

“Don’t you worry ‘bout a thing” – the moderating role of age in the relationship between qualitative job insecurity and career sustainability

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Abstract

Purpose – Building on a stress-related view, this study examines the impact of qualitative job insecurity on three indicators of career sustainability. It also examines the moderating role of employee age in this relationship.

Design/methodology/approach – Dutch respondents ($N = 398$) working in various sectors responded to an online survey. Our hypotheses were tested using path modeling with Mplus.

Findings – Qualitative job insecurity was negatively related to job satisfaction, general health, and employability. Moreover, a moderating effect of employee age on the relationship between qualitative job insecurity and job satisfaction was found.

Practical implications – Organizations need to take measures to prevent qualitative job insecurity, as this appears to be an essential hindering factor that might endanger an employee’s career sustainability. Especially younger workers (<40 years) seem to suffer from qualitative job insecurity as this decreases their job satisfaction, urging management and HR professionals to protect them against it.

Originality/value – By focusing on qualitative job insecurity, this study helps to close an essential gap in the literature that so far has mainly focused on quantitative job insecurity. Besides, this is the very first empirical work investigating the link between qualitative job insecurity and multiple indicators of career sustainability. Finally, this research adds a developmental approach to sustainable careers by comparing younger and older workers.

Keywords Qualitative job insecurity, Career sustainability, Job satisfaction, General health, Employability, Employee age

Paper type Research paper

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We would like to thank our Master students for their help with the data collection.



Introduction

The turbulence and changes in today's internal and external labor markets may significantly impact a worker's career sustainability (Fugate *et al.*, 2021). Protecting and further enhancing one's current career sustainability are even more complex given the increasing globalization, dynamism in jobs, and the ever-changing employer-employee relationship (Horney *et al.*, 2010). Besides, given societal changes, such as the increasing aging and dejuvenization of the working population, attention for sustainable careers is all the more important as it is not self-evident that careers are sustainable throughout a worker's life-span. After all, many factors may endanger one's career sustainability throughout one's working life.

De Vos and Van der Heijden (2015) defined sustainable careers as "sequences of career experiences reflected through a variety of patterns of continuity over time, thereby crossing several social spaces, characterized by individual agency, herewith providing meaning to the individual" (p. 7), and argued that the three dimensions of *person*, *context*, and *time* actively interact with each other to shape one's career sustainability, which these authors conceptualized as the three indicators of *happiness*, *health*, and *productivity* (Van der Heijden, 2005). In our study, these three indicators of career sustainability are operationalized as job satisfaction being an indicator of an employee's happiness, general health representing the health indicator in sustainable careers, and employability being an indicator of productivity (De Vos *et al.*, 2020), respectively. Job satisfaction refers to an employee's subjective response to working in their job and organization (Cammann *et al.*, 1983). General health is defined as a person's belief about their physical, mental, and social well-being and not merely the absence of disease or infirmity (World Health Organization). Employability is defined as "the continuous fulfilling, acquiring or creating of work through the optimal use of competences" (Van der Heijde and Van der Heijden, 2006, p. 453).

Focusing on qualitative job insecurity, first, our work adds to the scholarly knowledge in the field of job insecurity as research on qualitative job insecurity is quite limited (e.g. Blotenberg and Richter, 2020). We posit that qualitative job insecurity might hinder an employee's career sustainability, which is even more distressing as employers' need for flexibility has only increased over time. Qualitative job insecurity comprises employees' perceived threats of losing *valued features of their job*, such as salary development, promotion opportunities, and working conditions within the near future (Greenhalgh and Rosenblatt, 1984; Hellgren *et al.*, 1999). At present, employment relationships are more unstable and volatile, let alone the impact of technological developments and AI (Balsmeier and Woerter, 2019; Graetz *et al.*, 2022), and many organizations experience tensions when contemplating investments in employee development (Fugate *et al.*, 2021; Hu *et al.*, 2021). We only have to remember the COVID-19 pandemic to understand how such a sudden career shock (Akkermans *et al.*, 2020) has negatively impacted all dimensions of life and work (Vu *et al.*, 2022). Analogously, it has threatened the job quality of many employees, resulting in increased perceptions of qualitative job insecurity (e.g. Vo-Thanh *et al.*, 2020).

