more empirical research on career inertia in the future.

Table 1

Overview of the studied internal forces and types of career inertia.

	Internal force	Type of career inertia
Study 1	Internal inertial forces (five forces examined as one factor)	Lowered perceived likelihood of leaving (as a proxy for "not changing jobs")
Study 2	Anticipated regret over changing jobs	Lacking career-goal progress
Study 3	Internal inertial forces (three forces integrated in the items of the CARINAS)	Career inaction

I hope that by now you, as a reader of my dissertation, got as excited as me four years ago by the thought of answering the question "(How) can internal, sometimes even irrational, factors explain why people remain in their current career position when they actually want to change?"

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Study 1: Why can't I get out? The mediating Role of Internal Inertial Forces in the Relationship between Job Embeddedness and the Perceived Likelihood of Leaving: a Test of the Theory of Career Inaction.

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People who are embedded in their organization are less likely to leave their organization, even when they desire or intend to do so. Yet, so far, it remains largely unclear why this happens and whether personal characteristics affect this likelihood. The theory of career inaction states that people who are highly embedded in their job are less likely to realise a desire to leave because they get internally paralyzed by several inertial forces when thinking about leaving. According to this theory, every person in the same situation is at least to some degree susceptible to these inertial forces and, thus, the relationship between job embeddedness and the inertial forces should not depend much on personal characteristics. Via three vignette studies and one field study, we examined whether the relationship between job embeddedness and the perceived likelihood of leaving is mediated by internal inertial forces. In the field study, we also explored whether personal characteristics (i.e., gender, age, educational level and proactive personality) indeed did not moderate the relationship between job embeddedness and the internal inertial forces. In all four studies, inertial forces were found to mediate the relationship between on-the-job embeddedness and the perceived likelihood of leaving. For the relationship between off-the-job embeddedness and the perceived likelihood of leaving, we found mediation in the first three studies, but not in the survey study. Finally, we found no moderation effects of personal characteristics in Study 4. Our results thus confirm several of the propositions in the theory of career inaction.

Keywords: *Career decision making, On-the-job embeddedness, Off-the-job embeddedness, Career inaction, Vignette study.*

Introduction

About two decades ago, Mitchell et al. (2001) introduced the construct of job embeddedness to the turnover literature to refer to various contextual factors that keep people in their jobs (e.g., good links with colleagues, attractive benefits, and high involvement in the community people live in). They noted that for more than 100 years, turnover scholars had examined when and why individuals leave their organization, studying factors such as low job satisfaction and low organizational commitment (Hom et al., 2017). However, this focus could only explain a relatively small part of the variance in the likelihood of leaving (Griffeth et al., 2000). Therefore, Mitchell et al. (2001) introduced the concept of job embeddedness to switch researchers' attention to the question "Why do people *stay?*". Since then, research has convincingly shown that job embeddedness explains variance in turnover beyond what can be explained by traditional antecedents of turnover, such as turnover intentions, job satisfaction, and organizational commitment (Jiang et al., 2012). Furthermore, job embeddedness has been linked with several benefits other than retention, such as higher performance (e.g., Halbesleben & Wheeler, 2008), more organizational citizenship behavior (Kiazad et al., 2015), and more innovative work behavior (Ng & Feldman, 2010).

Recently, however, researchers have started to raise concerns about the dark side of job embeddedness. Job embeddedness can especially become problematic when people desire to change jobs but job embeddedness hinders them to act on and realize that desire, in that way creating a tensional discrepancy between people's desires and actions. In such situations, being deeply embedded can bring along certain risks, such as a lower degree of career satisfaction (Verbruggen & van Emmerik, 2020), worsened sleep quality (Allen et al., 2016), enhanced emotional exhaustion (Allen et al., 2016; Peltokorpi et al., 2022), lowered job performance (Greene et al., 2018), more deviant behaviors (Burton, 2015), and more guilt and hostility (Peltokorpi, 2022). Given these risks, it seems imperative to better understand why

job embeddedness holds people back from realising a desired change. It is particularly relevant to better understand the internal processes that are affected by job embeddedness since, as Rothausen and colleagues (2017) showed, it is through such internal processes that a context affects people's turnover and retention decisions. Insight into these internal processes is therefore crucial for managers to satisfactorily address any harmful outcomes of unrealized turnover thoughts and to amend strategies for employee retention (Rothausen et al., 2017; Verbruggen & van Emmerik, 2020).

The aim of this study is therefore to shed light on internal processes that are triggered by job embeddedness among people with a desire to leave their organization. To this end, we build on the theory of career inaction (Verbruggen & De Vos, 2020) which explains why and when people do not act on a desired change in their career (i.e., career inaction). Inspired by research on the psychology of doing nothing (e.g., Anderson, 2003; Beike et al., 2009), Verbruggen and De Vos (2020) proposed that the thought of making a change in one's career triggers several internal inertial forces (e.g., fear and anxiety, perceptions of cognitive complexity to make the decision), which can have a paralyzing effect and withhold people from acting on their desired change. The theory further proposes that contextual factors like job embeddedness can trigger these internal inertial forces and that people in the same situation are all, at least to some extent, susceptible to these forces (Verbruggen & De Vos, 2020).

Building on the above, this study examines whether the relationship between job embeddedness and the perceived likelihood of leaving is mediated by internal inertial forces. We examine the effects of both on-the-job embeddedness (i.e., contextual forces within the organization that keep people from leaving) and off-the-job embeddedness (i.e., contextual forces in the community that keep people from leaving) since researchers have advised examining both types of job embeddedness separately, although the expected relationships are

typically similar (e.g., Porter et al., 2019). Furthermore, because the theory of career inaction posits that people in the same context are all—at least to some extent—susceptible to internal inertial forces (Verbruggen & De Vos, 2020), we explore whether the relation between job embeddedness and internal inertial forces is indeed not moderated by personal characteristics. In line with the recommendations of Verbruggen and De Vos (2020), we used a series of experimental vignette studies to assess the directionality of the relationship between job embeddedness and inertial forces. We added a field study (i.e., an online survey) to assess the external validity of our research and to explore the potential moderation effects of various personal characteristics (i.e., gender, age, being highly educated, having children and having a proactive personality; Bateman & Crant, 1993).

This study contributes to the literature in three key ways. First, we gain insight into why job embeddedness could keep people with a desire to leave from leaving their organization. By shedding light on internal inertial forces triggered by on- and off-the-job embeddedness, our study adds to the growing body of research on the "dark side" of job embeddedness. Second, we test several aspects of the theory of career inaction (Verbruggen & De Vos, 2020) and thereby provide one of the first empirical tests of this relatively new theory. Third, by integrating insights on job embeddedness with the theory of career inaction, our study expands the understanding of the internal processes at play in the turnover/retention process. As Rothausen and colleagues (2017) argued, understanding these internal processes is crucial because it is through these processes that employees' retention, turnover, and future wellbeing are affected.

Literature Review and Hypotheses

Job Embeddedness

Job embeddedness refers to numerous contextual elements that enmesh people in their organization (Mitchell et al., 2001). These elements can be related to the organization, such as

having a good salary or good colleagues—called on-the-job embeddedness—or to people's community, such as being married or living in a pleasant neighbourhood—called off-the-job embeddedness. Furthermore, Mitchell and colleagues (2001) distinguish three types of contextual elements that can embed people in their job: the *links* people have to others in their organization or community, the degree to which people experience a *fit* with their job or community, and the number of *sacrifices*—referring to organizational or community valuables that people might lose when leaving the organization.

For a long time, scholars have focused on the positive outcomes associated with job embeddedness. Higher levels of on-the-job and off-the-job embeddedness have been related to increased employee performance (Halbesleben & Wheeler, 2008), greater job satisfaction (Zhang et al., 2021), lower turnover intentions, and less turnover (Jiang et al., 2012). Additionally, high levels of on-the-job embeddedness have been related to more innovation-related behaviors (Coetzer et al., 2018; Ng & Feldman, 2010), and more organizational citizenship behavior (Lee et al., 2014), whereas off-the-job embeddedness has been found to buffer the negative effect of work-life conflict on turnover intentions (Treuren & Fein, 2021). Since on-the-job and off-the-job embeddedness may relate with a different strength and sometimes in a different way to outcomes, researchers recommend studying the effects of on-the-job and off-the-job embeddedness separately (e.g., Kiazad et al., 2015; Porter et al., 2019).

More recently, potential negative effects of job embeddedness have gained attention, mainly because highly embedded employees are less likely to actually leave their organization, even when they desire to leave (Swider et al., 2011) or work in an adverse environment and thus would benefit from leaving (Allen et al., 2016). When people with a desire or need for change stay because they are highly embedded in their job, they tend to experience negative outcomes, possibly because they need personal resources (e.g., time, energy) to deal with the discrepancy between their preferences and actions (Allen et al., 2016)

and/or because they keep having counterfactual thoughts that confront them with what could have been, in that way triggering negative emotions and dissatisfaction (e.g., Verbruggen & van Emmerik, 2020). In line with these arguments, research has found that deeply embedded workers who have a desire or need to leave the organization report, on average, lower career satisfaction (Verbruggen & van Emmerik, 2020), worsened sleep quality (Allen et al., 2016), enhanced emotional exhaustion (Allen et al., 2016; Peltokorpi et al., 2022), lower job performance (Greene et al., 2018), more deviant behavior (Burton, 2015), and more guilt and hostility (Peltokorpi, 2022) compared to their less embedded counterparts.

The aim of this study is to further our understanding of why job embeddedness is likely to keep people with a desire to change from leaving their organization. To do so, we build on the theory of career inaction (Verbruggen & De Vos, 2020).

Theory of Career Inaction

The theory of career inaction (Verbruggen & De Vos, 2020) focuses on the concept of career inaction, which refers to the phenomenon that people do not act sufficiently on a desire for change in their career. Even though many people know someone who seems to be in that situation, the phenomenon of career inaction has received little research attention, possibly because, as Verbruggen and De Vos (2020, p. 3) argue, "in objectively stable career paths, nothing seems to be happening." The authors built their theory on the psychological research on doing nothing (e.g., inaction, status quo, omission; Anderson, 2003; Beike et al., 2009), which refers to a series of studies across different fields that look at internal factors, such as cognitive biases and emotions, that can explain why people oftentimes avoid making decisions or taking actions and, instead, postpone or avoid decisions, "do nothing", or stick with the status quo even when there are stimuli to decide or act (Anderson, 2003; Kool et al., 2003). Verbruggen and De Vos (2020) argue, in line with the psychology of doing nothing, that because career decisions are complex and uncertain, thinking of making a career change

is likely to trigger several internal inertial forces which may create tensions within individuals (Rogiers et al., 2022) and can keep people from acting sufficiently on their desired change.

Verbruggen and De Vos (2020) identified three key internal inertial forces that are relevant to understanding inaction in careers. First, fear, or more broadly: negative emotions triggered by outcome uncertainty of career decisions (Hartley & Phelps, 2012; Hirschi & Koen, 2021), can make the career decision-making process harder (Gati & Kulcsár, 2021; Trevor-Roberts, 2006) and trap people into the status quo—which is the known and easy current situation (Luce et al., 1997). Second, when people think about making a career change, they may weigh the short-term efforts and costs related to leaving (e.g., looking for a new job) heavier than expected potential benefits in the longer term (e.g., gain in job satisfaction, more learning opportunities), even if those costs would in total be lower than the expected benefits, again keeping people stuck in the status quo (Ritov & Baron, 1992). Third, career decisions may be experienced as highly cognitively demanding, since people may want to take into account many features and consider the potential impact on many areas of their lives (Gati & Kulcsár, 2021). Since our brain capacity is limited and we can only process and interpret a certain amount of information (Marois & Ivanoff, 2005), perceived cognitive demands can push people to the limits of their cognitive capacity and, as a consequence, paralyze them (Dhar, 1996).

These inertial forces are internal, interdependent forces that—according to the theory of career inaction—all people are at least to some extent susceptible to (Verbruggen & De Vos, 2020). Nevertheless, the strength of these forces can depend on specific decisional and situational factors (Verbruggen & De Vos, 2020). One of the situational factors identified by Verbruggen and De Vos (2020) is job embeddedness.

Job Embeddedness, Internal Inertial Forces, and the Perceived Likelihood of Leaving

Based on the theory of career inaction (Verbruggen & De Vos, 2020), we expect that on-the-

job and off-the-job embeddedness will lower the perceived likelihood of leaving despite an intention to change employers because job embeddedness strengthens internal inertial forces. Inspired by the psychology of doing nothing on which Verbruggen and De Vos (2020) built their reasoning, we include two other, related internal inertial forces that have been shown to trigger decision avoidance and strengthen the status quo (Keinan & Bereby-Meyer, 2017): perceived riskiness (i.e., how risky the decision to leave the organization feels) and anticipated responsibility (i.e., how responsible they would feel if changing would lead to bad outcomes). We will thus look at five internal forces, i.e., the perceived fear when thinking about leaving, the perceived cost/benefit ratio related to leaving, the estimated cognitive demand, the perceived riskiness, and the anticipated responsibility related to leaving, which together are likely to explain how on-the-job and off-the-job embeddedness affect people's perceived likelihood of leaving.

Both on-the-job and off-the-job embeddedness are likely to enhance these internal inertial forces. First, highly embedded people may experience more fear or anxiety when thinking about leaving compared to lowly embedded people because the organizational and community ties, as well as the benefits they may have to sacrifice when leaving, can feel like a golden cage: a comfortable, known, and safe situation that may stand in stark contrast to the uncertainty of a career change (Rogiers et al., 2022). Second, people who have a high degree of job embeddedness—reflected by for example an attractive wage, many good connections with colleagues, or a pleasant neighbourhood to live in—might perceive more potential losses and difficulties related to leaving compared to others with a low degree of job embeddedness. Because the short-term costs related to leaving are likely to be higher and more mentally present for highly embedded employees compared to lowly embedded people, they are more likely to get paralyzed and avoid acting on their desire to leave. Third, high on-the-job and high off-the-job embeddedness may make the decision to leave more cognitively demanding

because people then have more job- and community-related elements to take into account (Mitchell et al., 2001). As a consequence, they will experience a higher cognitive load that can push them toward the boundary of their cognitive capacity (Simon, 1990) into a state of mental paralysis. Fourth, highly on-the-job and highly off-the-job embedded people can perceive leaving as riskier than lowly embedded employees because leaving implies the possibility of losing most of the elements that enmesh them in their jobs (e.g., the wage built up over years, the good relations established with colleagues or community members). This perceived risk may trigger them to refrain from or postpone actions needed to realise the desired change (Anderson, 2003; Malodia et al., 2022). Finally, when individuals are highly embedded, they may anticipate more responsibility when leaving would turn out badly because the decision to leave has then brought the loss of all the factors that embedded them in their job (Anderson, 2003; Sherman et al., 2021). Put differently, since there is much to lose, people might try to avoid the responsibility for and self-blame over the action (i.e., leaving) that could lead to potential loss. The above internal inertial forces may together explain why highly on-the-job and highly off-the-job embedded employees perceive it to be less likely that they will leave despite their desire to leave compared to lowly embedded employees.

Hypothesis 1: High on-the-job embeddedness lowers the perceived likelihood of leaving via internal inertial forces.

Hypothesis 2: High off-the-job embeddedness lowers the perceived likelihood of leaving via internal inertial forces.

Personal Characteristics as Moderators?

The theory of career inaction assumes that everybody in the same situational condition (here: job embeddedness) is—at least to some extent—susceptible to internal inertial forces, as these are considered general human tendencies (Verbruggen & De Vos, 2020). To test this

assumption, we explore whether the relationship between job embeddedness and internal inertial forces is indeed not dependent upon—so: not moderated by—individual characteristics. Given the context of this study, we opted to test this for individual factors that have been shown to relate to the feasibility of finding another job or realizing a career change. In particular, we examine the moderating role of age, gender, educational degree, having children and proactive personality. First, we selected demographic characteristics that are often related to risk groups in the labour market, referring to people who generally face more challenges to successfully change jobs. Being older, female, and less educated, and having children have all been found to influence one's perceived employability (e.g., Cifre et al., 2018; De Lange et al., 2021; Kmec et al., 2013; Pinto & Ramalheira, 2017; Turnbull et al., 2018). Additionally, these demographics have been linked to perceiving more barriers to labour mobility and making fewer transitions in the labour market (see, e.g., Greer & Kirk, 2022; Sullivan & Al Ariss, 2021; Steindórsdóttir et al., 2023). In this study, we therefore explore whether job embeddedness is similarly related to internal inertial forces for older workers, women, lowly educated workers, and parents as for younger workers, men, highly educated workers and non-parents. Second, we examine the moderating role of proactive personality, which reflects people's general tendency for proactive behaviors (e.g., looking for initiatives, striving for constant progress; Bateman & Crant, 1993). People with highly proactive personalities tend to have more confidence in their ability to take action, identify new opportunities, overcome obstacles and realise a career change (Yu et al., 2021). Therefore, we explore whether or not job embeddedness triggers the same amount of internal inertial forces for highly proactive workers as for less proactive ones.

Research question 1: *Do age, gender, educational degree, having children, and proactive personality moderate the relationship between on-the-embeddedness and internal inertial forces?*

Research question 2: *Do age, gender, educational degree, having children, and proactive personality moderate the relationship between off-the-embeddedness and internal inertial forces?*

Method

To test our hypotheses and research questions, we conducted three vignette studies and one survey study. Vignettes are short, written descriptions of hypothetical situations in which factors of interest to a certain decision-making process are manipulated while other factors are kept constant (Wason et al., 2002). Verbruggen and De Vos (2020) recommended using experimental vignette studies to examine the relevance of situational conditions, such as job embeddedness. Although this method is very established in psychological research on doing nothing (e.g., Hursh et al., 2020; van Putten et al., 2010), it is less known in career research (although not uncommon, see, e.g., Beham et al., 2020; Jakob et al., 2019). This method allows us to 'design' the conditions of interest (here: low and high job embeddedness combined with a desire for change), which may not always be easily found in random samples. Furthermore, compared to traditional surveys, experimental vignette studies better allow conclusions about the direction of causality because scholars can isolate the effect of the manipulated factors (Aguinis & Bradley, 2014; Wason et al., 2002). In addition, although people are asked to assess the reactions of a third person in the scenario, research has shown that such an "imagine-other" perspective triggers similar brain activation patterns as when "imagine-self" perspectives are used (e.g., Decety et al., 2013; von Mohr et al., 2020), suggesting that people are well able to empathize with the characters in a given scenario when asked to do so. Finally, experimental vignettes lower the desirability bias since respondents answer the questions in an indirect way (Martínez-Pastor & Fernández-Lozano, 2022). However, vignette studies have lower external validity than survey studies (Aguinis & Bradley, 2014), which is why we also performed a field study.

We used the three vignettes to test whether internal inertial forces mediate the relationship between on-the-job and off-the-job embeddedness and the perceived likelihood of leaving. In the first and second vignette study, we used a within-subject vignette study, which implies that each participant was asked to assess both the condition of high job embeddedness and the condition of low job embeddedness. This design makes it possible to test the direct influence of the manipulated context while keeping individual characteristics constant (Aguinis & Bradley, 2014; Atzmüller & Steiner, 2010). To check for potential overestimation of the effect size, which is a risk that comes with obvious manipulation in within-subject design vignettes (Aguinis & Bradley, 2014; Atzmüller & Steiner, 2010), we complemented the first two studies with a third, between-subject vignette study. Here, participants were presented with either a scenario of high embeddedness or a scenario of low job embeddedness.

We complemented the vignette studies with one survey study to examine the hypotheses based on people's own experiences. In addition, we used the survey study to explore the moderating role of age, gender, educational level, having children, and having a proactive personality in the relationship between job embeddedness and internal inertial forces. We opted to only test the moderation relationships in the survey study since it felt harder to manipulate the individual factors in the vignettes in a realistic way (e.g., it may be difficult for a male respondent to well assess the situation of a female character in a vignette).

Study 1

Procedure and Participants

A call for participation in our first vignette study was spread among a convenience sample of employees via one professor, one doctoral student, and four master students. We targeted employees rather than students to ensure that participants could relate to the scenario. We aimed for at least 55 respondents per vignette (so 110 employees in total), which is in line

with the sample size of other within-person vignette studies on related topics (e.g., Shoshan & Sonnentag, 2019).

After the (online) informed consent form, participants were randomly assigned to either the vignette on on-the-job embeddedness or the vignette on off-the-job embeddedness. Each vignette contained information about two employees, one experiencing high job embeddedness and one experiencing low job embeddedness. After reading the vignette, respondents were asked to estimate the likelihood of leaving and the perceived inertial forces for the two employees in the vignette. At this time, the vignettes were still visible to the respondents. Afterward, respondents were given a manipulation check, followed by a general questionnaire about their demographics and personality.

A total of 179 employees participated in our survey. Ninety respondents received the on-the-job embeddedness scenario and 89 the off-the-job embeddedness scenario. Respondents were between 21 and 62 years old, with an average of 35.7 years (*SD* = 11.7). The majority of the respondents were female (71.7%), forty percent had children (40.4%), and most had a bachelor's degree or higher (87.4%). We found no difference between the respondents receiving the on-the-job embeddedness vignette and those receiving the off-the-job vignette (*95% confidence level*).

Development of the Vignettes

The scenarios were developed and tested in several steps. First, we developed an initial version of the scenarios by taking into account several exemplary vignettes in the field of the psychology of doing nothing (Gilovich et al., 2003; van Putten et al., 2013). Since we aimed to examine the impact of job embeddedness on the likelihood of leaving among employees who have a desire or intention to change, our scenarios focus on employees who are dissatisfied with their job and intend to leave their organizations. Because job satisfaction has been shown to be highly correlated with the fit dimension of job embeddedness ($\rho > .70$;

Ramaite et al., 2022), we focused on manipulating the links and sacrifices dimensions of job embeddedness. In line with the literature, on-the-job links were operationalized as high versus low organizational tenure and on-the-job sacrifices as high versus low wage and extra-legal benefits (Mitchell et al., 2001; Zhang et al., 2012). For off-the-job embeddedness, links were operationalized via marital status and having children and community sacrifices as high versus low community involvement (Mitchell et al., 2001; Zhang et al., 2012). In each scenario, the highly embedded and the lowly embedded employee had the same age, were both dissatisfied with their job, and experienced a desire to leave.

Second, we conducted a pilot study with 16 respondents—a combination of laymen and academics—to check if our scenarios were relatable, close to people's real-world experiences, and captured on-the-job and off-the-job embeddedness (see, external validity; Aguinis & Bradley, 2014; Kreps & Roblin, 2019). Based on the feedback from this pilot study, we made a few changes in the wording of the scenarios and the items (see Table 1 for the final versions).

Third, we tested whether our manipulations indeed captured on-the-job and off-the-job embeddedness using an additional data collection with 139 employees (72 assessing the on-the-job embeddedness vignette and 67 the off-the-job vignette). After reading the scenario, respondents had to assess the on-the-job embeddedness of the employees in the on-the-job embeddedness vignette (using the 6-item scale of Clinton et al., 2012 adapted to our vignette; e.g. "Overall, Bo/Luca has strong ties with people throughout the organization") or the employees' off-the-job embeddedness in the off-the-job embeddedness vignette (using the 6 item-scale of Clinton et al., 2012, adapted to our vignette; e.g., "Bo/Luca would be very sad to leave the general community where Bo/Luca lives right now"). Results confirmed our manipulations ($M_{\text{high on-the-job}} = 3.43$; $SD_{\text{high on-the-job}} = 0.57$; $M_{\text{low on-the-job}} = 2.65$; $SD_{\text{low on-the-job}} = 0.48$; $p < .001$; $M_{\text{high off-the-job}} = 3.54$; $SD_{\text{high off-the-job}} = 0.61$; $M_{\text{low off-the-job}} = 2.77$; $SD_{\text{low off-the-job}} =$

0.68; $p < .001$).

Finally, since research has shown that the framing of a question (here: asking to assess the perceived likelihood of leaving or the perceived likelihood of staying) sometimes affects the response tendency (Kahneman & Frederick, 2007), we tested the influence of framing with an additional sample of 92 employees. Forty-five respondents were asked to assess the likelihood of staying and 47 had to assess the likelihood of leaving for the same scenario. Both groups did not differ significantly in their estimate of how likely it was that the employee in the scenario would leave (/would not stay in) the organization ($p = .232$). We therefore decided to continue with the word "leaving".

Table 1

Within-person vignettes to manipulate on-the-job and off-the-job embeddedness

On-the-job embeddedness	**Off-the-job embeddedness**
Bo and Luca both work for the same organization but do not know each other. Bo is 40 years old and has been working for 12 years in the organization. Bo has a relatively high wage and several nice extra-legal benefits. Luca is also 40 years old and has been working for 3 years in this organization. The wage and extra-legal benefits of Luca are relatively low. Lately, both Bo and Luca aren't satisfied anymore with their job and wish to leave the organization.	Bo and Luca are both 32 years old and work for the same, large organization but do not know each other. Bo is married and has 2 young children who are 1 and 3 years old. On top, Bo is closely involved with the nearby school of the eldest child. Luca is single at the moment and has no kids. Luca loves reading and watching TV. Both are unhappy with their jobs and think about leaving the organization they work for.

Measures

Internal inertial forces were measured using five items which assessed, respectively, the fear related to leaving ('How frightening do you think the thought of leaving the organization is for Bo/ Luca?'; 1: *not at all frightening* – 5: *very frightening*), the perceived cost/benefits ratio (i.e., take a position on a 5-point scale with two extremes, the closer to one extreme, the more you agree with that statement: '1: Bo/Luca has a lot to win by leaving the organization in the

coming six months' and '5: Bo/Luca has a lot to lose by leaving the organization in the coming six months'), the perceived decision difficulty (i.e., 'How difficult is the decision whether or not to leave the organization for Bo/ Luca; 1: *not at all difficult* – 5: *very difficult*), the perceived riskiness of leaving (i.e., 'How risky do you think it is for Bo/ Luca to leave the organization in the coming next six months; 1: *not risky at all* – 5: *very risky*), and the anticipated responsibility (i.e., to which extent do you agree with the following statement 'If Bo/Luca would change jobs and if the result would be disappointing, Bo/Luca would feel very responsible for it'; 1: *completely not agree* – 5: *completely agree*). The items were in line with measures used in earlier vignette studies to assess perceived risk (Darouei & Pluut, 2018), perceived difficulty (Carroll et al., 2011), perceived fear (Fairchild, 2010) and anticipated responsibility (McGloin & Thomas, 2016).

Perceived likelihood of leaving was measured by asking the respondents to assess how likely they thought it was that the employees in the scenario (Bo and Luca) would leave the organization in the next six months. Respondents indicated the estimated likelihood of leaving on a 5-point Likert scale ranging from 1 (not likely at all) to 5 (very likely). This approach is in line with the measurement of behavioral likelihood in other vignette studies (Darouei & Pluut, 2018; Foster & Diab, 2017).

A manipulation check was included, in particular an attention check (Hauser et al., 2018; Kane et al., 2023). For the on-the-job embeddedness vignette ($N = 90$), we asked: "Who has worked in the organization for the longest time?" and for the off-the-job one ($N = 89$), we asked: "Who is married?". The attention checks were asked after respondents had assessed the estimated likelihood of leaving and the internal inertial forces.

Analysis

After removing participants who failed the attention check (i.e., one respondent for the on-the-job embeddedness vignette and two respondents for the off-the-job embeddedness

vignette)[2], we first performed an explorative factor analysis (EFA) in SPSS to examine whether the five items of the inertial forces had one underlying factor. Results indicated that the five items indeed had one common underlying factor that explained 49,98% of the variance in internal inertial forces in the on-the-job embeddedness scenario and 58.27% in the off-the-job embeddedness scenario. Furthermore, the five items formed a reliable scale of internal inertial forces as they had good Cronbach alpha's exceeding the value of .70 in both the on-the-job embeddedness vignette ($\alpha = .75$) and the off-the-job embeddedness vignette ($\alpha = .81$). Given these results, we included internal inertial forces as one factor in the following analyses.

Next, we did paired sample t-tests to explore mean differences between the high and low job embeddedness conditions in the on-the-job and the off-the-job embeddedness vignette. We report the results for the internal inertial forces factor in the manuscript; the results for each internal inertial force separately can be found in the supplementary materials (also for Study 2 and Study 3).

Afterward, we examined the mediating role of the inertial forces in the relationship between job embeddedness and the likelihood of leaving. In line with recommendations to use multilevel testing when vignettes are nested, which is the case for within-person vignettes (Baguley et al., 2022), we performed multilevel mediation modeling using the MLmed macro (Rockwood, 2017). In particular, multilevel analysis takes into account that the observations ($N = 278$) are nested in the respondents ($N = 139$) and, thus, that observations are not independent.

Results

We first discuss the results for the on-the-job embeddedness scenario. As hypothesized, participants estimated that the highly embedded employee had a significantly lower likelihood

[2] Results were similar when we did not remove these participants.

of leaving (M = 2.33; SD = .76) than the lowly embedded employee (M = 3.93; SD = .51; Cohen's d = 2.03; $t(84) = 18.68$; $p < .001$). In addition, participants believed that the highly embedded employee experienced more internal inertial forces than the lowly embedded employee (M_L = 2.78; M_H = 3.83; SD = .63; Cohen's d = -1.64; $t(85) = -15.12$; $p < .001$). We then tested whether the relationship between on-the-job embeddedness and the likelihood of leaving was mediated by the internal inertial forces. We found partial support for hypothesis 1, as the relationship between on-the-job embeddedness and the perceived likelihood of leaving was partially mediated by the internal inertial forces (indirect effect = -.44; SE = .13; $z(178) = 3.38$; $p < .001$). An additional direct effect of on-the-job embeddedness on the likelihood of leaving was found (direct effect = -1.13; SE = .15; $t(178) = 7.50$; $p < .001$).

