

# How to minimize job insecurity: The role of proactive and reactive coping over time<sup>☆</sup>

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## ABSTRACT

Job insecurity is no longer a temporary setback but an experience that many workers endure for prolonged periods of time during their career. While there is much research on the behaviors that may help workers to cope with the negative consequences of job insecurity (i.e., reactive coping), insight into behaviors that may help workers to minimize or even prevent the experience of job insecurity itself is still minimal (i.e., proactive coping). Yet, such insight is crucial to advance our knowledge on the dynamics of job insecurity and may offer an alternative strategy to help workers manage the experience of job insecurity during their career. Hence, in this 5-wave weekly survey study among 266 workers, we view the experience of job insecurity as an ongoing process that may fluctuate over time and investigated whether proactive coping (career planning, scenario thinking, career consultation, networking, and reflecting) could help workers to minimize their future job insecurity. Multilevel path analyses showed that weekly proactive coping behaviors were either unrelated or positively (rather than negatively) related to job insecurity in the following week, indicating that positive outcomes of proactive coping may need more time to establish. Additionally, we explored whether coping behaviors that are proactive in theory could also function as reactive coping behaviors (i.e., could buffer the negative consequences of job insecurity). Results showed no buffering effects, indicating that theoretically proactive coping behaviors did not function reactively. We discuss that prolonged proactive coping efforts are needed in contemporary careers, despite the short-term discomfort.

## 1. Introduction

Throughout the world, organizations are using cost-saving practices such as outsourcing, offshoring, restructuring, downsizing, and nonstandard work practices to improve their market position (Kalleberg, 2011). Due to these organizational changes, temporary and contract-based employment have become mainstream. Even workers with permanent contracts are not assured of stable job content or

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favorable job features. As a result, job insecurity – the perceived threat to the continuity of one's job or favorable job features (Hellgren et al., 1999) – has become a chronic experience for many workers (Wu et al., 2020). That is, job insecurity is no longer a temporary setback in contemporary careers, but a stressor that can be present for a prolonged period of time. This is a problematic development, because the experience of job insecurity impairs well-being (cf. De Witte, 1999) and is negatively associated with subjective career success, organizational commitment, job performance, and organizational performance (Cheng & Chan, 2008; Ng & Feldman, 2014; Sverke et al., 2002, 2019). As such, there is an urgent need to identify strategies with which workers can successfully cope with experiencing job insecurity in their career to minimize its harm.

Prior research has largely focused on identifying coping strategies that can decrease the negative consequences of job insecurity. Such coping refers to all cognitive and behavioral efforts to manage distress and the situation causing distress (Folkman, 2013). Specifically, research has shown that engaged coping strategies (e.g., changing the situation, symptom reduction, seeking social support) and emotion-focused strategies (e.g., describing what one feels and re-evaluating the situation) can mitigate the negative relation of job insecurity with mental health and job satisfaction (e.g., Cheng et al., 2014; Menéndez-Espina et al., 2019; Probst & Jiang, 2016; Richter et al., 2013). These types of coping strategies can be labelled 'reactive coping', as they are a response to an existing stressor and serve to decrease its negative consequences (Reuter & Schwarzer, 2009). However, one can also cope proactively: instead of reacting to a stressor to decrease its consequences, 'proactive coping' consists of efforts undertaken in advance to manage, modify or even prevent the stressor in itself (Aspinwall & Taylor, 1997). Proactive coping with job insecurity thus refers to those coping strategies that serve to decrease or prevent later feelings of job insecurity. While extant research on proactive coping with job insecurity is promising (cf. Koen & Parker, 2020; Koen & van Bezouw, 2021; Stiglbauer & Batinic, 2015), it has not yet been able to capture if and how proactive coping at one point in time can indeed serve to modify later feelings of job insecurity. As such, Shoss' (2017) integrative review summarized the topic of proactive coping with job insecurity with questions instead of answers: "*What are the strategies that individuals use to try to preserve their job or job features? What are the ways by which people proactively cope with potential job or job feature loss? (...) These questions echo the importance of longitudinal research on JI (job insecurity).*" (p.1929). Through our longitudinal design, we aim to create insight into intra-individual changes in job insecurity over time. As such, our approach will advance our theoretical knowledge on coping with job insecurity as an ongoing and chronic stressor, and provide practical implications that enable workers to better manage job insecurity during their careers.

In the current study, we conceptualize job insecurity as a continuous stressor, often without a clear onset, that fluctuates from week to week within the same person (cf. Schreurs et al., 2012). In a 5-wave longitudinal survey study, we investigate whether weekly proactive coping relates to decreased feelings of job insecurity in the following week. Specifically, by building upon Aspinwall and Taylor's (1997) conceptual framework of proactive coping, we first aim to uncover whether engaging in five proactive coping behaviors (i.e., career planning, scenario thinking, career consultation, networking, and reflecting) can decrease workers' future experience of job insecurity. Second, we aim to contribute to the conceptual clarity of proactive coping in the job insecurity process by exploring an alternative model in which the coping behaviors mentioned above function in a reactive rather than a proactive manner, i.e., by mitigating the negative consequences of job insecurity rather than the experience of job insecurity itself. By doing so, we address an apparent contradiction between Aspinwall and Taylor's (1997) proposition that proactive and reactive coping require different behaviors to be successful, and coping literature's proposition that some strategies, such as planning, may be useful in both a proactive and a reactive manner (Garnefski et al., 2001; Lyne & Roger, 2000).

Our research contributes to extant literature in four ways. First, by adopting a proactive perspective, we address the current knowledge gap regarding whether and how workers can manage the experience of job insecurity itself. Instead of approaching job insecurity as something that workers can only react to in order to mitigate its consequences (e.g., "*job insecurity is not a clear problem that can be solved since it is a situation beyond individuals' control*"; Giunchi et al., 2019, p. 5), we propose a less deterministic perspective in which workers are able to influence their own future levels of job insecurity. Second, by applying Aspinwall and Taylor's (1997) conceptual framework of proactive coping, we empirically test its premise that proactive coping can minimize work stressors, as well as the idea that proactive coping behaviors serve a different purpose than reactive coping behaviors. Third, by using a longitudinal within-person design to shed light on job insecurity as a process unfolding over time, we respond to Lee et al.'s (2018) call: "*If insecurity continues to grow and become a more prominent feature of the work environment in the future, a process approach that captures how people make sense of their personal situation, draw on resources to [proactively] cope with it, and react in productive ways becomes essential*" (p.352). Fourth, by exploring the full job insecurity spectrum (including cognitive, affective, quantitative, and qualitative components), we help uncover whether different types of job insecurity ask for different coping strategies. As such, our study fits better with the reality of contemporary careers in which job insecurity is an ongoing multi-faceted stressor (cf., Jiang & Lavaysse, 2018; Urbanaviciute et al., 2021), and can lay the foundations for evidence-based interventions that help workers to manage their experience of job insecurity throughout their career.

## 2. Theoretical background and hypotheses

### 2.1. Job insecurity as an intra-individual process

In contemporary careers, most workers experience a certain degree of job insecurity at all times (Wu et al., 2020). While it is important to mitigate the negative consequences of job insecurity, it would be even more appealing if these consequences could be cut down at the root by managing levels job insecurity. In this article we investigate whether this can be done through proactive coping. Conceptually we propose that the proactive behavior – job insecurity dynamic operates at the intermediate self-regulation level (Lord et al., 2010), given that proactive behavior implies new actions being consciously composed and executed to decrease the discrepancy

between the current and desired state. Intermediate level self-regulation processes are theorized to have cycle times varying between minutes and days, depending on the type of behavior (Lord et al., 2010). Given our focus on proactive behavior and the experience of job insecurity, we use intervals of seven days to allow individuals sufficient time to enact in proactive behaviors. This intra-individual approach enables us to discover whether workers can manage their future levels of job insecurity and to clarify the difference between proactive and reactive coping. Below, we will first introduce our hypotheses regarding how workers can manage their future job insecurity with proactive coping, after which we will discuss how the same behaviors may also function in a reactive manner to manage potential consequences.

## 2.2. Proactive coping with ongoing job insecurity

Proactive coping refers to future-oriented coping that tries to detect and proactively manage stressors (Aspinwall & Taylor, 1997). Proactive coping differs from concepts such as anticipatory coping or preventive coping, which are aimed at specific critical events or imminent threats (Reuter & Schwarzer, 2009). Proactive coping also differs from proactive personality (e.g., Seibert et al., 1999) and attributional measures of proactive coping (e.g., Proactive Coping Inventory; Greenglass et al., 1999, July 12–14), since proactive coping refers to behavior and not a general behavioral tendency. Thus, in the context of job insecurity, proactive coping refers to behaviors that are aimed at detecting and managing future job insecurity. Examples of proactive coping can be gaining information from one's supervisor about contract renewal, or maintaining (or creating) good relationships within one's professional network to signal future job leads.