Second, to the best of our knowledge, this is the first study that investigates the link between qualitative job insecurity and multiple indicators of career sustainability. Particularly, to address the tensions organizations experience when contemplating investments in employee development, we advocate a sustainable career perspective (De Vos *et al.*, 2020) wherein a multiple-stakeholder (i.e. systemic) approach (cf. Colakoglu *et al.*, 2006) is critical. Specifically, career sustainability is highly dependent upon the employer-employee relationship and its mutually beneficial consequences (Fugate *et al.*, 2021). Adopting such a sustainable career perspective enables us to analyze the damaging impact of qualitative job insecurity in the light of one's happiness, health, and productivity (Van der Heijden, 2005). Our focus on qualitative job insecurity stems from the fact that this type of insecurity "is likely to be appraised as the absence of positive stimuli (e.g. lack of opportunities)" within one's current job (Long *et al.*, 2022, p. 299). Therefore, we believe examining its predictive validity in light of employees' career sustainability is especially worthwhile. In addition, qualitative job insecurity, concerning job feature loss, is a particular

threat to one's growth needs (Tu *et al.*, 2020), making it the most suitable antecedent in the light of our sustainable career perspective. Obviously, the absence or lack of valued job features is even more distressing when one's career sustainability is already at stake.

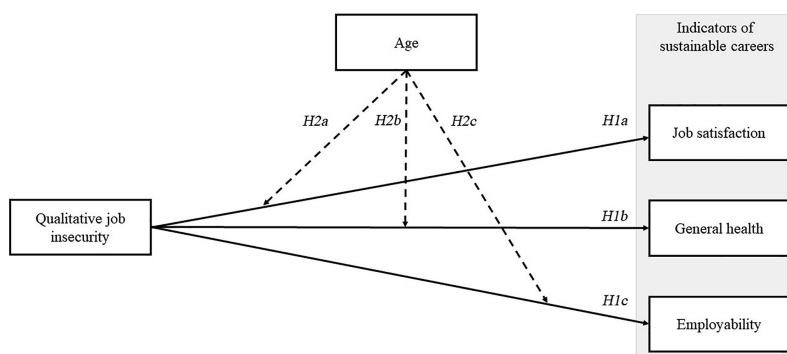
Third, by examining the possible role of age in our model relationships, we respond to an earlier call to do justice to the complex character of careers by adding a developmental approach to sustainable careers (Van der Heijden *et al.*, 2020). In particular, by differentiating between younger (<40 years) and older workers (≥ 40 years) [see earlier empirical work (Boerlijst *et al.*, 1998; Taylor and Walker, 1998; Van der Heijden *et al.*, 2009) and practice recommendations by Finkelstein and Farrell (2007, p. 100 on the Age Discrimination in Employment Act) for justification for this dichotomy], we increase our insight in age-related changes in the damaging effect of qualitative job insecurity on workers' career sustainability. Besides, such an approach enables us to disentangle the impact of qualitative job insecurity on the indicators of sustainable careers for younger versus older workers. This sets the stage for recommendations on age-related HRM policies in organizations and how to translate these into sound practices by line managers. Figure 1 depicts our research model.

Theory and hypotheses

Qualitative job insecurity and career sustainability

Job insecurity is an unpleasant experience for individuals and one of the most common stressors in contemporary working life (Jiang and Lavaysse, 2018). From earlier research, we know that it has negative consequences for all kinds of individual and work-related outcomes, such as mental and physical health, well-being, job satisfaction, work engagement, and turnover intentions (Cheng and Chan, 2008; De Witte *et al.*, 2016; Griep *et al.*, 2021; Jiang and Lavaysse, 2018; Llosa *et al.*, 2018; Sverke *et al.*, 2002). These negative consequences can be explained by different theoretical frameworks. The transactional stress theory (Lazarus and Folkman, 1984) is one of the main stress frameworks. It views job insecurity as a stressor that confronts the individual with a demand perceived as threatening in case it exceeds the individual's resources to handle it. Moreover, as the particular threat related to job insecurity is vague and the source may be uncertain, counteracting this threat is difficult, making it likely for stress reactions to occur (Barling and Kelloway, 1996; Sverke *et al.*, 2002).

On top of this, one might not only fear losing one's job (i.e. quantitative job insecurity) but especially qualitative job insecurity might also threaten one's ability to protect and obtain resources, as described in the Conservation of Resources (COR) theory (Hobfoll, 1989). Because resource loss is more potent than resource gain, and as stress occurs when resources



Source(s): Authors work

Figure 1.
Theoretical moderated
model from qualitative
job insecurity to
indicators of
sustainable careers

are lost, at each iteration of a resource loss, individuals and organizations have fewer resources to offset resource loss. The latter is referred to as a resource loss spiral in Corollary 2 of COR theory (Hobfoll *et al.*, 2018).