We found similar results for the off-the-job embeddedness scenario, although the effect sizes were smaller. Participants again believed that the highly embedded employee had a significantly lower likelihood of leaving (M = 2.45; SD = .78) than the lowly embedded employee (M = 3.93; SD = .86; Cohen's d = -1.38; $t(84) = -12.65$; $p < .001$). Participants also believed that the highly embedded employee experienced more internal inertial forces (M = 3.55; SD = .62) than the lowly embedded employee (M = 2.61; SD = .57; Cohen's d = -1.16; $t(84) = -10.62$; $p < .001$). The results of the MLmed macro analysis revealed a negative direct effect of off-the-job embeddedness on the perceived likelihood of leaving (direct effect = -.79; SE = .17; $t(172) = 4.66$; $p < .001$), and a partial mediation of this relationship by the inertial forces (indirect effect = -.68; SE = .15; $z(172) = 4.70$; $p < .001$). This partially supports hypothesis 2.

Study 2

Procedure and Participants

We conducted a second within-person vignette study with a more holistic description of job embeddedness to test whether our assumptions would be confirmed with a different operationalization. Data were collected via a panel service of Bilendi with 148 Belgian employees. The on-the-job and off-the-job vignette were assessed by 74 respondents each. Similar to Study 1, respondents got to read a vignette in which we manipulated the level of job embeddedness, and after that, they responded to questions about the perceived likelihood of leaving and the estimated experience of internal inertial forces for the fictitious employees, Bo and Luca. During this, the scenario remained visible to them.

In total, about half of the respondents were female (50.2%) and had a bachelor's degree or higher (50.7%). The average age was 43.7 years (*SD* = 11.03). Eighty-four percent of the respondents lived together with a partner and 39.2% had children living at home.

Development of the Vignettes

Similar to Study 1, we based our on-the-job and off-the-job scenarios on the definition of job embeddedness (Mitchell et al., 2001) and focused on manipulating the dimensions of links and sacrifices. We also kept the within-person design to compare both operationalizations accurately. In contrast to Study 1, we now described links and sacrifices in a more general way (see Table 2).

Table 2

Within-person vignettes to manipulate on-the-job and off-the-job embeddedness in Study 2.

On-the-job embeddedness	Off-the-job embeddedness
Bo and Luca are both 40 years old and work for the same organization but they don't really know each other. Bo has a lot of good relationships with others in the organization. If Bo would leave the organization, it would bring along a lot of sacrifices (e.g., wage, extra-legal benefits). Luca has few good relationships with others in the organization. If Luca would leave the organization, it would bring along few sacrifices (e.g., wage, extra-legal benefits). Bo and Luca are both unhappy in their job and are thinking about leaving the organization.	Bo and Luca are both 32 years old and work for the same, large organization but they don't really know each other. Both live in a nearby neighbourhood. Bo has many good relationships with the people from this neighbourhood. If Bo would have to leave this neighbourhood, it would bring along a lot of personal and/ or family-related sacrifices. Luca has few good relationships with the people from this neighbourhood. If Luca would have this neighbourhood, it would bring along few personal and/ or family-related sacrifices. Bo and Luca are both unhappy in their job and are thinking about leaving the organization.

Measures and Analysis

We used the same measures as in Study 1. First of all, we assessed the fit of the scale for the inertial forces via confirmatory factor analysis (CFA) in R using the Lavaan package (Rosseel, 2012). Further on, we performed the same analyses as in Study 1 because we had the same within-person data structure and identical aims. The analyses included paired sample t-tests for the comparison of means between the high and low conditions, and multilevel mediation analysis via the MLmed macro (Rockwood, 2017).

Results

The CFA analysis showed that our five-item scale for the inertial forces had a good fit to the data ($X^2[5] = 12.33$; CFI = 0.98; TLI =0.96; RMSEA = 0.07; SMSR = 0.03). Moreover, the scale for inertial forces was also found to be reliable in both the on-the-job ($\alpha = .79$) and the off-the-job embeddedness vignette ($\alpha = .75$). Hence, we will include "inertial forces" as one factor in the further analyses.

For the on-the-job embeddedness vignette, results of the paired sample t-tests showed that respondents estimated that it was less likely to leave for the highly embedded employee (M = 2.66; SD = .90) than for the lowly embedded employee (M = 3.95; SD = .79; Cohen's d = 1.02; $t(73) = 8.80$; $p < .001$). They also believed that the highly embedded employee (M = 3.55; SD = .65) experienced a higher level of inertial forces than the lowly embedded one (M = 2.59; SD = .60; Cohen's d = 1.00; $t(73) = 8.60$; $p < .001$). Results from the MLMed macro showed partial support our mediation assumption: we found a partial mediation of the internal inertial forces in the relationship between the holistic manipulation of on-the-job embeddedness and the perceived likelihood of leaving with a significant indirect effect (*effect* = -0.70; SE = 0.15, Z = -4.82; $p < .001$) and direct effect (*estimate* = -.59; SE = 0.17; $t(72) = -3.39$; $p = .001$).

For the off-the-job embeddedness vignette, respondents also indicated that they expected the highly embedded employee (M = 2.66; SD = .83) to be less likely to leave the organization in the next six months compared to the lowly embedded employee (M = 3.86; SD = .90; Cohen's d = 1.01; $t(73) = 8.67$; $p < .001$). They also estimated that the highly embedded employee (M = 3.33; SD = .57) experienced more internal inertial forces than the lowly embedded one (M = 2.61; SD = .63; Cohen's d = .83; $t(73) = 7.12$; $p < .001$). The results of the MLmed macro showed a partial mediation by the internal inertial forces with an indirect effect (*estimate* = -.53; SE = .10; $t(72) = -4.00$; $p < .001$) and direct effect of off-the-job embeddedness (*effect* = -.67; SE = .13; Z = -5.29 ; $p < .001$) on the perceived likelihood of leaving.

Study 3

To complement the within-subject designs of Study 1 and Study 2, we tested our hypotheses in a third vignette study using a between-subject design to check the robustness of our findings.

Procedure and Participants

Data were collected via the panel services of Qualtrics, where each respondent received 4.76 euros for their participation in the online survey. Power analyses based on the effect sizes in Study 1 suggested a needed sample size of at least 250 employees per vignette (we used G*Power 3 by Faul et al., 2007). After giving consent, participants received one vignette on on-the-job embeddedness and one vignette on off-the-job embeddedness. The order of the vignettes was randomly chosen by the software. Each vignette contained information about one employee, experiencing either high or low job embeddedness (i.e., a between-person design). Content-wise, we used the same vignettes as in Study 1. Yet, because of the between-person design, respondents were only presented with one (high or low) condition for the on-the-job embeddedness vignette and one (high or low) condition for the off-the-job embeddedness vignette. So, the respondents could not compare the different conditions (Aguinis & Bradley, 2014). After reading the vignette, respondents were asked to estimate the likelihood of leaving and the perceived internal inertial forces for the employee in the vignette. During this time, the vignette remained visible to them. Afterward, respondents were given a manipulation check. Finally, respondents received a general questionnaire with questions about their personalities and demographics.

In total, 351 employees participated in this study. They were between 18 and 63 years old, with an average age of 34.3 years (*SD* = 10.7). The majority of respondents (63.3%) were male, 58.4% of the respondents had children, and most respondents (63.7%) obtained at least a bachelor's degree.

Measures

We used the same measures as in Study 1 and added an instructional manipulation check (IMC) or ‘screener’ (e.g., Oppenheimer et al., 2009) to see whether respondents attentively read the survey questions (Mancosu et al., 2019). In both IMCs, we instructed respondents to

select the fourth answer option, despite it being an incorrect option. For the on-the-job embeddedness vignette (N = 351), we asked "How old is Luca?" (20, 30, 40, or 50 years old). For the off-the-job vignette (N = 344), we asked "How many children does Kim have?" (none, one, two, or three). Respectively 273 and 267 respondents passed the IMC, the others were not taken into account for further analyses.

Analysis

After removing the participants who failed the attentiveness check (i.e., N = 78 for the on-the-job embeddedness vignette and N = 77 for the off-the-job embeddedness vignette), we first checked the fit of our scale for the inertial forces so that we can include "inertial forces" as one factor in the further analyses. Next, we ran independent sample t-tests to explore potential mean differences between the low and high conditions for both the on- and off-the-job embeddedness vignette. Finally, we tested the mediation effect of the inertial forces in the relationship between job embeddedness and the perceived likelihood of leaving via Hayes' Process macro (Hayes, 2022).

Results

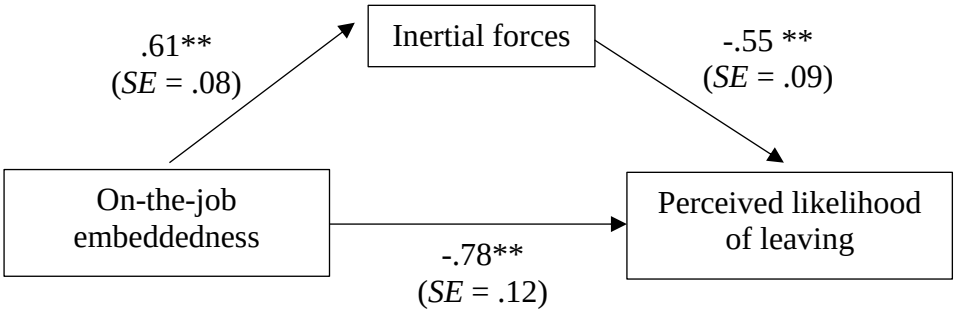
First, results from the CFA show a good fit for the internal inertial forces scale (X^2[5] = 18.59; CFI = 0.98; TLI =0.96; RMSEA = 0.07; SMSR = 0.03). We also found good Cronbach alpha values both in the on-the-job embeddedness vignette (α= .74) and the off-the-job embeddedness vignette (α = .76).

Next, we discuss the results of further analyses. We start with the results for the on-the-job embeddedness scenario. In line with our expectations, the independent sample t-tests showed that the expected likelihood of leaving was significantly lower in the high-embeddedness scenario (M_H = 2.91; SD_H = 1.06) than in the low-embeddedness scenario (M_L = 3.95; SD_L = 0.91; Cohen's d = 1.06; t(271) = 8.67; p < .001). Further, also the perceived internal inertial forces were found to be significantly higher in the high embeddedness

scenario(M_H = 3.50; SD_H = .65) than in the low embeddedness scenario (M_L = 2.93; SD_L = .67; Cohen's d = -.86; $t(271) = 8.67$; $p < .001$) embeddedness scenario. Results of the mediation analyses (see Figure 1) showed support for a partial mediation of the inertial forces in the relationship between on-the-job embeddedness and the likelihood of leaving. This provides partial support for hypothesis 1.

Figure 1

Unstandardized regression coefficients and effects for the on-the-job embeddedness vignette of Study 3 (N = 262).

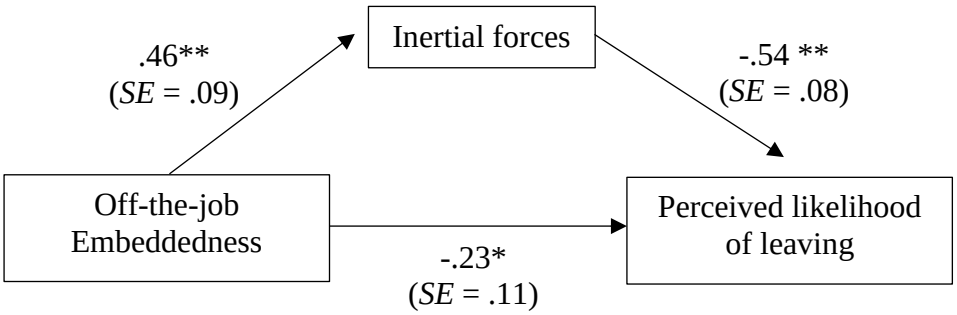


Note.
Total effect= -1.11** (*SE = .12)*
Direct effect = -.78** *(SE* = .12)
Indirect effect = -.34** (BootSE = .08; BootCI [-.496;-.197])
**$p < .001$; *$p < .05$

Concerning off-the-job embeddedness, independent t-tests showed that the estimated likelihood of leaving was significantly lower for the highly embedded employee (M_H = 3.38; SD_H = 1.02) than for the lowly embedded employee (M_L = 3.88; SD_L = .92; Cohen's d = .523; $t(265) = 4.22$; $p < .001$). Further, also the overall experienced inertial forces were estimated to be higher for the highly embedded employee (M_H = 3.37; SD_H = .78) as compared to the lowly embedded employee (M_L = 2.94; SD_L = .67; Cohen's d = -.60; $t(265) = 8.67$; $p < .001$). Next, the results of the mediation analyses (see Figure 2) revealed a partial mediation of the internal inertial forces in the relationship between off-the-job embeddedness and the likelihood of leaving. This provides partial support for hypothesis 2.

Figure 2

Unstandardized regression coefficients and effects for the off-the-job embeddedness vignette of Study 3 (N = 262).



Note.
Total effect= -.48** (*SE* = .12*)*
Direct effect = -.23* *(SE* = .11)
Indirect effect = -.24** (BootSE = .06; BootCI [-.381;-.124])
***p* < .001; **p* < .05

Study 4

Procedure and Participants

The final study aims to test the mediating role of internal inertial forces in the relationship between job embeddedness and the perceived likelihood of leaving based on employees' own experiences. In addition, we use this dataset to explore whether age, gender, educational level, having children and proactive personality moderate the relationship between job embeddedness and the internal inertial forces.

Data were collected using an online survey with 426 Belgian employees using the Bilendi panel services. About half of the respondents were male (49.8%) and had a bachelor's degree or higher (50.5%). The average age was 43.4 years (*SD* = 11.4). Eighty percent of the respondents lived together with a partner and 39.7% had children living at home.

In order to understand how respondents felt about their career, we asked them how satisfied they currently were with their career (single item, on a scale from 1 to 10). On average, these respondents felt rather satisfied with their career (*M* = 7.43; *SD* = 1.50), with

about ten percent of the respondents giving a score of five or less. So, it is important to keep in mind that the respondents of this study do not necessarily feel dissatisfied with their job or have a desire to change jobs—in contrast to the three vignette studies, where we could manipulate this. This study thus forms a broader exploration of the estimated effect of job embeddedness on internal inertial forces and the moderating role of age, gender, educational level, having children, and proactive personality.

Measures

Inertial forces were assessed with the same 5-item scale as in Studies 1, 2, and 3 (e.g., "How difficult is it for you to decide whether or not to leave your organization?"). Cronbach alpha was .71.

On-the-job and off-the-job embeddedness were measured using the 6-item scales of Clinton and colleagues (2012). Both the scale of on-the-job embeddedness (α = .81) and the scale of off-the-job embeddedness (α = .81) were found to be reliable.

Perceived likelihood of leaving was assessed by asking the respondents how likely it was that they would leave their organization in the coming six months.

Proactive personality was measured using the 6-item scale of Claes et al. (2005). An example item is: "I am always looking for better ways to do things". Respondents had to indicate to which degree each item described them on a five-point Likert scale (1: *doesn't describe me at all* – 5: *describes me extremely well*). Cronbach alpha was .83.

Demographics were measured directly by asking the respondents their age, their educational degree (0 = no bachelor's degree; 1 = bachelor's degree or higher), gender (0 = male, 1 = female), and whether they have children (0 = no children, 1 = children).

Attention check. We checked respondents' attention via an instructional screener. Respondents had to select the option "describes me well " as a random item among the others in the survey.

Analysis

First, we inspected the attention check and removed respondents who failed this check. Second, we performed another CFA to assess the measurement model and to test whether the internal inertial forces assess a different construct than on-the-job and off-the-job embeddedness. Next, we ran correlational analyses to get a general idea of how variables behaved in relation to each other. Finally, we tested the mediation effect of the inertial forces and the moderation effect of age, educational level, gender, having children, and proactive personality on the first mediation path via Hayes' Process macro, model 7 for moderated mediation (Hayes, 2022). In particular, this model examined whether personal factors affected the intensity with which job embeddedness was related to internal inertial forces and whether that then further was linked with the perceived likelihood of leaving.

Results

First, results from the attention check showed that 38 of the 426 respondents did not pass this check. Hence, these respondents were not taken into account for further analyses. Second, the CFA[3] showed that a model with four factors (i.e., inertial forces, on-the-job embeddedness, off-the-job embeddedness, and proactive personality) yielded a moderate to good fit with the data (see Table 3 for the detailed results). All items loaded decently on the intended factors (loadings > .45; $p < .001$). In addition, the four factor-model yielded a significantly better fit than a model in which the inertial forces loaded on the on-the-job embeddedness factor, than a model in which the inertial forces loaded on the off-the-job embeddedness factor, and than a model in which the inertial forces loaded on the proactive personality. These results support that the inertial forces are distinct from the job embeddedness construct.

[3] We allowed for error correlations between the fit, links, and sacrifice items (both for on-the-job and off-the-job embeddedness) in these models. Allowing error correlations is considered acceptable when there is a good reason for these error correlations and as long as the error correlations are within factors, which was the case in these data (Kline, 2005).

Table 3

Confirmatory factor analyses Study 4 (N=388).

	df	X^2	CFI	TLI	RMSEA	SRMR	$\Delta X[3]^2$	p-value
4-factor model	216	506.24	0.92	0.90	0.06	0.06		
Inertial forces load on on-the-job embeddedness	219	765.37	0.84	0.82	0.08	0.09	259.13	< .001
Inertial forces load on off-the-job embeddedness	219	951.20	0.79	0.75	0.09	0.10	444.96	< .001
Inertial forces load on proactive personality	219	956.30	0.78	0.75	0.09	0.10	450.06	< .001

Note. CFI = Comparative Fit Index, TLI = Tucker Lewis Index, RMSEA = Root Mean Square Error of Approximation, SRMR = Standardized Root Mean Square Residual.

Next, results from our correlation analyses can be found in Table 4. We found a positive correlation between on-the-job embeddedness and inertial forces on the one hand, and the positive link between inertial forces and the perceived likelihood of leaving on the other hand, in line with hypothesis 1. However, we did not find a significant correlation between off-the-job embeddedness and the inertial forces (r = .08, p = .12), in contrast to hypothesis 2.

Table 4

Descriptives and correlations for all variables of Study 4 (N = 388).

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. On-the-job embeddedness	3.52	0.67								
2. Off-the-job embeddedness	3.67	0.71	.29**							
3. Inertial forces	3.65	0.75	.33**	.08						
4. Perceived likelihood of leaving	1.65	1.00	-.39**	-.10*	-.36**					
5. Age	43.40	11.31	-.00	.01	-.03	-.13**				
6. Gender [a]	1.50	0.50	.02	.01	.12*	.03	-.13**			
7. Education [b]	0.54	0.50	.05	-.00	-.05	.03	-.19**	-.03		
8. Children [c]	0.39	0.49	-.05	.03	-.04	.14**	-.05	-.01	-.04	
9. Proactive personality	3.36	0.61	.29**	.26**	-.11*	.04	-.02	-.10*	-.02	.02

Note. **p < .001, *p < .05. All correlations are Pearson Correlations (2-tailed).

[a] 0 = male, 1 = female

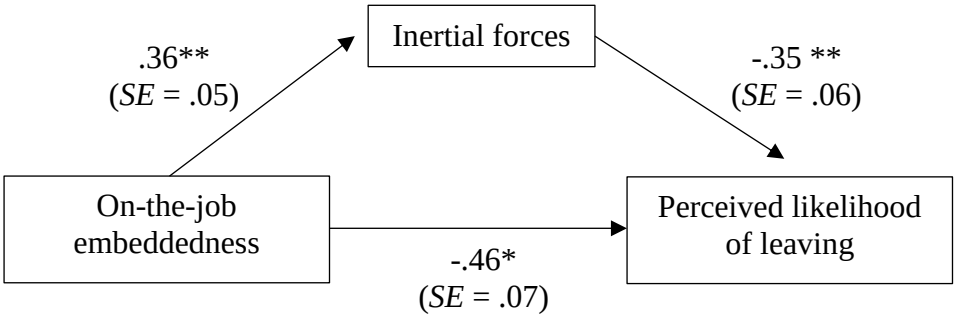
[b] 0 = no bachelor's degree, 1 = bachelor's degree or higher

[c] 0 = no children, 1 = one or more children

Finally, we look at the results of the mediation-moderation analyses. Results for on-the-job embeddedness (see Figure 3) showed a partial mediation[4] of the inertial forces in the relationship between on-the-job embeddedness and the perceived likelihood of leaving, and hence, provides partial support for hypothesis 1. Yet, the results indicated that the explored personal factors (i.e., age, educational level, gender, children and proactive personality) did not moderate the mediation path between on-the-job embeddedness and the inertial forces. In other words, we did not find a moderated mediation with moderation on the first path for any of the personal factors we included. We only found a significant partial mediation by the inertial forces for the relationship between on-the-job embeddedness and the perceived likelihood of leaving (see Table 4).

Figure 3

Unstandardized regression coefficients and effects for on-the-job embeddedness, Study 4 (N = 388).



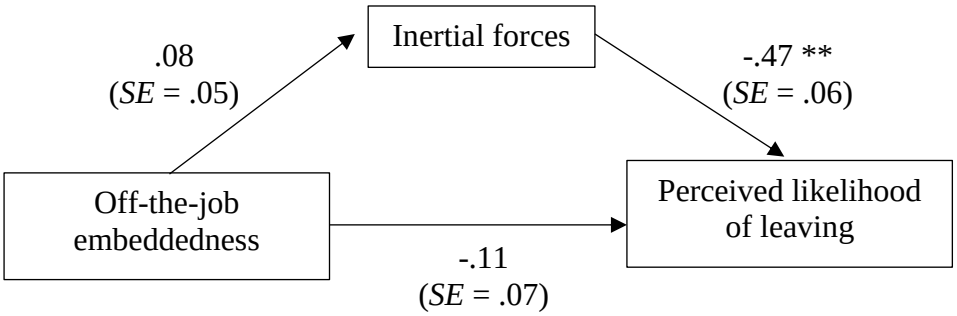
Note.
Total effect= -.59** (*SE* = .07*)*
Direct effect = -.46* *(SE* = 07)
Indirect effect = -.13 (*BootSE* = .03; *BootCI* [-.200;-.064])
***p* < .001; **p* < .05

[4] Since we did not find significant effects for the moderated mediation model (model 7 in the process macro), we calculated the effects for the pure mediation model (model 4 in the process macro). These are the effects presented in Figures 3 and 4.

For off-the-job embeddedness, results of the mediation-moderation analyses (see Figure 4) showed no support for a mediation effect of the inertial forces in the relationship between off-the-job embeddedness and the perceived likelihood of leaving. In addition, none of the personal factors was found to moderate the relationship between off-the-job embeddedness and internal inertial forces (see Table 5).

Figure 4

Unstandardized regression coefficients and effects for off-the-job embeddedness, Study 4 (N = 388).



Note.
Total effect= -.14* (*SE* = .07*)*
Direct effect = -.11 *(SE* = .07)
Indirect effect = -. 04 (*BootSE* = .03; *BootCI* [-.092; .010])
***p* < .001; **p* < .05

Table 5

Moderation tests for Study 4 (N = 388).

	Variable	Estimate	*SE*	*p*-value	Index moderated mediation	*Boot SE*	*Boot LLCI*	*Boot ULCI*
Age	On-the-job	0.00	.01	.746	-.00	.00	-.004	.004
Age	Off-the-job	0.00	.01	.736	-.00	.00	-.005	.004
Gender	On-the-job	-0.08	.11	.459	.03	.04	-.055	.101
Gender	Off-the-job	-0.02	.11	.833	.01	.05	-.097	.112
Education	On-the-job	0.16	.11	.149	-.05	.04	-.132	.029
Education	Off-the-job	0.11	.11	.329	-.05	.05	-.149	.056
Children	On-the-job	0.11	.11	.271	-.04	.05	-.136	.041
Children	Off-the-job	-0.10	.11	.343	.05	.05	-.055	.159
Proactive personality	On-the-job	0.09	.07	.198	-.03	.03	-.086	.012
Proactive personality	Off-the-job	0.08	.08	.311	-.04	.04	-.122	.038

Note. BootLLCI = bootstrapped lower level confidence interval, BootULCI = Bootstrapped upper level confidence interval. The level of confidence for all confidence intervals is 95% and N bootstrap = 5000.

General Discussion

This study aimed to explore internal processes that explain why people who are embedded in their organization, end up staying with their employer, even when they have a desire or intention to leave. In particular, building on the theory of career inaction (Verbruggen & De Vos, 2020), we performed three vignette studies and one survey study to examine whether the relationship between on-the-job and off-the-job embeddedness and the perceived likelihood of leaving is mediated by internal inertial forces (i.e., fear, cost-benefit ratio, perceived difficulty, perceived riskiness, and anticipated responsibility related to leaving) and moderated by personal characteristics (i.e., age, educational level, gender, children and proactive personality).

First, in all three vignette studies, we found that the relationship between on-the-job and off-the-job embeddedness and the likelihood of leaving was partially mediated by internal

inertial forces. These findings strengthen the assumption that situational factors (here: job embeddedness) might influence people's behaviors (here: their perceived likelihood of leaving) via internal cognitive forces. This assumption is interesting since although contextual factors may not be easily changed, it is often feasible to alter the cognitive processes triggered by contextual factors and, in that way, people's behavioral reactions to their context (e.g., via cognitive behavioral therapy see Dike et al., 2021; Law et al., 2014). In particular, our studies provide empirical support for the rationale of the theory of career inaction (Verbruggen & De Vos, 2020), namely that internal inertial forces (partially) explain why highly embedded people with a desire to leave are likely to stay with their employer. In addition to the three inertial forces identified in the theory of career inaction (i.e., fear, cost/benefit ratio, and decision difficulty), we also considered the perceived risks related to leaving and anticipated responsibility as part of the internal inertial forces. Factor analyses showed that all five internal inertial forces were correlated and belonged to a single factor, which indicated that they are interrelated forces keeping people from acting sufficiently on a desired change. The fact that we only found partial mediation shows that either other internal inertial forces may play a role, or that job embeddedness partly affects employees in other ways. Future research should further explore this issue. Other possible inertial forces could be anticipated regret (Zeelenberg & Pieters, 2007), or (an overload of) emotions caused by the decision to make (e.g., Lerner et al., 2015) related to changes in one's career. Aside from the decision difficulty we studied, scholars could also examine the role of decision fatigue referring to the emotional and cognitive strain triggered by an overload of choices to make (Baumeister et al., 1998). All of these might also explain why embedded people would prefer sticking with the status-quo or avoiding the decision altogether despite a desire for change in their careers.

Second, in line with the proposition of Verbruggen & De Vos (2020) that internal inertial forces might at least to some extent apply to everyone thinking of leaving their

organization, or desiring a change in their careers, we found no moderation effects on the first mediation path of the personal characteristics that we included (i.e., age, educational degree, gender, having children and proactive personality) in Study 4. However, for the results of Study 4, it is important to keep in mind that the respondents of this study were not necessarily dissatisfied with their job or did not necessarily have a desire to change jobs. Hence, we can only confirm that job embeddedness, whether or not people are dissatisfied and want to leave their job, triggers internal inertial forces and that this mediation was independent of respondents' age, gender, educational level, having children, or proactive personality. Overall, these results suggest that the intensity with which embedded employees experience internal inertial forces does not depend much on individual factors such as age, gender, education, having children, or a proactive personality. So, the internal inertial forces indeed seem to be mechanisms that everyone is at least to some extent susceptible to when confronted with the same context.

Implications for the Literature

This paper is one of the first empirical tests of the theory of career inaction (Verbruggen & De Vos, 2020). Our results suggest that embeddedness can enhance the risk that employees get paralyzed by internal inertial forces (e.g., fear, perceived riskiness, etc.) when thinking about leaving their organizations, lowering the perceived likelihood of them leaving. These results underscore that career decisions are complex and that their implementation and enactment process is far from linear (Akkermans & Kubasch, 2017; Gati & Kulcsár, 2021). Our results are also in line with the conclusion of Rothausen et al.'s (2017) qualitative study that the turnover process can feel like a messy cyclical process, consisting of many emotional, cognitive, and behavioral elements. In this study, we focused on how job embeddedness can trigger internal inertial forces, which may then lead to a lower perceived likelihood of leaving. We thus looked at how job embeddedness—as a contextual factor that can make people stay

and not change jobs—affected perceived job change behaviors. This is in line with how Verbruggen and De Vos (2020) theorized the functioning of internal inertial forces in the context of career inaction. However, we did not explicitly look at the direct effect of other contextual barriers to job change like experienced discrimination, perception of limited opportunities to change jobs, etc. We do recognize that numerous other contextual barriers exist, and that career decision-making (and enactment, implementation) might thus be more complex than we described in this study. A relevant path for future research is to explore the link between contextual barriers (e.g., labor market conditions, stereotypes, or perceived employability) and the internal inertial forces that we proposed as an explanatory mechanism to career outcomes like the perceived likelihood of leaving.

Second, and relatedly, we contribute to the career literature by integrating insights from the behavioral decision-making literature and earlier work on the "psychology of doing nothing." In contrast to the (still) influential rational models of career decision-making, career scholars have started to shift their focus to other-than-rational models that account for the role of unconscious processes and emotions (Lent & Brown, 2020; Murtagh et al., 2011; Verbruggen & De Vos, 2020). This new stream of models partly draws on insights from the behavioral decision-making literature, which aims to unravel the effect of emotions and cognitive shortcuts that may trigger 'biased' judgment and choice (Payne et al., 1998). We also gained insight from the studies on the psychology of doing nothing (e.g., Anderson et al., 2003; Kool et al., 2010) on how cognitive biases and emotional responses can make people stay with the status quo, not take action even when there are stimuli to do so. Combined, these insights can help to better understand the dynamics in career decision-making. Internal inertial forces (e.g., fear triggered by the thought of leaving, the disproportional weight of costs versus benefits of leaving) could be considered irrational as they prevent people from acting sufficiently on a desired change in their careers. Future work on internal factors that can

withhold people from realizing a desired change in their career could benefit from further exploration of the behavioral decision-making literature and works on the psychology of doing nothing (e.g., to identify other internal inertial forces or identify potential relationships between such forces.)