According to Aspinwall and Taylor's (1997) conceptual framework, proactive coping can be divided into five components: Recognition, initial appraisal, preliminary coping, elicitation and use of feedback, and resource accumulation. Based on Aspinwall and Taylor (1997) we propose that each of these five components can help manage workers' future experience of job insecurity. First, Aspinwall and Taylor (1997) state that the recognition of potential stressors at an early stage, through being aware of one's goals and having a plan for how to attain them, may lessen the development of these stressors through increased options to divert the stressors. For example, through planning the different components of a task one has to complete within a given period of time, one may realize that this time period is insufficient to complete the whole task. By recognizing this potential stressor early, one can set priorities or negotiate more time, before the actual deadline is near. Regarding the specific stressor of job insecurity, when workers regularly engage in career planning, they recognize potential threats to their career in an early stage, which may create the opportunity for actions to minimize a future increase in job insecurity. For example, by looking forward in time, workers may realize that their contract will soon expire or that the demand for the product they sell may decline. Subsequently, they can explore the options for a new contract or a potentially better selling product – before feelings of job insecurity have grown out of proportion. We expect that being aware of options to divert threats to one's career decreases people's future experience of job insecurity. Consequently, we expect that engaging in career planning during a given week will decrease people's experience of job insecurity in the following week. Therefore, we propose:

**Hypothesis 1a.** *The amount of weekly career planning is negatively related to the experience of job insecurity in the following week.*

The second component of proactive coping, initial appraisal, involves the assessment of the current situation and, more importantly, what the situation is likely to become: “the task facing the would-be proactive copier is to run the incipient stressful event forward in time to project what its likely implications or course will be or could be” (Aspinwall & Taylor, 1997, p. 424). Therefore, Aspinwall and Taylor argue that considering different scenarios of how a situation may develop can help to identify threats and their future impact. Thus, scenario-thinking may benefit the appraisal process. For example, one can visualize different scenarios of an organizational restructuring, which may result in an early recognition of a threat. Following Aspinwall and Taylor's framework, we expect that being aware of possible threats provides workers with more tangible job options and subsequently decreases the experience of job insecurity. Thus, we expect that engaging in scenario thinking during a given week will decrease people's experience of job insecurity in the following week. Therefore, we propose:

**Hypothesis 1b.** *The amount of weekly scenario thinking is negatively related to the experience of job insecurity in the following week.*

The third component, preliminary coping, involves activities aimed at preventing or minimizing the further development of a recognized and appraised potential stressor. Aspinwall and Taylor (1997) suggest that preliminary coping behaviors are virtually always active, and that the specific actions that are needed depend heavily on the nature of the problem. In the context of potential job insecurity, we propose talking with one's supervisor or business partner about one's career prospects (i.e., career consultation) may be an effective preliminary coping effort. It may inhibit potential job insecurity directly (e.g., it is communicated your work efforts will still be needed in the future), or will generate important information which can be used in subsequent proactive coping behaviors (e.g., it is communicated how much time is remaining to explore other options). So regardless of the nature of the newly gained information, we expect that engaging in career consultation during a given week will decrease people's experience of job insecurity in the following week. Therefore, we propose:

**Hypothesis 1c.** *The amount of weekly career consultation is negatively related to the experience of job insecurity in the following week.*

The fourth component, elicitation and use of feedback, involves acquiring feedback from one's social network and reflecting on the development of the potential stressor and the impact of one's preliminary coping behaviors. Especially when stressors are nebulous in form, as is the case with job insecurity (Shoss, 2017), individuals rely heavily on the feedback of their social network (Aspinwall & Taylor, 1997). The information provided by a social network is argued to help interpret situations and to create suitable preliminary coping behaviors. Reflecting on preliminary coping behaviors yields information about the situation, that may be used to alter

appraisals or future preliminary coping behaviors and will hence indirectly help minimize the potential stressor. Following this reasoning, we propose two coping behaviors are especially important in this stage: networking and reflecting. Here, networking entails both the maintenance of existing relationships and building new ones, and reflecting entails acquiring feedback from both others and the self. We expect networking and reflecting to result in a clearer understanding of the situation, and, thus, that engaging in networking and reflecting during a given week will decrease people's experience of job insecurity in the following week.

**Hypothesis 1d.** *The amount of weekly networking is negatively related to the experience of job insecurity in the following week.*

**Hypothesis 1e.** *The amount of weekly reflecting is negatively related to the experience of job insecurity in the following week.*

The final component of proactive coping is resource accumulation. [Aspinwall and Taylor \(1997\)](#) argue that the more resources one has, the likelier it is that one will be successful in the above-mentioned components of proactive coping. Resources refer to objects, personal characteristics, conditions, or energies that are valued by the individual (e.g., money, time, social network; [Aspinwall & Taylor, 1997](#); [Hobfoll, 1989](#)). For example, it may be easier to recognize a situation that may develop into a future stressor, when one has an extensive social network to receive information from. Resources are not built in a matter of weeks, but are the result of continuous effort over a prolonged period of time (e.g., financial resources result from long-term saving efforts, not from the act of saving money one certain week). This makes the amount of resources relatively stable during the 5-week timespan of our study. Therefore, we examine resources as a between-person moderator to investigate whether workers with more resources are more successful in their proactive coping behaviors than workers with less resources.

**Hypothesis 2.** *The negative relationship between weekly proactive coping and the experience of job insecurity in the following week is stronger for individuals with more resources than for individuals with less resources.*

### 2.3. Job insecurity and strain

Prior research consistently indicates that job insecurity is related to various forms of strain, such as decreased job and life satisfaction, and reduced general and psychological health ([Cheng & Chan, 2008](#); [De Witte, 1999](#); [Jiang & Lavaysse, 2018](#)). Longitudinal studies suggest a directional relationship in which job insecurity results in strain (e.g., [Hellgren & Sverke, 2003](#)). Although this prior evidence concerns the relationship between job insecurity and strain at the between-person level, we pose that the job insecurity-strain relationship functions similar to other work stressor-strain relationships over time (cf. [Pindek et al., 2019](#)), and thus we expect that the experience of job insecurity is associated with strain at the within-person level:

**Hypothesis 3.** *The experience of weekly job insecurity is positively related to weekly psychological strain.*

### 2.4. Proactive and reactive coping with job insecurity

While the conceptual distinction between proactive and reactive coping is theoretically well-defined, it can be difficult to categorize actual coping behaviors in these categories. As [Stiglbauer and Batinic \(2015\)](#) explain: “the types of cognitive, behavioral, or emotional efforts made within this [proactive coping] process are not necessarily different from those within reactive coping. However, they are temporally prior and therefore fulfill a different function” (p. 266). To illustrate, individuals may use their network proactively to minimize future job insecurity, but they may also use their network reactively to decrease the strain resulting from existing job

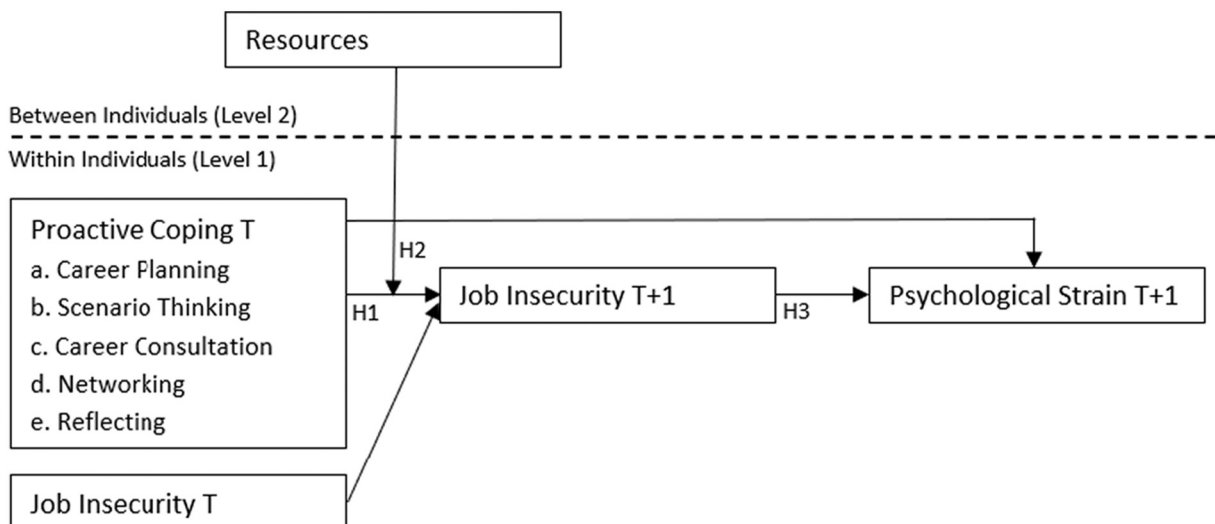


Fig. 1. The proactive coping model.

insecurity. Unfortunately, prior research on proactive coping and job insecurity has been unable to capture this conceptual distinction because of the methodological timing of proactive coping. For example, [Stiglbauer and Batinic \(2015\)](#) examined proactive coping as a moderator between job insecurity and its consequences while, conceptually, proactive coping should precede the experience of job insecurity in time. Examining coping as a way to buffer negative consequences of job insecurity makes it reactive coping by definition ([Aspinwall & Taylor, 1997](#); [Reuter & Schwarzer, 2009](#)). While [Koen and Parker \(2020\)](#) did examine proactive coping prior to job insecurity and found that it can minimize the experience of job insecurity, their research design was unable to exclude the option that 'proactive' coping may have been a response to job insecurity because they did not control for job insecurity at an earlier stage.