In particular, using transactional stress theory (Lazarus and Folkman, 1984) and COR theory (Hobfoll, 1989; Hobfoll *et al.*, 2018), we argue that feelings of insecurity regarding losing valued features of one's job can undermine job satisfaction and health (Ashford *et al.*, 1989; De Witte *et al.*, 2016; Hellgren *et al.*, 1999; Nikolova *et al.*, 2019) (being the first two indicators of an employee's career sustainability). Indeed, Sverke *et al.* (2002), in their meta-analysis and review of job insecurity and its consequences, concluded that job insecurity has detrimental consequences for employees' job attitudes and health (p. 242). Similarly, Jiang and Lavaysse (2018), who conducted a meta-analysis and primary study on the relationship between job insecurity and an impressive set of individual and work-related outcomes, including job satisfaction and health-related ones, found detrimental effects.

For the much less investigated linkage between qualitative job insecurity and employability (being the third indicator of an employee's career sustainability) we again build on COR theory (Hobfoll, 1989) and contend that qualitative job insecurity is a demand comprising a resource loss "which uses up more resources and hampers the development of other resources" (De Cuyper *et al.*, 2012, p. 774), herewith endangering their employability (cf. Berntson *et al.*, 2010; Mäkikangas *et al.*, 2013). Qualitative job insecurity comprises a perceived breach of the psychological contract associated with strong adverse emotional reactions (Robinson and Rousseau, 1994). We posit that such reactions affect the workers' perceived employability. More specifically, workers who experience qualitative job insecurity worry about the qualities of their current job and already suffer from a lack of growth opportunities that it provides, which may spill over into worrying about their future employability as well (i.e. their career potential; Van der Heijde and Van der Heijden, 2006). Such a resource loss spiral (Hobfoll, 2001) also entails that for individuals losing resources, investments become more complex [cf. the Matthew effect: the rich get richer, and the poor get poorer (Rigney, 2010)], further endangering their career sustainability. Based on the outline given above, the following hypothesis is formulated:

- H1. Qualitative job insecurity is negatively related to job satisfaction (H1a), general health (H1b), and employability (H1c).

The moderating role of age in the relationship between qualitative job insecurity and career sustainability

In this study, we focus on qualitative job insecurity as a predictor of workers' career sustainability and, in addition, examine the moderating effect of employee age in this relationship. Past research already suggested the inclusion of age in the job insecurity-outcome link (Sverke *et al.*, 2002), and earlier empirical work already showed a moderating effect of age in the relationship between job insecurity on the one hand and turnover intention (Cheng and Chan, 2008), career optimism (Hofer *et al.*, 2021), and intrinsic job satisfaction (Yeves *et al.*, 2019) on the other hand. As career outcomes appear to depend heavily on career and life stage considerations (Feldman and Ng, 2007; Tordera *et al.*, 2020), it is likely that our models' relationships will also be affected by age.

Concerning the moderating role of age, Baltes *et al.* (1999) and Kanfer and Ackerman (2004) already stressed the importance of taking into account the notion of "loss and growth" (as characterized by a decline in fluid intelligence and an increase in crystallized intelligence with aging) in research on aging at work. In order to minimize losses, as this is more impactful than resource gain (see the explanation of Corollary 2 of COR theory above; Hobfoll *et al.*, 2018), older employees are inclined to adopt specific strategies using those personal resources that are available to them (Selection, Optimization, and Compensation theory; Baltes *et al.*, 1999).

Moreover, due to age-related resource losses, such as a limited amount of remaining time and opportunities, they will allocate fewer resources to growth (e.g. Freund and Ebner, 2005).

Zacher and Frese (2009) defined Occupational Future Time Perspective (OFTP) as an individual worker's perception of remaining time and opportunities in their career. Previous scholars already found that OFTP decreases with aging (Armstrong-Stassen *et al.*, 2008; Kooij *et al.*, 2014; Maurer *et al.*, 2003; Van der Heijden, 2006; Von Hippel *et al.*, 2013; Rudolph *et al.*, 2018). We argue that OFTP may also influence how various aspects related to one's work-related situation, such as the various aspects of work conditions, labor relations, and conditions of employment, influence an employee's career sustainability. Specifically, being a younger worker implies that time is perceived as more expansive and open-ended. Thus, younger workers are more likely to attach high importance to development goals to optimize the future (Bal *et al.*, 2010), in our case one's career sustainability. Therefore, we expect that qualitative job insecurity takes its toll, especially if the employee is younger. Besides, the mere fact that younger workers' lower calendar age implies that their remaining time in the work context is expected to be longer (i.e. time till official retirement age) only adds to the importance of experiencing developmental opportunities, herewith strengthening the negative impact of qualitative job insecurity.