Third, in line with recommendations in research on job embeddedness (e.g., Porter et al., 2019), we examined the influence of both on-the-job and off-the-job embeddedness on the perceived likelihood of leaving. Overall, we found similar effects for both types of job embeddedness, although in general, the strength of the effects seemed to be higher for on-the-job embeddedness than for off-the-job embeddedness (except for Study 1, where we saw stronger effects for off-the-job embeddedness). In Study 4, we also could not find a mediation effect of the internal inertial forces in the relationship between off-the-job embeddedness and the likelihood of leaving. This suggests that although both elements within the organization and elements within one's community can trigger internal inertial forces, the organization-specific forces seem to be stronger. This could be so because these forces are more surely affected by leaving the organization than elements in one's community.

Fourth, in Study 1 to Study 3, we looked at internal inertial forces among fictitious employees with a desire to leave their organization to better understand the case of dissatisfied or 'reluctant' stayers (Hom et al., 2012; Li et al., 2016). Despite a bulk of studies providing support for the effect of the classic antecedents like turnover intention, job dissatisfaction, and job embeddedness, other studies emphasize the variation in turnover behavior that is left unexplained beyond these classic antecedents (Jiang et al., 2012). Our results indicate that the effect of job embeddedness on the perceived likelihood of leaving for people with a desire to leave is partly explained by the experience of internal inertial forces, which thus seem to be more proximal to the likelihood of turnover than the desire to leave. This suggests that, still, a lot can lie between the desire to leave and the effective act of

leaving. We hereby further the understanding of internal processes during the turnover/ retention process. As Rothausen and colleagues (2017) argued, insight into these internal processes is a first step in helping managers address potentially unfavorable outcomes of unrealized turnover thoughts. In addition, understanding these internal processes forms an important requisite for people to get "unstuck" and is thus crucial knowledge to help individuals with a need or desire to change (Hall-Renn, 2007).

Practical implications

Our results are insightful for career counsellors who try to help individuals in career inaction. Many counselling interventions have been designed to work at the conscious level (Krieshok, 1998). Yet, recently, career theorists have called for more inclusion of (cognitive) barriers and the influence of heuristics that may play at the more unconscious level in the process of career decision-making (e.g. Lent & Brown, 2020). Knowing that internal inertial forces lower the perceived likelihood of leaving, increased awareness of those forces at the more conscious level, as well as specific interventions to tackle each of them seem of great value for making sustainable career choices. Inspired by approaches from clinical psychology like cognitive behavioral therapy, career counselling scholars can explore interventions that can modify internal cognitive forces, and ultimately alter behavioral outcomes (Dike et al., 2021; Law et al., 2014). More specifically, cognitive behavior therapy tries to change behavior by working on underlying cognitive processes (Hofmann, 2014). In the case of anxiety, for example, interventions can focus on reshaping the attitudes and thoughts that trigger the anxiety via gradual exposure and habituation (e.g., Clark & Beck, 2011; McCall et al., 2019). In the case of career inaction, specific career counselling interventions on internal inertial forces might help people to overcome the paralysis caused by those internal forces. New or updated tools that allow career counselling clients to reflect more deeply upon these internal inertial forces

and other internal cognitive factors like anticipated regret could help to make more conscious and sustainable career decisions.

Limitations and Suggestions for Future Research

This study has some limitations, which also provide pathways for future research. First, we used two different designs in the studies: our first three studies were experimental vignettes and our fourth study was a cross-sectional online survey. Vignettes are by definition hypothetical (Atzmüller & Steiner, 2010). Overall, vignettes have good internal validity and are therefore often used to explore situations of complex decision-making as well as their underlying cognitive processes (Aguinis & Bradley, 2014; Sheringham et al., 2021). Although the results of our survey study based on people's own experiences corroborated the findings of the vignettes, we can still not with full certainty state that in real life, deeply embedded people with a desire to leave perceive it to be less likely that they will leave their job over time. Moreover, our survey study was cross-sectional and has, by consequence, a lower internal validity—which implies that the results of Study 4 should be interpreted with caution. Although we built on the proposed relationships by Verbruggen and De Vos (2020), it could be that people's perceived likelihood of leaving also affects their experience of inertial forces. It could, for example, be that when people find it to be less likely that they would leave their jobs, they also tend to perceive (even) more internal inertial forces. Yet, we believe that the combined results of our four studies provide a good starting base for future studies on, for example, the phenomenon of career inaction, or the effect of internal inertial forces on other career outcomes with longitudinal designs. Longitudinal studies could take into account the complex links between inertial forces and the (perceived) likelihood of leaving (e.g., by controlling for respondent's perceived likelihood of leaving in the different survey waves). Careers are by definition dynamic as they unfold over time: they are shaped by past, current, and future experiences, goals, and expectations (Akkermans et al., 2021; Arthur et al., 1989).

Implementing longer-term longitudinal designs would not only allow us to examine current forces behind this perceived career inertia (i.e., perceiving the low likelihood of leaving one's job despite wanting to) but also to identify actual (in-)actions and their outcomes over time. By doing so, career scholars could further unravel the complex process of career decision-making—especially for highly embedded people. Second, this study was conducted in Belgium. Belgians are among the "top commuters" in Europe as they commute relatively long (20% commute more than two hours per day) and far (25% commute more than 40 km per day) according to a recent study (SD Worx, 2022). In the context of our study, this general high mobility level might mean that changing organizations does not necessarily imply moving. In other words, it might explain why we found overall lower effects of off-the-job embeddedness on the likelihood of leaving. Studying our relationships in other countries could yield different results, with potentially stronger negative effects of off-the-job embeddedness on the likelihood of leaving among people with a desire for change in their careers. Therefore, we believe that it would be interesting for future research to look at the difference in (direct and indirect) effects sizes in the context of on-the-job embeddedness versus off-the-job embeddedness. Finally, scholars may also want to consider the potential interaction of on-the-job embeddedness and off-the-job embeddedness. Although, we exploratorily checked this interaction in our fourth study and did not find support for it, others have found that off-the-job embeddedness can form a significant moderator when looking at the effect of on-the-job embeddedness on involuntary turnover (Burrows et al., 2022).

Third, for Study 4, we used a sample of random Belgian workers who felt rather satisfied with their career and did potentially not have a clear or active desire for change in their career. Accordingly, the results from this study are not fully comparable with the results from our vignettes, since the character in the vignette was described as dissatisfied with the current job and having a desire to change jobs. In a general sample of workers, it is hard to

find people who are clearly dissatisfied and want to change jobs, especially in Belgium where workers typically stay with one employer for a relatively long time (e.g., tenures of about 11 years; www.statista.com; www.steunpuntwerk.be). Future research in more targeted samples of dissatisfied workers or workers with a change desire might form an interesting avenue for further exploration of the functioning of internal inertial forces.

Finally, for future longitudinal research, it could be interesting to study how the various internal inertial forces interact with each other over time. Earlier research already dug into how several cognitive processes can influence each other over time. A study by Schildberg-Hörisch (2018), for instance, found that stress, fear, and cognitive load can temporarily lead to elevated levels of perceived risk. This hints at the fact that people might not experience all these inertial forces at the same time, or with the same intensity. Causal relationships may exist between them: one force could be triggering, strengthening, or perhaps counterbalancing another force. Disentangling the relations between the inertial forces can further enhance our understanding of why people stay despite the desire to leave.

Conclusion

Building on the theory of career inaction, we examined why and when job embeddedness relates to a lower likelihood of leaving among employees with a desire to leave in four different studies. We found that the relationship between both on-the-job and off-the-job embeddedness and the likelihood of leaving was partially mediated by several internal inertial forces. We did not find support for the moderation effects by age, educational level, gender, having children, or proactive personality that we explored in Study 4. Overall, our results confirm several of the ideas of the theory of career inaction and shed light on important internal processes in the employee turnover process.

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Supplementary materials

Study 1

Table 6

Descriptives and paired sample t-tests for the on-the-job embeddedness scenario Study 1.

		M	*SD*	*t*-test (85)	*p*-value	Cohens' *d*
Fear	Low	2.93	0.91	-10.32	< .001	1.12
	High	4.06	0.64			
Costs vs. benefits of leaving	Low	2.19	0.73	-9.90	< .001	1.07
	High	3.52	1.02			
Decision difficulty	Low	1.24	0.78	-13.94	< .001	1.52
	High	4.34	0.55			
Risk	Low	2.60	0.86	-6.19	< .001	0.67
	High	3.19	0.92			
Anticipated responsibility	Low	3.31	1.00	-7.19	< .001	0.78
	High	4.02	0.95			

Table 7

Descriptives and paired sample t-tests for the off-the-job embeddedness scenario Study 1.

		M	*SD*	*t*-test (85)	*p*-value	Cohens' *d*
Fear	Low	2.75	0.74	-9.23	< .001	1.01
	High	3.73	0.70			
Costs vs. benefits of leaving	Low	1.98	0.85	-7.08	< .001	0.77
	High	3.00	1.10			
Decision difficulty	Low	2.65	0.84	-10.45	< .001	1.14
	High	3.87	0.79			
Risk	Low	2.44	0.77	-6.71	< .001	0.73
	High	3.21	0.88			
Anticipated responsibility	Low	3.21	1.01	-6.28	< .001	0.69
	High	3.95	0.92			

Study 2

Table 8

Descriptives and paired sample t-tests for the on-the-job embeddedness scenario Study 2.

		M	*SD*	*t*-test (85)	*p*-value	Cohens' *d*
Fear	Low	2.72	1.02	-6.06	< .001	0.70
	High	3.61	0.94			
Costs vs. benefits of leaving	Low	2.26	0.89	-6.69	< .001	0.78
	High	3.38	0.98			
Decision difficulty	Low	2.49	0.98	-7.40	< .001	0.86
	High	3.82	0.98			
Risk	Low	2.70	0.96	-3.41	< .001	0.40
	High	3.26	0.92			
Anticipated responsibility	Low	2.80	0.91	-5.89	< .001	0.68
	High	3.66	0.86			

Table 9

Descriptives and paired sample t-tests for the off-the-job embeddedness scenario Study 2.

		M	*SD*	*t*-test (85)	*p*-value	Cohens' *d*
Fear	Low	2.58	0.95	-6.16	< .001	0.72
	High	3.42	0.83			
Costs vs. benefits of leaving	Low	2.35	1.01	-5.62	< .001	0.65
	High	3.23	0.85			
Decision difficulty	Low	2.51	0.86	-8.07	< .001	0.94
	High	3.70	0.90			
Risk	Low	2.58	1.05	-1.61	.056	0.19
	High	2.78	0.85			
Anticipated responsibility	Low	3.01	0.90	-4.05	< .001	0.47
	High	3.51	0.90			

Study 3

Table 10

Descriptives and paired sample t-tests for the on-the-job embeddedness scenario Study 3.

		M	*SD*	*t*-test (271)	*p*-value	Cohens' *d*
Fear	Low	3.14	0.99	-3.06	< .001	0.37
	High	3.50	0.95			
Costs vs. benefits of leaving	Low	3.48	0.97	-3.05	.001	0.37
	High	3.85	1.02			
Decision difficulty	Low	3.02	1.10	-5.68	< .001	0.69
	High	3.73	0.93			
Risk	Low	2.84	0.19	-4.24	< .001	0.51
	High	3.31	0.95			
Anticipated responsibility	Low	2.19	0.99	-7.58	< .001	0.92
	High	3.13	1.07			

Table 11

Descriptives and paired sample t-tests for the off-the-job embeddedness scenario Study 3.

		M	*SD*	*t*-test (271)	*p*-value	Cohens' *d*
Fear	Low	3.11	0.94	-2.65	< .001	0.33
	High	3.43	1.04			
Costs vs. benefits of leaving	Low	3.51	0.93	-2.30	.001	0.28
	High	3.78	1.02			
Decision difficulty	Low	3.06	0.98	-3.71	< .001	0.46
	High	3.53	1.08			
Risk	Low	2.68	1.00	-4.26	< .001	0.52
	High	3.20	0.99			
Anticipated responsibility	Low	3.10	1.10	-4.31	< .001	0.54
	High	3.65	0.96			

Study 2: Thinking regret, feeling regret? A longitudinal study on the relationship between anticipated regret, experienced regret and career satisfaction via goal commitment and goal progress.

Paulien D'Huyvetter & Marijke Verbruggen

Anticipated regret refers to the regret that people expect to experience if they would make a specific decision. Oftentimes, anticipated regret is functional: it steers people's choices into the direction of the outcome with the least expected regret. But what if people are not well able to estimate the regret a decision will trigger? In this study, we argue that this is likely the case in the context of career decisions and that because of that, anticipated regret related to career change may have negative rather than beneficial consequences for people's well-being. In particular, by integrating insights from action-inaction, goal and career research, we posit that among people who have a career goal (e.g., changing jobs), anticipated regret related to changing jobs may trigger lower rather than higher career-related wellbeing (here: more experienced regret and less career satisfaction) and this via lower career goal commitment and less career goal progress. Results from our path analysis with a longitudinal dataset with 371 Flemish workers in career counseling largely confirm our hypotheses. Anticipating regret over changing jobs was related with lower goal commitment and less goal progress, which in turn was associated with more experienced regret and less career satisfaction. With this study, we add to the research on the role of irrational factors in career decision-making, highlight the potential dysfunctional role of anticipated regret, and offer a novel explanation for dysfunctional stable career paths.

Keywords: *Anticipated regret, experienced regret, career decisions, career goal commitment, goal progress, employee wellbeing.*

Introduction

Career choices are among the most prevalent and strongest subjects of regret in people's lives (Lecci et al., 1994; Jokisaari, 2003; Roese & Summerville, 2005). Regret refers to the cognitive emotion that we feel when thinking about how our situation could have been better if only we had acted differently (Zeelenberg & Pieters, 2007). It is among the most intense and most frequently experienced negative emotions (Saffrey et al. 2008; Shimanoff, 1984) and has been linked with several detrimental effects when it endures, such as: lower levels of physical and mental well-being, lower self-esteem, less commitment to work, worsened productivity and lower life satisfaction (Dijkstra & Barelds, 2008; Lecci et al., 1994; Kvale et al., 2016; Sijtsema et al., 2021). Career-related regret is likely to become even more prevalent in today's society due to the abundance of career options and the high access to information that can confront people with 'what could have been' (Budjanovcanin & Woodrow, 2022).

Despite the prevalence of career-related regret, emotions—including regret—do not play a prominent role in career research. Indeed, for many decades, career theories and researchers have dominantly conceptualized career decision-making and development as a rather linear, planned, and rational process (Krieshok et al., 2009; Gati & Kulcsár, 2021). This contrasts with other research fields, such as consumer decision making and organizational behavior, where emotions are studied more frequently and accepted as powerful drivers and relevant consequences of behavior (e.g., Ashkanasy et al., 2017; Gardner, 1985; Zeelenberg et al., 2008; Weiss & Cropanzano, 1996). In the career field, scholars have only recently started to study the role of regret in career decision-making (e.g., Budjanovcanin, 2019, 2022; Zikic, 2022). For instance, Budjanovcanin and colleagues (2019) found that cardiac physiologists experienced more occupational regret when their occupational choice was influenced by others and when they felt that people in other professions were better off, with more regretful physiologists experiencing less occupational commitment and higher intentions to quit.

Relatedly, Verbruggen and van Emmerik (2020) found that employees who stayed in their organization despite earlier turnover intentions experienced more career-related regret, which in turn resulted in lower career satisfaction over time. In line with these empirical findings, recent conceptual papers have proposed regret as an important outcome of past career sacrifices (Zikic, 2022) and past career inaction (i.e., not having acted enough on a desire for a career change; Verbruggen & De Vos, 2020).

The scarce research on career-related regret to date has dominantly focused on the regret people experience related to a past career decision or (in)action. Yet, regret may not only arise as the result of a career decision-making process; anticipations of this emotion may also steer the career decisions and actions people take. Anticipated regret refers to the regret that people expect to experience if a certain option that they are considering would turn out to badly (Connolly & Zeelenberg, 2002; Zeelenberg, 1999a). Studies on (consumer) decision-making showed that anticipated regret often fulfills a functional, beneficial role: it can guide people towards the option that is likely to result in the least expected amount of future regret (Connoly & Zeelenberg, 2002; Zeelenberg, 1999a; Zeelenberg, 2018). Yet, this functional role is dependent on people being well able to judge their future regret, which is not always the case (e.g., Buchanan et al., 2019; Loewenstein et al., 2001). Among others, people tend to overestimate their regret from actions (e.g., changes) that turn out badly and underestimate their regret from bad outcomes of inactions (e.g., staying with the status quo; see, omission and status quo bias; Gilovich & Medvec, 1995; Ritov & Baron, 1995). This inaccurate forecasting seems to apply especially to big decisions for which the outcomes only become clear after some time (e.g., Gilovic & Medvec, 1995), such as with career decisions. Due to this bias in anticipated regret, people have a tendency to take insufficient action and end up with the status quo rather than to act on and realize a desired change (Ritov & Baron, 1995).

In the end, this can, ironically, lead to a more rather than less regrettable situation (Liu et al., 2022).

Given the known importance of anticipated regret in the decision-making process and the increased awareness of the role of regret for career decisions, it is imperative to better understand how anticipated career-related regret affects the career decision process and subsequent well-being, including experienced regret. This is the aim of this study. By integrating insights from action-inaction (e.g., Gilovich et al., 1995), goal (e.g., Brown, 1996; Latham & Locke, 2006) and careers research (e.g., Verbruggen & De Vos, 2020), we expect that among people who have a career goal (e.g., changing jobs, getting promoted, finding a better work-life balance), anticipated regret may trigger lower career-related well-being—here: more experienced career-related regret and lower career satisfaction—via lower goal commitment and goal progress. Goal commitment and goal progress are two core requirements of a satisfactory goal attainment process (Brown, 1996; Latham & Locke, 2006), which is in turn key for career-related well-being (Lent & Brown, 2006). In this study, we are mainly interested in unraveling why and how anticipated regret could hamper progress towards a career goal like changing jobs, and, therefore, focus on anticipated regret related to changing jobs. We argue that anticipated regret may lower goal commitment since the negative anticipatory thoughts may reduce the value of the set career goal (Brunstein, 1993). When people are less committed to their goal, they tend to make less goal progress and experience lower well-being (Monzani et al., 2015). Studying this process will allow us to understand whether anticipated action regret related to changing jobs indeed plays a dysfunctional role in the career decision-making process and through which path this occurs. To test our model, we gathered data with 371 Belgian workers who were likely to have a goal to change something in their career (e.g., leaving their current job) at three time points.

With this study, we make several contributions to the career and regret literature. First, we further clarify the role of regret in career decision-making. Aside from including experienced regret and its antecedents, we also bring attention to the role of anticipated regret related to career goals (here: anticipated regret over changing jobs)—which has remained understudied in career research so far. Second, by zooming in on the negative effects of anticipated regret rather than the generally assumed beneficial effects, we enrich the understanding of the dark side of (career-related) anticipated regret and contribute to a deeper understanding of irrationality and biases in the process of career decision-making (Lerner et al., 2015). Third, our focus on how anticipated regret may keep people from realizing their desired career goals (e.g., changing jobs) may reveal a novel explanation for dysfunctional stable career paths and thereby contribute to our understanding of inaction in careers (Verbruggen & De Vos, 2020).

Literature review and hypotheses development

Experienced and anticipated regret

Regret is a negative cognitive emotion that originates from a comparison between what is and what could have been (Gilovich & Medvec, 1995; Zeelenberg & Pieters, 2007). Regret is thus a counterfactual emotion that arises when people engage in mental simulations about how their life could have been if they would have acted differently (Feiler & Müller-Trede, 2022). Although regret is often experienced as painful and intense, the emotion can also help people in their self-regulation. In particular, the feeling of regret can inform people about their mistakes, provoke learning, and, in that way, stimulate behavioral and/or cognitive repair work (Gilovich & Medvec, 1995; Sijtsema et al., 2021; Zeelenberg & Pieters, 2007). However, regret does not always succeed to realize this functional role (Sijtsema et al., 2021). When regret endures, it can result in lower life satisfaction (Newall et al., 2009), worsened health (Wrosch et al. 2007), and reduced quality of life (Wrosch et al., 2005).

Interestingly, regret is not only experienced as a result of decision making. Often, people engage in anticipations of regret before a decision is made (Zeelenberg, 2018). When people consider different options, they often cognitively construct hypothetical scenarios about how their future would be if a certain option was chosen (i.e., prefactual thoughts), including how much regret they would feel if that option would turn out badly (Taylor & Schneider, 1989; Zeelenberg, 2018). This is called anticipated regret (Zeelenberg, 1999a).

Already decades ago, scholars acknowledged the importance of anticipated regret for people's decision making and goal striving (e.g., Janis & Mann, 1977; Loomes & Sugden, 1982; Savage, 1951). Originally, researchers posited that the fear of future regret would influence people's behavior in a way that they would think more deeply before making a decision, which would then result in better (e.g., less regretful) choices (e.g., Janis & Mann, 1977; Loomes & Sugden, 1982). In other words, anticipated regret was long assumed to lead to more "rational" choices. In line with these expectations, research has shown that people who engage more in regret anticipations tend to have a more elaborate decision-making process and search more intensely for information about the alternatives (Janis & Mann, 1977; Reb 2008). Later on, more nuanced views arose. Zeelenberg (1999a)'s work, for example, illustrated how anticipated regret could lead to both risk-averse and risk-seeking decision-making. With his work and that of others (e.g., Keinan & Bereby-Meyer, 2017), the awareness rose that anticipated regret is only rational as long as people can accurately predict their future regret (Zeelenberg, 1999b).

However, anticipated regret is not always accurate. Among others, people tend to overestimate their regrets stemming from wrongful actions (Gilbert et al., 2004), while underestimating or not thinking about their regrets from inactions that could go badly (Andrade & Van Boven, 2010). Wrongful actions catch our attention more easily because they typically imply a deviation from the norm (Kahneman & Miller, 1986). Because they

imply such a deviation, people associate them with more personal responsibility (Keinan & Bereby-Meyer, 2017) and, hence, with more regret (Gilovich & Medvec, 1995). Inactions, on the other hand, are less obvious to perceive and, therefore, often overlooked (Gilbert, 2006; Keinan & Bereby-Meyer, 2017). Because people tend to think more spontaneously of regrets related to actions than of regrets related to inactions, and because most people try to avoid future regret (Zeelenberg, 2018), anticipated regret is seen as one of the key explanations for the omission and status quo bias (Keinan & Bereby-Meyer, 2012).These biases reflect people's tendency to, respectively, opt for omissions (or inactions) and to stay with the status quo, even if that is not the most ideal or desirable option (Ritov & Baron, 1992). These tendencies may explain why people's enduring regrets often stem from inactions (Gilovich & Medvec, 1995) and from goal-aspiration discrepancies that require action to resolve (Davidai & Gilovich, 2018).

So, to summarize: most people inherently try to avoid future regret and tend to think more spontaneously of regrets related to actions compared to regrets related to inactions. Yet, they tend to overestimate regret from actions and underestimate regret from inactions. So, they are likely to often choose for inaction, since this is typically the option with the least expected amount of future regret. However, they may end up regretting this option in the longer run. So, ironically, it seems that anticipating regret may sometimes enhance rather than lower the likelihood of experienced regret.

Anticipated regret in the career field

The career domain may be one domain where people's anticipated regret over actions (here: thoughts about what could go wrong when they would change jobs) could result in more, rather than less, experienced regret and well-being. With low job mobility rates in many western countries (Rodrigues et al., 2016), not changing jobs is the descriptive career norm in many societies—i.e., what most people do in their career and what thus is the observable

norm in society. Diverging from that norm by considering a job change is therefore likely to trigger anticipated action regret—i.e., thoughts about how much regret they may feel if a job change would turn out badly. Given its likely prevalence, anticipated action regret will be the focus in this study. Building on the goal and career literature, we assume that these regret anticipations may interfere with people's career goal striving process and could, in that way, negatively affect their subsequent career-related well-being. Our reasoning thus focuses on people who have a career goal and, accordingly, we will test our model using a sample of workers who expressed to have a career goal.

Although anticipated regret has not yet been studied as such in the career field, two recent qualitative studies hinted at its potential role for career development and well-being. First, an interview study on career inaction by Rogiers et al. (2022) illustrated how people experienced emotional tensions and hardship (among others: the fear of regret) when thinking about making a change in their careers, which withhold them from undertaking sufficient action to actually realize that desired change. Second, the qualitative work of Budjanovcanin et al. (2022) suggested that (experienced) regret should not only be considered as an outcome of "wrongful" career decisions (see, the concept of career inaction), but could also act as a factor that leads to such decisions. Building on these insights, we study the role of anticipated regret in careers more explicitly.

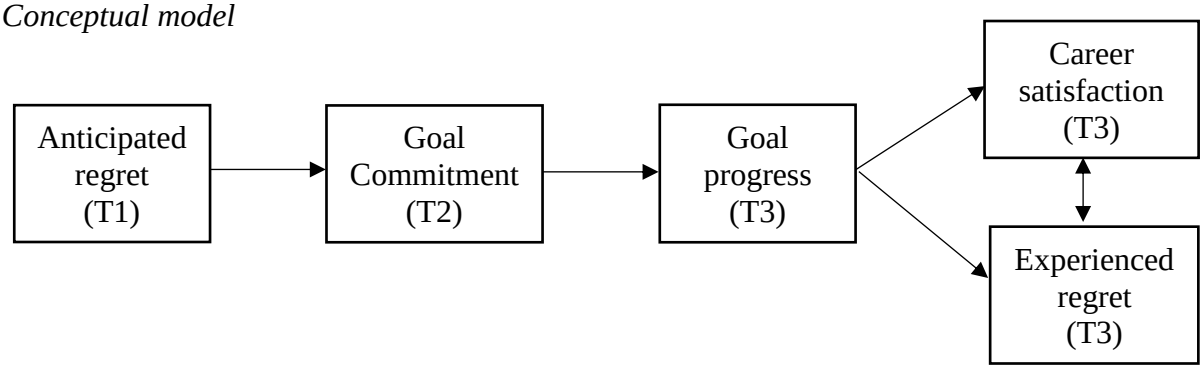
Research model and hypotheses

We propose that anticipated regret about making a job change can affect subsequent experienced regret and career satisfaction via goal commitment and goal progress, which are two key mechanisms for satisfactory decision-making (Brown, 1996; Latham & Locke, 2006). In particular, we expect that people who anticipate more regret about making a job change are likely to feel less committed to the career goal they set and will therefore make less career goal progress. Accordingly, we expect them to experience more career-related

regret and less subsequent career satisfaction. Figure 1 shows our research model. In what follows, we develop our hypotheses.

Figure 1

Conceptual model



First of all, we expect a negative relationship between anticipated regret about changing jobs and goal commitment, i.e., people's attachment or determination to reach a pursued goal (Locke & Latham, 1990). We expect that this can be true—so, that people who anticipate more regret about changing jobs experience less commitment to the specific career goal they set—both in the situation when people's career goal involves a job change *despite* their anticipated regret and in the situation when their career goal does not imply a job change, *in line with* their anticipated regret. When people's career goal involves changing jobs, anticipated regret about changing jobs is likely to make people value their goal less. This is because the anticipated regret functions as an informative signal for individuals that changing jobs might not be the best goal for them because it might result in regret (Schwarz, 2012). When people attach less value to a goal, they tend to be less able to fully commit to that goal (Monzani et al., 2015). Therefore, anticipated regret about changing jobs is likely to relate to lower goal commitment when people's career goal involves a job change. But also when people set a career goal that does not involve changing jobs, more anticipated regret about changing jobs could potentially lower their goal commitment. Anticipating regret about changing jobs implies engaging in prefactual thinking (Zeelenberg, 1999a), or in other words:

creating mental images of how it would be if one would follow through on that option (here: changing jobs). The more people engage in anticipatory thinking about changing jobs, the stronger and more salient the images in their mind become of the alternative(s) of changing jobs. Research has shown that these deliberations, even if they entail negative thoughts, can stimulate a mental attachment to these options ("option attachment"; Biderman & Shohamy, 2021; Carmon et al., 2003), which can make it harder to fully commit to the goal that one ultimately chooses. Therefore, more anticipated regret about changing jobs could also lower goal commitment for people who set a career goal does not involve such a change. We therefore hypothesize:

Hypothesis 1: Anticipated regret is negatively related to career goal commitment.

Second, when people are less committed to their goal, they are likely to make less goal progress. Goal commitment is considered one of the most important factors for goal progress as it steers motivation, effort and persistence (Latham & Locke, 2006). When people are more committed to a goal, they are more motivated to reach that goal, take more actions to realize the goal and persist longer in striving towards that goal despite potential setbacks (Brown, 1996; Fishbach et al., 2009; Latham & Locke, 2006). In line with this reasoning, research has found positive relationships between goal commitment and goal progress (e.g., Monzani et al., 2015). Given that goal commitment represents such a key element in goal theory, and is of relevance to goals in almost any context, we expect goal commitment to relate positively to career goal progress.

Hypothesis 2: Goal commitment is positively related to career goal progress.

Third, how much progress people make towards their career goal, can influence how satisfied they are about their career, and how much career-related regret they experience. Career satisfaction is defined as individuals' evaluation of their accumulated career experiences so far (Hagmaier et al., 2018). Career satisfaction is mostly studied from a

"progress" perspective, using the Career Satisfaction Scale (Greenhaus et al., 1990; Spurk et al., 2011). This means that career satisfaction is referred to as the extent to which people feel that their career progress is satisfactory, or put differently: the degree to which their career progress is in line with their preferences, values and goals (Barnett & Bradley, 2007; Seibert & Kraimer, 2001). When people have made less progress towards their career goals, they are thus likely to be less satisfied with their career. In line with this expectation, research found that less (career) goal progress is linked to less positive affect and lower subjective well-being (Milyavskaya & Werner, 2018) as well as to lower career satisfaction (Verbruggen & Sels, 2010).

