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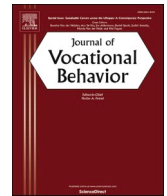
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The rise and fall of job insecurity during a pandemic: The role of habitual coping[☆]

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ABSTRACT

Crises like the COVID-19 pandemic can trigger concerns about loss of employment and changes in work conditions, and thereby increase job insecurity. Yet, little is known about how perceived job insecurity subsequently unfolds over time and how individual differences in habitual coping moderate such a trajectory. Using longitudinal data from 899 US-based participants across 5 waves (March to June 2020), we investigated the trajectory of job insecurity during the COVID-19 pandemic and how this trajectory depended on habitual coping strategies such as planning, reappraisal, and distraction. Results from latent growth curve analysis indicated that, on average, job insecurity initially increased and then decreased after signing of the coronavirus stimulus bill, suggesting a pattern of shock followed by adjustment. During the shock phase, habitual use of distraction was related to less increases in job insecurity. Later during the adjustment phase, decreases in job insecurity were more pronounced for individuals with higher habitual use of planning, but were not affected by reappraisal or distraction. Hence, different coping strategies appear beneficial in different phases of adjustment, and the beneficial effect of planning may take time to manifest. Altogether, our study highlights how in the context of extraordinary and uncontrollable events, coping strategies can impact the trajectory of a stressor.

1. Introduction

The COVID-19 pandemic had wide ranging impacts on people's careers (Akkermans et al., 2020). Implications of the pandemic on jobs and careers include increased unemployment, changed work conditions, and increases in job stressors (Akkermans et al., 2020; De Witte et al., 2015). In the first week after the WHO declared COVID-19 a pandemic, 1.4 million Americans lost their jobs. By mid-April 2020, the U.S. unemployment rate increased to a level unprecedented since the Great Depression, reaching an unemployment rate of 14.7 % (as cited in Wilson et al., 2020). Such rapid and unprecedented layoffs due to macro-level crises may make workers more likely to feel threatened by the potential loss of their job, and therefore experience job insecurity (Akkermans et al., 2020).

Yet, little is known about how job stressors unfold in such times of crisis. Indeed, over time, increases in work stressors may

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continue, level off, or wane. For example, an employee who initially experiences increased job insecurity during a period of mass layoffs may later experience more security—or at least less *insecurity*, and this may be related to both psychological adaptation processes (e.g., [Zhu et al., 2016](#)), and contextual factors, such as the signing of the coronavirus stimulus bill by the White House to financially support people who were disadvantaged by the pandemic ([Cochrane & Stolberg, 2020](#)).

To examine the trajectory of a stressor during a macro-level crisis, the present research uses longitudinal data that started on March 10, 2020 – the eve of the World Health Organization (WHO) declaring COVID-19 a pandemic, to June 2020. We conceptually distinguish two phases of the pandemic: an initial *shock phase*, which is characterized by high uncontrollability, unpredictability, and emotional intensity. This phase reflects the early weeks of the pandemic in March 2020. We also distinguish a subsequent *adjustment phase*, characterized by more controllability and predictability, and lower emotional intensity. We predict that the trajectory of job insecurity will differ in each theorized phase, as individuals, organizations, and governments adjusted to the pandemic.

We expect that different habitual coping strategies influence the trajectory of job insecurity during the COVID-19 pandemic. In fact, habitual coping, or individual differences in the way people dispositionally cope with stressors, influence how people respond to stressors ([Carver et al., 1989](#)). Over time, habitual coping strategies may also help in reducing the stressor itself, such as job insecurity ([Koen & Parker, 2020](#)). At the same time, habitual coping requires personal and situational resources, such as control, social support, and work involvement (e.g., [Stiglbauer & Batinic, 2015](#); [Urry & Gross, 2010](#)), which may not be as available in the context of a macro-level crisis ([Akkermans et al., 2018](#)). The COVID-19 pandemic is, therefore, a prime setting to study individual differences in the way people respond to and cope with job insecurity during crises. Drawing on the transactional theory of stress and coping ([Lazarus & Folkman, 1987](#)), we expect that habitual coping will have a different effect on the trajectory of job insecurity across the shock and adjustment phases.