Contradictorily, the relative importance of development goals will decline for older workers, as they perceive that such goals are unlikely to be attainable in the limited remaining time and opportunities in their career. Otherwise stated, older workers are more oriented to making the limited remaining time count and focus more on prioritizing emotional well-being over growth and learning at work. Therefore, they attach more value to intrinsic rewards, such as the content of their work and the quality of their relationships at the workplace. That is to say, the age-related decline in OFTP shifts attention away from development goals and, therefore, reduces the negative impact of qualitative job insecurity in light of one's career sustainability.

Based on this line of reasoning, the following hypothesis is formulated:

- H2.* The negative relationship between qualitative job insecurity and job satisfaction (H2a), general health (H2b), and employability (H2c) is stronger for younger workers (<40 years) in comparison with their older counterparts (≥40 years).

Methods

Participants and procedure

In 2019, 784 participants were recruited through the professional networks of the students of one of the researchers in the Netherlands. The students approached organizations in their professional networks with the request to help recruit respondents by sharing information on the research and the link to an online survey among their workers. Data were gathered in the context of master thesis research, applying convenience sampling, and the participation of the respondents was voluntary. The research was approved by the ethical committee of the university. As such, active consent on four aspects was required from the participants at the start of the survey: for agreement on the use of the data for research, for being informed and the further availability of the responsible researcher if questions would arise, for anonymity, and for the opportunity to leave the survey at any moment. The participants received no incentives for participation. The response rate based on usable questionnaires was almost 51%, a reasonable response rate for survey research (Baruch and Holtom, 2008).

The respondents, $N = 398$ in total (female = 73.9%, male = 26.1%) were $M = 43.53$ ($SD = 12.66$) years old, came from a large variety of sectors (e.g. financial services such as banking and insurance, education, non-profit healthcare, and business services such as

consulting), and had on average a long organizational tenure ($M = 13.44$, $SD = 11.83$). About half of them held a university degree (68.3%). The dataset contained no missing data.

Measures

All variables were measured using a standardized questionnaire. Cronbach's alphas of all multi-item measures within our sample can be seen in [Table 1](#). All included scales exhibited sufficient internal consistency ([Nunnally et al., 1967](#)).

Qualitative job insecurity. Qualitative job insecurity was measured with a Dutch version of the four-item scale developed by [Hellgren et al. \(1999\)](#). A sample item is "I believe that the organization will need my competencies also in the future." The participants indicated the extent to which they agreed with the items on a five-point Likert-type scale ranging from 1 = *totally agree* to 5 = *totally disagree*.

Chronological age. The individuals provided their exact chronological age in years. We formed a dichotomous variable, with 0 = *younger than 40 years* (42.21%) and 1 = *40 years or older* (57.79%).

Job satisfaction. Job satisfaction was measured using a Dutch version of the three-item scale developed by [Cammann et al. \(1983\)](#). A sample item is "In general, I like working here." The participants indicated the extent to which they agreed with the items on a seven-point rating scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*.

General health. General health was measured using a single item developed by [Ware and Sherbourne \(1992\)](#). Participants were asked to indicate how they felt about their health in general, using a five-point rating scale ranging from 1 = *poor* to 5 = *excellent*.

Employability. Employability was measured with a Dutch version of the short-form 22-item scale ([Van der Heijden et al., 2018](#)) developed by [Van der Heijde and Van der Heijden \(2006\)](#). Sample items are "I consider myself ... competent to weigh up and reason out the 'pros' and 'cons' of particular decisions of working methods, materials, and techniques in my job domain" (occupational expertise; answering categories ranging from 1 = *not at all* to 6 = *extremely*); "I consciously devote attention to applying my newly acquired knowledge and skills" (anticipation and optimization; answering categories ranging from 1 = *never* to 6 = *very often*); "I adapt to developments within my organization ..." (personal flexibility; answering categories ranging from 1 = *very badly* to 6 = *very well*); "In my organization, I take part in forming a common vision of values and goals" (corporate sense; answering categories ranging from 1 = *never* to 6 = *very often*); and "The time I spend on my work and career development on the one hand and my personal development and relaxation on the other are ... evenly balanced" (balance; answering categories ranging from 1 = *not at all* to 6 = *to a considerable degree*). The overall employability mean score was built based on the mean scores of the five employability dimensions.