The current study tackles this problem by measuring both coping behaviors and job insecurity at five different points in time, allowing us to differentiate between coping that is expected to minimize the future experience of job insecurity in consecutive weeks (i.e., proactive coping), and coping that is expected to minimize the strain resulting from existing job insecurity (i.e., reactive coping). This differentiation is essential to understand which behaviors are most effective in achieving proactive coping goals (i.e., minimizing job insecurity) and/or reactive coping goals (i.e., minimizing consequences). Here, we propose that the difference between proactive and reactive coping lies in its timing and function rather than in the type of behaviors. We therefore explore two within-level research models: 1) a proactive model in which coping forms an antecedent of job insecurity ([Fig. 1](#)), and 2) a reactive model in which coping forms a moderator between job insecurity and psychological strain ([Fig. 2](#)). Put differently, we explore whether the proactive coping behaviors discussed earlier (i.e., career planning, scenario thinking, career consultation, networking and reflecting) can also function as reactive coping behaviors by moderating the relationship between job insecurity and psychological strain. This assumption aligns with prior research that indicates that changing the situation ([Cheng et al., 2014](#)), seeking social support ([Menéndez-Espina et al., 2019](#)), and re-evaluating the situation ([Richter et al., 2013](#)) can buffer the negative consequences of job insecurity. However, there is also evidence indicating the contrary: problem-focused coping such as job support and social support can strengthen the negative relationship between job insecurity and its negative consequences ([Giunchi et al., 2019](#)). Uncovering whether behaviors can successfully fulfill both proactive and reactive functions is valuable, since this would indicate how to kill two birds with one stone: minimizing future job insecurity and buffering the consequences of insecurity that is currently experienced.

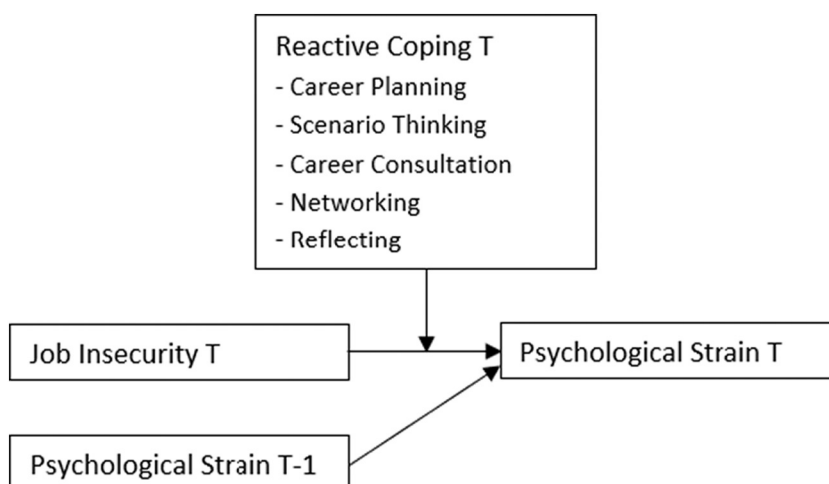
It is important to address that [Aspinwall and Taylor's \(1997\)](#) conceptual framework seemingly opposes our proposition that proactive and reactive coping can consist of the same behaviors: they explicitly state that different behaviors are likely to be successful for proactive coping than for reactive coping. This is based on the idea that proactive and reactive coping have different goals, and thus require different skills and activities to reach those goals. That is, because the goal of proactive coping is to mitigate the development of potential stressors, it is expected to be active (e.g., problem solving, seeking social support) rather than passive (e.g., withdrawal, ignoring). Because the goal of reactive coping is to decrease a stressor's consequences, it can be both active and passive: successful reactive coping is generally active in escapable situations and passive in unescapable situations, such as bereavement or past defeat ([Bandler et al., 2000](#)). In the case of job insecurity, individuals are not yet 'defeated' and may still feel that they can influence their future work situation. As such, in the context of job insecurity, we expect successful proactive and reactive coping to be both active forms of coping, making it plausible that the same behaviors can be used effectively for their different aims.

## 2.5. Four types of job insecurity

Job insecurity can refer to the perceived threat to the continuity of one's job (i.e., quantitative job insecurity) as well as to the perceived threat to favorable job features (i.e., qualitative job insecurity; e.g., [De Witte et al., 2010](#)). In addition, job insecurity as a 'perceived threat' implies both cognitive and emotional experiences ([Huang et al., 2010](#)), generally referred to in the literature as 'cognitive job insecurity' and 'affective job insecurity', respectively (e.g., [Jiang & Lavaysse, 2018](#)). Taken together, both quantitative and qualitative job insecurity can have a cognitive component and an affective component, resulting in a two-by-two grid of four types of job insecurity: cognitive quantitative job insecurity, affective quantitative job insecurity, cognitive qualitative job insecurity, and affective qualitative job insecurity.

While these four types of job insecurity and the value of differentiating them are generally acknowledged in prior research (e.g., [Jiang et al., 2021](#)), few studies have empirically examined all four components. Studies generally focus on either the quantitative and qualitative dimensions ([De Witte et al., 2010](#)), or the cognitive and affective dimensions ([Jiang & Lavaysse, 2018](#)). Moreover, some scales consist of a combination of quantitative and qualitative items (e.g., [Kraimer et al., 2005](#)), or a combination of cognitive and affective items (e.g., [Vander Elst et al., 2014](#)), which prohibits a fuller understanding of the separate job insecurity types and their different relations with antecedents and outcomes. Combining cognitive and affective items may in some cases even be seen as problematic, since affective job insecurity may function as a mediator between cognitive job insecurity and health and performance outcomes ([Jiang & Lavaysse, 2018](#)). To examine if coping has a similar impact for all four types of job insecurity, we test our hypotheses and exploratory questions for each insecurity type.





**Fig. 2.** The reactive coping model.

Note. Arrows indicate relationships within individuals (Level 1).

### 3. Methods

#### 3.1. Context, participants, and procedure

Survey data were collected<sup>1</sup> in June and July 2020 in the Netherlands. We targeted a broad pool of workers from all sectors and educational levels to enhance the generalizability of our findings, with three exclusion criteria. First, we excluded workers aged 65+, since prospects of retirement may make their (potential) job insecurity a different experience incomparable with job insecurity of the rest of the sample. Second, we excluded those who worked <20 h a week, since they may not be as dependent on work (e.g., for their identity or financial reasons). Third, we excluded fulltime students, since student loans and other regulations (e.g., student housing) may confound with our outcome variables. We recruited participants via social media, social media advertisements, and organizational newsletters. Participants received: a) a €5 voucher for completing the first survey, b) a €15 voucher for completing all five surveys, and c) recommendations about coping with job insecurity after the study.

In total, 314 participants registered for the study and 281 started the baseline survey. Of these, 15 respondents did not meet the inclusion criteria, resulting in 266 usable responses at the baseline. Mean age was 39.8 years ( $SD = 11.8$ ) and 72.9% was female. Regarding highest level of education, 7.5% finished high school, 15.0% finished vocational education, 39.1% had a bachelor's degree, 36.8% had a master's degree, and 1.5% had a doctorate degree. Regarding contract type, 51.1% had a permanent contract, 27.1% had a temporary contract, 12.4% had a flexible contract, and 9.4% were self-employed. Sample sizes for the subsequent weekly surveys were:  $N_{T1} = 266$ ;  $N_{T2} = 256$  (96.2%);  $N_{T3} = 255$  (95.9%);  $N_{T4} = 254$  (95.5%);  $N_{T5} = 249$  (93.6%). 248 participants filled in all five surveys. The final dataset consisted of 1.280 weekly surveys.

#### 3.2. Measures

The baseline measures, assessed in the T1 survey, included resources and demographics. We also measured neuroticism, proactive personality, and experienced threat of COVID-19, but these were not used in the present study. We measured job insecurity, coping behaviors, and psychological strain at all measurement points (i.e., T1-T5). See Appendix A for all items.

#### 3.3. Baseline variables

*Resources* were measured with three items based on Aspinwall and Taylor's (1997) three main resources (i.e., time, money, and social support), supplemented with four items referring to resources that are expected to be accumulated through long-term use of the coping behaviors measured in this study (e.g., "I have a clear image of my career goals and how to achieve them"; 1 = "strongly disagree", 7 = "strongly agree").