Finally, we expect that lower career goal progress relates to more experienced career-related regret. Regret is in part shaped by how much we blame ourselves for the (non-satisfactory) outcome of past actions (Zeelenberg & Pieters, 2007). When people—triggered by prior anticipated regret—have made less progress towards their career goal, they may blame themselves for the lack of progress. With self-blame being a key aspect of regret (Zeelenberg & Pieters, 2007), we expect that people who lack such progress as a result of prior anticipated regret are likely to experience more career-related regret. In line with this, Verbruggen & van Emmerik (2020) found that employees who stayed despite strong turnover cognitions experienced more career-related regret. This brings us to the following hypothesis:

Hypothesis 3: Career goal progress is (a) positively related to career satisfaction, and (b) negatively to experienced career-related regret.

Method

Procedure and sample

To test our conceptual model, we collected three-wave longitudinal data in 2022 with Belgian career counseling clients. People in career counseling very often have a desire for change in their careers but wish some assistance with the process of deciding on or realizing their career

goals. Therefore, this sample seemed highly relevant for this study on anticipated and experienced regret in careers. To reach a sample of career counseling clients, we collaborated with the public employment service of Flanders (VDAB). This organization certifies the Flemish career counseling centers and issues the so-called career vouchers to workers who are interested in following career counseling. In Flanders (i.e., the northern part of Belgium), workers with at least seven year of working experience can buy career vouchers that entitle them to up till seven of career counseling in a certified career counseling center at a heavily reduced price. The career counseling centers are expected to assist clients in specifying their career goals and setting up a personal development plan that can help them to attain those career goals.

We collected data with career counseling clients in three waves. The first survey was sent immediately after people applied for a career voucher, the second one after approximately four months (i.e., when most respondents were having their last sessions of counseling), and the third one again four months later (i.e., when most of them had finished the career counseling). The links to the online surveys were sent by VDAB so that the respondents remained anonymous to the researchers at all times. However, we received a unique encrypted ID from VDAB for each respondent to link their answers over the three waves. Furthermore, VDAB did not have access to the data but received an aggregated feedback report about the most interesting findings.

For the first and second survey, we received 996 and 505 responses respectively. In total, 371 workers responded to all three surveys. Of this total sample, 92.2% were employees and 7.8% were self-employed. Respondents were aged between 23 and 68 (M = 43.41, SD = 8.45). Most of the respondents were female (72.2%), highly educated (i.e., having a bachelor's degree or higher, 71.0%), and had one or more children (67.7%).

We performed a dropout analysis via ANOVA and Pearson Chi Square tests (see supplementary material, Tables 2 and 3) tests to examine whether significant differences existed between the respondents who stopped after wave 1 or 2 and those who did not. The results revealed no significant differences for the variables of age, work status (e.g. employee vs. self-employed), gender, having children or not, or educational level. However, people without a partner were slightly more likely to drop out after wave 1 than those who had a partner (χ^2 = 3.65, *df* = 1, *N* = 782, *p* = .056). Overall, the dropout does not seem to be very selective. Neither did we see effects of the drop-out rates on any of the studied variables.

Measures

Anticipated regret was measured at T1 via two items based on O'Carroll et al. (2016): "If I would leave my current job now, I would regret it later" and " If I would leave my current job now, I would later wish I would not have done that". Respondents indicated how much they agreed on a five-point Likert scale (1: *I do not agree at all* to 5: *I completely agree*). Cronbach alpha of this scale was .93.

Goal commitment was measured at T2 using the five-item scale of Klein et al. (2001). Respondents were first asked to describe their most important career goal and then had to assess the five items on a five-point Likert scale (1: *I do not agree at all* – 5: *I completely agree*). A sample item is: "I am strongly committed to pursuing this goal." Cronbach alpha was .75.

Goal progress was measured at T3 with the four-item scale of Greguras & Diefendorff (2010). We first asked the respondents to think about the career goal they had mentioned in the previous survey four months earlier and then let them assess the four items on a five-point Likert scale (1: *I do not agree at all* to 5: *I completely agree*). A sample item is "I have made considerable progress toward attaining this goal." Cronbach alpha was .95.

Career satisfaction was measured at T3 via the five-item scale of Greenhaus et al. (1990). Respondents had to indicate how much they agreed with the presented items on a five-point Likert scale (1: *I do not agree at all* to 5: *I completely agree*). A sample item is: "I am satisfied with the success I have achieved in my career." Cronbach alpha was .82.

Experienced career-related regret was measured at T3 using a slightly adapted version of the three-item scale of Verbruggen & van Emmerik (2020). The original scale of Verbruggen and van Emmerik (2020) was used with employees who did not change jobs (i.e., stayers) and hence, their items focused on regret about not having made a change in one's career. Since our respondents could have made a change in their career, we first asked them whether or not this was the case and then provided them with regret-items that were adjusted to their situation (i.e., assessing regret about having made a change in their career if they made a change in the past eight months, or about not having made a change in their career if they did not make a change). A sample item is "I regret [not] having made a change in my career in the past eight months" (1: *I do not agree at all* to 5: *I completely agree*). Cronbach alpha was .89.

Control variables were age (in years), gender (0 = male, 1 = female), educational level (0 = no bachelor's degree, 1 = bachelor's degree or higher) and risk aversion. Risk aversion was measured with the six item-scale of Mandrik and Bao (2005). A sample item was "I feel nervous when I have to make decisions in uncertain situations" (1: *I do not agree at all* to 5: *I completely agree*). Cronbach alpha was .81. We also controlled for career satisfaction at T1 when modeling career satisfaction at T3. Career satisfaction at T1 (Cronbach α = .80) was measured with the same five-item scale of Greenhaus et al. (1990) which we used at T3.

Analyses

We first performed a confirmatory factor analysis (CFA) and explored the descriptives of our study's variables. Next, hypotheses were tested via path analysis using the Lavaan package

(Rosseel, 2012) in R Studio (version 2024.04.1) since this allows to test all relationships simultaneously. To evaluate the model fit, we relied on the following criteria for a good model fit as recommended by Bagozzi & Yi (2012) and Weston & Gore (2006): Chi square goodness-of-fit test (χ^2; should ideally be non-significant), Comparative Fit Index (CFI; ≥ 0.90 for acceptable fit; ≥ 0.95 for good fit), Tucker Lewis Index (TLI; ≥ 0.90 for acceptable fit; ≥ 0.95 for good fit), Root Mean Square Error of Approximation with 90% confidence interval (RMSEA; ≤ 0.10 for acceptable fit; ≤ 0.06 for good fit), and Standardized Root Mean Square (SRMR; ≤ .010 for acceptable fit; ≤ 0.08 for good fit).

Results

The CFA showed an acceptable to good fit between our measurement model with five core latent variables (i.e., anticipated regret, goal commitment, goal progress, career satisfaction, and experienced regret) and the data ($\chi^2 = 469.46$, $df = 260$, $\chi^2/df = 1.81$, $p < .001$, $CFI = 0.93$, $TLI = 0.92$, $RMSEA = 0.06$, $SRMR = 0.05$). Table 1 shows the descriptives and correlations of this study's variables.

Table 1

Descriptives and correlations for model variables (N = 371).

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Career satisfaction T1	2.62	1.13	—								
2. Anticipated Regret T1	2.67	0.91	.16**	—							
3. Goal commitment T2	2.97	0.58	.01	-.12*	—						
4. Goal progress T3	3.28	1.05	.09	-.03	.33**	—					
5. Career satisfaction T3	3.27	0.79	.25**	-.04	.17**	.47**	—				
6. Experienced regret T3	2.50	1.11	-.02	.07	-.18**	-.53**	-.39**	—			
7. Risk aversion T1	3.60	0.68	-.08*	.19**	.03	-.04	-.06	.01	—		
8. Age	43.41	8.45	.05	.07	-.04	-.09	-.01	.03	-.14**	—	
9. Gender [a]	.72	.45	.00	-.04	.02	.13*	-.02	-.10	.02	-.07	—
10. Education [b]	.70	.46	.06	.04	.01	.10	-.05	-.11*	.01	-.06	.17**

Note. Pearson correlations were calculated for all variables expect for the correlations with gender and education. Here, we calculated nonparametric Spearman correlations.

**p < .01, *p < .05

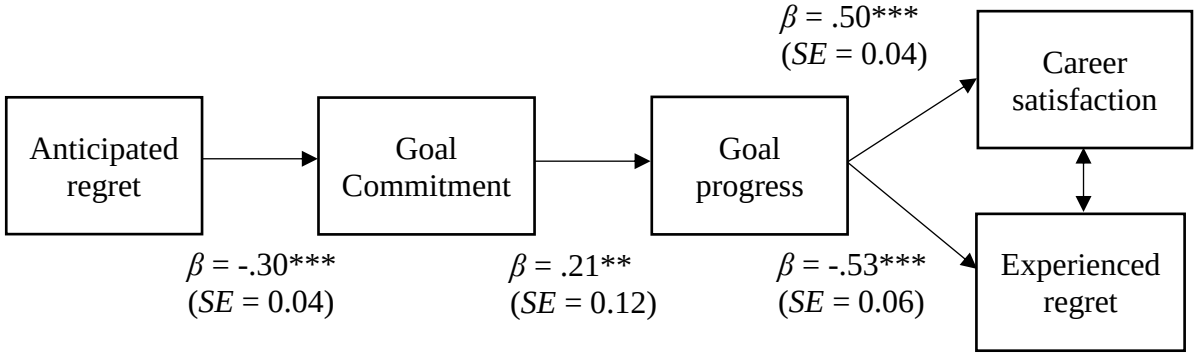
[a] 0 = male, 1 = female

[b] 0 = lowly educated (no bachelor's degree), 1 = highly educated (a bachelor's or higher)

Next, we tested the path model. We found a good model-data fit (χ^2 = 26.06, *df* = 15, χ^2/df = 1.74, *p* = .037, *CFI* = 0.96, *TLI* = 0.90, *RMSEA* = 0.06, *SRMR* = 0.04). Our findings confirmed significant standardized effects between all adjacent variables (see Figure 2). Anticipated regret at T1 was negatively related with goal commitment at T2 (β = -.30, *p* < .001), which was in turn positively related with goal progress at T3 (β = .21, *p* = .001). Finally, goal progress was negatively related with experienced regret (β = -.53, *p* < .001), and positively with career satisfaction (β = .50, *p* < .001). These results provide support for our hypotheses 1, 2 and 3. For completeness, we also explored the indirect effect from anticipated regret. These tests showed that anticipated regret was significantly negatively related with goal progress via goal commitment (*standardized effect = -.06, p* = .01*),* and significantly negatively related with career satisfaction (*standardized effect* = -.03, *p* = .01) and positively with experienced regret (*standardized effect* = .03, *p* = .01) via perceived goal commitment and goal progress.

Figure 2

Results of the path analysis (N = 239).



*Note. ***p<.001, **p< .01, *p<.05*

Supplementary analyses

We performed additional analyses (see supplementary materials, Table 4) to check whether the results hold for both respondents whose career goal involves changing jobs and for those whose career goal does not involve changing jobs. To this end, we first coded respondents' answers to the open question "What is your most important career goal?" (T2) into a dummy

(1 = career goal involves changing jobs; 0 = otherwise). The coding was completed in two rounds: an initial coding by the second author and a verification by the first author. First, we ran the model for the two groups separately and all the paths in the model remained significant. So, anticipated regret was negatively related to goal commitment, both for workers whose goal involved changing jobs (β = -.41, p < .001) and for workers whose goal did not involve changing jobs (β = -.26, p = .01). The indirect paths became marginally significant, though, possibly due to the smaller sample sizes ($N_{\text{goal involving job change}}$= 121; $N_{\text{goal not involving job change}}$ = 208). These supplementary analyses (i.e., regressions per goal type) show that anticipated regret about changing jobs is indeed related to lower subsequent goal commitment, regardless if the career goal involves changing jobs or not.

Discussion

In this study, we integrated insights from action-inaction, goal and career research to posit that anticipated regret about changing jobs may not yield the beneficial effects that are often associated with regret anticipations. More specifically, we expected that anticipated regret related to changing jobs would relate to lower career-related well-being (here: more experienced regret and less career satisfaction) via lower career goal commitment and less career goal progress. The results of our path analysis confirm our hypothesized model: anticipating regret about changing jobs was related to lower levels of career goal commitment, which in turn resulted in less career goal progress, higher experienced regret and less career satisfaction. Taken together, more regret anticipations about changing jobs were related to lower rather than higher subsequent well-being in the context of careers.

With these findings, our study makes several contributions to the career and regret literature. First, this paper adds to our understanding of experienced regret in careers. In particular, we found that people are more likely to experience career-related regret when they—triggered by prior regret anticipations and lower goal commitment—make less progress

towards their career goal. This finding adds to the insight of Budjanovcanin and colleagues (2019) that people experience career-related regret when their career choices are influenced by others, by showing that also internal forces (here: anticipated regret and lower goal commitment) can trigger regret. In that way, our study's findings align with the focus in the theory of career inaction on internal forces triggering regret (Verbruggen & De Vos, 2020) as well as with regret research which argues that regret often involves a self-blame component (Zeelenberg & Pieters, 2007). Furthermore, our findings add to the reasoning of Verbruggen & De Vos (2020), who focused on regret when people with a desire for change end up *not* changing, by showing that regret can be experienced by both individuals whose career goals involves changing jobs and individuals whose goal does not involve such a change. Probably, not making sufficient career goal progress confronts people with "what could have been" if only they had been more committed to their goal and, in that way, induces regret regardless what their goal exactly entailed.

Second, we contribute to the career literature by integrating anticipated regret as a behavioral motivator in the career decision-making process. Whereas behavioral scholars have already recognized anticipated regret as a reliable predictor of future behavior (Ajzen & Sheikh, 2013; Sandberg & Conner, 2008, Zeelenberg et al., 1999a), career scholars had—to the best of our knowledge—not yet considered anticipated regret as an antecedent to career outcomes such as career satisfaction and career-related regret. Although earlier work did already highlight other forms of pre-factual and anticipatory thinking (e.g., the role of outcome expectations; see, SCCT by Lent et al., 1994), the focus has mainly been on how these anticipations influenced career decisions. In this study, we found that engaging in regret anticipation may also affect the career goal striving and outcome process. For future research, it could be interesting to unravel how exactly these anticipations function. Scholars can for

instance look more into potentially different paths triggered by anticipated regret, for example depending on whether or not the career goal is consistent with the anticipations.

Third, we add to the regret literature by highlighting the 'dark side' of anticipated regret in career decision-making. The regret literature tends to focus on the rational and self-regulatory effect of anticipated regret, i.e., that anticipating regret should lead people to think more extensively about their options and pick an option that minimizes future regret (e.g., Zeelenberg et al., 1999b; Zeelenberg & Pieters, 2007). Ironically enough, we found that anticipated regret about changing jobs led to more rather than less career-related regret. It is important to note that we focused on regret anticipations about changing jobs, which can be considered as career behavior that deviates from the descriptive career norm in most western countries, i.e., staying with one's employer (Rodrigues et al., 2016). In situations where people diverge from the norm, they generally overestimate their future regrets. We expected, and found, that this could impede people's goal striving via lower goal commitment and lower goal progress, both when individuals decide to act in line with their anticipated regrets or against them. It could be interesting for future regret research to explore the influence of regret anticipations about other atypical options on people's subsequent goal striving and well-being to enrich our understanding of the risks and benefits of anticipated regret.

Fourth, and relatedly, our finding that anticipated regret about changing jobs lowers people's progress towards their career goal also offers a novel explanation for dysfunctional stable career paths. Here, we believe that anticipated regret might add to the understanding of career inaction, defined by Verbruggen and De Vos (2020) as the phenomenon in which people do not succeed in taking sufficient action over some period of time to realize a desired change in their careers. As stated in the theory of career inaction (Verbruggen & De Vos, 2020), and found by Rogiers et al. (2022), internal inertial forces can paralyze people when thinking about their career desire (e.g., changing jobs) and, eventually, keep them from acting

upon their career desires. The authors mention how forces such as fear and the disproportionate influence of short term costs and efforts can trigger a tendency to delay the decision to take action, or avoid it altogether. Building on our findings, we suggest that anticipated regret over a desired career change might form an additional internal inertial force, as it also might hamper progress towards a desired career goal. An interesting avenue for future research is to disentangle the interaction of anticipated regret with the inertial forces that are already included in the theory of career inaction (Verbruggen & De Vos, 2020).

Limitations and suggestions for future research

This study has a number of limitations. First, we had a specific sample of career counseling clients. Since career counseling helps people to form specific career goals, the career goals of our respondents might have been more salient compared the career goals of people who do not participate in career counseling. Future research may want to examine whether our hypothesized effect of anticipated regret can also be confirmed in a larger, more general, random sample, for whom career goals may be less salient. Second, our data collection took place in Flanders (Belgium), where the labor market is characterized by low job mobility (Dries & Verbruggen, 2023). It could be interesting for future research to explore whether anticipated regret about changing jobs plays out similarly or differently in labor markets with higher job mobility. Third, we used a time span of four months in-between the waves. This was based on the advice of VDAB based on the typical length of career counseling in Flanders. In studies with more general samples, it could be good to experiment with different – both shorter and longer – time frames to gain a better understanding of how long people in a non-intervention setting typically need to act on their career goals. Fifth, although we asked participants to think back about the career goal they mentioned in the previous surveys (e.g., on T3 referring to T2) when asking about their progress, we did not verify whether they remembered their career goal, and whether their career goal changed or not. Moreover we

measured anticipated regret over changing jobs, but measured experienced regret linked to the broader change they had realized or not. In this sense, some noise may be present in our results. We would like to stimulate future research to strive for a good match between the subject of anticipated and experienced regret, and include a control for the potential change of career goals over the course of the study.

Our study may trigger scholars to explore a number of interesting areas for future research. A first area relates to testing whether there could be a "circle of regret". In this study, we did not examine the effect of career-related regret on future anticipated regrets. However, building on regret regulation theory (Zeelenberg & Pieters, 2007), we could assume that past experiences of regret will make people more regret averse, and thus also trigger more anticipated regret when making 'new' decisions. This is also in line with the reasoning of Epstude et al. (2016), who state that the act of mental simulating (e.g., the if-then simulations of anticipated regret) in a way bridges the past with the future. Testing this negative intensifying circle of regret, as well as which elements can break this circle form another relevant topic for future research.

Next, we mainly looked at anticipated action regret (i.e., anticipated regret about changing jobs) and not anticipated inaction regrets (e.g., anticipated regret about not changing jobs). It would be interesting to see if their functioning differs. Scholars could thus examine if anticipating regret over inactions (e.g. "If I would not change jobs, then… XX.") does have that assumed beneficial function, and leads to more "rational" (i.e., less regrettable) decisions. It could be that anticipated inaction regret works like a signal that not acting, or not changing jobs, is not the best option. Hence, it might motivate people to actually take action and change jobs. If one's goal also concerned changing jobs, then alignment would exist between the anticipated regret and the selected goal—which could be beneficial for their commitment and progress to the goal of changing jobs, as well as for their wellbeing. This would be in line

with the reasoning in regret theories that taking action relates to less regret than not acting—at least in the shorter run. If one's goal did not imply changing jobs, there might again be a troubling discrepancy between the anticipated regret and the selected goal that makes one doubt whether it would really not be better to change jobs still. Here, it seems plausible that the counterfactual thoughts about changing jobs might lower commitment to the selected goal (that did not concern changing jobs). In turn, this might lead to lower progress to the selected career goal, and come with increased regret about not having changed goal or less satisfaction with one's current career. However, taking into account the social norms surrounding people seems imperative. As said, this study took place in Belgium where norms of "not changing jobs" might be more salient. In situations where such norms would be less present, it could be that people would also anticipate less regret to changing jobs (or more regret to not changing jobs if the norm is more to "change jobs"). It would be very interesting to see future research flesh out these potential alternative effects.

Finally, more attention could be given to moderating variables related to anticipating regret. We think, for example, about gender differences. In this study, we controlled for the effect of gender on regret, but we did not examine an interaction effect with anticipated regret on the path with goal commitment. Research has already shown that women are more regret sensitive than men. Moreover, women tend to anticipate and experience more regret than men (e.g., career choice regret; Yan et al., 2022). In this way, it could be that the effects we found could be stronger for women than for men. Another potential factor to consider is people's temporal focus, or the degree to which people tend systematically focus more on the past, present or future in their lives (Shipp et al., 2009). Peltokorpi et al., (2022) already found a moderating effect of temporal focus on the relation between turnover intentions and turnover behavior, in the way that a general focus on the past intensified the relationship. It would be

very interesting to see whether a similar, intensifying—or, contrastingly, buffering—effect could exist for the relationship between anticipated regret and goal commitment.

Practical implications

Our findings are interesting for career counseling to help individuals make better career decisions. Lent & Brown (2020) already suggested an updated version of Parsons' (1909) model for career exploration and decision-making which included negative affectivity as a potentially impeding factor for career decision-making. They show how it is important to become aware of such negative affectivity (e.g., anticipated regret) in order to improve the career decision making—and, hopefully, make less regrettable decisions. Our study showed that regret anticipations about changing jobs may hinder the career goal process. As anticipated emotions appear before decisions are made and actions are taken, they are still malleable. Via conversational therapy forms, comparing pros with cons or other reflective exercises when making a career decision, people might be guided towards more awareness of their anticipated emotion of regret and its potential detrimental influence on their decisions. Counseling or therapy interventions could help people to transform their anticipated regret (back) in a more beneficial form of mental simulating. For example, rather than focusing on the short-term avoidance of regret, counselors might help clients to see anticipated regret as an open door towards broadening one's curiosity. More specifically, a "what if" question can also trigger curiosity, which has been shown to broaden people's thought-action repertoires (Fredrickson & Branigan, 2005; Gallagher & Lopez, 2007). By doing so, counseling can stimulate the positive, motivating effect of anticipated regret as a specific form of pre-factual thinking (Epstude et al., 2016).

Conclusion

In contrast to the generally assumed beneficial effect of anticipated regret, we found that anticipating more regret over changing jobs makes people less committed to their career goal (to change or not change jobs), and this leads to less goal progress. Ultimately, such reduced progress can be linked to more experienced career-related regret and reduced levels of career satisfaction. Future research can build on these empirical findings to examine the potentially enhancing negative cycle between anticipated and experienced career-related regret.

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Supplementary materials

Table 2

Dropout analyses via independent sample t-tests for age as a continuous variable.

		N	*M*	*SE*	T-test	*df*	p-value (two-sided)
Dropout after T1	no	505	43.32	8.39			
	yes	278	43.02	8.33	0.48	574.81	0.63
Dropout after T2	no	371	43.41	8.45			
	yes	134	43.07	8.25	0.40	240.43	0.69

Table 3

Dropout analyses via Chi Square tests for status, gender, partner, children, and education as categorical variables.

		N	χ^2	*df*	p-value (two-sided)
Dropout after T1					
Status[a]	no	505	0.54	1	.46
	yes	491			
Gender[b]	no	503	0.15	1	.70
	yes	277			
Partner[c]	no	504	3.65	1	.06
	yes	278			
Children[d]	no	505	0.10	1	.75
	yes	278			
Education[e]	no	497	1.54	1	.21
	yes	273			
Dropout after T2					
Status[a]	no	371	2.62	1	.11
	yes	134			
Gender[b]	no	370	0.39	1	.53
	yes	133			
Partner[c]	no	371	0.79	1	.76
	yes	133			
Children[d]	no	371	0.33	1	.56
	yes	134			
Education[e]	no	366	0.11	1	.74
	yes	131			

Note. All variables were coded as binary variables.

[a] 0 = employee, 1 = self-employed

[b] 0 = male, 1= female

[c] 0 = without partner, 1= with partner

[d] 0 = no children, 1 = one or more children

[e] 0 = lowly educated, 1 = highly educated (having obtained a bachelor's degree or higher)

Table 4

Summary of path model estimates split by goal type (additional analyses).

Estimate	Model 2[a] *N* = 144	Model 3[b] *N* = 87
Anticipated Regret (AR) → Goal Commitment (GC)	-.26*	-.41**
Interaction term: AR*career goal		
Goal Commitment (GC) → Goal Progress (GP)	.17*	.22*
Goal Progress (GP) → Career Satisfaction $_{T3}$ (CS)	.41**	.58**
CS $_{T1}$ → CS $_{T3}$	.43**	.37**
Goal Progress (GP) → Experienced Regret (ER)	-.42**	-.66**
Indirect path 1: AR → GC → GP → CS	-.02 (p = .09)	-.05 (p = .06)
Indirect path 2: AR → GC → GP → ER	.02 (p = .09)	.06 (p = .06)
Model fit		
χ^2/df	24.57/15	13.64/15
CFI	0.94	1.00
TLI	0.83	1.03
RSMEA	.07	.00
SRMR	.06	.05

Note. N = number of observations used in path model, CFI = Comparative fit index; RMSEA = Root mean square error of approximation; SRMR = Standardized root mean square. Values shown are standardized path estimates.

**p < .001; *p < .05.

[a] *path model for subsample with goals not involving job change.*

[b] *path model for subsample with goals involving job change.*

Study 3: Development and validation of the career inaction scale.

Paulien D'Huyvetter, Marijke Verbruggen, Xinhui Jing, & Jos Akkermans

Career inaction is the phenomenon in which people do not take sufficient action to realize a desired change in their career. Despite recent theoretical advancements and strong indications that career inaction is a prevalent phenomenon that brings along important risks to both individuals and organizations, there is no reliable and valid scale to accurately measure it. Therefore, we developed and validated an 8-item scale of career inaction (CARINAS) across four studies. In Study 1 (N = 258), we pilot-tested the reliability and factor structure of the Dutch CARINAS among Belgian workers. In Study 2 (N = 799), we tested the reliability, measurement invariance across groups, and construct validity of the scale, and started exploring the nomological network of the Dutch CARINAS among Belgian career counseling clients. In Study 3 (N = 170), we tested the reliability and validity of the English CARINAS and reran the correlation tests from Study 2 among US workers. Finally, in Study 4 (N = 198), we re-tested the factor structure and reliability of our scale and further explored the nomological network of the Dutch CARINAS in a two-wave dataset collected with Belgian workers. The results of these four studies revealed that the CARINAS has high reliability and a good factor structure across different groups. Furthermore, the tests of the nomological network yielded interesting insights regarding the assumptions underlying the theory of career inaction. By developing and validating the CARINAS, our study adds to the research on (barriers to) career transitions, paves the way for further empirical research on career inaction, and provides a diagnostic tool for professionals guiding people in their career decision-making process.

***Keywords**: Career Inaction, Career, Scale Development, Scale Validation, Belgian and US Employees.*

Introduction

"Job unhappiness is at a staggering all-time high, according to Gallup" (Collins, 2022)

"Stuck In A Job You Don't Want? UK Workers Have Entered The 'Great Career Depression'" (HuffPost, 2023)

Careers are more dynamic and flexible than ever before (De Vos et al., 2019). Consequently, people need to make career-related decisions more frequently throughout their careers, and navigating career transitions across the lifespan has become a critical theme for almost everyone (Akkermans et al., 2024; Sullivan & Al Ariss, 2021). However, career research to date has dominantly focused on making effective career decisions and has, accordingly, overlooked a critical part of careers: the fact that many people who want to make a change, fail to do so (Oelberger, 2024; Verbruggen & De Vos, 2020). Indeed, newspapers regularly release headlines that illustrate how many people feel unhappy, unmotivated, or stuck in their jobs. Many of them consider making a change in their career, such as switching employers or starting their own business, but then end up staying in their jobs (e.g., Watson et al., 2021). Research has indicated that *not* making a desired career change (e.g., staying while having the intention to leave) can have negative consequences for both organizations and individuals. Research has, for instance, shown that this can lead to lower organizational citizenship behavior, lower productivity, and worsened health (Allen et al., 2016; Mai et al., 2016). These findings raise a crucial question: Why do we still see so many people not making desired career changes if it can lead to poorer career outcomes?

One potential explanation for this situation is that individuals do not always succeed in taking sufficient action to realize the change they long for. Verbruggen and De Vos (2020) recently introduced the concept of career inaction to capture this phenomenon. They defined career inaction as "the failure to act sufficiently over some period of time on a desire to make a change in one's career" (p. 378). In their theory of career inaction, Verbruggen and De Vos

(2020) clarified how career inaction arises over three phases: the awareness phase, the inaction phase, and the recall phase. In the first phase, people realize that they have a desire for change (e.g., changing jobs). In the second phase, which is the "beating heart" of career inaction, people fail to take sufficient action to realize their career desire. This phase lasts for some period of time until people believe that the opportunities and possibilities to act on the desire are gone. This is when they end up in the third phase, in which they look back on how a personal lack of action brought them to this point. Verbruggen and De Vos (2020) also reflect on factors strengthening inaction and its possible consequences. They posit that when people are surrounded by social norms contrasting their desires or when they are deeply embedded in their jobs (i.e., contextual characteristics), they are more likely to act insufficiently on a desired change because the change is then more complex and risky. Similarly, when people's career desire is less crystallized or concerns a transition of a larger perceived magnitude, people are expected to find it more difficult to take action because they may be less motivated or find the change more scary. Verbruggen and De Vos (2020) moreover suggest that being in career inaction holds considerable risks for both employees and organizations, such as poorer health, lower well-being, increased stress, and lowered productivity.

To date, Verbruggen and De Vos' (2020) theory of career inaction has mainly received follow-up in qualitative studies. For example, the interview study of Rogiers et al. (2022) uncovered that people in career inaction experienced emotional tensions due to conflicting motives (e.g., the desire for change vs. the comfort of keeping the status quo). Interviewees tried to alleviate these tensions using strategies that helped in the short run but were often unsuccessful in the long run. Wordsworth and Vilakant's (2021) qualitative study on the career consequences of an earthquake showed that for people who felt stuck in their careers before the earthquake, this significant shock event helped them to take action and get out of career inaction. Furthermore, the interview study by Budjanovcanin and Woodrow (2022) on

people who experienced occupational regret showed that a significant group of their interviewees stagnated in their position, experiencing sustained career inaction. Finally, Oelberger (2024) observed in the qualitative part of her study that career inaction often occurred among single professionals. They used their work devotion as an identity armor to justify staying in their job despite their desire for a job that was better combinable with a romantic relationship. These are valuable insights that have confirmed the phenomenon of career inaction and advanced our initial understanding of its role in people's careers.