Controls. Given the outcomes of previous studies, we decided to include gender (1 = male, 2 = female) and organizational tenure in years as control variables ([Ng et al., 2005](#)). Besides, building on earlier scholarly work ([Straub et al., 2020](#); [Kossek and Ollier-Malaterre, 2020](#)), we controlled for care responsibilities (0 = no, 1 = yes). Hence, we ruled out alternative explanations while testing our hypothesized moderation model by controlling for these three theoretically and empirically relevant variables.

Analysis strategy

We used Mplus (Version 8.4, [Muthén and Muthén, 1998-2017](#)) to estimate the hypothesized manifest path model, as shown in [Figure 1](#). We also modeled additional paths for the three control variables (i.e. gender, organizational tenure in years, and care responsibilities), which were all regressed on all three outcomes (i.e. job satisfaction, general health, and employability). We also correlated all three outcome variables with each other.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1	Age category	0.578	—							
2	Gender	1.739	−0.080 ^{***}	—						
3	Care responsibilities	0.698	0.424 ^{***}	−0.005	—					
4	Organizational tenure	13.444	0.543 ^{***}	0.044	0.249 ^{***}	—				
5	Qualitative job insecurity	2.875	0.247 ^{***}	0.035	0.134 ^{***}	0.221 ^{***}	—			
6	Job satisfaction	5.740	0.089	−0.071	0.038	0.131 ^{**}	0.62	0.77		
7	General health	4.118	−0.013	−0.033	0.008	0.088	−0.313 ^{***}	0.221 ^{***}	—	
8	Employability	4.2891	−0.040	−0.122 [*]	0.015	−0.037	−0.154 ^{**}	0.302 ^{***}	0.246 ^{***}	0.74

Note(s): Age category (0 = below 40 years, 1 = 40 years or older), gender (men = 1, women = 2), care responsibilities (0 = no, 1 = yes)

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. $N = 394$ –398

Source(s): Authors work

Table 1.
Descriptives,
intercorrelations, and
Cronbach's alphas

Results

Preliminary results: discrimination between the study constructs

We conducted confirmatory factor analyses to show that the three central study variables assessed by psychological scales using multiple items (i.e. the predictor qualitative job insecurity, job satisfaction, and employability, both outcomes) are distinct, using Mplus Version 8.4 (Muthén and Muthén, 1998-2017). We evaluated the model fit based on different model fit indices: comparative fit index (CFI; Kline, 2016), standardized root mean square residual (SRMR; Hu and Bentler, 1998), and the root mean square error of approximation (RMSEA; Kline, 2016). Models with CFI values greater or equal to 0.90 and RMSEA and SRMR values less than 0.08 indicate a good model fit overall (Hu and Bentler, 1998; Schreiber, 2017). We compared Model 1 with three latent factors (i.e. qualitative job insecurity, job satisfaction, and employability) with Model 2, wherein all items of all scales were loaded onto one general factor. The model comparison showed that Model 1 (χ^2 [51] = 172.80, $p < 0.001$; CFI = 0.900, SRMR = 0.068, RMSEA = 0.078) was preferable over the poor-fitting Model 2 (χ^2 [54] = 584.79, $p < 0.001$; CFI = 0.576, SRMR = 0.115, RMSEA = 0.157; $\Delta\chi^2$ = 411.99, Δdf = 3, $p < 0.001$, ΔCFI = 0.333). Moreover, we compared Model 1 with Model 3, a two-factor model that includes qualitative job insecurity and a sustainable career factor comprising all job satisfaction and employability items. Model 1 (i.e. the hypothesized three-factor model) was preferable over the poor-fitting two-factor Model 3 (χ^2 [53] = 415.39, $p < 0.001$; CFI = 0.705, SRMR = 0.102, RMSEA = 0.131; $\Delta\chi^2$ = 242.59, Δdf = 2, $p < 0.001$, ΔCFI = 0.195). These results suggest that the scales used here measure different constructs and can be applied in further analyses. The factor loadings of Model 1 can be seen in Table A1 in the appendix.