<sup>1</sup> Before data collection, the study had been approved by the Ethics Review Board of the authors' university. Participants were informed about the anonymity and confidentiality of the data and the voluntary nature of their participation at the webpage that preceded the first survey and provided their informed consent.

**Table 1**

Means, standard deviations, and correlations for the study variables.

|                           | <i>M</i> | <i>SD</i> | $\alpha$  | <i>ICC</i> | 1       | 2     | 3      | 4       | 5      | 6      | 7      | 8       | 9       | 10     | 11     | 12      | 13     | 14     |
|---------------------------|----------|-----------|-----------|------------|---------|-------|--------|---------|--------|--------|--------|---------|---------|--------|--------|---------|--------|--------|
| 1. Age                    | 39.78    | 11.76     | –         | –          | –       |       |        |         |        |        |        |         |         |        |        |         |        |        |
| 2. Gender <sup>a</sup>    | 1.73     | 0.45      | –         | –          | 0.03    | –     |        |         |        |        |        |         |         |        |        |         |        |        |
| 3. Education <sup>b</sup> | 3.01     | 0.93      | –         | –          | –0.38** | 0.07  | –      |         |        |        |        |         |         |        |        |         |        |        |
| 4. Resources              | 5.08     | 0.92      | 0.72      | –          | –0.03   | –0.08 | 0.20** | –       |        |        |        |         |         |        |        |         |        |        |
| 5. Career planning        | 3.86     | 1.71      | 0.95–0.95 | 0.65       | –0.21** | 0.04  | 0.17** | 0.03    | –      | 0.86** | 0.64** | 0.55**  | 0.63**  | 0.32** | 0.34** | –0.13*  | 0.43** | 0.14** |
| 6. Scenario thinking      | 3.67     | 1.53      | 0.86–0.90 | 0.66       | –0.19** | 0.05  | 0.10   | 0.05    | 0.85** | –      | 0.69** | 0.61**  | 0.70**  | 0.38** | 0.41** | –0.09   | 0.46** | 0.18** |
| 7. Career consultation    | 2.44     | 1.43      | 0.76–0.84 | 0.61       | –0.05   | –0.03 | –0.02  | 0.07    | 0.58** | 0.64** | –      | 0.75**  | 0.74**  | 0.27** | 0.28** | –0.13** | 0.28** | 0.08** |
| 8. Networking             | 2.96     | 1.68      | 0.92–0.95 | 0.64       | –0.01   | 0.01  | 0.06   | 0.12    | 0.46** | 0.54** | 0.69** | –       | 0.74**  | 0.26** | 0.26** | –0.16** | 0.26** | 0.09** |
| 9. Reflecting             | 2.89     | 1.49      | 0.84–0.90 | 0.63       | –0.14*  | –0.00 | 0.05   | 0.04    | 0.58** | 0.63** | 0.69** | 0.71*   | –       | 0.31** | 0.32** | –0.15*  | 0.32** | 0.12*  |
| 10. Cog Quan JI           | 2.77     | 1.67      | 0.84–0.89 | 0.83       | 0.03    | –0.02 | –0.05  | –0.21** | 0.34** | 0.40** | 0.29** | 0.24**  | 0.36**  | –      | 0.84** | 0.35**  | 0.64** | 0.41** |
| 11. Af Quan JI            | 2.58     | 1.59      | 0.89–0.93 | 0.81       | 0.04    | 0.05  | –0.04  | –0.25** | 0.35** | 0.41** | 0.27** | 0.21**  | 0.35**  | 0.86** | –      | 0.31**  | 0.72** | 0.42** |
| 12. Cog qual JI           | 4.26     | 1.26      | 0.70–0.80 | 0.65       | 0.25**  | –0.01 | –0.15* | –0.32** | –0.12* | –0.15* | –0.13* | –0.22** | –0.17** | 0.22** | 0.22** | –       | 0.36** | 0.30** |
| 13. Af qual JI            | 3.15     | 1.40      | 0.84–0.90 | 0.75       | –0.10   | 0.15  | 0.06   | –0.34** | 0.44** | 0.43** | 0.24** | 0.20**  | 0.27**  | 0.57** | 0.63** | 0.26**  | –      | 0.52** |
| 14. Psych strain          | 3.16     | 1.32      | 0.84–0.90 | 0.73       | –0.22** | 0.02  | 0.08   | –0.46** | 0.15*  | 0.17** | 0.06   | 0.06    | 0.07    | 0.28*  | 0.32** | 0.14*   | 0.43** | –      |

Note: Correlations below the diagonal represent between-person correlations at T1 ( $N = 264$ – $266$ ) and correlations above the diagonal are within-person correlations ( $N = 1278$ ).  $N = 264$ – $266$ . All measures with the exception of age, gender, and education, were measured on 7-point Likert scales. JI = Job insecurity, Cog = Cognitive, Af = Affective, Quan = Quantitative, Qual = Qualitative.

<sup>a</sup> 1 = Male, 2 = Female.

<sup>b</sup> 1 = Primary education or high school, 2 = Vocational education, 3 = Bachelor education, 4 = Master education, 5 = PhD degree.

\*\*  $p < .01$  (2-tailed).

\*  $p < .05$  (2-tailed).

### 3.4. Weekly variables

All weekly variables were measured on 7-point scales, ranging from “(almost) never” to “(almost) always”. The measures were adapted to suit a frequency response format and started with “Could you please indicate, how often you, in the last week...”.

**Job Insecurity.** Cognitive quantitative job insecurity was measured with three items from Vander Elst et al. (2014), cognitive qualitative job insecurity with three items from Hellgren et al. (1999), affective quantitative job insecurity with two items from Hellgren et al. (1999) and one item from Vander Elst et al. (2014), and affective qualitative job insecurity with three items from Låstad et al. (2015) and one item from Vander Elst et al. (2014). To make the survey accessible for self-employed and other non-standard workers, we adapted the items to refer to ‘work’ instead of ‘job’ and to refer to expectations in general instead of within their organization.

**Coping Behaviors** were measured with three items each, using previously validated scales that we selected guided by Aspinwall and Taylor's (1997) descriptions of the coping behaviors. Measures for career planning, career consultation, and networking were taken from Strauss et al. (2012), and for scenario thinking and reflecting from Bindl et al. (2012).

**Psychological strain** was measured with eight items from Kalliath et al. (2004).

**Table 2**

Results of the multilevel path analyses of the tested proactive coping models.

|                                                              | Job insecurity type    |                       |                        |                       |
|--------------------------------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
|                                                              | Cognitive quantitative | Cognitive qualitative | Affective quantitative | Affective qualitative |
| <b>Career planning</b>                                       |                        |                       |                        |                       |
| Direct relationships:                                        |                        |                       |                        |                       |
| Job insecurity T → Job insecurity T + 1                      | −0.107*                | −0.130**              | −0.143**               | −0.097*               |
| H1a: Career planning T → Job insecurity T + 1                | 0.024                  | 0.008                 | 0.015                  | 0.000                 |
| H3: Job insecurity T + 1 → Strain T + 1                      | 0.110**                | 0.098**               | 0.129**                | 0.163**               |
| Career planning T → Strain T + 1                             | 0.000                  | 0.002*                | 0.002                  | 0.004                 |
| Cross-level moderation:                                      |                        |                       |                        |                       |
| H2: Career planning T * Resources → Job insecurity T + 1     | 0.009                  | −0.021                | −0.004                 | −0.031                |
| <b>Scenario thinking</b>                                     |                        |                       |                        |                       |
| Direct relationships:                                        |                        |                       |                        |                       |
| Job insecurity T → Job insecurity T + 1                      | −0.110**               | −0.131**              | −0.156**               | −0.083*               |
| H1b: Scenario thinking T → Job insecurity T + 1              | 0.026                  | −0.029                | 0.008                  | −0.020                |
| H3: Job insecurity T + 1 → Strain T + 1                      | 0.110**                | 0.098**               | 0.129**                | 0.162**               |
| Scenario thinking T → Strain T + 1                           | −0.009                 | −0.005                | −0.007                 | −0.002                |
| Cross-level moderation:                                      |                        |                       |                        |                       |
| H2: Scenario thinking T * Resources → Job insecurity T + 1   | −0.032                 | −0.031                | 0.010                  | −0.005                |
| <b>Career consultation</b>                                   |                        |                       |                        |                       |
| Direct relationships:                                        |                        |                       |                        |                       |
| Job insecurity T → Job insecurity T + 1                      | −0.106*                | −0.146**              | −0.144**               | −0.092*               |
| H1c: Career consultation T → Job insecurity T + 1            | 0.038                  | −0.052                | 0.081**                | 0.012                 |
| H3: Job insecurity T + 1 → Strain T + 1                      | 0.110**                | 0.099**               | 0.128**                | 0.163**               |
| Career consultation T → Strain T + 1                         | 0.014                  | 0.022                 | 0.008                  | 0.019                 |
| Cross-level moderation:                                      |                        |                       |                        |                       |
| H2: Career consultation T * Resources → Job insecurity T + 1 | −0.038                 | −0.008                | −0.031                 | −0.032                |
| <b>Networking</b>                                            |                        |                       |                        |                       |
| Direct relationships:                                        |                        |                       |                        |                       |
| Job insecurity T → Job insecurity T + 1                      | −0.110**               | −0.141**              | −0.141**               | −0.099**              |
| H1d: Networking T → Job insecurity T + 1                     | 0.014                  | −0.047                | −0.002                 | 0.014                 |
| H3: Job insecurity T + 1 → Strain T + 1                      | 0.111**                | 0.096**               | 0.129**                | 0.163**               |
| Networking T → Strain T + 1                                  | −0.027                 | −0.023                | −0.026                 | −0.027                |
| Cross-level moderation:                                      |                        |                       |                        |                       |
| H2: Networking T * Resources → Job insecurity T + 1          | −0.053                 | −0.003                | 0.004                  | −0.028                |
| <b>Reflecting</b>                                            |                        |                       |                        |                       |
| Direct relationships:                                        |                        |                       |                        |                       |
| Job insecurity T → Job insecurity T + 1                      | −0.106*                | −0.139**              | −0.149**               | −0.101**              |
| H1e: Reflecting T → Job insecurity T + 1                     | 0.018                  | −0.052                | 0.042                  | 0.010                 |
| H3: Job insecurity T + 1 → Strain T + 1                      | 0.111**                | 0.097**               | 0.131**                | 0.163**               |
| Reflecting T → Strain T + 1                                  | −0.016                 | −0.011                | −0.019                 | −0.014                |
| Cross-level moderation:                                      |                        |                       |                        |                       |
| H2: Reflecting T * Resources → Job insecurity T + 1          | −0.064*                | −0.037                | −0.019                 | −0.009                |
| Estimate [CI] for high resources                             | −0.040 [−0.115, 0.034] |                       |                        |                       |
| Estimate [CI] for low resources                              | 0.076 [−0.002, 0.154]  |                       |                        |                       |