The time is now ripe to start studying career inaction in a more generalizable way, through larger-scale quantitative studies. However, this requires a valid measurement instrument to assess career inaction reliably. Such an instrument is currently lacking. Indeed, the few studies that have studied career inaction quantitatively, have assessed the phenomenon indirectly, that is, by examining the experiences of people who failed to realize a desired change in their careers (e.g., Verbruggen & van Emmerik, 2020). Yet, these indirect assessments are unable to capture whether the failure to realize the desired change is due to a lack of sufficient action, which is a core element of career inaction. Without a direct measurement instrument to assess career inaction, our understanding of this phenomenon is likely to remain limited.

To address this gap, we developed and tested a scale that assesses the extent to which people feel to be in the second phase of the career inaction process, so: people's experience that they are not taking sufficient action to realize a desired change in their career. We thus really focus on people's own appraisal of their situation, or, in other words, on how they assess their actions. We did so in three steps. First, we developed a measurement instrument, the Career Inaction Scale (CARINAS), based on best practice recommendations in scale development (e.g., Hinkin, 1995; Wright et al., 2017). This scale follows the definition and conceptual development offered by Verbruggen and De Vos (2020), with a focus on the key

facets of the career inaction phase. Second, we tested the construct validity (i.e., convergent and discriminant validity) by empirically comparing the CARINAS to existing measures of career self-directedness, helplessness, locked-in at the workplace, work pressure, and job autonomy. Third, we explored the nomological network of career inaction by examining its relationship with several potential antecedents (i.e., subjective norms, transition magnitude, proactive personality, job embeddedness, and risk aversion) and outcomes (i.e., career satisfaction, affective well-being, job performance, regret, and perceived health).

Our study makes three key contributions. First, theoretically and conceptually speaking, the CARINAS can complement the dominant focus in career research on individual agency and effective decision-making by offering a valid tool that can assess the degree of career inaction that people experience. Therefore, our new measurement instrument can add to ongoing scholarly debates about, for example, career success, self-directedness, and career transitions (Hirschi & Koen, 2021). Second, methodologically speaking, the CARINAS will enable large-scale quantitative research in the area of career inaction. Doing so would be a necessary next step in building on the available qualitative knowledge to advance research on this phenomenon. Moreover, having a valid and reliable measurement instrument will allow for more effective knowledge accumulation and sharing among scholars interested in career inaction, as they can use the same scale in their research, thus increasing the comparability of empirical work. Third, the CARINAS will have important practical implications for career counselors and HR professionals as a valid measurement instrument that can serve as a diagnostic tool for career professionals to evaluate and support people in their career decisions.

Theoretical background

Career inaction refers to “the failure to act sufficiently over some period of time on a desire to make a change in one’s career” (Verbruggen & De Vos, 2020, p. 8). Verbruggen and De Vos

(2020) introduced this concept in 2020 to raise awareness of the phenomenon that people do not always enact their career desires or plans. Although career transitions have been a research topic ever since Parson's (1909) "Choosing a vocation" (De Vos et al., 2021), career researchers have typically focused on how career decisions are—or should be—made (e.g., Gati, 1986; Holland, 1973; Lent et al., 1994) or on the process through which people realize their career decisions (e.g., Ibarra & Barbulescu, 2010; Nicholson, 1984). Little research attention has been devoted to understanding why people who desire to change, end up staying at their workplace (Budjanovcanin & Woodrow, 2022; Canivet et al., 2017; Verbruggen & De Vos, 2020). Career inaction is one phenomenon that can explain why such career inertia happens.

Verbruggen and De Vos (2020) described career inaction as a processual phenomenon, in which people become aware of a desire for change in their career, but then fail to act sufficiently on that desire (see their theory of career inaction). The desire for change is an important component of career inaction because it sets in motion certain internal processes that may trigger outcomes of career inaction over time. In particular, when people experience a desire for change, they typically start fantasizing about how life could be when the desired change is realized (i.e., pre-factual thoughts; Connoly & Zeelenberg, 2002), for instance, how much happier they would be or how much easier their work-family combination would be when they would change jobs. Although pre-factual thoughts can give people energy and motivation to act on their career desires (Epstude et al., 2016; Hammell & Chan, 2016), people in career inaction experience the opposite: they get overwhelmed and do not succeed in acting sufficiently on their career desire, even though they have the opportunity to do so (Verbruggen & De Vos, 2020). As Verbruggen and De Vos (2020) recognize, this "opportunity to act" is not easy to evaluate objectively; however, what mainly matters is how people appraise their own situation. When, after some time, the window of opportunity closes,

people who experienced career inaction may start wondering why they did not act more on their desired change, precisely because they appraised that they had the opportunity to act more (Gilovich & Medvec, 1995). At this point, the initial pre-factual thoughts tend to evolve into counterfactual thoughts, or thoughts about what could have been, if only they had acted more. For example, people could think "If only I had pushed myself to take more action to change jobs, I would have been a lot happier now". Comparing what is now and what could have been "if only" can trigger self-blame and regret (Connolly & Zeelenberg, 2002). This regret can induce other negative outcomes, such as decreased levels of satisfaction (Verbruggen & van Emmerik, 2020), and worsened health and well-being (Lee et al., 2017; Newall et al., 2009).

Career inaction shows similarities with, yet is conceptually different from several other phenomena. For instance, just like the phenomenon of "being locked-in"— i.e., being in a non-preferred workplace but not perceiving many job opportunities to change (Stengård et al., 2017)—career inaction captures situations where people are not in the career situation they desire. However, while people who are locked-in are in this situation due to external causes (i.e., low employability), people in career inaction experience a lack of agency (i.e., they do not succeed in taking sufficient action). Relatedly, similar to "unanswered callings"—i.e., occupations that people felt drawn to but failed to pursue (Berg et al., 2010)—career inaction has a counterfactual core; however, career inaction is broader as it can relate to other career desires than occupational change (Verbruggen & De Vos, 2020). Finally, career inaction is related to yet different from career indecision, i.e., the state of being unable to make an (optimal) educational, vocational, or career-path choice (Osipow, 1999; Xu & Bhang, 2019). While both career inaction and career indecision can hamper individuals in their career development, career indecision typically precedes the career decision, while career inaction hinders the enactment of the career desire. As such, career inaction can include

career indecision, but it may also entail internal hindrances after people make a career decision (Bian, 2023). Put otherwise, also people who did not experience career indecision or who overcame this state may still struggle with career inaction.

Since career inaction focuses on the enactment phase, it can complement broader theories on goal-directed and agentic behavior. Examples are the action regulation theory (Frese & Zapf, 1994; Zacher & Frese, 2018), implementation intention theory (Gollwitzer, 1993), control theory (Carver & Scheier, 1998), and the rubicon model of action phases (Achtziger & Gollwitzer, 2007). In general, these theories try to explain when or why people take goal-oriented actions, with a focus on the rather rational, linear processes via which people move from cognitions, such as goals and desires, to actual actions to attain goals (Keller et al., 2020). Typically, these theories pay less attention to inconsistencies between people's desires/goals and behaviors, or to non-rational, internal factors that inhibit people from acting on their desires (e.g., fear, mental overload). Since career inaction concerns situations of inconsistencies that are at least in part due to internal factors (since people appraise that they could have acted more; Verbruggen & De Vos, 2020), career inaction may be an interesting addition to these theories.

Aim of this study

As was mentioned above, the theory of career inaction (Verbruggen & De Vos, 2020) has mainly received qualitative follow-up to date. The few quantitative studies on the topic used indirect measurements of career inaction, by looking at people with a desire for change who did not realize their desire (e.g., Verbruggen & van Emmerik, 2020). Given the likely relevance of career inaction for understanding many people's career experiences (Rogiers et al., 2022; Verbruggen & De Vos, 2020) and the risks career inaction is expected to bring along (e.g., lower satisfaction, decreased productivity, reduced health; Oelberger, 2024;

Rogiers et al., 2022; Verbruggen & De Vos, 2020), more quantitative research on the topic is imperative. This, however, requires a valid and reliable measurement instrument.

To enhance our understanding of career inaction, we developed and validated the Career Inaction Scale (CARINAS). Our instrument assesses people's experience of being in the career inaction phase, so: people's perception that they do not succeed in taking sufficient action to realize a desired change in their career. As such, our scale includes the desire for change and the lack of sufficient action; which are the two core elements reflected in the career inaction phase. A high score on our scale thus implies that people have, and are aware of, a career desire and that they feel that they could act more on this desire than they are currently doing. We decided to focus on people's experience of being in this phase, rather than the entire process of career inaction, because this is—according to Verbruggen and De Vos (2020)—the core phase of the career inaction process and because we know that this phase brings along important negative outcomes (e.g., tensions, stress; Rogiers et al., 2022).

Scale development and validation process

We followed the procedure of scale development suggested by Boateng et al. (2018) and conducted three studies. In Study 1, we generated a set of Dutch items to assess career inaction and pilot-tested these items. In Study 2, we tested the reliability, the measurement invariance across various groups, and the convergent and discriminant validity of our scale and we did a first exploration of the nomological net. In Study 3, we tested the reliability and validity of the English version of our scale and ran a correlation analysis to also explore the nomological net in our English dataset. Finally, in Study 4, we performed additional tests of reliability and expanded the nomological network. In what follows, we formulate hypotheses for the convergent and discriminant validity (tested in Study 2) and for the nomological network of career inaction (tested in Studies 2, 3, and 4). Table 1 provides an overview of the sample characteristics for Studies 1 to 4.

Table 1

Sample characteristics, Studies 1-4.

Characteristic	Category	Study 1	Study 2	Study 3	Study 4[a]
Data type		Cross-sectional	Cross-sectional	Cross-sectional	Longitudinal (two-wave)
Sampling type		Convenience sampling: spreading anonymous links to our online survey via social media/ e-mail	Purposive sampling: collaboration with the public employment service of Flanders	Stratified sampling: Prolific panel services (representative sample)	Convenience sampling: Bilendi panel services
Sample description	General/ specific	General: Belgian workers (Dutch-speaking)	Specific: Flemish career voucher clients (Dutch-speaking)	General: of US workers (English-speaking)	General: Belgian workers (Dutch-speaking)
Sample size		258	799	176	T1:289 T2:198
Age[b]	M SD	40.5 11.04	43.3 8.4	37.1 10.2	42.7 10.2
	Range	18-63	23-68	20-65	22-64
Gender	Male	63.6	72.9	42.6	51.5
	Female	37.4	27.1	55.7	49.5
Education	Low (< BCs)	35.6	69.4	33.8	62.2
	High (≥ BCs)	64.4	31.6	66.2	38.8
Partner	No partner	24.0	15.5	18.7	24.5
	With partner	76.0	84.5	81.3	75.5
Children	No children	33.5	33.5	.	49.0
	One or more children	66.5	66.5	.	51.0

[a] For Study 4, all characteristics refer to the sample that completed both waves

[b] For characteristics “Sample size” and “Age”, all cells represent absolute values. Other cells are percentages

Convergent validity

In a scale development process, it is first of all important to demonstrate the convergent validity of the scale. Convergent validity implies that a scale is related significantly to measures of constructs that are theoretically related. To test convergent validity, we explore the correlation between our scale of career inaction and the constructs of career self-directedness (Briscoe et al., 2006), helplessness (Odéen et al., 2013) and being locked-in (Stengård et al., 2016).

First, career self-directedness refers to an attitude whereby people steer their own careers and take up responsibility for realizing their career choices (Briscoe et al., 2006). The attitude reflects a feeling of personal agency regarding one's career (Briscoe et al., 2006). A recent meta-analysis showed that this attitude is positively related to subjective and objective career success and career changes (Li et al., 2021). In contrast to career self-directedness, career inaction — i.e., failing to act sufficiently on a desired change in one's career — is conceptually characterized by low levels of agency and a low likelihood of realizing the desired change (Verbruggen & De Vos, 2020). As such, we expect a negative correlation between career self-directedness and career inaction.

Hypothesis 1a: Career self-directedness is negatively related to career inaction.

Second, helplessness refers to individuals' expectation that there is no link between their actions and the outcomes they desire (Odéen et al., 2013). People who experience helplessness tend to take less initiative, are more often absent from work, and have a higher likelihood of feeling locked-in at the workplace (Chung et al., 2017; Martinko & Gardner, 1982; Sideridis, 2003; Stengård et al., 2017). In the context of careers, helplessness implies that people expect that their career actions have little impact on their career development. When people expect that they can't change much with their career actions, it is likely that see

little value in career action and, thus, that they are less motivated to act on their career desires. We therefore expect a positive correlation between helplessness and career inaction.

Hypothesis 1b: Helplessness is positively related to career inaction.

Third, being locked-in refers to the situation that people stay in a workplace they don't prefer due to a perceived lack of alternative job opportunities (Stengård et al., 2016). As explained above, both career inaction and being locked-in refer to situations in which people are not in the work situation they prefer or desire, but the concepts differ in the explanation for being in this situation (i.e., not perceiving many alternative job opportunities versus not taking sufficient action). We therefore expect a moderately positive correlation between both concepts.

Hypothesis 1c: Being locked-in is positively related to career inaction.

Discriminant validity

Another step in the scale development process is demonstrating discriminant validity. This means that a scale is not or at most weakly[5] related to dissimilar constructs that are conceptually unrelated (Rönkkö & Cho, 2022). To this end, we explore the correlation between career inaction and two job characteristics: job autonomy and work pressure. Job autonomy refers to the degree to which a job allows the employees to freely make work decisions about where, when, and how to perform their work tasks (Hackman & Oldham, 1975; Kubicek et al., 2017). Work pressure refers to the pressure a job puts on employees due to excessive workload, work speed, and/or work responsibilities (Hetland et al., 2021). Verbruggen and De Vos (2020) expected that career inaction can occur to individuals in a wide range of jobs, occupations, and positions – characterized by varying degrees of job

[5] Rönkkö and Cho (2020, p.12) describe that discriminant validity implies that a correlation between two measures "is low enough for the measures to be regarded as measuring distinct constructs." The authors also state that "Using the cutoff of zero is clearly inappropriate as requiring that two factors be uncorrelated is not implied by the definition of discriminant validity and would limit discriminant validity assessment to the extremely rare scenario where two constructs are assumed to be (linearly) independent." (p. 14).

autonomy and work pressure. There are no reasons to expect that job autonomy or work pressure would affect the likelihood that people act on a desired change. Nevertheless, there may be a weak correlation between these job characteristics and a desire for change—the other core element of career inaction—, since job characteristics are known to be distal and thus rather weak antecedents turnover intentions (Hom et al., 2012). Taking this into account, we expect no, or at most a weak correlation between career inaction and job autonomy and work pressure.

Hypothesis 2a: Career inaction is not, or weakly, correlated to job autonomy.

Hypothesis 2b: Career inaction is not, or weakly, correlated to work pressure.

Nomological network

To test the nomological network of career inaction, we incorporated several theoretically and empirically relevant constructs. Verbruggen and De Vos (2020) proposed that career inaction is influenced by contextual factors and decisional characteristics, and suggested that also people's personalities may be of impact. We, therefore, assess the relationship between career inaction and several of the contextual, decisional, and personality factors suggested by Verbruggen and De Vos (2016; 2020): subjective norms to stay, transition magnitude, proactive personality, job embeddedness, and risk aversion. In addition, Verbruggen and De Vos (2020) argued that career inaction can trigger several negative attitudinal, well-being, and performance outcomes. We therefore expect career inaction to be related to career satisfaction, affective well-being, job performance, regret, and health. Below, we develop two series of hypotheses, a first series on potential antecedents (H3a-H3e) and a second one on potential outcomes (H4a-H4e).

Antecedents of career inaction

Subjective norms refer to the perception that important others will either support or disapprove of a particular behavior (Ham et al., 2015). Research across scholarly fields has

shown that people tend to behave in line with prevailing social norms (e.g., Westaby & Lowe, 2005; Westaby et al., 2010). Following this research, the theory of career inaction (Verbruggen & De Vos, 2020) proposes that individuals are more likely to experience career inaction when they perceive stronger subjective norms favoring stability (in this case, staying in their current job). When the subjective norms against making a career-related change are stronger, people will expect less social support and more resistance from others when they act on their desire for change. These anticipations may trigger fear, which could paralyze people and strengthen their degree of being in career inaction. In line with this expectation, earlier research has shown that norms to stay were negatively related to people's job search intensity (Zikic & Saks, 2009). We formulate the following hypothesis:

Hypothesis 3a: Subjective norms to stay are positively related to career inaction.

Transition magnitude refers to the degree of differences in skills, location, required knowledge, and other characteristics between a pre-transition and post-transition situation (e.g., the current and the desired new job; Latack, 1984; Nicholson, 1984). For example, the transition magnitude is larger when changing occupations (e.g., from engineer to science teacher) than when changing jobs or positions (e.g., from engineer to "senior" engineer) as the former implies a bigger change in tasks, activities, and required skills (Breeden, 1993; Chudzikowski, 2012). This means that occupational changes are also considered more risky and more pivotal to one's career (Dlouhy & Biemann, 2018). The theory of career inaction (Verbruggen & De Vos, 2020) proposes that individuals are more likely to take insufficient action to pursue a desired career transition when they perceive the transition magnitude to be large rather than small. This is because people may anticipate more short-term costs (e.g., loss of skills and networks), efforts (e.g., longer and possibly more costly training needed when making a larger transition), and risks (e.g., uncertainty of fit with the new position) related to making a larger career change, and because it is harder and more complex to compare the

current and the desired career position (Verbruggen & De Vos, 2020). Under such conditions, individuals are more likely to get paralyzed and stop acting on their desired career change (Verbruggen & De Vos, 2020). Therefore, we hypothesize that:

Hypothesis 3b: Transition magnitude is positively related to career inaction

Proactive personality refers to the degree to which people tend to show initiative, take action, and persevere until meaningful change occurs (Crant, 2000). Previous studies have found that proactive individuals are more likely to take the initiative to explore available career opportunities, find new ways to solve problems, and persevere until the intended change happens (e.g., Aryee et al., 2005; Bateman & Crant, 1993; Seibert et al., 2001). Given their innate inclination to take action, we expect that proactive individuals are less likely to experience career inaction. We therefore hypothesize that:

Hypothesis 3c: Proactive personality is negatively related to career inaction

On-the-job embeddedness refers to the extent to which job-related elements keep people embedded or stuck in their organization (e.g., promotional opportunities, pension, and good colleagues; Lee et al., 2004, 2014). The theory of career inaction (Verbruggen & De Vos, 2020) proposes that people with a desire for change are less likely to take sufficient action to pursue this desire when their on-the-job embeddedness is high due to the fear of the anticipated loss (e.g., losing the excellent pension package) and the enhanced cognitive complexity to compare an uncertain new job with the current job with all the valued job-related features. In line with this theoretical proposition, studies have found that employees with a desire to change jobs are less likely to search intensely and less likely to leave when they experience more on-the-job embeddedness (e.g., Allen et al., 2016; Jiang et al., 2012). Therefore, we hypothesize that:

Hypothesis 3d: On-the-job embeddedness is positively related to career inaction

A fifth and final antecedent we explore is risk aversion. Risk aversion refers to the tendency of people to avoid options with uncertain outcomes (Baron, 2008). Since making a change in one's career always implies uncertainty, it could be expected that more risk-averse people are less likely to act on a desired change because the thought of changing triggers more fear and uncomfortable feelings. In line with this expectation, Allen and colleagues (2005) found that employees were less likely to realize their turnover intentions when they were more risk-averse.

Hypothesis 3e: Risk aversion is positively related to career inaction

Outcomes of career inaction

Career satisfaction refers to people's satisfaction with how their career evolves and progresses over time (Greenhaus et al., 1990) and is often considered an indicator of subjective career success (Seibert et al., 2024). People who experience career inaction, tend to feel stuck in their career without succeeding to take sufficient action to change their situation. They are therefore likely to feel that their career does not evolve and progress as they aspired and that this is due to their own lack of action, which is likely to lower their career satisfaction (Verbruggen & De Vos, 2020). Indeed, research indicates that a lack of progress toward one's career goals is likely to lower people's career satisfaction and success (Hülsheger & Maier, 2010; Verbruggen & Sels, 2010).

Hypothesis 4a: Career inaction is negatively related to career satisfaction

Recent research on career inaction has revealed that failing to act on one's desire for change creates emotional tension, which may negatively affect people's well-being (Rogiers et al., 2022). These findings are in line with the theory of career inaction (Verbruggen & De Vos, 2020), which states that a failure to act on a desired change can cause counterfactual thinking that triggers reduced well-being. Indeed, research has shown that inactions are more related to depression, anxiety, and stress than 'wrongful' actions (e.g., Davidai & Gilovich,

2018; Wrosch et al., 2007). Likewise, research has found that people tend to experience more emotional exhaustion when they feel stuck in an adverse career environment (Allen et al., 2016). Therefore, we hypothesize that:

Hypothesis 4b: Career inaction is negatively related to affective well-being

Next, we expect a negative relationship between career inaction and job performance. According to the theory of career inaction (Verbruggen & De Vos, 2020), people in career inaction are in a state of paralysis, which may transcend to other behaviors, such as their work effort. Accordingly, they could show lower job performance. In line with this expectation, research has found that employees who stay despite a desire to leave show lower levels of intra- and extra-role performance (Burton et al., 2010; Mai et al., 2016). We therefore hypothesize:

Hypothesis 4c: Career inaction is negatively related to job performance

We also expect career inaction to be related to regret. Regret is a negative cognitive emotion that originates from a comparison between what is and what might have been (Chua et al., 2009). When people are in career inaction, they are considering making a career change and tend to fantasize about how their life could be when they achieve the desired change (i.e., 'pre-factual thought'; Rothausen et al., 2017). These pre-factual thoughts may evolve into 'counterfactual thoughts' about 'what life could have been' if they had acted on the intended career change (McCloy & Byrne, 2000). The comparison between what is and what could have been is likely to trigger regret, especially when, in comparison, the factual reality is valued lower (Zeelenberg & Pieters, 2007). In line with these ideas, the theory of career inaction (Verbruggen & De Vos, 2020) proposes that counterfactual thoughts make it more difficult for people to justify their inaction, thereby triggering regret. In line with this reasoning, empirical research (Verbruggen & van Emmerik, 2020) found that stayers with

stronger preceding turnover thoughts experienced more regret about not having changed jobs. Thus, we hypothesize that:

Hypothesis 4d: Career inaction is positively related to regret about not changing

Finally, we expect career inaction to be negatively related to perceived health. People in career inaction tend to think about and long for a change in their career. At the same time, they do not succeed in acting sufficiently on this desire. Accordingly, they are unlikely to get closure and may be regularly confronted with the discrepancy between their desire and their actual career situation. This recurrent confrontation may trigger rumination, and sleep problems and even affect their overall health (Jokisaari, 2003; Lee et al., 2017). It is therefore possible that career inaction is negatively related to perceived health.

Hypothesis 4e: Career inaction is negatively related to perceived health.

Study 1

The first study aimed to develop a set of items and to pilot-test these items. In what follows, we explain our approach for these two steps.

Step 1: Item generation and expert check

First, a pool of Dutch items was generated to assess the degree to which people experience career inaction. In particular, we aimed to capture the extent to which people feel that they are not taking sufficient action to realize a desired change in their career—as reflected in the second, core phase of the processual phenomenon of career inaction. We applied the deductive method as described by Boateng et al. (2018), in which the items are based on existing theory and research on the topic. As research on career inaction is still in a nascent stage, item generation was primarily based on the theory of career inaction by Verbruggen and De Vos (2020) and the qualitative study on the lived experience of career inaction of 43 Belgian-employed individuals by Rogiers et al. (2022). We aimed to develop a short scale that

could capture career inaction as a one-factor construct reflecting the degree to which people experience that they are not taking sufficient action to realize their career desire.

Earlier research (Kline, 2005) suggested that most constructs could be captured with good internal consistency reliability via a scale composed of four to six items and that short scales can effectively decrease the risk for response biases triggered by fatigue or boredom. Kline (2013) and Weiner et al. (2012) also recommended generating at least double the number of the minimal desired items to allow for an optimal selection of items in later stages. Since we aimed for a short, efficient, unidimensional measurement instrument that could reliably capture to which degree individuals experience career inaction, we formulated an initial set of eight items— thus, double the minimal number of four items that are recommended for a short scale. We started with five key items reflecting the tension between wanting to change, but not succeeding in doing so because of a personal lack of action. Example items are the items "I would like to change something in my career, but I don't actively pursue it" and "I fail to take concrete actions to fulfill my career desires". In line with the practice of including items broader than the identified construct (Clark, 1995; Loevinger, 1957), we did not only include items that directly assessed people's feeling of not taking sufficient action to realize a desired career change, but also some broader items based on the qualitative quotes of people who felt stuck in career inaction (Rogiers et al., 2022): i.e., "I don't manage to realize my career desires ", "I fail to effectively change the aspects in my career that I want to change", and "I feel stuck in my career". Items were all developed in Dutch. We opted for a Likert response scale ranging from 1 (*I completely disagree*) to 5 (*I completely agree*) because the 5-point length has been shown to generally result in good reliability (DeCastellarnau, 2017).

To test whether these items were clear, understandable, easy to score, and capturing the underlying "inability to undertake sufficient action to realize a desired career change", the

scale was pilot-tested with seven expert career scholars and ten laymen. All 17 participants independently assessed each item on clarity and conceptual fit with the construct of career inaction. Based on their feedback, some items were reformulated and one item (i.e., "I want to change something in my career, but I don't dare to give up what I currently have") was added to our scale. An overview of the original nine Dutch items, with their English translation, can be found in the supplementary materials (i.e., Table 8).

Step 2: Dimensionality and reliability

Next, we collected data from 258 Belgian workers to test the dimensionality and reliability of our scale. Participants were recruited via convenience sampling, i.e., a non-random sampling method that gathers data with participants that were easy to recruit. Participants were sought by spreading anonymous links to our online survey via social media (LinkedIn, Facebook, Instagram) and e-mail. Demographical details can be found in Table 1.

The dimensionality of the scale was tested using Exploratory Factor Analysis (EFA) with principal axis factoring as the extraction method. A Kaiser-Meyer-Olkin value of .95 and a significant Bartlett's test of sphericity ($p < .001$) indicated that our data were fit for factor analysis. A single-factor solution emerged: the first identified factor had an eigenvalue of 6.25 and explained 69.5% of the total variance, whereas the second factor only had an eigenvalue of 0.51 and explained 5.6% of the variance. Standardized factor loadings of the items ranged from .74 to .88, meaning that the items are highly correlated with the primary factor and make substantial contributions to measuring the factor. In addition, Cronbach's alpha for the scale was .94, suggesting a good internal consistency.

In sum, the results of Study 1 show the adequateness of the developed nine items to measure career inaction as a one-dimensional construct. Consequently, we retained all nine items for further validation in the next study.

Study 2

The aim of the second study was fourfold. First, we tested the factor structure and reliability of our scale in a new sample. Second, we performed a series of measurement invariance tests to check the suitability of the CARINAS for different groups. Third, we investigated the construct validity (i.e., convergent and discriminant validity) of our scale via correlational analysis. Fourth, we performed a first correlational test to initiate the mapping of the nomological network (i.e., assessing hypotheses 3a-3c and 4a-4c).

Procedure and sample

We collected data from 799 Flemish workers who bought a career counseling voucher between January and April 2022 via purposive sampling. We did so in collaboration with the public employment service of Flanders in order to reach a specific sample: career voucher clients. In Flanders, the Dutch-speaking north of Belgium, every worker with at least seven years of work experience can buy a career counseling voucher for 40 euros once every six years to follow four hours of career counseling in an independent career center. Because workers who want to participate in career counseling often experience a desire for change in their career but want help reaching their career goal (Verbruggen & Sels, 2008), this seemed a particularly relevant sample to further test the psychometric properties of our career inaction scale. Details on the demographics of the respondents can be found in Table 1.

Measures

Career inaction was measured with the 9-item CARINAS developed in Study 1. The items were measured on a five-point Likert scale ranging from 1 (*completely disagree*) to 5 (*completely agree*).

Career self-directedness was measured using the 8-item scale of Briscoe et al. (2006), among which "I am in charge of my own career." Respondents scored the items on a 5-point

Likert scale ranging from 1 (*completely disagree*) to *5* (*completely agree*). Cronbach alpha was .78

Helplessness was measured via three items adapted from Odéen et al. (2013), in which "life" was replaced by "career" to apply the scale to the career context. A sample item is "All my attempts at changing my career are meaningless." Respondents indicated how well these items described them on a 5-point Likert scale (1*: does not describe me at all* to 5: *describes me very well*). Cronbach alpha was .75.

Being locked-in was measured using the approach of Stengård et al. (2016). We assessed both respondents' workplace preference (using the question "Is the job you do today the job you wish to do in the future?"; 1 = yes, 2 = no, but I'm satisfied right now, and 3 = no, I'm dissatisfied with my job) and perceived employability ("How easy would it be for you to get another similar job without having to change residence?"; 1: very easy – 4: very hard). Similar to the approach of Stengård and colleagues (2017), respondents who responded 2 'no, but I'm satisfied right now' were left out of this measure and the others were categorized into two groups reflecting whether the individual was (1) being locked-in (combination of low employability and answer alternative 3 on the workplace non-preference scale), or (0) not locked-in (all other combinations).