This research has the potential to address multiple outstanding theoretical issues. First, job insecurity may change with time and circumstance, so we investigate piecewise changes in job insecurity, and distinguish between a shock phase and an adjustment phase. In doing so, we enrich theorizing on job insecurity by providing insight into how it changes over time. Second, there is a paucity of research on how coping strategies influence the stressor itself (i.e., perceived job insecurity), despite prominent theorizing in major theories of stress and coping on the role of coping in changing the transaction between the person and the stressor, and in offsetting threats (e.g., [Hobfoll, 1989](#); [Lazarus & Folkman, 1987](#)). In fact, cross-sectional and longitudinal studies have mainly focused on the moderating role of coping on stressor-strain relations (e.g., [Cheng et al., 2014](#); [Day & Livingstone, 2001](#); [Koen & Parker, 2020](#); [Richter et al., 2013](#)). The present research thus investigates how habitual coping strategies influence the trajectory of the stressor itself. Third, by examining the interplay between job insecurity during the pandemic and individual coping strategies, we integrate both agentic and contextual perspectives in understanding work and careers. Indeed, mainstream career theories tend to emphasize the role of individual agency in forging career paths ([Briscoe & Hall, 2006](#); [Defillippi & Arthur, 1994](#)). In certain contexts however, for example a macro-level crisis, agency may have a more limited role ([Akkermans et al., 2018](#); [Forrier et al., 2018](#)).

1.1. Job insecurity as a changing work stressor

Job insecurity is the subjective experience of being threatened by the loss of a job, or the loss of valued features of the job ([De Witte et al., 2015](#)). As a result, job insecurity also threatens people's work-related resources, such as financial security, social embeddedness, social status, and identity, and is therefore conceptualized as a stressor ([Jahoda, 1982](#); [Vander Elst et al., 2016](#)). Job insecurity may vary across individuals who are exposed to the same conditions ([Shoss, 2017](#); [van Vuuren et al., 1991](#)). At the same time, job insecurity may, on average, be higher when labor market conditions are unfavorable, for example during economic crises, as these factors signal to people that their job may be in danger ([Chung & van Oorschot, 2011](#); [Gallie et al., 2017](#); [Shoss, 2017](#)). Accordingly, we conceptualize job insecurity as a stressor that may increase due to a common contextual factor (e.g., the pandemic), but that may also vary for some people more than others, due to individual differences in key psychological variables—namely, habitual coping strategies.

Job insecurity has been investigated both cross-sectionally (e.g., [Richter et al., 2013](#); [Selenko & Batinic, 2013](#)) and longitudinally ([De Witte et al., 2015](#), for a review; [Koen & Parker, 2020](#); [Langerak et al., 2022](#); [Selenko & Batinic, 2013](#)); studies tend to report positive links between job insecurity and indicators of strain ([De Witte et al., 2015](#); [Shoss, 2017](#)). More recently, researchers have adopted a temporal perspective to job insecurity, by investigating changes in job insecurity over a period of two and six years ([Kinnunen et al., 2014](#); [Klug et al., 2019](#), respectively). Specifically, both [Klug et al. \(2019\)](#) and [Kinnunen et al. \(2014\)](#) found that about one-quarter of their participants experienced changes in job insecurity over time, thus indicating that job insecurity can rise and fall as time passes. Further, [Kinnunen et al. \(2014\)](#) argue that these changes are more likely during periods in which layoffs increase, as this signals to people that their jobs may be in jeopardy.