Note. N = 1007 (within-person), N = 259 (between-person).

\*\* p < .01 (2-tailed).

\* p < .05 (2-tailed).



### 3.5. Analytic strategy

The data had a two-level structure with repeated weekly measures at the within-person level (i.e., Level 1;  $N = 1.280$ ), nested within individuals at the between-person level (i.e., Level 2;  $N = 266$ ). We investigated two multilevel models using multilevel path analysis in Mplus 7.31. First, we tested our hypotheses with the proactive coping model depicted in Fig. 1. Second, we explored whether theoretically proactive coping behaviors can also function in a reactive manner, by testing the reactive coping model depicted in Fig. 2. The proactive and reactive models were tested separately for the four job insecurity types and five coping behaviors. While our hypotheses concern within-level relationships, we also modeled these same relationships at the between-level to explore whether results showed a similar trend between persons. In all models, time-varying predictor variables were person-mean centered for the within-level analyses. For the between-level supplemental analyses, time-varying predictor variables were averaged into person means (cf. Binnewies et al., 2010).

## 4. Results

Table 1 displays descriptive statistics and correlations for study variables. We evaluated the factor structure of the four job insecurity types with multilevel confirmatory factor analysis (CFA) in Mplus 7.31. Fit indices were interpreted using Hu and Bentler's (1999) suggested values. Results showed a good fit for the four-factor model,  $\chi^2(127) = 335.26$ , CFI = 0.95, RMSEA = 0.04, SRMR = 0.05. This model fitted the data significantly better than a two-factor model with a quantitative and qualitative dimension ( $\Delta\chi^2 = 403.39$ ,  $\Delta df = 1$ ,  $p < .001$ ,  $\Delta CFI = 0.09$ ), a two-factor model with cognitive and affective dimension ( $\Delta\chi^2 = 759.29$ ,  $\Delta df = 12$ ,  $p < .001$ ,

**Table 3**  
Results of the multilevel path analyses of the tested reactive coping models.

|                                                     | Job insecurity type    |                       |                        |                       |
|-----------------------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
|                                                     | Cognitive quantitative | Cognitive qualitative | Affective quantitative | Affective qualitative |
| Career planning                                     |                        |                       |                        |                       |
| Direct relationships:                               |                        |                       |                        |                       |
| Psychological strain T-1 → Psychological strain T   | −0.144**               | −0.140**              | −0.130**               | −0.139**              |
| Job insecurity T → Psychological strain T           | 0.119**                | 0.110**               | 0.127**                | 0.174**               |
| Career planning T → Psychological strain            | 0.012                  | 0.024                 | 0.007                  | −0.012                |
| Within-level moderation:                            |                        |                       |                        |                       |
| Job insecurity T * Career planning T → Strain T     | 0.000                  | 0.030                 | −0.061*                | −0.021                |
| Estimate [CI] for high Career planning              | –                      | –                     | 0.073 [0.010, 0.137]   | –                     |
| Estimate [CI] for low Career planning               | –                      | –                     | 0.180 [0.103, 0.257]   | –                     |
| Scenario thinking                                   |                        |                       |                        |                       |
| Direct relationships:                               |                        |                       |                        |                       |
| Psychological strain T-1 → Psychological strain T   | −0.144**               | −0.139**              | −0.131**               | −0.139**              |
| Job insecurity T → Psychological strain T           | 0.116**                | 0.111**               | 0.127**                | 0.169**               |
| Scenario thinking T → Psychological strain          | 0.017                  | 0.037                 | 0.014                  | −0.002                |
| Within-level moderation:                            |                        |                       |                        |                       |
| Job insecurity T * Scenario thinking T → Strain T   | 0.009                  | 0.029                 | −0.020                 | 0.009                 |
| Career consultation                                 |                        |                       |                        |                       |
| Direct relationships:                               |                        |                       |                        |                       |
| Psychological strain T-1 → Psychological strain T   | −0.145**               | −0.136**              | −0.132**               | −0.141**              |
| Job insecurity T → Psychological strain T           | 0.124**                | 0.100**               | 0.135**                | 0.175**               |
| Career consultation T → Psychological strain        | −0.054**               | −0.031                | −0.057**               | −0.059**              |
| Within-level moderation:                            |                        |                       |                        |                       |
| Job insecurity T * Career consultation T → Strain T | 0.026                  | 0.051*                | −0.002                 | 0.053                 |
| Estimate [CI] for high Career consultation          | –                      | 0.140 [0.084, 0.197]  | –                      | –                     |
| Estimate [CI] for low Career consultation           | –                      | 0.060 [0.009, 0.110]  | –                      | –                     |
| Networking                                          |                        |                       |                        |                       |
| Direct relationships:                               |                        |                       |                        |                       |
| Psychological strain T-1 → Psychological strain T   | −0.144**               | −0.136**              | −0.130**               | −0.140**              |
| Job insecurity T → Psychological strain T           | 0.120**                | 0.110**               | 0.128**                | 0.168**               |
| Networking T → Psychological strain                 | 0.009                  | 0.029                 | 0.005                  | 0.002                 |
| Within-level moderation:                            |                        |                       |                        |                       |
| Job insecurity T * Networking T → Strain T          | −0.022                 | 0.034                 | −0.026                 | 0.031                 |
| Reflecting                                          |                        |                       |                        |                       |
| Direct relationships:                               |                        |                       |                        |                       |
| Psychological strain T-1 → Psychological strain T   | −0.143**               | −0.139**              | −0.130**               | −0.138**              |
| Job insecurity T → Psychological strain T           | 0.121**                | 0.110**               | 0.127**                | 0.171**               |
| Reflecting T → Psychological strain                 | 0.005                  | 0.028                 | 0.002                  | −0.010                |
| Within-level moderation:                            |                        |                       |                        |                       |
| Job insecurity T * Reflecting T → Strain T          | 0.045                  | 0.032                 | −0.029                 | −0.010                |

Note.  $N = 1007$  (within-person).

\*\*  $p < .01$  (2-tailed).

\*  $p < .05$  (2-tailed).