Job autonomy was measured with a 4-item scale on psychological job control (Kossek et al., 2006). A sample item is "I have the freedom to work wherever is best for me—either at home or at work." Respondents indicated the degree to which they agreed with the items on a 5-point Likert scale (1: *do not agree at all* to 5: *completely agree*). Cronbach alpha was .75

Work pressure was measured using the 3-item scale of Peeters et al. (2005). We asked respondents how often they (a) had to work very fast, (b) had too much work to do, and (c) had to work extra hard to finish a task in their job. They could respond on a 5-point Likert scale from 1 (*never)* to 5 *(always*). Cronbach alpha was .86.

Subjective norms to stay were measured with two items adapted from Zikic and Saks (2009). Whereas the original scale asked respondents to what degree "their significant other and other people who are important to them think they should seek a new job in the next four months" (p. 122), respondents in this study had to indicate to what extent their partner and other people who are important to them thought that they should stay with their current employer (1: *to a very little extent* to 5: *to a very large extent*). An example item is: "To what extent does your partner think that you should stay with your current employer?" Cronbach alpha was .77.

Transition magnitude was measured using the 3-item scale of West et al. (1987). A sample item is: "How different is your desired job from your current job with respect to the tasks you have to complete?" Respondents scored the items on a 5-point Likert scale from 1 (*completely different*) to 5 (*not different at all*). All items were reversed such that a higher score indicates a larger magnitude. Cronbach alpha was .87.

Proactive personality was measured with the 6-item scale of Claes et al. (2005). A sample item is: "If I believe in an idea, no obstacle will prevent me from making it happen." Respondents scored the items on a 5-point Likert scale ranging from 1 (*doesn't describe me well*) to 5 (*describes me very well*). Cronbach alpha was .83.

Career satisfaction was measured with a single item as also used by Nauta et al. (2009), Skotnicki et al. (2023), and Verbruggen and van Emmerik (2020),: "Generally speaking, how satisfied are you currently with your career?" Respondents could answer with a number from 1 to 5, with 5 referring to the highest degree of satisfaction.

Affective well-being was measured with five items of the General Health Questionnaire by Goldberg and Hillier (1979). An example item was "How often did you feel calm and quiet in the past month?" Respondents could answer on a six-point Likert scale ranging from 1 (*never*) to 6 (*always*). Cronbach alpha was .87.

Job performance was measured with the 6-item scale of Abramis (1994). One of the items is “How well do you think you made decisions in the past working week?” Respondents could score the items on a 5-point Likert scale ranging from 1 (*very bad*) to 5 (*very good)*. Cronbach alpha was .85.

Results

Step 1: Factor structure. First, we conducted a Confirmatory Factor Analysis (CFA) using the Maximum Likelihood estimator with Robust standard errors (MLR) to examine the fit of the data with the factor structure. We found a moderate fit for the model in which the 9 items loaded on 1 latent factor ($\chi^2[27] = 219.14$; *CFI* = .925; *TLI* = .900; *RMSEA* = .095; *SRMR* = .051). Based on the modification indices, we removed item 5: “I fail to effectively change the aspects in my career that I want to change.” The 8-item model without item 5 (see Table 2) showed a good fit to the data ($\chi^2[20] = 104.49$; *CFI* = .960; *TLI* = .944; *RMSEA* = .073; SRMR = .040) and a significantly better fit than the 9-item model ($\Delta\ \chi^2[7] = 109.99$; $p <$ .001). Standardized loadings ranged from .44 to .84 (Tabachnick & Fidell, 2013). Based on our CFA findings, we moved on with the 8-item model for further analysis. Cronbach’s alpha of the 8-item scale was .87 and the composite reliability was .88, which both indicate good internal consistency. Table 2 contains the final 8 items in Dutch, their English translation-back-translation (advised by e.g., Klotz et al., 2023), and all item-loadings. We validated this translated version of the CARINAS in Study 3.

Table 2

The final eight items of the career inaction scale (CARINAS) with item-loadings.

Item	English translation	Standardized item loadings				
	(Original Dutch formulation)	**Study 1**	**Study 2**	**Study 3**	**Study 4 (T1)**	**Study 4 (T2)**
1	I would like to change something in my career, but I don't actively pursue it *(Ik wil graag iets veranderen in mijn loopbaan, maar ik maak er geen werk van)*	.81	.76	.82	.86	.88
2	I would like to change something in my career, but I don't know how to start *(Ik wil graag iets veranderen in mijn loopbaan, maar ik weet niet goed hoe eraan te beginnen)*	.81	.79	.82	.84	.81
3	I want to change something in my career, but I don't dare to give up what I currently have *(Ik zou wel iets willen veranderen in mijn loopbaan, maar ik durf niet opgeven wat ik nu heb)*	.73	.69	.71	.83	.84
4	I fail to take concrete actions to fulfill my career desires *(Ik slaag er niet in om concrete acties te ondernemen om mijn loopbaanwensen waar te maken)*	.88	.85	.84	.89	.92
5	I feel paralyzed when thinking about realizing my career desires *(Ik voel me verlamd wanneer ik nadenk over het realiseren van mijn loopbaanwensen)*	.81	.78	.86	.84	.82
6	I find it difficult to take action to change something in my career *(Ik vind het moeilijk om actie te ondernemen om iets aan mijn loopbaan te veranderen)*	.79	.77	.90	.81	.86
7	I feel stuck in my career *(Ik heb het gevoel dat ik vastzit in mijn loopbaan)*	.84	.52	.83	.83	.76
8	I don't manage to realize my career desires *(*Ik kom er niet toe om mijn loopbaanwensen te realiseren*)*	.77	.66	.84	.69	.84

***Step 2: Measurement invariance*.** Next, we assessed whether the 8-item scale worked equally well for men and women, for people with and without a bachelor's degree or higher, for people with and without a partner, and for people with and without children. We did so by testing the four levels of measurement invariance (MI)—configural, metric, scalar, and strict—via multiple-group CFA. With each level, the restrictedness of the model increases as the loadings, intercepts, and error variances are fixed, respectively. Per level, measurement invariance holds when the fit of the model does not significantly deteriorate compared to the previous level (Leitgöb et al., 2023). In other words, for metric MI, we compared the fit of the model with restricted loadings to the non-restricted model; for scalar MI, we compared the fit of the model where also intercepts were restricted to the model with the restricted loadings only; and for strict MI, we compared the model where also the residuals were restricted to the model where loadings and intercepts were restricted.

Building on the work of Chen (2007), we examined the changes in model fit via the comparison of changes in the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean squared Residual (SRMR) with suggested cutoffs. For samples of more than 300 respondents, metric measurement invariance implied that there should not be a decline in CFI higher than .010 in combination with an increase in the RMSEA higher than .015 or an increase in SRMR higher than .030. For scalar and strict measurement invariance, the decline in CFI should be below .010, the increase in RMSEA should be below .015, and the change in SRMR should be lower than .010 (Chen, 2007).

Results confirmed configural, metric, scalar, and strict invariance for the four contexts under consideration (see Table 3). So, the scale performed equally well in measuring the experience of career inaction among men and women, among people with and without a

bachelor's degree, among people with and without a partner, and among people with and without children.

Table 3

Results of the measurement invariance tests for Study 2.

Group and Invariance type	CFI	RMSEA	SRMR	ΔCFI	ΔRMSEA	ΔSRMR
Gender [a]						
Configural	0.954	0.089	0.041			
Metric	0.952	0.084	0.051	-0.002	-0.005	0.010
Scalar	0.950	0.080	0.053	-0.002	-0.004	0.002
Strict	0.949	0.075	0.056	-0.001	-0.005	0.003
Educational level [b]						
Configural	0.953	0.090	0.039			
Metric	0.953	0.083	0.043	-0.000	-0.007	0.004
Scalar	0.952	0.078	0.044	-0.001	-0.005	0.001
Strict	0.954	0.072	0.044	-0.002	-0.006	0.000
Partner [c]						
Configural	0.954	0.088	0.040			
Metric	0.956	0.080	0.042	-0.002	-0.008	0.002
Scalar	0.956	0.074	0.043	-0.000	-0.006	0.001
Strict	0.957	0.069	0.044	0.001	-0.005	0.001
Children [d]						
Configural	0.954	0.088	0.040			
Metric	0.956	0.080	0.042	-0.002	-0.008	0.002
Scalar	0.956	0.074	0.043	-0.000	-0.006	0.001
Strict	0.957	0.069	0.044	0.001	-0.005	0.001

Note. CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR= Standardized Root Mean squared Residual.

[a] Men versus women.

[b] Bachelor or higher versus no bachelor degree.

[c] With partner versus without partner.

[d] No children versus one or more children.

Step 3: Convergent and discriminant validity.

For the convergent validity, we found that career inaction was correlated negatively with career self-directedness and positively with helplessness and being locked-in (see Table 4). We can thus confirm that the constructs of career self-directedness, helplessness, and being locked-in relate to career inaction in a way that corresponds to theory-based expectations (see hypotheses 1a-1c). For the discriminant validity, we found no significant correlations between career inaction on the one hand and job autonomy ($r = -.05$; $p = .20$) and work pressure ($r = .04$; $p = .27$) on the other hand. This confirms our theory-based expectations that job autonomy and work pressure are not or only very weakly correlated to career inaction (see hypotheses 2a and 2b).

Additionally, we performed several confirmatory factor analyses to test whether the career inaction scale was distinct from the scales of career self-directedness, helplessness, job autonomy, and work pressure. The models in which career inaction was modeled as a distinct factor had always a good fit and better fit indices than the models in which the items of career inaction loaded on one of the other constructs (see supplementary materials, Table 9). This confirms that our career inaction scale is distinct from career self-directedness, helplessness, job autonomy, and work pressure. Given the support for both convergent and discriminant validity, we can conclude that our career inaction scale has good construct validity.

Table 4

Means, standard deviations, and correlations for convergent and discriminant validity for Study 2 (N = 799).

	M	SD	1	2	3	4	5
1. Career inaction	3.20	0.77	_				
2. Career self-directedness	3.50	0.58	-.41**	_			
3. Helplessness	2.54	0.79	.49**	-.41**	_		
4. Being locked-in[1]	0.30	0.46	.16**	-.14**	.27**		
5. Job autonomy	2.69	0.92	-.05	.18**	-.14**	-.02	_
6. Job demands	3.81	0.74	.04	-.01	.07*	.04	-.11*

***p < .001. *p < .05. All correlations are two-sided Pearson correlations.*

[1] For the statistics with being locked-in, N = 574 since participants who answered that they were not in their preferred job but were still satisfied with their job were left out of the analysis, in line with the approach of Stengård et al., (2016).

Step 4: Correlation analysis for the nomological network.

Finally, we did a first exploration of the nomological network of career inaction. In particular, we did a correlational analysis to assess hypotheses 3a-3c and 4a-4c (see Table 5). Results showed that workers who experience stronger norms of staying (r = .13, p < .001) and those with a lower degree of proactive personality (r = -.34 ; p < .001) tend to experience more career inaction. This is in line with Hypotheses 3a and 3c, respectively. However, contrary to hypothesis 3b, the correlation between transition magnitude and career inaction was not significant (r = -.06; p = .12). Furthermore, in line with our expectations, higher scores on career inaction were related to lower scores on career satisfaction (r = -.12, p < .001), affective well-being (r = -.23 ; p < .001), and job performance (r = -.11 ; p < .001). This is in line with hypotheses 4a, 4b, and 4c, respectively.

Table 5

Means, standard deviations, and correlations for nomological network for Study 2 (N = 714).

	M	SD	1	2	3	4	5	6
1. Career inaction	3.20	0.77	_					
2. Norms to stay	2.32	1.07	.13**	_				
3. Transition magnitude	2.54	1.10	-.06	.11**	_			
4. Proactive personality	3.36	0.65	-.34**	-.04	.10**	_		
5. Career satisfaction	2.60	1.12	-.12**	.16**	.18**	.09**	_	
6. Affective well-being	3.20	0.88	-.23**	.16**	.18**	.19**	.29**	_
7. Job performance	3.59	0.74	-.11**	.09*	.15**	.26**	.14**	.20**

**$p < .001$. *$p < .05$. All correlations are two-sided Pearson correlations

Study 3

To verify the reliability and validity of the English translation of the CARINAS, we collected data with an English-speaking sample as well.

Procedure and sample

We gathered a representative sample of 176 US respondents via the panel services of Prolific. We targeted US workers between 18 and 67 years old, who worked full-time or part-time and who were fluent in English. Respondents received a monetary reward for their participation. The demographic details for this sample can be found in Table 1. Additionally, we saw that slightly more than half of the respondents (55.3%) reported to have an active desire to change something in their career.

Measures

We measured subjective norms to stay (Cronbach α = .87), transition magnitude (Cronbach α = .93), proactive personality (Cronbach α = .86), career satisfaction (single item), affective well-being (Cronbach α = .74) and job performance (Cronbach α = .86) with the same scales as in Study 2. Career inaction was assessed using the 8-item CARINAS. We also asked respondents whether they had an active desire for change in their career (0 = no; 1 = yes).

After removing six respondents who failed the attention check, we performed a CFA and reliability analysis and ran correlation analyses with the same variables as in Study 2.

Results

Step 1: Factor structure.

The confirmatory factor analysis (CFA) with MLR estimator showed a good fit for the model in which the 8 items loaded on one latent factor ($\chi^2[20] = 65.1$; *CFI* = .960; *TLI* = .944; *RMSEA* = .089; *SRMR* = .042). Standardized loadings were in line with the results from Study 2, they ranged from .65 to .91 (see Table 2). Cronbach alpha was .93, which shows a good internal consistency reliability.

Step 2: Correlation analysis for the nomological network.

Here, results first of all showed that career inaction was negatively correlated with the norms to stay ($r = -.17$, $p = .02$), which is in contrast to hypothesis 3a in which we expected a positive correlation between norms to stay and career inaction. In line with hypotheses 3b and 3c, we found a positive correlation between career inaction and transition magnitude ($r = .44$, $p < .001$) and a negative one between career inaction and proactive personality ($r = -.40$, $p < .001$). Next, results indicated that career inaction was negatively related to career satisfaction ($r = -.41$, $p < .001$), affective well-being ($r = -.41$, $p < .001$), and job performance ($r = -.41$, $p < .001$). These results are in line with hypotheses 4a-4c.

To better understand the unexpected negative correlation between norms to stay and career inaction, we ran the correlation analysis again for the group of people who stated to have an active desire for change and for the group who did not. For the group of people who had a desire for change in their career, the correlation between norms to stay and career inaction became positive though non-significant ($r = .12$, $p = .25$) and for the people without a desire for change, the correlation remained negative ($r = -.37$, $p < .001$).

Overall, the results of this study support the reliability and validity of the English version of the CARINAS—with almost identical correlations to the hypothesized antecedents and outcomes.

Study 4

The aim of Study 4 was to confirm the factor structure and reliability of the Dutch version of our scale, examine the test-retest reliability, and extend our understanding of the nomological network of career inaction. For the nomological network, we first retested the relationships we assessed in Study 2 and additionally tested hypotheses 3d-3e and 4d-4e.

Procedure and sample

We collected a two-wave dataset with Belgian workers via the Bilendi panel services. Research has shown that panel data converge with data collected from more conventional sources (Walter et al., 2018). The waves were one month apart. We reached 289 people in the first wave and 198 in the second wave. Details about the sample's demographics are presented in Table 1.

Measures

Career inaction (measured at T1 and T2), subjective norms to stay (measured at T1; Cronbach α = .79), transition magnitude (measured at T1; Cronbach α = .90), proactive personality (measured at T1; Cronbach α = .80), career satisfaction (measured at T2; single item), affective well-being (measured at T2; Cronbach α = .89) and job performance (measured at T2; Cronbach α = .89) were measured with the same scales as in Study 2. For career inaction, we used the 8-item version of the CARINAS. We additionally included measures for on-the-job embeddedness, risk aversion, regret about not changing, and perceived health.

On-the-job embeddedness was measured at T1 using the 6-item scale of Clinton et al. (2012). One of the items is "I would miss the excitement that this job brings if I left." Cronbach alpha for this on-the-job embeddedness measurement was .82.

Risk aversion was measured at T1 using the 6-item scale of Mandrik and Bao (2005). A sample item is: "I prefer situations that have foreseeable outcomes". The scale was found to be reliable (Cronbach α = .77).

Regret about not changing was measured at T2 via a 3-item scale of Verbruggen and van Emmerik (2020). A sample item is "I regret not having realized a change in my career in the past six months." Respondents indicated how much they agreed with the items (1: *I don't agree at all* to 5: *I completely agree).* Cronbach alpha was .91.

Perceived health was measured with the widely used single-item general health measure (e.g., Latham & Peek, 2013), which asks respondents to evaluate their general health (1: *poor*; 5: *excellent*). Research has found this single item to have good validity both cross-sectionally and longitudinally (Macias et al., 2015).

Results

Step 1: Factor structure. Confirmatory Factor Analyses with the MLR estimator confirmed a good fit of the 8-item CARINAS at T1 (*CFI* = .966; *TLI* = .956; *RMSEA* = 0.069; *SRMR* = .039) and T2 (*CFI* = .978; *TLI* = .969; *RMSEA* = .060; *SRMR* = .036). Additionally, we performed a test for measurement invariance over time, in the same manner as we did in Study 2. In particular, we tested configural, metric, scalar, and strict measurement invariance, by consequentially fixing factor loadings (metric invariance), intercepts (scalar invariance), and error variances (strict invariance). The career inaction factors as well as the residuals of the same items were allowed to correlate over time (Fokkema et al., 2013). In line with the guidelines of Chen (2007) for samples with less than 300 observations, metric invariance is violated if the change is CFI is higher than .005 supplemented by a change of more than .010

in RMSEA or a change of more than .025 in SRMR. For scalar and strict invariance, a change of more than .005 in CFI, supplemented by a change of ≥ .010 in RMSEA or a change of ≥ .005 in SRMR would indicate non-invariance. Results confirmed metric, scalar, and strict measurement invariance of our measurement instrument over time (see Table 6).

Table 6

Metrics for measurement invariance over time (Time 1 vs. Time 2) for Study 4.

Type of invariance	CFI	RMSEA	SRMR	ΔCFI	ΔRMSEA	ΔSRMR
Configural	0.951	0.084	0.055			
Metric	0.946	0.086	0.070	-0.005	0.002	0.015
Scalar	0.944	0.084	0.067	-0.002	-0.002	-0.003
Strict	0.941	0.083	0.064	-0.003	-0.001	-0.003

Note. CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR= Standardized Root Mean squared Residual.

All correlations are two-sided Pearson correlations.

Step 2: Reliability.

We found good internal consistency of the CARINAS at both time points, with high Cronbach alpha values (α_{T1} = .93; α_{T2} = .94) and high composite reliability scores (CR_{T1} = .93; CR_{T2} = .94; Hair et al., 2009, p. 619). We also found good[6] test-retest reliability with a Pearson's correlation between career inaction at time 1 and career inaction at time 2 of .62 (Ratner, 2009) and an Intraclass Correlation Coefficient of .62 (Cicchetti, 1994).

Step 3: Expanding the nomological network.

To further our understanding of the nomological network of career inaction, we first ran correlation analyses. Additionally, we completed hierarchical regression analyses for the outcomes (i.e., career satisfaction, affective well-being, task performance, regret about not

[6] We refer to this test-retest reliability as "good" in line with cutoffs (Cicchetti, 1994; Ratner, 2009). Test-retest correlations are also in line with those reported for related instruments in the career field, such as for the Career Indecision Profile (CIP-65) scale (Zobell, 2018).

changing, and perceived health; see Table 7). We first always estimated a model with only the demographics as estimators (i.e., age, gender, having a partner, having children, and education), followed by a model that also included the antecedents (i.e., social norms, transition magnitude, proactivity, job embeddedness, and risk aversion), and—in a final step—added career inaction.

For the correlation analysis, results correspond to those in Study 2 and our hypotheses, with three exceptions. First, regarding hypothesis 3a, Study 2 showed a positive relationship between subjective norms to stay and career inaction (r_1 = -.34 and r_2 = -.22), but Study 4 uncovered a negative relationship between the two variables. This is, however, in line with the negative correlation that was found in Study 3. Second, regarding hypothesis 3b, Study 2 did not show a significant relationship between transition magnitude and career inaction, whereas Study 4 found a significant positive relationship (r_1 = .33 and r_2 = .29), which has also been found in Study 3. Third, contrary to hypothesis 3d, we found a negative—and thus not, as expected, a positive—relationship between career inaction and on-the-job embeddedness (r_1 = -.47 and r_2 = -.42) (for a full report, see supplementary materials, Table 10).

Results from the regression analyses (Table 7) indicated that career inaction had a significant negative effect on career satisfaction (B = -.37, p < .001), affective well-being (B = -.30, p < .001), and perceived health (B = -.22, p = .01) beyond the effect of the control variables, the norm to stay, the magnitude of change, job embeddedness, proactivity, and risk aversion. Results also confirmed a positive effect of career inaction on regret (B = .29, p < .001) beyond the effect of the control variables, the norm to stay, the magnitude of change, job embeddedness, proactivity, and risk aversion. We found no support for the expected negative effect on task performance (B = -.13, p = .12). These results thus support hypotheses 4a-4b and 4d-4e.

Table 7

Regression analysis results for predictive validity test (Study 4).

Variables	**DV = career satisfaction** (*N* = 195)	**DV = affective well-being** (*N* = 196)	**DV = task performance** (*N* = 196)	**DV = regret** (*N* = 177)	**DV = perceived health** (*N* = 196)
Age	-0.03	-0.07	0.05	-0.14*	-0.12
Gender	0.04	-0.04	0.00	0.01	-0.03
Partner	-0.01	-0.01	-0.09	0.03	0.02
Children	-0.07	0.00	-0.03	0.09	0.10*
Education	-0.15*	0.17*	0.10	-0.06	0.17
Social norms	0.11	0.01	0.02	0.01	0.06
Transition magnitude	-0.05	-0.04	-0.11	0.17**	0.00
Proactivity	-0.08	0.19*	0.27**	-0.03	0.00
Job embeddedness	0.28**	0.02	0.18*	-0.31**	0.05
Risk aversion	0.05	-0.06	0.11	-0.12	-0.05
Career inaction	-0.37**	-0.30**	-0.31	0.29**	-0.22*
ΔR^2	0.09**	0.06**	0.01	0.05**	0.03*

Note. All regression coefficients are standardized. ΔR^2 refers to the increase in explained variance after adding career inaction to the regression model.
*p < .05, **p < . 01

General discussion

In this paper, we developed and validated an 8-item scale that measures the degree to which people experience to be in the career inaction phase, so, the degree to which they are not taking sufficient action to realize a desired change in their career (Verbruggen & De Vos, 2020). We thus focused on the second phase of career inaction, rather than the entire process as described in the theory of career inaction (Verbruggen & De Vos, 2020). By developing our career inaction scale (CARINAS), we facilitate research on how career goals and desires are not always easy to realize, which could complement the dominant focus in career research on agency and efficient decision-making (Akkermans et al., 2024; De Vos et al., 2020). Furthermore, our scale can stimulate more quantitative research on career inaction, thereby enhancing our understanding of this prevalent but understudied phenomenon. In addition, our scale has practical implications for career counselors and HR professionals as it can be used

as a diagnostic tool to assess people's degree of career inaction, which can help to more accurately guide people in their career transition process. In this discussion, we first reflect on our findings and contributions and then discuss suggestions for future research and the limitations of our study.

Implications for career inaction research

Overall, the results from our four studies supported the quality of the scale we developed. The Dutch version of the career inaction scale (CARINAS) has good internal consistency, performs equally well for different groups (i.e., regardless of people's gender, educational level, and having a partner and/or children), and demonstrates good convergent and discriminant validity. Also for the English version of the CARINAS, we found good reliability and validity (see Study 3). Furthermore, we explored the nomological network of career inaction via correlation analyses with potential antecedents (i.e., subjective norms, transition magnitude, proactive personality, job embeddedness, and risk aversion) and outcomes of career inaction (i.e., career satisfaction, affective well-being, job performance, regret, and perceived health). With some exceptions (see below), correlations across the three studies were generally in line with the theoretical expectations from the theory of career inaction. This all supports the psychometric qualities and added value of our CARINAS scale.

Furthermore, our study provides empirical support for several of the propositions formulated in the theory of career inaction (Verbruggen & De Vos, 2020). In particular, our findings offered clear and consistent support for how career inaction relates to various outcomes. Specifically, across Studies 2, 3, and 4, we found that career inaction was significantly and negatively related to career satisfaction, affective well-being, and job performance. Moreover, Study 4 showed that career inaction is positively related to regret about not having made a desired career change and negatively to perceived health. Although these findings do not directly test any of the process-related propositions formulated in the

theory of career inaction, they provide initial support for its theoretical assumptions that career inaction can lead to poorer career outcomes (Verbruggen & De Vos, 2020).

Whereas the expected relationships between career inaction and career outcomes were all as expected, the correlations with potential antecedents were more ambiguous. In line with our expectations, we found that career inaction was negatively related to proactive personality in Studies 2, 3, and 4, and positively with risk aversion in Study 4— although the correlation across time was only marginally significant. These findings suggest that people who have an innate inclination to act are less susceptible to career inaction, whereas risk-averse individuals are more prone to career inaction. Next, we found cautious support for a positive relationship between transition magnitude and career inaction (i.e., employees who aspired to a larger transition experienced more career inaction), although the correlation was only significant in Studies 3 and 4.

Two other findings were more puzzling. First, although social norms to stay were, as expected, positively related to career inaction in Study 2, they were negatively related to career inaction in Study 3 and Study 4. These contradictory results may be related to the sample characteristics in Studies 2, versus studies 3 and 4. Specifically, whereas dataset 2 was collected among workers who applied for a career voucher and thus often have a desire for a career change (Verbruggen & Sels, 2010), dataset 3 and 4 were collected with a more general sample of US and Belgian workers respectively, who may not have had a strong desire for a career change. Perhaps subjective norms are particularly influential for career inaction among people who are actively deliberating a career change and who may, therefore, be more aware of such social norms. People who do not actively desire a career change may interpret the social norms to stay as a confirmation that they are currently in a good place and, hence, experience less inaction. This idea was partially supported by the results from the additional correlation analyses in Study 3. Here, we saw that norms to stay were positively (yet non-

significantly) related to career inaction for people with a desire for change, but negatively related to career inaction for people without a desire for change.

Second, the correlation between on-the-job embeddedness and career inaction, which was only tested in Study 4, turned out to be negative rather than, as we expected, positive. Given that we only tested it in one study, we must interpret this finding cautiously, as future studies may find support for the theoretical idea that embeddedness can trigger inaction because people fear leaving behind what they have. That said, one possible explanation could be that people who are not actively pursuing a career change, as was likely the case for the general sample of Study 4, do not experience embeddedness as something that threatens their career aspirations. Instead, perhaps people who do not have a strong desire for change and who are highly embedded in their jobs seem to be less likely to experience career inaction, as they feel comfortable in their current situation and thus are less likely to have a desire for change (Jiang et al, 2012; Swider et al., 2011; Zhang et al., 2021).

These puzzling findings have potentially significant implications for understanding the phenomenon of career inaction and, hence, for the theory of career inaction (Verbruggen & De Vos, 2020). When reading the propositions of Verbruggen and De Vos (2020) on the relationship of career inaction with subjective norms and embeddedness, the authors implicitly focused on people who have a desire for change. In particular, they argue that when people have a desire for change in their career, stronger subjective norms to stay and more on-the-job embeddedness are likely to strengthen the inertial forces that keep people from acting on their desire and, therefore, the likelihood of career inaction. In line with this argument, we found a positive relationship between subjective norms to stay and career inaction in our second study with Belgian workers who bought a career voucher, as well as with the US workers who stated to actively desire change in their career in our third study. Hence, in these

samples of workers who likely desire a career change, we found empirical support for the theoretical expectations formulated in the theory of career inaction.

However, research has also found that subjective norms (Abrams et al., 1998) and on-the-job embeddedness (Jiang et al., 2012) significantly affect people's turnover intentions, in the sense that people tend to have a lower desire to leave their organization when the norms to stay are stronger and when they are more embedded in their organization. Career inaction will, by definition, only be high when people have a desire for a change in their career. For this reason, it makes sense that in datasets 3 and 4—which were collected with people who, on average, had less of a strong desire for change—we found that subjective norms to stay (Studies 3 and 4) and on-the-job embeddedness (Study 4) related negatively to career inaction. These findings suggest that the propositions formulated around the predictors of career inaction (Verbruggen & De Vos, 2020) may only apply to people who have at least some desire to make a career change. Theoretically, this implies that predictive factors, such as social norms and embeddedness, may not have linear relationships with career inaction, or even that they change (e.g., from negative to positive) depending on whether someone desires a change. Methodologically, this means that future research should establish whether, for example, certain thresholds of career inaction must be established before hypotheses can be accurately tested. Interestingly, these complexities seem to apply only to the predictors of career inaction (i.e., factors only predict career inaction if there is already a desire for change). Yet, the experience of career inaction itself seems to be less complex, as all our expectations around how career inaction relates to outcomes were in line with the theory of career inaction.

Third, our studies show that career inaction is a prevalent phenomenon that many people experience to at least some degree. Indeed, we found a mean of 3.21 (*SD* = 0.70) in our second dataset with workers who planned to follow career counseling, a mean of 2.78 (*SD* = 0.99), and a mean of 2.70 (*SD* = 0.79) in our fourth dataset with a more general sample

of US and Belgian workers respectively. These means and standard deviations suggest that a non-negligible share of workers scores above the mid-point of 3 and, thus, experience forces that keep them from acting sufficiently on their desired career change. Since a substantial share of workers seems to experience career inaction, it is valuable to perform more research on this recently identified phenomenon. Furthermore, the fact that the mean of career inaction in our second study was higher than in our third and fourth studies suggests that career inaction is an experience that people may not always succeed in dealing with on their own, and that stimulates them to search for help from a career counselor. Future research may want to further explore this possibility. More generally, the differences in results between our second study on the one hand, and our third and fourth study on the other hand show that sample characteristics are important for a good understanding of the results. Future studies may want to look into the development of benchmarks, potentially specific to certain populations (e.g., with vs. without a clear desired career change), to correctly judge the scores of the CARINAS. Already, we believe it is highly important for researchers to reflect well on their sampling decisions when using the CARINAS to study career inaction.