1.2. Job insecurity during the COVID-19 pandemic

The COVID-19 pandemic, which serves as the context of this study, has been an extraordinary and uncontrollable crisis with tangible consequences on jobs and careers ([Akkermans et al., 2020](#)). Such crises, given their low controllability, bring about a sensemaking process whereby people reflect on the implications of the crisis for their situation ([Akkermans et al., 2018, 2020](#); [Maitlis & Sonenshein, 2010](#); [Weick, 1988](#)). For example, the unprecedented rise in layoffs during the pandemic might make people evaluate the extent to which their own job might be threatened, thereby increasing perceptions of job insecurity. Recently, [Lin et al. \(2021\)](#) observed, among Chinese workers, that job insecurity was positively correlated with both the novelty and the disruptiveness of the COVID-19 pandemic event. People also differ in their perceptions of job insecurity; for instance, [Klug et al. \(2019\)](#) observe that increases in job insecurity perceptions among early-career workers differ by individual circumstances such as temporary contracts or

lower education. Nevertheless, the pandemic has been an extraordinary event to which people were exposed worldwide. Therefore, we argue that the pandemic forced most people to evaluate and make sense of its implications on their jobs, even if the impact of these implications may vary across individuals.

Over the course of the pandemic, we expect some fluctuation in the levels of job insecurity. This is because the pandemic is an event of long duration, and arguably, changes in job insecurity during the pandemic are not likely to remain constant over time (Kinnunen et al., 2014). We expect increasing levels of job insecurity mainly during the initial stages of the pandemic. Indeed, during early stages of the pandemic, many organizations had to change and adapt to accommodate the COVID-19 measures that were put in place (e.g., restaffing, transitioning to telework). Further, layoffs increased drastically during the early period of the pandemic (as cited in Wilson et al., 2020). These signals may increase people's concerns over whether they could keep their own jobs as the pandemic continued. Hence, the early stage of the pandemic should be characterized by a rapid increase in job insecurity. We label this earlier stage of the pandemic the *shock phase*. The shock phase should be characterized by high emotional intensity, lack of control, and unpredictability. Based on the above, we expect the following:

Hypothesis 1. During the shock phase, the trajectory of job insecurity is positive, reflecting increases in job insecurity over time.

After the initial shock, people may start to adjust. This adjustment may be linked to both psychological and contextual factors. First, drawing on the adaptation literature (e.g., Zhu et al., 2016), it is likely that people adapted at some point to the novelty of this crisis and the increase in stressors that it brought about. We expect that over the course of the pandemic, some people found new ways to plan for the situation (e.g., transitioning to part-time work, transitioning to telework, selecting and carrying out specific work tasks that were not implicated by the pandemic), which should reduce people's work-related stressors. A recent study by Michel et al. (2021) showed that work-related psychological strain decreased over time during the pandemic, thereby providing support for adaptational mechanisms. Second, on the 27th of March 2020, the coronavirus stimulus bill was signed by the White House (Cochrane & Stolberg, 2020). This date may have signaled a turning point for US workers as it might have reduced some of the uncertainty around the pandemic, clarified the implications of the pandemic on workers' jobs, and allowed people to experience more control over the situation. For example, Wilson et al. (2020) found that job insecurity was associated with anxiety via financial concern, meaning that people may feel less threatened by the potential loss of their job when they are less financially concerned by the implications of this job loss. Accordingly, we use the date of the signing of the stimulus bill as a transition point in the job insecurity trajectory, and label the second stage of the pandemic the *adjustment phase*. The adjustment phase should be characterized by more control and predictability and less emotional intensity than the shock trajectory. As such, we predict:

Hypothesis 2. During the adjustment phase, the trajectory of job insecurity is negative, reflecting decreases in job insecurity over time.