**Table 4**

Between-person findings of the multilevel path analyses of the tested proactive coping models.

|                                                                | Job insecurity type    |                       |                        |                       |
|----------------------------------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
|                                                                | Cognitive quantitative | Cognitive qualitative | Affective quantitative | Affective qualitative |
| <b>Career planning</b>                                         |                        |                       |                        |                       |
| Direct relationships:                                          |                        |                       |                        |                       |
| Resources → Job insecurity                                     | 0.155                  | −0.687**              | 0.344                  | 0.063                 |
| S1a: Career planning → Job insecurity                          | 0.424**                | −0.111                | 0.405**                | 0.454**               |
| S3: Job insecurity → Strain                                    | 0.292**                | 0.307**               | 0.318**                | 0.489**               |
| Career planning → Strain                                       | −0.008                 | 0.153**               | −0.014                 | −0.101**              |
| Between-level moderation:                                      |                        |                       |                        |                       |
| S2: Career planning * Resources → Job insecurity               | −0.182**               | 0.027                 | −0.228**               | −0.178**              |
| Estimate [CI] for high resources                               | 0.257 [0.096, 0.417]   | –                     | 0.195 [0.042, 0.349]   | 0.290 [0.163, 0.417]  |
| Estimate [CI] for low resources                                | 0.591 [0.432, 0.749]   | –                     | 0.614 [0.471, 0.757]   | 0.618 [0.513, 0.722]  |
| Between-level moderated mediation:                             |                        |                       |                        |                       |
| S4a: Career planning * Resources → Job insecurity → Strain     | −0.053**               | –                     | −0.072**               | −0.087**              |
| Estimate [CI] for high resources                               | 0.075 [0.025, 0.125]   | –                     | 0.062 [0.011, 0.113]   | 0.142 [0.076, 0.208]  |
| Estimate [CI] for low resources                                | 0.172 [0.103, 0.241]   | –                     | 0.195 [0.129, 0.262]   | 0.302 [0.233, 0.371]  |
| <b>Scenario thinking</b>                                       |                        |                       |                        |                       |
| Direct relationships:                                          |                        |                       |                        |                       |
| Resources → Job insecurity                                     | 0.102                  | −0.835**              | 0.314                  | 0.054                 |
| S1b: Scenario thinking → Job insecurity                        | 0.525**                | −0.042                | 0.511**                | 0.527**               |
| S3: Job insecurity → Strain                                    | 0.288**                | 0.212**               | 0.317**                | 0.492**               |
| Scenario thinking → Strain                                     | 0.001                  | 0.170**               | −0.011                 | −0.104*               |
| Between-level moderation:                                      |                        |                       |                        |                       |
| S2: Scenario thinking * Resources → Job insecurity             | −0.171**               | 0.070                 | −0.227**               | −0.180**              |
| Estimate [CI] for high resources                               | 0.368 [0.193, 0.542]   | –                     | 0.303 [0.128, 0.4767]  | 0.362 [0.221, 0.503]  |
| Estimate [CI] for low resources                                | 0.683 [0.518, 0.847]   | –                     | 0.720 [0.578, 0.861]   | 0.693 [0.586, 0.799]  |
| Between-level moderated mediation:                             |                        |                       |                        |                       |
| S4b: Scenario thinking * Resources → Job insecurity → Strain   | −0.049*                | –                     | −0.072**               | −0.088**              |
| Estimate [CI] for high resources                               | 0.058 [0.049, 0.163]   | –                     | 0.095 [0.036, 0.156]   | 0.178 [0.103, 0.253]  |
| Estimate [CI] for low resources                                | 0.130 [0.117, 0.276]   | –                     | 0.226 [0.152, 0.304]   | 0.341 [0.269, 0.413]  |
| <b>Career consultation</b>                                     |                        |                       |                        |                       |
| Direct relationships:                                          |                        |                       |                        |                       |
| Resources → Job insecurity                                     | 0.145                  | −0.724**              | 0.254                  | 0.029                 |
| S1c: Career consultation → Job insecurity                      | 0.493**                | −0.104                | 0.475**                | 0.435**               |
| S3: Job insecurity → Strain                                    | 0.296**                | 0.292**               | 0.322**                | 0.459**               |
| Career consultation → Strain                                   | −0.029                 | 0.137**               | −0.034                 | −0.075                |
| Between-level moderation:                                      |                        |                       |                        |                       |
| S2: Career consultation * Resources → Job insecurity           | −0.246**               | 0.052                 | −0.279**               | −0.228**              |
| Estimate [CI] for high resources                               | 0.267 [0.057, 0.477]   | –                     | 0.218 [0.003, 0.433]   | 0.225 [0.070, 0.381]  |
| Estimate [CI] for low resources                                | 0.719 [0.497, 0.942]   | –                     | 0.731 [0.533, 0.9309]  | 0.645 [0.473, 0.816]  |
| Between-level moderated mediation:                             |                        |                       |                        |                       |
| S4c: Career consultation * Resources → Job insecurity → Strain | −0.073**               | –                     | −0.090**               | −0.105**              |
| Estimate [CI] for high resources                               | 0.078 [0.013, 0.145]   | –                     | 0.070 [−0.001, 0.141]  | 0.103 [0.029, 0.178]  |
| Estimate [CI] for low resources                                | 0.213 [0.122, 0.304]   | –                     | 0.235 [0.1509, 0.320]  | 0.296 [0.206, 0.385]  |
| <b>Networking</b>                                              |                        |                       |                        |                       |
| Direct relationships:                                          |                        |                       |                        |                       |
| Resources → Job insecurity                                     | 0.094                  | −0.660**              | 0.197                  | 0.010                 |
| S1d: Networking → Job insecurity                               | 0.429**                | −0.081                | 0.404**                | 0.372**               |
| S3: Job insecurity → Strain                                    | 0.296**                | 0.298**               | 0.321**                | 0.452**               |
| Networking → Strain                                            | −0.028                 | 0.117**               | −0.029                 | −0.056                |
| Between-level moderation:                                      |                        |                       |                        |                       |
| S2: Networking * Resources → Job insecurity                    | −0.219**               | 0.026                 | −0.245**               | −0.212**              |
| Estimate [CI] for high resources                               | 0.227 [0.065, 0.388]   | –                     | 0.178 [0.011, 0.346]   |                       |

(continued on next page)

Table 4 (continued)

|                                                                                            | Job insecurity type    |                       |                        |                                              |
|--------------------------------------------------------------------------------------------|------------------------|-----------------------|------------------------|----------------------------------------------|
|                                                                                            | Cognitive quantitative | Cognitive qualitative | Affective quantitative | Affective qualitative                        |
| Estimate [CI] for low resources                                                            | 0.630 [0.429, 0.831]   | –                     | 0.629 [0.456, 0.802]   | 0.177 [0.051, 0.303]<br>0.567 [0.414, 0.719] |
| Between-level moderated mediation:<br>S4d:Networking * Resources → Job insecurity → Strain | –0.065**               | –                     | –0.078**               | –0.096**                                     |
| Estimate [CI] for high resources                                                           | 0.067 [0.016, 0.118]   | –                     | 0.057 [0.001, 0.113]   | 0.080 [0.020, 0.140]                         |
| Estimate [CI] for low resources                                                            | 0.187 [0.103, 0.270]   | –                     | 0.202 [0.127, 0.277]   | 0.256 [0.175, 0.336]                         |
| Reflecting                                                                                 |                        |                       |                        |                                              |
| Direct relationships:                                                                      |                        |                       |                        |                                              |
| Resources → Job insecurity                                                                 | 0.094                  | –0.726**              | 0.276                  | 0.039                                        |
| S1e: Reflecting → Job insecurity                                                           | 0.501**                | –0.103                | 0.484**                | 0.442**                                      |
| S3: Job insecurity → Strain                                                                | 0.294**                | 0.300**               | 0.319**                | 0.459**                                      |
| Reflecting → Strain                                                                        | –0.020                 | 0.154**               | –0.026                 | –0.067                                       |
| Between-level moderation:                                                                  |                        |                       |                        |                                              |
| S2: Reflecting * Resources → Job insecurity                                                | –0.209**               | 0.048                 | –0.265**               | –0.215**                                     |
| Estimate [CI] for high resources                                                           | 0.308 [0.121, 0.495]   | –                     | 0.240 [0.042, 0.437]   | 0.245 [0.102, 0.387]                         |
| Estimate [CI] for low resources                                                            | 0.693 [0.502, 0.885]   | –                     | 0.728 [0.556, 0.899]   | 0.640 [0.501, 0.778]                         |
| Between-level moderated mediation:                                                         |                        |                       |                        |                                              |
| S4e: Reflecting * Resources → Job insecurity → Strain                                      | –0.062**               | –                     | –0.085**               | –0.098**                                     |
| Estimate [CI] for high resources                                                           | 0.091 [0.031, 0.150]   | –                     | 0.077 [0.010, 0.143]   | 0.112 [0.042, 0.183]                         |
| Estimate [CI] for low resources                                                            | 0.204 [0.124, 0.283]   | –                     | 0.232 [0.154, 0.311]   | 0.293 [0.215, 0.372]                         |

Note.  $N = 259$  (between-person).

\*\*  $p < .01$  (2-tailed).

\*  $p < .05$  (2-tailed).

$\Delta\text{CFI} = 0.08$ ), or a common-factor model ( $\Delta\chi^2 = 857.65$ ,  $\Delta df = 15$ ,  $p < .001$ ,  $\Delta\text{CFI} = 0.02$ ).

We evaluated the factor structure of the coping behaviors measure with multilevel CFA in Mplus 7.31, using Hu and Bentler's (1999) suggested values. Results showed an acceptable fit for the five-factor structure of coping,  $\chi^2(170) = 719.89$ ,  $\text{CFI} = 0.94$ ,  $\text{RMSEA} = 0.05$ ,  $\text{SRMR} = 0.05$ , and the five-factor model fitted the data significantly better than a six-factor model consisting of five factors and an higher order factor ( $\Delta\chi^2 = 9834.08$ ,  $\Delta df = 40$ ,  $p < .001$ ,  $\Delta\text{CFI} = 0.05$ ), or a common-factor model ( $\Delta\chi^2 = 2756.80$ ,  $\Delta df = 24$ ,  $p < .001$ ,  $\Delta\text{CFI} = 0.28$ ).