Suggestions for future research

Our scale allows researchers to further examine career inaction and its nomological network. A first intriguing area for further research could be to explore the interrelatedness of career inaction, which focuses on internal forces that keep people from acting on a desired change, and potential external forces that can inhibit people from realizing a career change. This would also answer the recent calls for more contextualized research on careers (e.g., Gunz & Mayrhofer, 2011; De Vos et al., 2020). Various external elements (e.g., lack of time, money, and support) could withhold people from undertaking sufficient action to realize their desired career change and in that way, strengthen career inaction. At the same time, people may be better able to justify that they did not act on a desired change when external forces are at play

and therefore possibly experience less regret (Zeelenberg & Pieters, 2007). Therefore, career inaction that is mainly triggered by external forces may have other outcomes than career inaction that is mainly due to internal inertial forces.

Further research can also test the propositions of the theory of career inaction, and explore alternative explanatory processes and boundary conditions. For example, future studies may look into the mediation pathways for the relation between career inaction and the explored outcomes. In Study 4, the high positive correlation between career inaction and regret on the one hand, and the between regret and other outcomes (e.g., affective well-being) on the other hand support the regret-mediation as predicted in the theory of career inaction (Verbruggen & De Vos, 2020). Relatedly, also the relationship between career inaction and related constructs, such as career indecision, is worth exploring empirically. In general, the CARINAS enables scholars to investigate the propositions of the theory of career inaction, to further understand the boundaries of the construct and its relation with other variables.

The development of the CARINAS also facilitates studies on the dynamics of careers. A longitudinal study including career inaction may, for instance, allow us to explore whether career inaction can explain why desires are not always translated into intention, and intentions not always into actions. Also, longitudinal studies could map how the intensity of career inaction evolves over time (e.g., via latent profile analysis based on the career inaction scores at different time points). The test-retest correlation of .62 which we found in Study 4 may indicate that career inaction is not fully stable. However, this is in line with the finding of Rogiers et al. (2022) that the duration and intensity of career inaction can vary between people. For some it takes two years to realize the career change they desire, for others, it takes five years to close down the desire. So, over the duration of our survey waves, career inaction might have gotten less intense for some, or more intense for others. Looking into how scores of career inaction change over time, and which factors are causing those changes, forms

another promising avenue for future research. Furthermore, relatedly, it would also be interesting to look at which factors could lead people in and help people out of career inaction. A first interesting factor to explore here is the construct of career shocks. Career shocks refer to disruptive events that trigger a reflection upon one's career (Akkermans et al., 2018; 2021). It is possible that both positive (e.g., an unexpected promotion) and negative career shocks (e.g., an unexpected layoff) lower career inaction; the former by lowering people's desire for change and the latter by triggering action. In some cases, negative career shocks (e.g., a missed promotion) may also cause paralysis, thus increasing inaction, e.g., when people start dwelling on what could have been. Another interesting factor to explore is career indecision (Osipow, 1999). Whereas indecision is related to not being able to choose a certain career path, inaction is more related to not undertaking action to implement a decision; or realizing the chosen option that resulted from a decision. In this way, career indecision could form an antecedent of career indecision. Moreover, we also believe that (some of) the causes of career indecision might also be causes of career inaction (e.g., the outcome uncertainty related to career choices). These propositions concerning the relationship between career inaction, career shocks, and career indecision can be tested in future research via the CARINAS.

Lastly, it is interesting to measure career inaction from different time perspectives. Time is an important aspect within the theory of career inaction (Verbruggen & De Vos, 2020) as it explains how people first become aware of a desire for change, then do not take sufficient action to fulfill the desire, and afterward look back on the fact that the desire hasn't been realized at least partly due to a lack of one's own actions. We intentionally chose to focus on people's experience that they are not succeeding in acting sufficiently on a desired change, the second phase, as this is the core aspect of career inaction (Verbruggen & De Vos, 2020) and other research indicated that severe emotional tensions arise when people

experience such inaction (Rogiers et al., 2022). When used in longitudinal settings, our scale may also facilitate a better, richer understanding of the effects of past inaction. Alternatively, another measure could be developed to assess career inaction from a retrospective perspective. Measurement instruments could then focus on the question "To what extent do people feel they have experienced a period of career inaction in the past?". Comparing the results between both measurements could be one way to facilitate dynamic explorations of career inaction. Scholars could, for example, study how career inaction evolves, for whom it lasts longer/shorter, or how the two measurement results might relate to each other.

Practical implications

In addition to the theoretical implications, our research also has practical implications for career counselors and HR professionals. Specifically, although it may be hard or even impossible to alter external barriers (e.g., social norms, unfavorable economic conditions) to realizing career desires, working on the internal forces of career inaction (i.e., fear of the unknown, paralysis caused by the difficulty of the career decision) may be more achievable. In this context, the CARINAS can be used as a diagnostic tool to assess people's degree of career inaction—reflecting the intensity of the struggle with internal inertial forces that keep people from acting sufficiently upon their desired career changes.

Career counselors and coaches can use the CARINAS to assess to which degree people experience to be in career inaction and, thus, feel that they are not undertaking sufficient action to realize their desired career changes. Filling out the survey in the context of counseling may already help people to actively reflect on the reason(s) for their insufficient action. In that way, the CARINAS can help individuals to map their internal barriers to the desired change—allowing for an increased awareness, which may, in turn, enable the counselor to offer more efficient and tailored support and guidance. This awareness exercise might stimulate people from within to take action and overcome their barriers.

Additionally, counselors can build on insights from other theories, such as implementation intention theory (Gollwitzer, 1993; 1996), when clients experience career inaction. This theory posits that forming "if-then" links can help to keep people on track to attain their goals when they face difficulties in translating their goals into action (Gollwitzer, 1999). More precisely, people bind a particular behavior to a situational cue—internal or external—in a way that when that cue pops up, the intended behavior almost automatically is activated. For example, in the case where someone would be trying to change jobs, implementation intentions could be: "Whenever I receive a reject from an application, I will summarize two points of improvement for the next one" or "If I get scared, I will go talk to people who already succeeded in making this change in their career". These mental contingency plans could help people to keep enacting their desire and overcome paralysis. However, a critical condition for a successful formation of implementation intentions is that the goal intention is strong, positive, and activated—which might not always be the case for people struggling with career inaction.

Overall, we believe that the CARINAS provides a solid starting ground for counselors to identify and discuss career inaction with their clients. Both the average level of career inaction, as well as the scores on the separate items, might assist career counselors and HR professionals in their objectives to design effective and person-specific interventions. This may, ultimately, contribute to a more accurate guidance of people during the complex career decision-making process.

Limitations

Our study has some limitations. First, since research on career inaction is still scarce, we mainly relied on the theory of career inaction (Verbruggen & De Vos, 2020) and on the qualitative study on the lived experiences of career inaction of Rogiers and colleagues (2022) to develop our items. Yet, as more studies on career inaction will be conducted, a more

nuanced view could arise. This might bring the opportunity to retest and potentially improve the validity of the CARINAS to measure career inaction.

Second, our scale was formulated and tested in Dutch in Studies 1, 2, and 4 given our Belgian research context. The Belgian labor market is relatively well-performing, but also tight with persistent labor shortages (De Smet et al., 2023). Although one in three Belgian workers is not very satisfied with their job (Torbeyns, 2021), the average job tenure was 10.5 years in 2022, making Belgians among the top "stayers". To compare, in Denmark, workers stay on average 6.2 years with the same employer (Statista, 2023). Belgium scores very high on the Hofstede cultural dimension of uncertainty avoidance (i.e., 94 out of 100), again one of the highest possible scores. Taken together, this could mean that in a different societal and cultural context, different results might be obtained. For example, in countries where workers have shorter job tenure or are less uncertainty-avoidant, the general prevalence of career inaction may be lower. Despite the fact that it is not likely that this context-specificity would strongly impact the psychometric properties of our scale, it could influence whether and how career inaction impacts people's career behaviors and paths. Furthermore, we tested the reliability and validity of the English translation-back-translation of the CARINAS in Study 3—with a representative sample of 170 active US workers. Although this yielded promising results, we would like to call for more empirical studies that validate the English version of our scale and examine the prevalence, antecedents, and outcomes of career inaction in other contexts. Such future studies would also help to increase the generalizability of our results. With this first validation of the English CARINAS, we have already taken a step towards enabling scholars to do so.

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Supplementary materials

Table 8

The original nine items of the career inaction scale. The statements were rated on a five-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree).

Item	English translation ***(Original Dutch formulation)***
1	I would like to change something in my career, but I don't actively pursue it *(Ik wil graag iets veranderen in mijn loopbaan, maar ik maak er geen werk van)*
2	I would like to change something in my career, but I don't know how to start *(Ik wil graag iets veranderen in mijn loopbaan, maar ik weet niet goed hoe eraan te beginnen)*
3	I want to change something in my career, but I don't dare to give up what I currently have *(Ik zou wel iets willen veranderen in mijn loopbaan, maar ik durf niet opgeven wat ik nu heb)*
4	I fail to take concrete actions to fulfill my career desires *(Ik slaag er niet in om concrete acties te ondernemen om mijn loopbaanwensen waar te maken)*
5	I fail to effectively change the aspects in my career that I want to change *(Ik slaag er niet in om zaken die ik mijn loopbaan zou willen veranderen, ook effectief te veranderen)*
6	I feel paralyzed when thinking about realizing my career desires *(Ik voel me verlamd wanneer ik nadenk over het realiseren van mijn loopbaanwensen)*
7	I find it difficult to take action to change something in my career *(Ik vind het moeilijk om actie te ondernemen om iets aan mijn loopbaan te veranderen)*
8	I feel stuck in my career *(Ik heb het gevoel dat ik vastzit in mijn loopbaan)*
9	I don't manage to realize my career desires *(*Ik kom er niet toe om mijn loopbaanwensen te realiseren*)*

Table 9

Fit indices of the CFA models of career inaction and the variables used for the convergent and discriminant validity tests (Study 2).

	CFI	RMSEA	SRMR
Career inaction and career self-directedness			
Two-factor model	.94	.058	.049
One-factor model	.81	.101	.097
Career inaction and helplessness			
Two-factor model	.95	.072	.050
One-factor model	.83	.128	.083
Career inaction and work pressure			
Two-factor model	.97	.051	.039
One-factor model	.66	.185	.148
Career inaction and job autonomy			
Two-factor model	.97	.052	.048
One-factor model	.70	.153	.132

Note. CFI = Comparative Fit Index, RMSEA = Root Mean Square Error of Approximation, SRMR = Standardized Root Mean Square Residual.

Table 10

Correlations - predictive validity test for Study 4 (N = 177).

	M	SD	1	2	3	4	5	6	7	8	9		
1. Career Inaction (T1)	2.60	0.99	_										
2. Career Inaction (T2)	2.56	1.02	.62**	_									
3. Norms to stay	3.38	1.09	-.34**	-.22**	_								
4. Transition magnitude	2.22	1.04	.33**	.29**	-.41**	_							
5. Proactive personality	3.46	0.59	-.35**	-.36**	.14(*)	-.17*	_						
6. On-the-job embeddedness	3.36	0.76	-.47**	-.42**	.32**	-.31**	.25**	_					
7. Risk aversion	3.36	0.65	.16*	.14(*)	.07	-.07	-.30**	.06	_				
8. Career satisfaction	7.56	1.47	-.49**	-.57**	.30**	-.28**	.13(*)	.51**	.07	_			
9. Affective well-being	4.28	0.95	-.40**	-.48**	.16*	-.12	.35**	.24**	-.20**	.41**	_		
10. Job performance	3.87	0.64	-.32**	-.38**	.21**	-.20**	.38**	.38**	.02	.33**	.46**	_	
11. Regret about not changing	2.04	0.98	.50**	.54**	-.28**	.38**	-.20**	-.51**	-.09	-.49**	-.39**	-.45**	_
12. Perceived health	2.96	0.87	-.26**	-.20**	.15**	-.05	.15	.18**	-.08	.19**	.48**	.34**	-.18*

**$p < .001$, *$p < .05$, (*) $p < .10$. All correlations are Pearson (2-tailed).

Epilogue

Careers have become increasingly unpredictable, dynamic, individualistic, and complex (De Vos et al., 2019). As a consequence, people encounter more and more complex career decisions and have to navigate an increasing number of career transitions to remain sustainably employed (De Vos et al., 2020). However, for many people making career decisions and transitions is rather hard. In line with recent research (e.g., Hamiot, 2019; Rogiers et al., 2022; Verbruggen & De Vos, 2020), this dissertation's findings highlight that quite a few people experience career-related inertia. They want to leave their job, or—more broadly—desire to make a change in their career, but do not do so. In contrast to most earlier work on career inertia, we focused on internal forces that can keep people stuck and withhold them from progressing toward a desired change in their career. We do so because these internal forces have not received much attention in relation to post-decisional career outcomes. In contrast to fields like marketing or behavioral economics, internal cognitive forces such as fear, risk-aversion, or anticipated regret have not often been considered antecedents to career actions or inactions. Moreover, internal forces are more malleable than several other external barriers to career change or progress (e.g., labor market conditions, lack of time, lack of money). By increasing awareness of the potential detrimental effects on career progress, career counselors—for example—might assist people in making better, less regrettable career choices.

To this aim, we mainly built on the behavioral economics literature and the work of Verbruggen & De Vos (2020) on career inaction. Overall, the studies in this dissertation advance our understanding of dysfunctionalities in stable careers. In the first study, we found that when deeply embedded people think about leaving their job, they experience more internal inertial forces that in turn reduce the likelihood of actually leaving their job. So, this

study showed that job embeddedness—which is typically associated with positive outcomes —can be rather dysfunctional when people have a desire to leave the organization because it triggers paralyzing internal forces. In that way, this study helps to explain why job embeddedness can lead to dysfunctional stability in one's career. In the second study, we challenged the generally assumed beneficial function of anticipating regret in the context of changing jobs. In particular, in a sample of career counseling clients who were likely to have a salient career goal, we found that anticipating regret over changing jobs was related to lower rather than higher subsequent career-related wellbeing (i.e., lower career satisfaction and more experienced regret) because these regret anticipations hindered goal commitment and goal progress. Interestingly, additional analyses also revealed that this was true for both people who had set a goal that implied changing jobs and for people who had a career goal that did not imply changing job (but, for example; striving for a better work-life balance by reducing late working hours). So, in general, this study showed how regret anticipations about changing jobs can contribute to dysfunctional stability one's career. In the third study, we developed and validated a measurement scale for career inaction that captures the degree to which people perceive that they are not taking sufficient action to realize a desired change in their career—so, career stability due to a lack of sufficient action. During the validation process, results indicated that career inaction is well prevalent among the studied samples and that it mostly relates to negative career outcomes (decreased career satisfaction, lower affective wellbeing, worsened health, etc.). These results suggest that staying due to career inaction is, as theorized (Verbruggen & De Vos, 2020), rather dysfunctional, at least in the short run.

In this epilogue, I discuss the key insights from the studies of this dissertation, clarify some limitations, and launch a couple of pathways for future research on career inertia. Throughout this epilogue, I use the term career inertia as an umbrella term to refer to the

phenomenon that people want a change in their career but do not succeed in realizing the desired change or in making satisfactory progress. Although career inertia may be due to a broad range of reasons (e.g., lack of job opportunities), I focused in this dissertation on the role of internal forces (e.g. fear of the unknown, anticipated regret over changing). When I focus specifically on the results related to career inaction (i.e., a form of career inertia that refers to situations in which people do not take sufficient action to realize a desired change in their career), I will mention this explicitly.

Key learning points

1. Career inertia is a "real thing"

Results from Study 2 and Study 3 in this dissertation suggest that career inertia is not a rare thing. In the second study, we collected data with career counseling clients over three time points to assess the influence of anticipated regret over changing jobs on career-related well-being outcomes. At T1, at the start of their career counseling trajectory, we noticed that many people had reported a desire to change something in their career (N = 717 or 84.95%). This is not surprising because one of the main aims of career counseling is to help people in the process of identifying and attaining their career desires and goals. Yet, at the end of their career counseling trajectory, 8 months later, almost half of the respondents indicated that they had not realized their desire (N = 223 or 49.78%). This illustrates that quite a few people might not realize the career progress that they strived for, even with the guidance of career counseling.

In the third study, we developed a measurement scale for career inaction based on the work of Verbruggen & De Vos (2020) and Rogiers et al. (2022). We validated this scale in three different samples. Two samples included people from a general population who were not necessarily likely to have a desire to change something in their careers and the other sample concerned the same people from Study 2: people who were likely to have a desire for

change in their careers and were in career counseling. As Verbruggen & De Vos (2020) stated, a desire for change in one's career is one of the key factors to career inaction. In line with this idea and the samples' specificity, we found a higher mean score on our five-point Likert scale for career inaction (CARINAS) among the career counseling clients (M = 3.20), but the mean scores on the CARINAS were also still rather high in the other samples (sample 1, M = 2.68; two-wave longitudinal sample 2, M_{T1} = 2.60). We need to note that whereas high scores on the CARINAS are, per definition, only possible when individuals experience a desire to change something in their career, low scores may be due to several reasons. It could be that respondents do not have a strong desire for change, but it could also be that they do not find it hard to take sufficient action to realize their career desire. To summarize: even with the help of career counseling, a significant amount of people struggle to realize their career desires. The findings from Study 2 and Study 3 support our idea that inertia in careers is a "real thing" and that it might even be more prevalent in the labor market than generally suspected.

2. Internal factors trigger career inertia

Multiple explanations can be given for career inertia: people can feel hampered in their career by contextual factors (e.g., labor market conditions), perceived contextual factors (e.g., low perceived employability), etc. In this doctoral dissertation, we focused on internal factors that inhibit people from realizing their desired career change or progress – a perspective that has remained largely understudied up to now.

In Study 1, we looked at how job embeddedness can trigger internal inertial forces which in turn can lower the perceived likelihood with which people will leave their job when they desire to do so. These internal inertial forces included the fear of the unknown when thinking about changing jobs, the disproportionate weighting of short-term costs and efforts over longer-term benefits related to leaving one's job, perceived difficulty of the decision to leave,

perceived risk related to leaving one's job, and the anticipated responsibility when leaving would turn out "badly". All these forces combined as "internal inertial forces" explained the relationship between job embeddedness and the likelihood of leaving: more embedded people experienced more internal inertial forces and, as a consequence, were less likely to leave their job despite wanting to do so.

In Study 2, we focused on anticipated regret over changing jobs as an internal force that may hamper people's goal-striving process. We found that anticipating more regret over changing jobs may indeed lower one's goal commitment and goal progress, unrelated to whether the final career goal implies changing jobs or not. Such lowered career goal progress turned out to be related negatively to career satisfaction and positively to experienced regret. Regret anticipations may thus form another inertial force to people's desired career progress—at least when these anticipations concern changing jobs.

In Study 3, we developed and validated a scale for career inaction as a specific form of career inertia. To do so, we mainly built on the theory of career inaction by Verbruggen & De Vos (2020) who proposed internal inertial forces as an explanation for the situation in which people do not succeed in undertaking sufficient action over some time to realize their desired career change. These internal forces are reflected in items such as "I want to change something in my career, but I don't dare to give up what I currently have" or "I would like to change something in my career, but I don't know how to start."

Altogether, we illustrated that internal forces can hamper people in their quest to realize a desired career change or to make desired progress in their career. Put differently, internal inertial forces can trigger career inertia.

3. Career inertia can be irrational

Getting "struck" by internal inertial forces may lead to seemingly irrational situations, such as not changing despite having the desire to change (see Study 1), or regretting career inactions

when beforehand anticipating regret over career actions (see Study 2). Up to now, this 'irrationality' perspective has been largely overlooked in traditional career models. Most traditional models namely assume that career decision-making and development (i.e. the enactment and realization of career desires, and goals) follows a more or less straight-forward, linear, and often rather rational process (Gati & Kulcsár, 2021). Examples of such career and action theories are Parsons' model of career choice (1909), the model of career development stages (Super, 1957), and the model of action phases (Keller et al., 2020). More recent career models like the social cognitive career theory models (Lent & Brown, 2002) and the chaos theory of careers (Pryor & Bright, 2003; 2014) embraced the complexity of real life by adding context factors (e.g., perceived opportunities, chance events) and cognitive factors (e.g., outcome and self-efficacy expectations). However, these models still mostly focus on the influence of these factors on career choices and dominantly describe the enactment of decision as a rather linear path (e.g., the social cognitive career theories by Lent & Brown, 2002; and to some extent also already the model of career development stages by Super, 1957 which recognizes the role of affect and past experiences but remains linear for the most part).

Contrastingly, reality seems to indicate that a more complex relationship exists between career decisions, goals, and their implementation. This could in part be explained with insights from the behavioral economics field. Here, scholars build on the reasoning that people only have a bounded rationality (Simon, 1990), which incentivizes them to use mental shortcuts when making complex decisions (e.g., career decisions) and which may result in biased decision-making and irrational outcomes (Kahneman, 2003). The findings of the first and second study of this dissertation are in line with this idea. In Study 1, we showed that job embeddedness might trigger internal inertial forces, which in turn reduce the perceived likelihood of people leaving their jobs when they actually want to do so. In Study 2, our findings illustrated that the sole act of engaging in regret anticipations over changing jobs can

lower goal commitment and career goal progress, which in turn was related to lower career-related well-being. We thus showed that regret anticipations can affect the enactment of career decisions (via goal striving), in a way that it can trigger more rather than less expected regret.

To conclude, this dissertation illustrated that internal forces may interfere in the process between career choices, goals, or desires and their enactment; making the process complex, messy, and potentially "irrational" as it can lead to unwanted or suboptimal career outcomes. These internal, cognitive forces can also make people move back and forward between their career goal(s) and the actions needed to realize that goal, in a way that they get paralyzed and not make the progress that they desire (see, career inaction; Verbruggen & De Vos, 2020). Therefore, we believe that traditional career decision-making and development models could benefit from a complementary perspective that includes human "irrational" tendencies—such as internal forces and anticipated regret. Taking these irrational tendencies, the non-linearity, and non-consistency (e.g., between anticipations over the possible outcomes of career options and the chosen career goal) more into account when studying careers may open interesting new avenues for future research.

4. Career inertia: an all-human phenomenon?

4.1. Career inertia can happen to everybody…

In Study 1, we found that deeply embedded people with a desire to leave are more likely to experience internal inertial forces, and hence less likely to actually leave. Their higher likelihood of being confronted with internal inertial forces and not realizing their desire to leave was found to be independent of their gender, age, education, and personality (i.e., proactiveness). Not only did respondents estimate that this was the case for the fictitious people in the vignettes, but this was also supported in the additional field study based on people's own experiences.

In Study 2, our results showed again that the demographic variables (age, gender, and being highly educated) were not related to anticipated regret over changing jobs – for which we have found that it elicited an important inertial effect in careers. So, also in the case of our second study, people's susceptibility to anticipated regret as an internal inertial force and the subsequent lack of career goal progress did not depend upon demographics. However, we did see that more risk-averse people were more likely to anticipate more regret over changing jobs (r = .19, p < .001). When controlling for the demographics (age, gender, and being highly educated), we also found a significant, positive standardized effect of risk aversion on anticipated regret over changing jobs at T1 (B = .19; SE = 0.05; $t(4)$ = 5.34; p < .001). This relatedness makes sense since more risk-averse people tend to avoid choosing the option that they perceive as risky—which largely applies to options where one anticipates more regret because these options are then perceived to not be the "best" option (Carver, 2001). Risk aversion did not have a significant influence on goal commitment (T2), career goal progress (T3), career satisfaction (T3), or experienced regret (T3).

In Study 3, as mentioned before, we developed and validated a scale that intended to measure the degree to which people feel that they cannot undertake sufficient action to realize a desired career change (see the 2nd phase of the career inaction theory by Verbruggen & De Vos, 2020). Here, we first found that career inaction can exist in any job as career inaction was unrelated to the level of job autonomy (r = -.05, p = .20) and work pressure (r = .04, p = .27). Next, we also saw that the demographic variables age, gender, having a partner or not, having children, and being highly educated (i.e., more than a bachelor's degree) or not were almost always[7] uncorrelated to career inaction. Finally, results from measurement invariance tests indicated that the scale for career inaction was interpreted similarly by males vs females, people with vs without a partner, people with vs without children, and people with vs without

[7] Only in the third (two-wave) sample of study 3 we saw that age was lowly negatively related to career inaction (r = -.14, p = .004) at T1.

a bachelor's degree. So, in different groups, the concept of career inaction was interpreted similarly and the scale to measure career inaction performed equally well. The found measurement invariance in a way thus also adds to our reasoning that career inaction as a specific form of career inertia is recognized in a similar way by a multitude of people.

4.2. … but some people may be more susceptible

Despite the finding that career inertia could hit any of us, personality characteristics do seem to matter in some cases. In particular, in Study 3, we found that proactive personality was negatively related to career inaction. So, people with a high general tendency to take initiative, focus on progress, and look for opportunities to grow, change, etc., are thus likely to experience less career inaction. This seems to be in contrast with our findings in Study 1 (i.e., the subpart on the performed online survey), where did not find a moderation effect of proactive personality on the relationship between embeddedness and internal inertial forces. Based on the results from this study, this non-significant moderation effect seems to illustrate that the triggering effect of job embeddedness on the internal inertial forces does not depend on personal characteristics. In other words, everybody seems susceptible to internal inertial forces, at least to some extent, when in the same context of deep job embeddedness—as posited by Verbruggen & De Vos (2020) in their theory of career inaction.

What can explain this difference? Both in Study 1 and Study 3, we used the same measure of personality, and we relied on a broad sample of people who did not necessarily have a strong desire for change in their career. Measure or sample specificity is thus unlikely to explain the difference in results. However, we assigned different roles to the personality characteristic of proactiveness in both studies. Whereas Study 1 focused on the moderation effect of proactiveness in the relationship between job embeddedness and internal inertial forces (i.e., a cognitive, non-behavioral construct), Study 3 focused on a direct effect of proactiveness on career inaction. We found that being more proactive in general did not make

the effect of job embeddedness on internal inertial forces less intense (Study 1), but we did see that people's general tendency for proactiveness directly impacted their level of career inaction (Study 3). Yet, when running additional analyses to check the direct effects of proactiveness in Study 1, we also could not find any significant results in the vignettes, or the survey of Study 1. A potential explanation for the difference in the effect of proactiveness inStudy 1 compared to Study 3 could lie in the orientation of the tested outcome variables. Since the construct of proactiveness was measured in a more behavioral than cognitive manner (e.g., "I am always looking for better ways to do things"; Claes et al., 2005), it could be that the link with the internal inertial forces and likelihood of leaving—which both have a cognitive orientation—was weaker than with career inaction—which has clear behavioral aspects (e.g., "I find it difficult to take action to change something in my career"; see CARINAS in this dissertation). It seems that one's general tendency to be proactive does not really affect cognitive outcomes, but rather behavioral outcomes.

4.3. Other factors that could act as influential moderators in future research.

Perhaps, the results would have been different for Study 1 if we used other, more cognition-oriented moderators. Now, we focused on individuals' proactivity to reflect their general tendency towards action or inaction, but other moderators could have also been appropriate to examine. A first example of an alternative moderator stems from the goal literature: *the action-state orientation of individuals*. Introduced by Kuhl (1985, 1994), this construct concerns the difference in individuals' ability to control their volitional behaviors such as making decisions on time, setting intentions or goals, committing to a plan of action, undertaking action, and persisting in that action when facing challenges or setbacks (Kuhl, 1992, 1994). Put simply, action-oriented people are more likely to translate their intended goals into action than state-oriented people. Several scholars recognized the importance of action-state orientations in the goal-striving process in a work context. Diefendorff et al.

(2000), for example, stated how the action-state orientation could be very useful in gaining an understanding of why individuals with similar work performance goals, skills, and motivation could still differ in attaining their goals. They further posited that whereas more action-oriented people tend to focus more on employing their (cognitive) resources to reach their desired goal, more state-oriented people tend to ruminate about alternative goals and hence have fewer cognitive resources available to use in their volitional process. Later on, Song et al. (2006) also found that individuals intending to change jobs would take less action towards that goal if they had a low vs. high action-orientation. In a similar vein, we could expect that people who are more state- than action-oriented, and thus possess a lower volition control ability, would also be more susceptible to cognitive internal, inertial forces that impede goal-striving.

Another interesting personal characteristic is *people's temporal focus* (Shipp & Aeon, 2019). This idea stems from the fact that the experience of time is subjective and that some people might structurally focus more on their past than on their future. With a general tendency to focus more on the past, it might be harder to let go of forgone options, and more difficult to not compare to how it was in the past, etc. For these people, it could then be easier to fall into the rabbit hole of career inertia, and harder to get out of it compared to those who are more future-oriented and have an inherent tendency to want to move forward.

A last fascinating moderator I would like to zoom in on is the construct of *decision fatigue*. In today's world, people have to make thousands of decisions per day. Making decisions, small and big ones requires significant cognitive resources and effort. However, individuals only have a limited cognitive processing capacity (Miller, 1956; the cognitive load theory; Sweller, 2024). Hence, it makes a lot of sense that after engaging in many choices, people might feel a sense of mental fatigue. Decision fatigue can not only deteriorate the decision quality of subsequent decisions, but it can also make people prone to using more

cognitive heuristics that may cause biased decision-making with suboptimal outcomes (Pignatiello, 2018). Therefore, it would be possible that people who have a generally higher level of decision fatigue, perhaps because of the type of job they currently have or the phase of life they are in, might be more prone to cognitive internal inertial forces of career inertia as well. More research on alternative moderators seems relevant to unravel for whom job embeddedness might be triggering more internal inertial forces, and hence, reduce the likelihood of leaving despite the desire to do so.