1.3. Coping strategies and the trajectory of job insecurity

Perceptions of job insecurity vary across individuals, and so, too, may the trajectory of job insecurity perceptions during a macro-level crisis. Previous research has shown that coping is a psychological variable that may attenuate the relationship between job insecurity and strain reactions (e.g., Cheng et al., 2014; Menéndez-Espina et al., 2019; Probst & Jiang, 2016; Richter et al., 2013). More recently, researchers have started to examine how use of coping strategies, at a given time point, may influence the experience of job insecurity itself, at a later time point. Although this approach is relatively recent in the job insecurity literature, different stress and coping theories have emphasized the role of coping in protecting resources (and offsetting threats to resources) before these resources are lost (Hobfoll, 1989), and in preventing, removing, or improving stressors (Carver et al., 1989). Theoretically, coping strategies have the potential to target the problem 'at the source', beyond mitigating the stressor-strain relationship. If so, it may require time to take effect: In a five-week survey, Langerak et al. (2022) observed no effects of coping strategy use at a given time on perceived job insecurity a week later. A potential explanation for the null finding is that five weeks was not enough time; some coping strategies, for example career planning, may need more time to take effect. Therefore, we extend our analysis to approximately 14 weeks (March–June 2020). This approach, which focuses on changes in job insecurity as opposed to investigating average values of job insecurity at multiple time points, is particularly useful to understand how habitual coping strategies may help people navigate demands in times of crises.

Although the coping literature recognizes and distinguishes many strategies that fit into different forms of coping, we focus here on three cognitive strategies: *planning*, a problem-focused coping strategy that involves coming up with steps to navigate or change the situation, *reappraisal*, an emotion-focused coping strategy that involves reinterpreting the situation, and *distraction*, an avoidance-focused coping strategy which involves redeploying one's thoughts and feelings away from the situation (Carver et al., 1989; Sexton & Dugas, 2008). Cognitive coping strategies are thought to precede behavioral and social regulatory processes (e.g., substance abuse, social support seeking). They therefore have important implications for the way people deal with stress and regulate emotional responses (Garnefski & Kraaij, 2007; Gross, 2002; Skinner et al., 2003).

The present research uses the context of the COVID-19 pandemic to consider whether habitual coping strategies moderate perceived job insecurity across two distinct phases of a crisis. Problem-focused forms of coping are generally thought to be effective for dealing with stress (for an overview, see Semmer, 2002). Yet, problem-focused forms of coping, including planning, require a person to have some control over the situation (Ito & Brotheridge, 2003; Spector, 2002). For example, a person who normally plans to find a new job months in advance before their work contract ends may find planning more difficult if they think their organization may or may not lay them off at any time. Therefore, problem-focused strategies such as planning may be ineffective during periods that are marked by

uncontrollability. In contrast, emotion-focused forms of coping, such as reappraisal, are generally thought to be effective at dealing with the emotional response of stressors (Carver et al., 1989). Reappraisal may be especially useful in uncontrollable contexts (e.g., Troy et al., 2013). Even avoidance-focused forms of coping, such as distraction—which have traditionally been classified as maladaptive (Carver et al., 1989), may be more useful than planning in highly stressful situations because the attentional disengagement may be functional at decreasing emotional reactivity for high-intensity stressors (Sheppes, 2020).

During the shock phase of the pandemic, people may feel that they have little control over the work context. Indeed, networking may be more difficult due to lockdowns and large group restrictions, and talking to one's supervisor about one's job insecurity may be more difficult given that working from home limited daily interactions with colleagues. Accordingly, a person who normally plans what they can do best in a stressful situation may find very limited options. Therefore, problem-focused forms of coping, such as planning, should be less effective at mitigating stressors during earlier stages of the pandemic, and may even make the stressor more salient, thereby leading to increases in job insecurity (Akkermans et al., 2018, 2020). Indeed, Zacher and Rudolph (2021) found that planning as a coping strategy was negatively related to life satisfaction during the pandemic. This may be due to the omnipresent lack of control in the pandemic that constrains the effectiveness of problem-focused coping. In contrast to planning, strategies that target reducing emotional distress or disengaging from the stressor may be the better strategies for the shock phase. Accordingly, reappraisal and distraction should be effective for mitigating increases in job insecurity during the shock phase of the pandemic.