Preliminary results: bivariate relationships

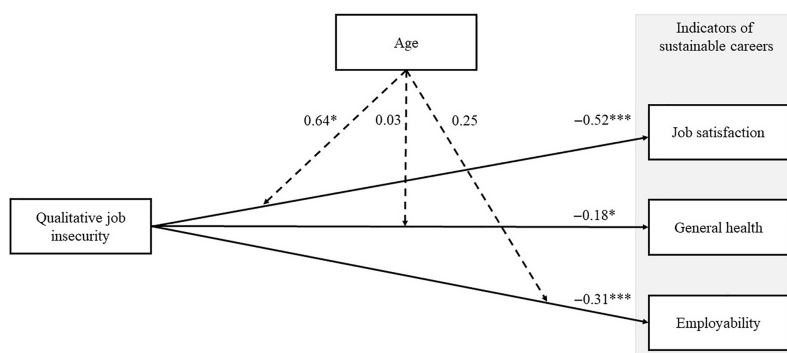
Table 1 summarizes the means, standard deviations, and correlations among all study variables and the controls, and shows that gender was significantly correlated with employability ($r = -0.122$, $p < 0.05$) and that care responsibility was significantly correlated with job insecurity ($r = 0.134$, $p < 0.01$). Moreover, organizational tenure was significantly correlated with job insecurity ($r = 0.221$, $p < 0.001$), and with job satisfaction ($r = 0.131$, $p < 0.01$).

Hypotheses' testing

Qualitative job insecurity-outcome link. Qualitative job insecurity was negatively related to job satisfaction ($\beta = -0.523$, $p < 0.001$), general health ($\beta = -0.181$, $p = 0.023$), and employability ($\beta = -0.313$, $p < 0.001$), herewith supporting Hypotheses 1a, 1b, and 1c (see Figure 2).

Moderating effects of age on the relationship between job insecurity and indicators of sustainable careers. We investigated the interaction effects of qualitative job insecurity and employee age category on the three outcomes (i.e. job satisfaction, general health, and employability). The interaction effect between qualitative job insecurity and employee age category on job satisfaction was significant ($\beta = 0.643$, $p = 0.010$), herewith supporting Hypothesis 2a. As shown in Figure 3, higher levels of qualitative job insecurity are linked to lower levels of job satisfaction, especially for younger workers. However, the interaction effects between qualitative job insecurity and employee age category on general health ($\beta = 0.032$, $p = 0.894$) and employability ($\beta = 0.253$, $p = 0.291$) were not significant. Therefore, Hypotheses 2b and 2c were not supported in our study.

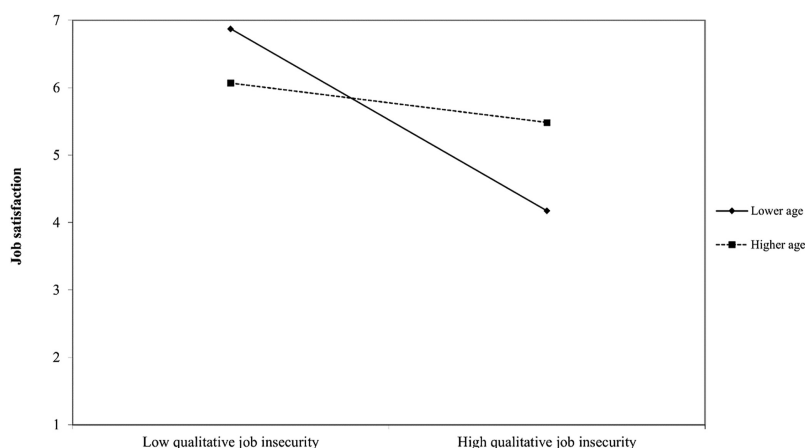
Finally, a closer look at the explained variances in the moderated model analyzed revealed that more variance was explained within job satisfaction ($R^2 = 0.167$) than within general health ($R^2 = 0.046$) and employability ($R^2 = 0.082$).



Note(s): * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. $N = 394$

Source(s): Authors work

Figure 2.
Results of the
moderated model



Source(s): Authors work

Figure 3.
Moderation effect of
younger/older workers
on the qualitative job
insecurity-job
satisfaction link

Discussion

Reflection on the results and theoretical implications

Both changes in the work environment (e.g. changing employer-employee relationships and all kinds of technological changes) and societal changes (e.g. the increasing aging and dejuvenization of the working population) urge key stakeholders in organizations to protect and further enhance all workers' career sustainability throughout the course of their working life. We argue that qualitative job insecurity, which we see as a central work stressor, might be a factor seriously endangering an employee's career sustainability. Moreover, given the higher importance of development goals because of a more open OFTP for younger versus older workers, we expect the detrimental effects of qualitative job insecurity to be more severe for the younger counterparts. In this section, we will discuss the conclusions of our study and translate them into theoretical implications for the scholarly literature.