#### 4.1. Main findings

Table 2 displays the results of the multilevel path analyses, testing Hypotheses 1–3. Hypothesis 1a posed that weekly career planning is negatively related to job insecurity in the following week. This hypothesis was not supported as we found no significant relationships between career planning and any of the job insecurity types (all  $ps > 0.05$ ; see H1a in Table 2). Hypothesis 1b posed that weekly scenario thinking is negatively related to job insecurity in the following week. This hypothesis was also not supported as we found no significant relationships between scenario thinking and any of the job insecurity types (all  $ps > 0.05$ ; see H1b in Table 2). Hypothesis 1c posed that weekly career consultation is negatively related to job insecurity in the following week. Contrary to this hypothesis, we found a positive relationship between career consultation and affective quantitative job insecurity ( $B = 0.08$ ,  $p < .01$ ). No significant relationships were found for the other job insecurity types (all  $ps > 0.05$ ; see H1c in Table 2). Hypothesis 1d and 1e posed that weekly networking and weekly reflecting are negatively related to the experience of job insecurity. These hypotheses were not supported as we found no significant relationships of networking and reflecting with any of the job insecurity types (all  $ps > 0.05$ ; see H1d and H1e in Table 2).

Hypothesis 2 posed that the negative relationship between weekly proactive coping and job insecurity in the following week is moderated by the amount of resources. The results show no significant cross-level interactions of resources in the within-level relationships between the proactive coping behaviors and job insecurity (all  $ps > 0.05$ ; see H2's in Table 2), with one exception: We found a significant cross-level interaction between resources and reflecting on cognitive quantitative job insecurity ( $B = -0.06$ ,  $p < .05$ ). The relationship between weekly reflecting and cognitive quantitative job insecurity was more positive for workers with few resources (95% CI  $[-0.00, 0.15]$ ) compared to those with many resources (95% CI  $[-0.12, 0.03]$ ). Hypothesis 3 posed that the experience of weekly job insecurity is positively related to weekly psychological strain. In support of this hypothesis, we found significant positive relationships between all types of job insecurity and psychological strain (all  $ps < 0.01$ ,  $B$ s ranged between 0.10 and 0.17, see H3's in

## Table 2).

The exploratory question whether proactive coping behaviors can also function in a reactive manner to minimize the psychological strain resulting from job insecurity, was tested according to the research model presented in Fig. 2, for the four types of job insecurity and the five types of coping separately. The results as displayed in Table 3 show that none of the coping behaviors moderated the within-level relationship between any of the job insecurity types and psychological strain (all  $ps > 0.05$ ; see 'Job insecurity T \* Coping T  $\rightarrow$  Strain T' in Table 3), with two exceptions. First, career planning moderated the relationship between affective quantitative job insecurity and psychological strain ( $B = -0.06$ ,  $p < .05$ ), in such a way that the positive relationship between insecurity and strain was weaker for workers high on career planning (95% CI [0.01, 0.14]), than for those low on career planning (95% CI [0.10, 0.26]). Second, career consultation moderated the relationship between cognitive qualitative job insecurity and psychological strain ( $B = 0.05$ ,  $p < .05$ ), in such a way that the positive relationship between job insecurity and strain was stronger for workers high on career consultation (95% CI [0.08, 0.20]), than for those low on career consultation (95% CI [0.01, 0.11]).

#### 4.2. Supplemental findings

The main results indicated that weekly proactive coping was unrelated (career planning, scenario thinking, networking, reflecting) or positively related (career consultation) to the experience of job insecurity in the following week. Because these findings contradict our expectations, we further explored the data by conducting two supplemental analyses. First, we tested the possibility that a combination of the five proactive coping behaviors, rather than each separate behavior, may decrease people's experience of job insecurity in the following week. We explored this possibility since the five stages of proactive coping are theoretically connected through several feedback loops (cf. Aspinwall & Taylor, 1997). Testing the proactive coping model with a combined coping measure showed that this was not the case: a combined measure of all five coping behaviors was not related to any of the job insecurity types (all  $ps > 0.05$ ).

Second, we tested the possibility that the unexpected findings were the result of the level of analysis. That is, prior research findings were based on between-level analyses, while our findings are based on within-level analyses. Yet, it may be possible that relationships at the between-level differ from relationships at the within-level (e.g., Wanberg et al., 2010). We therefore examined the proactive coping model at the between-person level. Results indicated that all proactive coping behaviors were positively related to all job insecurity types (all  $ps < 0.01$ ,  $B$ s ranged between 0.37 and 0.97, see S1a-S1e in Table 4), with the exception of cognitive qualitative job insecurity (all  $ps > 0.05$ ). Thus, workers who generally engage more in proactive coping, generally experience more job insecurity – except for cognitive qualitative job insecurity. Next, we found that, overall, the positive relationships between proactive coping and job insecurity were moderated by resources (all  $ps < 0.01$ ,  $B$ s ranged between  $-0.10$  and  $-0.28$ , see S2's in Table 4). That is, the positive relationship between proactive coping behaviors and job insecurity was weaker for workers high in resources than for workers low in resources (Table 4). Further, we found that all types of job insecurity were positively related to psychological strain (all  $ps < 0.01$ ,  $B$ s ranged between 0.21 and 0.60, see S3's in Table 4). Finally, in the cases that a moderating effect of resources was present, the results yielded a significant moderated mediation effect (all  $ps < 0.01$ ,  $B$ s ranged between  $-0.05$  and  $-0.11$ , see S4a-S4e in Table 4), which implies that the positive indirect relationship between proactive coping behaviors and psychological strain via job insecurity was stronger for workers with relatively few resources (Table 4).

### 5. Discussion

Guided by Aspinwall and Taylor's (1997) conceptual framework, we adopted a proactive intra-individual perspective to uncover if and how workers can manage their future experience of job insecurity. We investigated whether weekly proactive coping related to job insecurity in consecutive weeks and explored whether weekly proactive coping behaviors could also function in a reactive manner to buffer the negative consequences of job insecurity. Lastly, we explored whether the relationships we proposed on the within-person level (i.e., over time) were similar at the between-person level (i.e., between individuals). We found that weekly proactive coping was mostly unrelated to subsequent job insecurity at the within-person level, but positively related to job insecurity at the between-person level (although less so for those with high resources). Additionally, we found that proactive coping behaviors did not function reactively, i.e., could not weaken the relationship between job insecurity and psychological strain.

#### 5.1. Major findings and theoretical implications

Our results extend the job insecurity and coping literature in four ways. First, by examining the job insecurity process at the within-person level, we contributed to the limited knowledge of job insecurity as an intra-individual malleable experience (e.g., Lee et al., 2018). While we expected that weekly proactive coping would relate negatively to job insecurity in the following week, results showed that weekly proactive coping was mostly unrelated to job insecurity. We see two possible explanations for these results. A first possibility is that proactive coping may not have been 'wise' in the specific context of the COVID-19 pandemic. As highlighted by Parker et al. (2019), proactivity is not always positive: It may not be 'wise' when the context is not ready for change. In this study, it may have been rather difficult to initiate change due to the pandemic, or it may have felt insignificant in the bigger picture (e.g., What good is a career plan if there may be another lockdown soon?). A second possibility is that it may require more time before proactive coping can manifest itself: Our within-level results indicate that proactive coping does not decrease job insecurity after one week, and our between-level results indicate that people who used more proactive coping during the full 5-week period experienced higher levels of job insecurity. These findings are in line with recent suggestions that proactive coping may have no effects or even adverse effects in

the short term due to consumption of resources, but beneficial effects in the long term due to gaining new resources (Bolino et al., 2010; Cangiano et al., 2021; Giunchi et al., 2019). To illustrate, networking may cost time and resources, but one week of networking does not immediately result in a large and reliable network; creating a network that can further one's career opportunities takes time. Another reason why proactive coping may need more time to manifest itself, lies in its definition: future-oriented coping that aims to manage stressors as well as to detect stressors in an early stage (Aspinwall & Taylor, 1997). Possibly, proactive coping helped to detect threats to one's job and therefore increased rather than decreased people's feelings of job insecurity. That is, talking about one's career with a manager, colleague, or business partner (career consultation) may have made threats to job security more salient.