During the adjustment phase, some amount of control is regained, which may reduce the stressful intensity of the situation. For example, people may have had time to habituate to the new situation and its constraints, and have developed expectations and clarity of what they can and cannot do. Therefore, planning may become more effective at mitigating job insecurity in the adjustment phase. Reappraisal may also be helpful in the adjustment phase. Although reappraisal may not modify the stressor itself, it may still help people to see the situation in a different or more positive light, and therefore feel less threatened by it (Uusberg et al., 2019; Vishkin et al., 2020). Distraction, in contrast, involves completely disengaging from the stressor at all phases of the pandemic. As such, distraction does not actively modify job insecurity, nor does it help people feel less threatened by it, and should therefore be related to less decrease in job insecurity at the adjustment phase.

Hypothesis 3. Higher levels of habitual planning are related to (a) steeper increases in job insecurity during the shock phase and (b) steeper decreases in job insecurity during the adjustment phase.

Hypothesis 4. Higher levels of habitual reappraisal are related to (a) less steep increases in job insecurity during the shock phase and (b) steeper decreases in job insecurity during the adjustment phase.

Hypothesis 5. Higher levels of habitual distraction are related to (a) less steep increases in job insecurity during the shock phase and (b) less steep decreases in job insecurity during the adjustment phase.

Traditionally, scholars have argued that people have a preference towards a single form of coping they routinely use (Carver et al., 1989; McCrae, 1982). However, this position has been challenged by scholars who argue that it would be dysfunctional to use only one form of coping across all times and circumstances (Folkman et al., 1986). Indeed, Cohen et al. (1986) argue that when managing stressors, combining active and non-active coping strategies would be more effective than relying on a single strategy. Moreover, some coping strategies may be especially effective when used in combination with other strategies; for instance, Carver and Scheier (1994)

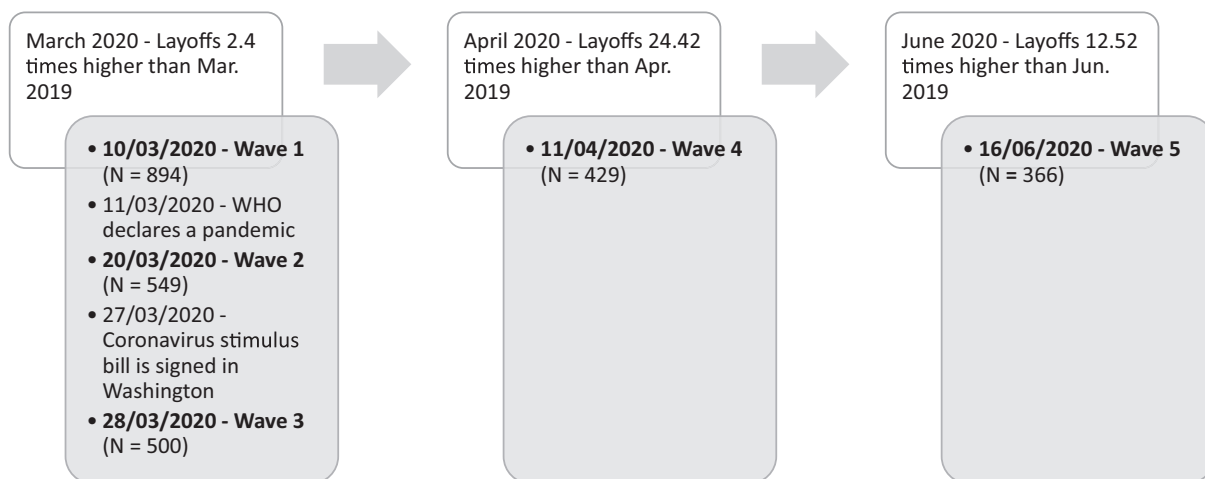


Fig. 1. Timeline of data collection and COVID-19 events.

Source. U.S. Bureau of Labor Statistics (2021).