4.4. The subjectivity of career inertia

Finally, I would like to note that career inertia remains subjective and personal even though career inertia could theoretically happen to any person who wants to change something in their career. The subjectivity of career inertia became most clear when developing and validating the measurement scale for career inaction (i.e., CARINAS) in Study 3. With this scale, we aim to measure the degree to which people feel that they are in a state of career inaction, in which they *themselves* perceive that they are not succeeding in undertaking sufficient action to realize a desired change in their career at the current moment. Verbruggen & De Vos (2020) stated that "sufficient" is different for everyone, and other people cannot easily estimate how much action is lacking for it to be called insufficient. "Sufficient action" thus also implies that some people might still undertake some sort of action, but that it is not enough to reach their desired change, and that others might not undertake any action at all. The core idea underlying the CARINAS is that it aims to grasp the perceived lack of action that people attribute to themselves.

5. Overall, career inertia has rather negative implications for individuals

5.1. According to our findings: mostly negative implications of career inertia

Throughout the studies of this dissertation, we found support for several negative consequences of career inertia. The results of Study 2, for example, suggest that when people

anticipate regret over changing jobs (as they desire), this could result in less career satisfaction and more experienced regret after eventually having changed jobs or not. In our third scale development and validation study, we developed an initial nomological network. We tested correlations and conducted regressions to explore how career inaction would relate to outcomes such as career satisfaction, task performance, affective well-being, regret, etc. We found that all correlations were significant in the direction we had hypothesized. Career inaction was negatively related to career satisfaction, task performance, affective well-being, and perceived health, and positively related to career-related regret. Regressions confirmed that career inaction explained variance above and beyond the effect of demographic factors (e.g., age, gender, children, and education), proactivity, and risk aversion on career satisfaction, affective well-being, perceived health, and regret. This indicates that indeed, career inaction seems to mostly have negative implications for individuals.

5.2. Future research: what about potential beneficial effects of career inertia?

Perhaps, by focusing on the short-term effects (i.e., a time lag of a maximum of four to eight months), we might not have grasped the potential positive effects of career inertia in the longer run. For example, by going through the process of career inaction "impulse desires" might fade out or individuals might reappreciate their current career position better. They might find a renewed sense of meaningfulness (i.e., perceiving work as valuable and important to oneself and others; Pratt & Ashforth, 2003), which has been shown to be related to increased commitment to work, more satisfaction in one's job and life, but also higher levels of job and organization engagement, personal initiative for learning, and improved career development (Fletcher & Schofield, 2019; Lysova et al., 2019; Steger et al., 2012). Eventually, career inertia could even result in increased self-knowledge or increased self-regulation skills—with or without the help of career counselors. For example, career inaction could perhaps also be a normal phase in every transition process. Just as Ibarra & Obodaru

(2016) describe that each transition implies a phase in which people are in a "liminal state". This can be seen as a cognitively and emotionally demanding state in which people still actively remember the past, and reflect upon this past but also strive to realize a career desire whilst facing the uncertainty of the unknown future. Yet, this process may also allow people to rethink what they actually want in their career, set directions, and explore barriers (Ibarra, 2023).

Similarly, it could be that when striving to realize a career transition, people experience a phase in which it seems hard to undertake sufficient action to realize their desired career transition. Yet, in order to realize their transition, they have to go through it. It would be interesting for future studies to explore under which boundary conditions career inaction (as a phase in career transitions) can form an opportunity for self-growth and -development.

It could, more broadly, be interesting to look at what role job crafting can play in the context of career inertia. Job crafting refers to the act in which people try to improve the fit between their current job and their needs and interest via small adjustments (e.g., changing the amount and/or scope of tasks performed; Wrzesniewski & Dutton, 2001; Vanbelle et al., 2014). Job crafting has been related to more engagement, more satisfaction, and more resilience, but has also been shown to be helpful in the attainment of people's work goals (e.g., Tims et al., 2012). Therefore, we believe that people in career inertia could also benefit from actively changing smaller parts of their job as it could help them to get closer towards the desired goal bit by bit.

6. Combining different literature fields resulted in a richer understanding of career inertia

Just as careers are embedded in multiple aspects or fields of life, so should the research on career-related phenomena like career inertia be. Making career decisions is not easy, in part

because they affect individuals' financial situation, lifestyle, subsequent career opportunities, and well-being (Verbruggen & De Vos, 2020; Verbruggen et al., 2015), but also because there is a lot to take into account. "A lot" does not only include work- and organization-related aspects, and potential contextual barriers, but also personal values, desires, needs, doubts, and cognitions of the people making the decision and those surrounding them. Moreover, technological advancements, but also societal, environmental, and economic changes, have made current careers less predictable and more dynamic (De Vos et al., 2019). To remain sustainably employed in this complex environment, almost everyone will make increasingly complex career decisions (and more transitions) over their lifespan (Akkermans et al., 2024; Kulcsár et al., 2020; De Vos & Van der Heijden, 2017, Sullivan & Al Ariss, 2021). To this aim, career decision-making models could benefit from a more nuanced and richer perspective on the complexities that come with career decisions and their enactment.

In all of the studies, we combined insights from different literature fields to build a richer understanding of inertia—and its internal cognitive mechanisms—in careers. In Study 1, we combined insights from the behavioral decision-making literature, career literature, and the turnover literature to explain how more embedded people can experience more inertial forces which then make them less likely to leave their organization. By doing so, we entered the potentially irrational forces that play a key role in the behavioral economics field into the research conversation on turnover and careers.

In Study 2, we built on ideas from the career regret literature and combined these with insights from the action-inaction, goal, and career literature. This allowed us to identify anticipated regret over changing jobs as another potential explanation for dysfunctional stable careers. Here, we highlighted how career inertia centers around the enactment of career decisions, and hence could complement broader theories on agency and goal-directed behaviors (e.g., action regulation theory by Frese & Zapf, 1994; implementation intention

theory by Gollwitzer, 1993). Such theories implicitly assume that people's desires, goals, and behaviors are consistent, and thus do not focus on the situations in which inconsistency might be present (see, career inertia). Also in Study 3, where we designed and validated a scale for career inaction, we considered several streams of literature (e.g., during the development of the items and the creation of the nomological network) like the turnover, regret, decision-making, and career literature.

One literature we did not tap into a lot but offers the potential to further unravel the complex nature of career decisions is the motivation literature. The cognitive-motivational-relational theory of emotion (Lazarus, 1991) states, among other things, that each emotion has an innate action tendency. For example, fear may trigger avoiding behaviors, whereas hope might trigger approach behaviors. Applied to career inertia, having a desire to change something in one's career could go hand in hand with the experience of positive emotions like hope or excitement. In this case, positive emotions could arouse people to act upon their desire. However, when thinking about the desire and then experiencing fear or anxiety, it could make people refrain from acting because these negative emotions signal that striving for this goal might not be a "good" thing (Carver, 2001). Future studies could start from the approach-avoidance motivation ideas to explore how these overlap or differ from the cognitive internal barriers, and how people deal with these internal factors (be it emotions, affective states, or other cognitive internal factors) (see the literature on appraisals and coping, e.g. by Lazarus & Folkman, 1984).

In hindsight, combining insights from behavioral economics, action-inaction, goal, regret, and career literature has facilitated us to develop a broader, more nuanced perspective on career decision-making. It complements the traditional career theories by recognizing more irrational, unconscious factors that may obstruct career decisions, their implementation, and

enactment. We believe this is a necessary perspective that grasps the human, sometimes irrational reality of career decision-making.

Limitations

1. Sample limitations

First, at the start of this dissertation in October 2020, the only way to select people who could be experiencing career inertia was in an indirect way since the only focused work on inertia in careers was that of Verbruggen & De Vos (2020). Their definition of career inaction has been influential to this dissertation. We focused on two elements included in that definition: (1) whether they *desired change* in their career (e.g., wanting to leave their current job because they were dissatisfied), and (2) whether they *struggled with realizing* that change. This is for example why we believed that the sample of career counseling clients formed a good group to test our assumptions on career inertia and its internal, cognitive forces (e.g., Study 2). However, this group of people might often also already be struggling with other issues, for example a higher risk for burn-out. Triggered by the writing of this epilogue, we ran some additional post-hoc tests. Despite the fact that the results of these tests showed that controlling for burn-out did not affect the significance of the found effects in our path model, we did see strong correlations between the burn-out levels (T1) and experienced regret (T3) for example. This highlights the need for careful interpretation of results (i.e., with attention for the sample one is working with), as well as the need for more research in both more general and specific samples to validate the findings in this dissertation. So, because the phenomenon of career inertia (and career inaction) was—and still is—emerging, it was hard to decide which was the best way to target and select samples to further explore career inertia.

Second, most studies were conducted in the geographical context of Belgium. Belgians tend to stay with their employers for a rather long time: 11 years on average to be precise (Clapson, 2024). In other words, there has been a structurally low degree of job mobility in

quite some western European countries. This may be in part due to policies that in the first place were introduced to protect workers, but may also hurt labor market mobility (e.g. tenure-based wage systems, rather rigid hire and fire rules, etc.). Second, maybe seemingly in contrast with my previous statement, Belgians are among the most commuting people among Europeans (SD Worx, 2022). This implies that changing jobs might thus not always be related to major changes in contextual factors. The triggering effect of contextual factors (e.g. off-the-job embeddedness) on cognitive, internal factors that we studied may thus be more outspoken in geographically bigger countries, or countries with higher levels of job mobility.

Third, the vast majority of our respondents were highly educated (i.e., obtained a bachelor's degree or more), with an average age of 40-44 years old, and actively working. More disadvantaged groups such as less educated workers, older workers, and disabled workers could experience career inertia in different ways (Lundahl et al., 2015). It could be that these groups of workers perceive fewer opportunities to bring change to their career, that they are confronted with less job security, or perceive specific stereotypes (e.g., age stereotypes) and hence experience even more or other cognitive internal forces when thinking about a desired career change. Future research may want to assess the role of cognitive internal forces related to career inertia, external factors that may strengthen the susceptibility to these internal forces, and perhaps even the prevalence of career inertia itself in different social and demographical contexts.

2. Methodological limitations

With this quantitative dissertation, we were able to gain an understanding of how contextual factors like job embeddedness can affect people's career behaviors via internal, cognitive forces, but also how anticipated regret as another force might bring down people's goal commitment and progress. We did so via experimental vignettes, online surveys (single and multi-wave), and scale development and validation. By combining these methods, I believe

that we delivered a good first indication of the existence of hampering cognitive internal forces in the context of career inertia.

However, to fully unravel the role of cognitive internal forces in career inertia, additional qualitative work might have been a very valuable addition to this dissertation. A career can be defined as "an individual's work-related and other relevant experiences, both inside and outside of organizations, that form a unique pattern over the individual's life span." (Sullivan & Baruch, 2009). This definition reflects that careers exist in a social environment in which people interact with each other and the environment. A recent review by Richardson et al. (2021), stated how quantitative studies have dominated the career field despite the fact that qualitative studies could allow for a deeper understanding of the lived experiences of individuals—especially for emerging phenomena such as career inertia. Studies looking into how people really experience career inertia, similar to the work of Rogiers et al. (2022), could for example help to gain an even better understanding of which other cognitive factors could have an inertial effect, but also identify potential moderators and boundary conditions. Scholars could, for example, study the contrasting effect of social norms related to staying among different samples via in depth-interviews (see one of the unexpected findings of study 3, discussion). More qualitative work could also help us to grasp how internal cognitive forces interact and function, and identify to what degree people are aware of these internal forces. For example, via narrative analysis, we could unravel how people exactly experienced a phase of career inertia in the past. Here, the story that people tell or their lived experiences play the central role, rather than the objective truth (Smith & Monforte, 2020).

Future research

1. The interplay between perceived external and internal barriers related to career inertia

A first intriguing area for future research concerns studying the interrelatedness of external (e.g., a lack of time, money, support, opportunities) and internal factors (e.g., the studied internal inertial forces of career inaction) that could hamper individuals' career progress or development. These factors or events that hinder the attainment of career goals have been labeled "career barriers" (Lent et al., 2002; Urbanaviciute et al., 2016). Career barriers are subjective: they may form a challenge for some but an unovercomeable wall to reaching a career goal for others (Luzzo, 1996). Hence, we suggest to focus on *perceived* barriers. The importance of perceived career barriers in the process of career decision-making has been recognized for several decades now (Hee Lee et al., 2008), for instance in career theories such as the social cognitive career theory (Albert & Luzzo, 1999; Lent & Brown, 1996) and the career construction theory (Savickas; 2002, 2013).

In this dissertation, we focused on the *internal* barriers more than on external barriers. However, in Study 1, we also showed that job embeddedness as a contextual factor may trigger a more intense experience of internal inertial forces—in line with the rationale of the theory of career inaction (Verbruggen & De Vos, 2020). We did not investigate the relative influence of each type of perceived barrier on career inertia. Yet, given that career transitions have become more prevalent—and will most likely continue to do so (Chudzikowski, 2012; Sullivan & Al Ariss, 2019), and given the negative individual implications of unfulfilled career desires (e.g., increased deviant behaviors, lower performance, less career satisfaction; Liu & Raghuram, 2021; Masicampo & Baumeister, 2011; Verbruggen & van Emmerik, 2020), it seems relevant and timely to look into how different types of career barriers relate to each other, as well as to career inertia and career-related well-being outcomes. By doing so,

future research would also answer the highlighted need for research on the boundary conditions to successful career transitions (Akkermans et al., 2024) and the more general call for more contextualized research on careers (e.g., Gunz & Mayrhofer, 2011; De Vos et al., 2020). Building on the findings from this dissertation, I make some concrete suggestions for research on the relatedness between external and internal barriers to career progress, transitions, or—more broadly—career development.

1.1. Studying the connection between external and internal barriers to making progress to a career goal

First, it would be interesting to gain an understanding of the direction of the interplay between external and internal barriers in a more general sense. Based on the results from Study 1, we expect that perceived external barriers (e.g., job embeddedness) may trigger or strengthen the effect of internal barriers like the internal inertial forces related to career inaction. Examples of other interesting perceived external barriers to study could be perceived age, gender, or ethnicity-based discrimination, as these could affect their perceived employability, or may trigger a lowered career decision-making self-efficacy (e.g., Binyamin & Brender-Ilan, 2022; Lindley, 2005). However, cognitions and emotions (e.g., anticipated regret) can also shape how individuals perceive their context. For example, scholars showed how self-efficacy positively relates to perceived employability (e.g., Ngo et al., 2017) and theorized how affect shapes individuals' judgment and decision-making (see, the affect-as-information theory and the work on "affective realism"; see e.g., Majeed, 2023; Wormwood et al., 2019). Investigating whether it is mainly external barriers that influence internal ones or whether a reversed effect may also exist, and on which boundary conditions this could depend—for instance via longitudinal methods—could have large practical implications. For example, counselors could build on the insights from this research to make their interventions more effective. More specifically, by having some insight into which barriers can be most

influential under certain conditions, counselors can prioritize working on those barriers that are most impeding.

1.2. Different connections, different effects?

Second, we anticipate that depending on the relative influence of either internal of external factors, career inertia might be more or less detrimental for individuals. Intuitively, people might first try to explain the undesired outcome of their career decision via perceived external barriers (see "self-serving bias"; Miller & Ross, 1975). People then tend to blame themselves less, but rather blame the context for not being able to, for example, act more on their desired career change. Choices that are easier to justify—even if they turn out to be "wrong"—are less regrettable (Zeelenberg & Pieters, 2007). Knowing that enduring regret comes with risks for individuals' performance, and physical and affective wellbeing (e.g., Verbruggen & De Vos, 2022), career inertia that was mostly caused by external barriers, could be less negative for individuals. In this context, it could be valuable to explore whether working adults can be meaningfully grouped based on perceived barriers to desired career transitions or changes and whether these profiles explain differences in experienced career inertia and its consequences (e.g., career satisfaction, well-being, etc.). To this aim, scholars could thus look into (longitudinal) latent class analysis.

2. Combining two emerging concepts: career shocks and career inaction

Our work environment has been changing at high speed and in unpredictable ways. Who would have predicted in December 2019 that a few months later the entire hospitality sector would be paralyzed and that millions of people would lose their jobs? Or that Artificial Intelligence within one year from now will replace the job of copywriters because AI is simply cheaper for organizations? In this context, career scholars started to look at "career shocks", which are disruptive, rather uncontrollable, and mostly unpredictable positive or negative events that trigger conscious deliberation of one's career (Akkermans et al., 2018;

2020; 2021b). Ample examples exist, like the lay-off of a close colleague (i.e., a negative shock), or an unexpected promotion (i.e., a positive shock).

So far, research has explored several work and career outcomes of career shocks. For example, earlier studies have already shown that negative career shocks can lead to negative outcomes such as a reduced salary, lower career satisfaction, and less optimism (Akkermans et al., 2020; Hofer et al., 2021). These outcomes are not only detrimental for individuals (e.g., their well-being, performance) experiencing career shocks but also for the organizations they belong to (e.g., workers' absenteeism, reduced performance). The negative effects could mainly explained via deep reflection which can cause individuals to feel paralyzed. In other words, being in career inaction may completely shake individuals' career goals, plans and development. In this way, we could expect that career shocks may also lead people into career inertia, perhaps even a phase of career inaction, slowing them down in their career progress or hampering their goal-striving behaviors.

At the same time, other studies suggest that negative career shocks can also lead to positive outcomes such as an increased perceived employability (Zhou et al., 2023), or an increased focus on opportunities (Feng et al., 2019). Other recent research also indicated that experiencing a shock event can even increase the likelihood of career transitions (Wordsworth & Nilakant, 2021). Building on the above, we suspect that experiencing a career shock could thus also "push" people out of career inaction.

Unraveling the relationship between career shocks could add to the understanding of both career inertia and career shocks. Qualitative studies like repeated in-depth interviews or narrative studies could form a fruitful way to explore the relationship between these two recent career concepts. Later on, qualitative research could also use well-validated measures for both career inertia (e.g., the CARINAS) and career shocks (nonexistent at the time of writing) to test observed patterns and links from the qualitative work.

3. Longitudinal research on the dynamics and more distal outcomes of career inertia

Time is a crucial aspect in the context of career inertia for several reasons. First, time lies at the heart of careers since they develop over individuals' life span, shaped by past experiences and future goals (Akkermans et al., 2021a; Arthur et al., 1989). Additionally, in relation to career inertia, it takes time for people to realize that they have reached a point in time where fulfilling a desired career change seems undoable (e.g. the three phases of career inaction) since there has to be some time during which the inertia persists (Verbruggen & De Vos, 2020). Only when looking back on this period of time, people might become aware of their paralysis. Now, how long "some time" is, differs from person to person. According to recent findings of Rogiers et al. (2022), some people might experience this feeling of stuckness for weeks or months, while others feel stuck for years. With the development of a measurement scale for career inaction (CARINAS), it becomes possible to study the dynamics of career inertia: when and for whom is career inertia the most problematic? Multiple pathways are discussed.

3.1. Studying the risk for career inertia over the course of the career decision-making and implementation process

A first interesting avenue is to study at which point in the career decision-making and implementation process people are at the most risk of career inertia and which hampering factors play in which phase. Here, scholars can build on the motivation, action, and goal-striving literature It could, for example, be useful to look at the action phases model (Achtziger & Gollwitzer, 2007; Keller et al., 2020). This model describes the translation from motivation (goal/ intention) to action in four phases: pre-decision, pre-action, action, and post-action. Given that being in career inertia reflects the situation in which individuals have a desire to change something in their career, but don't realize their desire, all phases could be impacted by paralyzing internal forces. Research can, for instance, study whether internal

inertial forces may rather complexify or hamper the translation from career goals or intentions into actions, or the translation from actions to goal attainment. I reflect on the impact in each phase by building on the results of Study 1 (with a focus on the internal inertial forces) and the general idea of career inertia.

The first phase of the action phases model is the pre-decisional phase where people choose a goal to strive for. Here, people could be overwhelmed with the complexity of the career decision, for instance, because of all the factors that need to be taken into account, or the idea that they can only select one option out of all possible options. This can cause a mental overload and trigger people to doubt whether they can actually successfully make a career decision and implement it (i.e., low self-efficacy). As a consequence, people might end up postponing or even avoiding their decision completely. In the pre-actional phase, individuals might have decided that they want to change jobs, but when planning their actions, they could outweigh the costs and efforts that they will face in the short term compared to the benefits in the longer term. Hence, they might get stuck implementing their action plan. The action phase can be hampered in a similar way: when individuals feel that they cannot give up the benefits they accumulated so far, they might slow down their progression toward the goal. Lastly, in the post-actional phase, people reflect upon their actions, successes, and failures, and evaluate how they could do better in the future. When the undertaken actions were not consistent with the intended goal or insufficient to reach the intended goal, the plan of action can be considered not successful. If people have been in career inertia before, they might believe that they just have to suck it up, and not even try to strive for their desired goal “because it’s a lost cause anyway”. Hence, their self-efficacy might decrease, and they may have an even harder time trying to motivate themselves to make new career decisions. Exploring where in the career decision-making and implementation process people could be most at risk of career inaction could be done via using the

CARINAS. It could be very interesting to follow people in their career decision-making and implementation process, and performing repeated measuring of their experience of being in the career inaction phase (reflected in the CARINAS). Moreover, it would also be enriching to study whether people who get stuck in different phases also experience different effects (e.g., less or more negative impact on well-being).

3.2. Identifying buffers for when in career inertia: implementation intentions as a first example

Action and goal theory cannot only assist in identifying when career inertia may be hampering goal-striving but also in how to counter-balance the impediment that career inertia brings. Such knowledge can be of high practical value for career counselors. Here, inspiration can be found in the implementation intention theory (Gollwitzer, 1993). Implementation intentions are mental bonds individuals create between future situational or internal cues they might encounter and (a) specific, goal-oriented behavior(s) (Brandstätter et al., 2001). Implementation intentions thus almost automatically, non-consciously trigger an action when individuals face the specified cue. Therefore, implementation intentions could be a useful approach to use when people are aware that they are in career inertia and actively trying to deal with (some of the) cognitive internal forces such as fear. It could be that one forms the following implementation intention "If I get afraid of changing jobs, I will think about all the good things changing jobs can result in for me and my family." This mental link might form a buffering force to the inertial cognitive forces, and help people to continue on their path towards goal attainment—as mentioned in Study 3.

3.3. Studying the factors that lead people into and out of career inertia: methodological suggestions

Scholars can unravel what makes people enter and leave the state of inertia, and which personal factors contribute to these changes in the degree of career inertia. One could conduct

a diary study to follow people who could be at risk of career inertia. Such a study method allows scholars to investigate patterns of cognitions, moods, and behaviors over time by letting respondents fill out short, repeating questionnaires on antecedents to career inertia, career inertia itself during a period, for example during several weeks in their lives. Diary studies are very labor intensive and therefore often require testing in a small sample. Before the repeated questionnaires, there can also be a preliminary investigation of some personal characteristics. An alternative method could be to conduct retrospective analyses in which people have already been confronted with career inertia and can reflect upon it. Retrospective analyses have the benefit that people already lived through the event of interest and probably also already made sense of it. In the first phase, quantitative surveys can provide a means to explore areas of interest, and later on, in-depth interviews can help to unravel more of the underlying reasoning (e.g., via narrative studies). Therefore, this method could be useful to see, for example, to which factors respondents attribute their career inertia. However, retrospective methods also ask for caution in the sense that there could be a memory bias.

3.4. A focus on the more long-term outcomes of career inertia

Finally, given the complexity of career decisions, scholars should explore more long-term influences of career inertia and its related internal, inertial forces. As said, making a career decision in the current work environment is complex and may take some time. However, also implementing a decision or attaining a desired career goal and perceiving subsequent career outcomes takes time. In this dissertation, we only studied short-term career outcomes. In Study 2, we looked at the relatedness between anticipated regret on experienced regret and career satisfaction among the specific sample of career counseling clients. With a period of three to four months between each of the three waves of surveys, we in total covered a period of almost one year. Although career counseling generally runs over a short period of time (Hirshi & Froidevaux, 2019), and our selected period was long enough for the counseling

clients to finish the sessions they could buy with their career vouchers (i.e., four to a maximum of seven sessions), we could not assess career outcomes in the long run. After individuals have identified their career desire or have made a career choice with the aid of the career counselor, it again takes time to implement their choice or attain their desired goal. Perdrix et al. (2012), for example, found that one year after the end of counseling about 25% did still not implement their goal or make a change. Additionally, they also found that outcomes like career decision-making readiness, which includes dysfunctional beliefs about career decision-making (see Gati et al., 2000), only changed in the longer run—compared to, for example, career satisfaction which already is affected after a few sessions of career counseling.

So, to examine more long-term effects of career inertia, among career counseling clients but also more general samples, more longitudinal studies are needed. Short-term effects may differ from long-term effects, for example, if after a while individuals still manage to attain their career goal or let go of their desired change. But also if people are in career inertia for a longer time, they might experience negative effects on their performance and wellbeing due to enduring lingering on what could have been if they had decided differently. It has been shown stressful events (e.g., complex career decisions) can trigger rumination—or self-oriented negative, recursive thoughts—and that this in the long run may cause anxiety and depression (Karabati et al., 2017). Michl et al., (2013) also found that less satisfied people tend to ruminate more, and as a consequence, feel less happy. In the career context, scholars also posited that self-reflection, which may arise during career inertia, can turn into rumination and, in this manner, bring along several risks for individuals' mental and physical well-being (Lengelle et al., 2016). Enduring regret over "bad" decisions or forgone alternatives (e.g., not having changed jobs when you wanted to) could in a way be seen as lingering thoughts, combined with self-blame. Not surprisingly, research also already

illustrated the negative effects of enduring career choice regret on individuals' health and well-being, work commitment, and productivity (Inman & Zeelenberg, 2002). Based on our findings, we believe that more interesting and valuable work can be done on how career inertia impacts individuals and their career in a more distal way, perhaps via rumination or regret. Mediation and path analyses can be used to explore how the outcomes arise over time.

4. Career inertia among students

4.1. Relevance of and reasoning behind studying career inertia among students

As commonly accepted, individuals' careers do not only conclude one's work-related experiences but also one's education leading to these experiences. During this PhD, I aimed to gain a deeper understanding of cognitive, internal forces that can keep adult workers from fulfilling a desired change in their career. If the opportunity to continue research on career inertia would present itself, I would explore how career inertia arises among students. More specifically, I would be fascinated to see whether the prolonged study paths and postponed transitions into their first job can also—at least in part—be explained by cognitive internal forces. Prolonged educational pathways have become a fundamental characteristic of the labor market in many countries (Blokker et al., 2023; OECD, 2016): young adults are more likely now than in the past to postpone entry into higher education (e.g., by taking a year off abroad; Wells & Lynch, 2012) and the average duration of getting a university degree has increased (Pastore, 2019). On top, more and more young adults postpone entry into employment after getting a (first) degree (e.g., by taking a gap year Holmlund et al., 2007). This prolonged uncertain life phase is particularly prevalent in Western industrialized societies and has been coined by Arnett (2000) as 'emerging adulthood' (Grosemans et al., 2018).

These trends do not come without risk. For instance, postponed entry into higher education has been found to be negatively related to degree completion (Roksa & Velez,

2012), and taking a gap year has been associated with reduced earnings at the age of 40 (Holmlund et al., 2008). These trends and the risks they bring along are likely to be linked with the increased emphasis that the media, governments, and the career literature put on being personally responsible for your own career success and failure (Van Vianen et al., 2009). This societal trend puts pressure on people to make the best possible choice (Verbruggen et al., 2013) and may, therefore, induce more anxiety ("*If I do not make the best choice, I only have me to blame*") and make the decision more cognitively demanding (*"I really need to make sure that I explore all options so that I can choose the best one for me").*

As such, I believe that cognitive, non-rational inertial forces may also explain part of career inertia among students. So far, only limited knowledge exists of the role of cognitive internal factors in understanding prolonged educational pathways (Wells & Lynch, 2012). Therefore, examining the role of internal "irrational" processes in the phenomena of prolonged studying and postponed school-to-work transitions (as two forms of career inertia among students) seems another valuable area for future research.

4.2. Methodological suggestion to study career inertia among students

To study the above mentioned elements, a mixed-method approach could prove to be successful. To examine if similar or completely different cognitive internal, inertial forces are at play in career inertia among students versus among working adults, qualitative methods seem most suited. It would be valuable, for example, to organize focus groups with students who have been studying longer than objectively speaking would be needed to obtain a first job, but also with student counselors who actively work with students who find it difficult to decide on their professional career and implement their decisions. Having collected this input, I would then create a conceptual model similar to examine the specific role of cognitive, internal forces in career inertia and subsequent early career outcomes. In this context, it could

perhaps also be valuable to establish an adapted version of the CARINAS for young adults who desire to transition to a first job but fail to do so.

On a final, personal note

Throughout the process of writing this dissertation, I have come to appreciate human cognitive irrationalities more and more. It's human, I would even say normal, to feel overwhelmed by all the factors you need to take into account when making a career decision. It's human to be afraid of the unknown outcome of your career decision. It's human to not 'just' want to give up the benefits you've collected so far. It's human to think about how you might regret changing jobs because all in all, your current job is not that bad, is it? It's human to not always or fully make career decisions as prescribed by many traditional theoretical models—most definitely in our complex, fast-changing, turbulent, and unpredictable world of work. Yes, it's even human to seek help to unravel which forces, external but thus also internal ones, that keep you stuck in limbo when wanting to change something in your career. A helping hand from a career counselor, a supervisor, a family member, a friend, or a spouse may assist and support us in becoming more aware of internal inertial forces that withhold us. Such increased awareness might even teach us something about ourselves. I think of questions like "Which forces am I most sensitive to?" But also: "How can I tackle each of those forces, and make the best of being stuck in career inertia?" If this were an audiobook, I would end with Kelly Clarkson singing "What doesn't kill you, makes you stronger." Finally, it is also my sincere hope that this dissertation may facilitate and stimulate scholars to conduct richer, more nuanced, and more human-centered research on the complex process of career decision-making, the implementation of career decisions, and career transitions—with the inclusion of internal forces related to career inertia.

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