It is important to note that the between-level findings indicated positive relationships between all proactive coping behaviors and job insecurity. While the arguments above may explain these positive relationships, the results can also raise a question about potential reverse directionality, such that job insecurity may instigate more proactive coping efforts. Given that coping is a self-regulatory behavior and thus implies self-regulatory loops (the process of using behaviors to improve the fit between desired and current state, and consequently modifying behaviors based on the evaluation of that fit, cf. Lord et al., 2010), this is indeed a possibility. However, recent longitudinal evidence suggests a negative relationship between job insecurity (or striving for security) as a predictor and proactive behavior as a consequence, not a positive one (Huang et al., 2021; Koen & van Bezouw, 2021; Probst et al., 2021; Tuan, 2022). More importantly, we accounted for the relationship between initial job insecurity and proactive coping in our research design: in examining the within-level relationships between proactive coping and subsequent job insecurity, we controlled for people's initial levels of job insecurity. As such, –while weekly planning, scenario thinking, consultation, networking and reflection may indeed have resulted from initial feelings of job insecurity– we can still conclude that these proactive behaviors did not result in significant changes in job insecurity in the week thereafter.

A second contribution is that our study further unravels the difference between proactive and reactive coping. Conceptually, proactive coping is aimed at reducing the development of a potential stressor itself, while reactive coping is aimed at reducing the negative consequences of that stressor (Aspinwall & Taylor, 1997). Yet, the literature is inconclusive regarding the nature of these behaviors: do proactive and reactive coping require different behaviors to be successful, or may certain behaviors be useful in both a proactive and a reactive manner? We showed that proactive behaviors were ineffective as reactive coping strategies: proactive career behavior did not mitigate the relationship between the stressor (job insecurity) and its consequences (psychological strain). Yet, these behaviors were also ineffective as proactive coping strategies as they failed to reduce job insecurity itself. We therefore argue that the difference between proactive and reactive coping is purely conceptual (i.e., referring to the aim of the coping behavior), while coping success is an empirical matter –regardless of its reactive or proactive nature. Put differently, we conclude that the difference between proactive and reactive coping lies in its proposed function, not in the type of behavior or its effectiveness.

A third contribution is that our study adds to existing knowledge about the role of resources in the proactive coping process. While Aspinwall and Taylor's (1997) stated that proactive coping is more likely to be successful when individuals have more resources, our results did not indicate such a moderating effect at the within-person level, with one exception: Workers high in resources were less likely to experience cognitive quantitative job insecurity as a result of weekly reflecting than workers low in resources. At the between-person level we found comparable results: The positive relationship between proactive coping and job insecurity was weaker for workers high in resources than for workers low in resources. As such, proactive coping seems to be more harmful in the short run for workers with relatively few resources. This is in line with Hobfoll's (1989) concept of loss spirals that postulates that individuals who lack resources are most vulnerable to additional resource losses.

A fourth contribution is that our study underlines the value of differentiating between four job insecurity types, because these types rendered different results. Specifically, the results for cognitive qualitative job insecurity (i.e., people's assessment of the likelihood that their job will change) differed from the results for the other three types of job insecurity at the between-person level (see Table 4). Also, the relatively high mean of cognitive qualitative job insecurity (see Table 1) indicated that it was experienced more strongly in our sample than the other three types of job insecurity. The timing of our study, i.e., during the COVID-19 pandemic and worldwide shift to working from home, may have particularly influenced the level of cognitive qualitative job insecurity and its relationship with proactive coping: People may have been particularly aware of the chance that their job may change due to the pandemic. Yet, their affective qualitative job insecurity seemed to be less affected by this. Taken together, these findings signal that dichotomies consisting of either quantitative and qualitative, or cognitive and qualitative, may not suffice to understand the full job insecurity experience.

## 5.2. Limitations and future research recommendations

Despite its contributions, our study also has some limitations. First, our study was limited by its 5-week timespan. Within-person research with longer time lags is necessary to investigate whether proactive coping behaviors can reduce the development of job insecurity in the long term. Such research may also be able to uncover our suggestion that proactive coping may first consume resources, before it creates new resources (Bolino et al., 2010; Cangiano et al., 2021). A recently published meta-analytic study of Jiang et al. (2021) underlines this idea, as their results suggested that resources are an important determinant of job insecurity. An important advantage of using within-person research with longer time lags is that it allows future researchers to further uncover the potentially high cycle level under which these processes operate: While we initially considered proactive coping with job insecurity to be about the direct effect of actions, which generally function at the intermediate self-regulation level, proactive coping may actually comprise reconstructing oneself into a better prepared version of oneself through acquiring new resources, suggesting self-regulation at the high level (Lord et al., 2010).

Second, we assessed the quantity of people's proactive coping behavior with the assumption that 'more is better'. Yet, individuals may benefit more from a little proactive coping for a prolonged period of time than from high levels of proactive coping for a short

amount of time. By spreading one's proactive coping efforts, individuals still gather information and may manage potential stressors, without depleting their resources. It is also possible that some proactive coping behaviors backfire when applied too intensively: well-intended behaviors of scenario-thinking, reflecting, and career planning may result in rumination, absorption in the past, or fantasies and anxieties about the future (Cangiano et al., 2019; Pingel et al., 2019; Richter et al., 2020). Additionally, the quality instead of the quantity of coping behaviors deserves empirical attention. It may be more fruitful to build a few high-quality relationships than to simply engage in high levels of relationship building (cf. Bolino et al., 2010). Likewise, the outcome of certain behaviors may be more important than the quantity of such behaviors: Some individuals may try to build new relationships without actually gaining relationships.

Third, the unexpected finding that proactive behavior did not result in significant changes in future job insecurity may raise concern about the validity of our measures: are the measures for planning, scenario thinking, career consultation, networking, and reflection an appropriate way to assess Aspinwall and Taylor's (1997) concept of proactive coping? For the measures in this study, we ensured content validity through the careful selection of measures based upon the example behaviors for the proactive coping stages described in Aspinwall and Taylor's (1997) paper, and used scales that have been used in prior - high-quality - proactivity research which illustrated convergent validity and reliability of all scales (Bindl et al., 2012; Strauss et al., 2012). We therefore believe that our non-significant findings cannot be ascribed to its measures, but should be interpreted as what they are: insight into what does not work to minimize job insecurity (i.e., weeks of proactive coping) and a prelude to discover what does work to minimize job insecurity (possibly: months or years of proactive coping).

Fourth, it is important to note that Aspinwall and Taylor's (1997) stages of proactive coping are not as sharply divided as it may seem in the current study. That is, these stages are interconnected and different stages may benefit from the same coping behavior: a conversation with one's supervisor could be used to assess the situation (initial appraisal) or to influence the development of that situation (preliminary coping). While the coping behaviors here fit the theoretical framework, we do not exclude the possibility that similar coping behaviors can be used to pursue different coping goals. Future research aimed at scale development may be a valuable pursuit in order to discern what coping behaviors and subscales can most accurately reflect Aspinwall and Taylor's (1997) stages of proactive coping.

Fourth, our research sample consisted of workers who worked at least, on average, 20 h per week. We made this choice with the intention to exclude workers that are less dependent on their work (e.g., for their identity or financial reasons). However, this does mean that our results cannot be generalized to the entire working population. More research is needed to investigate whether proactive coping with job insecurity functions in a similar manner among those who spend less than half their workweek on work.

Lastly, our results are based on correlational data, which implies that causality can only be inferred on theoretical, rather than empirical, grounds. At the within-level, we tried to prevent resulting uncertainties regarding directionality by controlling for prior job insecurity in the proactive model and controlling for prior psychological strain in the reactive model. However, at the between-person level, directionality can only be assumed based on theory.

### 5.3. Practical implications

The finding that proactive coping does not decrease and may even increase the amount of job insecurity and strain that individuals experience, points to the importance of recovery and self-care. While our study could not provide evidence for positive outcomes of proactive coping in the short term, extant research has shown repeatedly that the behavioral tendency to act proactively is related to all kinds of beneficial long-term outcomes, such as increased objective and subjective career success (for a meta-analytic review, see Fuller & Marler, 2009). Hence, it is advisable not to cease proactive behaviors in order to prevent temporary discomfort, but to keep engaging in proactive behaviors while trying to minimize discomfort. In fact, emotional (reactive) coping strategies such as seeking emotional support from friends and family may be of particular use to ease the short-term discomfort and maintain well-being (Kato, 2015). In addition, our study highlights the importance of supporting individuals with relatively few resources: on the between-person level, proactive coping related to more job insecurity and strain for individuals with fewer resources. Yet, it is especially important for these individuals to act proactively to ensure more resources in the future. A possible solution lies in granting vulnerable individuals 'start-up resources', from which they can further grow their resources independently. For example, these individuals may benefit from buddy systems (social resource), a small allowance (financial resource), or time slots in which there is time to think (temporal resource).

## 6. Conclusion

Our study showed that weekly proactive coping did not decrease the experience of job insecurity, nor did it help to mitigate the strain that typically results from job insecurity. We argue that the positive outcomes of proactive coping may need more time to establish, and that prolonged proactive coping efforts are needed despite the short-term discomfort. We hope that, with our clarification of the conceptual and empirical difference between proactive and reactive coping, future research will be inspired to further examine which time span and under what circumstances proactive coping does succeed to manage potential threats to job security.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.



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