This study adds a sustainable career perspective to address the tensions working organizations experience when considering investments in employee development. We

analyzed the damaging impact of qualitative job insecurity in the light of employees' career sustainability and the possible role that age can play as a moderator in this regard. Our empirical work contributes to the already existing scholarly literature in three important ways. First, as previous research in the field of job insecurity mainly focused on quantitative job insecurity, this study helps to close an important knowledge gap in this scholarly domain. Second, in developing our hypotheses explaining the impact of qualitative job insecurity on indicators of career sustainability, we have drawn on key notions from transactional stress theory and Conservation of Resources theory. Specifically, all three indicators (i.e. job satisfaction, general health, and employability) appeared to be negatively associated with the amount of qualitative job insecurity that the employee experienced.

Third, by differentiating between younger (<40 years) and older (≥ 40 years) workers, we contribute to the need to shed more light on the complex character of careers by adding a developmental perspective to sustainable careers. Again, using the Conservation of Resources theory while incorporating the notion of OFTP (Zacher and Frese, 2009), we expected the effects of qualitative job insecurity to be especially harmful to younger workers as they are likely to attach high importance to development goals. On the contrary, for older workers, the relative importance of such goals was assumed to decline because of the more limited remaining time and opportunities in their careers. In line with our expectations, employee age indeed moderated the relationship between qualitative job insecurity and job satisfaction, while, unlike our expectations, no such effect could be found on general health and employability.

The spiraling nature of resource loss that is posited in Corollary 2 of COR theory (Hobfoll *et al.*, 2018) might be part of the explanation for this outcome. Possibly, for our specific sample that was still relatively young ($M = 43.53$, $SD = 12.66$), only time can tell whether the resource loss due to qualitative job insecurity, which has decreased their feelings of job satisfaction, will also increase perceived levels of stress at the cost of their health and employability. Future longitudinal work, ideally including reciprocal relationships, is needed to disentangle further whether a loss spiral indeed starts with a decrease in job satisfaction, herewith possibly resulting in deteriorating health, which seriously endangers one's future employability (cf. the Matthew effect; Rigney, 2010). It seems that, while, as expected, there is a direct negative impact of qualitative job insecurity on all three outcomes in our research (i.e. job satisfaction, general health, and employability), and youngsters indeed suffer more strongly from this in terms of the subjective feelings of happiness about their current job, their future career potential (i.e. their employability) and health are not yet at a higher risk in comparison with their older counterparts.

Given all kinds of negative consequences of qualitative job insecurity (e.g. in terms of mental and physical health, well-being, job satisfaction, work engagement, and turnover intentions; Cheng and Chan, 2008; De Witte *et al.*, 2016; Griep *et al.*, 2021; Jiang and Lavaysse, 2018; Llosa *et al.*, 2018; Sverke *et al.*, 2002), that have been highlighted in previous research in this domain and within our study, and the fact that such experiences might also threaten one's ability to protect and obtain resources (cf. COR theory; Hobfoll, 1989), we believe that qualitative job insecurity should be avoided, for workers across the life-span. However, as our study indicates that especially younger workers' job satisfaction is in danger when they experience high levels of qualitative job insecurity, our scholarly work indicates that it is the happiness component of the career sustainability conceptualization that suffers most, more so in comparison with the health component (being the second employee well-being indicator that reflects the employee perspective of sustainable careers) and the productivity component (being the third indicator that reflects the employer perspective of the sustainable careers; Van der Heijden, 2005). Future research could test if this can be explained by the longer remaining time within the work setting (Zacher and Frese, 2009) and by specific components of multi-dimensional career insecurity, such as career insecurity linked to contractual

employment conditions and career insecurity linked to career opportunities (Spurk *et al.*, 2022).