Note. We defined the shock trajectory of job insecurity between Waves 1 and 3. Around Wave 3, the coronavirus stimulus bill was signed in Washington, and we therefore defined Wave 3 as a turning point to the adjustment trajectory. Although Wave 5 is also in the adjustment trajectory, it was measured approximately 2 months after Wave 4, and therefore is a follow-up survey. Dates given for the waves refer to the date on which said survey was launched.

argue that emotion-focused coping strategies may be instrumental in paving the way for problem-focused coping, and that problem-focused coping strategies may facilitate emotion-focused coping. There has been some empirical support for these statements. For example, Shimazu et al. (2008) observed that, under conditions of high situational demands, use of distancing in combination with problem-focused coping rendered problem-focused coping more effective at reducing psychological distress. Therefore, we shall explore two- and three-way interactions between coping strategies, to test whether habitual use of different combinations of strategies is more helpful to reduce job insecurity compared to habitual use of single strategies.

2. Method

2.1. Sample and procedure

We recruited US-based adults on MTurk for a five-wave longitudinal study, beginning on the eve the WHO declared COVID-19 a pandemic (March 10, 2020; see Fig. 1 for information on interval and timing of the waves). In Wave 1, we recruited 1056 participants over a few days, who were invited to subsequent waves. Given that we were interested in studying changes in job insecurity over time, participants were considered eligible only if they were involved in some form of paid work in at least one of the five waves. The number of working participants at Wave 1 was 894, 549 for Wave 2 (61 %), 500 for Wave 3 (56 %), 429 for Wave 4 (48 %), and 366 for Wave 5 (41 %). Participants were matched across waves using their provided MTurk ID. We excluded 22 cases that were not matched to an MTurk ID across waves. Participants were screened for duplicates based on the MTurk IDs they provided and on their IP addresses. Observations based on duplicate cases were excluded from the analyses. Further, to account for careless responding, we considered survey response time and Mahalanobis distance as relevant criteria (Desimone et al., 2015; Meade & Craig, 2012). Accordingly, responses to items were excluded in a given wave if participants responded to that survey in less than 5 min. We identified 17 careless responses based on survey timing at Wave 1, 7 participants at Wave 2, 7 participants at Wave 3, 9 participants at Wave 4, and 1 participant at Wave 5. Wave-specific data were deleted when flagged for careless responding. We calculated Mahalanobis distances on the set of study variables for each wave, and only excluded participants if they provided outlier responses in four waves or more, which resulted in the exclusion of 4 additional participants (note that no participant provided outlier responses in all five waves). Ultimately, participants were included in the analyses if they were involved in some form of paid work and had provided valid data in at least one of the five waves, if they did not provide outlier responses for more than three waves, and if we were able to match their data, resulting in a final sample size of 899.³ Of those, 45 % were aged between 18 and 34, 42 % between 35 and 54, and 13 % were 55 or older. Of the sample, 46 % identified as female, 54 % identified as male, and 0.6 % did not identify with either category. The majority of the sample had at least a college degree (72 %). At Wave 1, 17 % of participants reported working between 1 and 24 h per week, 27 % between 24 and 39 h per week, and 60 % were working 40 h or more per week.

We conducted dropout analyses between those who provided valid data in Wave 1 and were included in at least another wave, and those who provided valid data for Wave 1 but were not included in another wave (to check for substantial differences on study variables). Overall, those who remained scored lower on job insecurity ($M_1 = 2.24$, $M_2 = 2.58$, $t(875) = -4.81$, $p < .001$, Cohen's $d = -0.37$), and lower on distraction ($M_1 = 3.16$; $M_2 = 3.39$, $t(448.31)^4 = -3.281$, $p < .001$, Cohen's $d = -0.24$). There were no significant differences between groups on planning and reappraisal. Although there were some significant differences between waves on some of the study variables, the difference in the Cohen's D effect size was small for distraction and moderate for job insecurity. Our study was granted ethical approval from the authors' university prior to data collection.