Practical implications

Our study has some practical implications. Given the predictive value of qualitative job insecurity in the light of employees' job satisfaction and general health, line managers and HR professionals in working organizations should try their utmost to carefully align the organizational objectives with the individual employee's life- and work-related objectives in order to protect their well-being, being a key notion of the sustainable careers framework (De Vos *et al.*, 2020). In doing so, they must also make sure that the development of occupational competencies of all workers, across their entire life-span, is fostered and finetuned with the strategic goals of the organization. Only in case regular and true dialogues, about both one's current functioning and the necessary needs to meet future job and organizational demands take place (i.e. their employability; Van der Heijde and Van der Heijden, 2006), obsolescence (De Grip and Van Loo, 2002) can be prevented, and one's job security can be better safeguarded. This is not an easy task that requires a dual responsibility (i.e. from the employer, in particular one's direct supervisor, and the employee; Van der Heijden, 2005; Veld *et al.*, 2015).

The continuous changes in the labor market and work environment, and the inherent turbulence and impact on workers' career sustainability these changes entail, urge us to combine the employee perspective and employer perspective and to protect and ideally further enhance all three indicators of sustainable careers (i.e. happiness, health, and productivity, here operationalized as job satisfaction, general health, and employability). Besides, given societal changes, such as the increasing aging and dejuvenization of the working population, the notion of sustainable careers is all the more important. Therefore, we invite the key stakeholders in working organizations to shape the HR function in such a way that it is possible to create and sustain organizational viability while fostering their employees' career sustainability. Moreover, these stakeholders need to consider that, with the perception of less remaining time and opportunities due to aging, the importance of development opportunities is likely to change as well.

Given our findings on a moderation effect of age, an idiosyncratic approach is needed, wherein the parties involved are mindful about which resources are needed to protect workers' job satisfaction over time and who and what matters to one's career (Van der Heijden, 2005). Concrete examples of HRM practices that can be useful for a tailor-made approach across the employee's life-span are flexible benefits, additional leave, development on the job, ergonomic adjustments to the workplace, and part-time retirement (Kooij *et al.*, 2014). This will help make "meaningfulness" an essential element and shape the job resources and personal characteristics, such as employability-related competencies, that are needed to protect oneself against the negative impact of qualitative job insecurity.

Limitations and future research

Like all scholarly work, this study has some limitations. More specifically, all measures relied on self-reported data, which raises concerns about possible common-method bias (Podsakoff *et al.*, 2012). Therefore, we encourage colleagues to conduct future work wherein multi-source data are used, for instance, combining employee self-ratings and supervisor ratings for sustainable career indicators. Moreover, future research should measure all central variables based on psychologically sound, valid, and reliable measures that consist of multiple items. Therewith, it will be possible to build latent factors for all variables and use structure equation modeling (SEM) which decreases restrictions on the evaluation of the model's validity and reliability and is therefore preferable over path model analysis. Past literature

highlighted the benefits of using SEM over path models (e.g. [Coffman and MacCallum, 2005](#); [Feng et al., 2020](#)).

Besides, we encourage future studies separating waves that measure antecedents, moderators, and outcome variables (i.e. sustainable career indicators). Future longitudinal work is also needed to examine short- and long-term dynamics/changes in the sustainable career indicators over time. Ideally, both between-person and within-person change trajectories will be used in longitudinal designs ([Laursen and Hoff, 2006](#); [Morin et al., 2018](#)).

We also call for more research comparing different categories of workers (age/gender/occupational type) and additional scholarly work incorporating both qualitative and quantitative job insecurity to investigate different patterns of relationships comparing both types. Finally, we have only used the worker's calendar age in this empirical work. Using a broader conceptualization of age, over and above calendar age, might be a direction for future work. In this respect, [Sterns and Doverspike \(1989\)](#) divided five different approaches to age (i.e. chronological, organizational, functional, psychosocial, and life-span development approaches) to measure age-related changes across time, due to, e.g. health, career stage, and family status. Hopefully, our work will inspire colleagues to conduct more empirical work in this direction.

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Table A1.
Factor loadings in
confirmatory factor
analysis Model 1

Construct	Items	Loading
Qualitative job insecurity	Qualitative job insecurity 1	0.615
	Qualitative job insecurity 2	0.874
	Qualitative job insecurity 3	0.446
	Qualitative job insecurity 4	0.328
Job satisfaction	Job satisfaction 1	0.935
	Job satisfaction 2 (recoded)	0.505
	Job satisfaction 3	0.778
Employability	Occupational expertise	0.578
	Anticipation and optimization	0.662
	Personal flexibility	0.653
	Corporate sense	0.665
	Balance	0.458
Source(s): Authors work		

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