2.2. Measures

2.2.1. Job insecurity

We measured job insecurity in each wave using three items from De Witte (2000). Participants rated the extent to which they agree or disagree on the items using a five-point Likert scale (e.g., "I feel insecure about the future of my job." 1 = strongly disagree; 5 = strongly agree).

2.2.2. Coping strategies

We measured habitual coping strategies in Wave 1. Participants were asked to think about how they generally deal with stressful and emotional situations when they arise, and gave their assessments on a 5-point frequency scale, ranging from (almost) never to (almost) always. For problem-focused coping, we measured planning using three items from Carver et al. (1989; e.g., "I tried to come up with a strategy about what to do."). For emotion-focused coping, we measured reappraisal using three items from Izadpanah et al. (2017; e.g., "I changed my feelings by thinking differently about the situation."). For avoidance-focused coping, we measured distraction using three items from Sexton and Dugas (2008; e.g., "I distracted myself to avoid thinking about the subject.").

³ Note that this number is higher than the number of working participants at Wave 1 (894). This is because participants may be unemployed at Wave 1 but employed at subsequent waves.

⁴ Equal variances not assumed.

2.3. Analytical approach

Analyses were conducted using *Mplus* 8.5, which deals with missing values using Full Information Maximum Likelihood (FIML; Muthén & Muthén, 2017). First, we established the measurement models for the coping strategies and job insecurity across time. We conducted a confirmatory factor analysis (CFA) for the coping strategies, to ensure that the three coping constructs were sufficiently distinct from one another. Based on recommendations by Hu and Bentler's (1999), to indicate acceptable fit, we expected a value close to 0.06 for the Root Mean Square Error of Approximation (RMSEA), a value close to 0.95 or higher for the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI). We further tested for measurement invariance of job insecurity across time. We checked for configural invariance (same pattern of loadings across waves), followed by weak factorial invariance (configural invariance and invariant factor loadings across waves), strong factorial invariance (weak factorial invariance and invariant intercepts across waves), and strict factorial invariance (strong factorial invariance and invariant residual variables across waves). In all measurement models, we also correlated the residual variances of matching indicators across measurement points to avoid inflated estimates. Based on the recommendations for testing measurement invariance of Chen (2007), to detect measurement non-invariance, we expected a CFI decrease greater than or equal to 0.01 along with a RMSEA increase greater than or equal to 0.015.

Second, we used second-order latent growth curve modeling to estimate the average trajectory of job insecurity over time (Geiser et al., 2013). This allowed us to incorporate the measurement model into the structural model, and to correlate the uniquenesses between matching items across different measurement points, thereby leading to more robust results. Following recommendations by Geiser et al. (2013), we fixed the intercept of the first job insecurity items at zero for each wave, and we constrained the matching second and third items to be equal across waves. To account for the period before the coronavirus stimulus bill was signed in Washington and the period after, we estimated a piece-wise latent growth trajectory (Flora, 2008). As such, we specified the turning point at the third wave of the study (see Fig. 1). This approach allowed us to estimate and test the relationships between the intercept, which reflects the initial levels of job insecurity at Wave 1 of the study, and two slopes (for each of the shock and adjustment phases of the pandemic, respectively). We accounted for the unequal time interval between slopes by fixing the factor loadings to the week of measurement (see Fig. 1). For the first slope of the piecewise trajectory, we fixed the loadings for T1, T2, and T3 at 0 and 1.5, and 2.5 respectively. Given that this slope represents the shock phase, T4 and T5 were fixed at the same loading as T3. For the second slope, we fixed the loadings from T1 to T3 to 0, and the loadings of T4 and T5 to 2 and 11.5, respectively.

Third, we conducted a conditional growth model, in which we specified latent factors for each of the coping strategies, and used them as predictors of the intercept and slopes of job insecurity. Similar to the unconditional growth model, we also incorporated the measurement model into the structural model. We first tested a main-effects model, M1, in which the intercept and two slopes of job insecurity were regressed on planning, reappraisal, and distraction. Then, we tested models M2 and M3, which include two- and three-way interaction effects, respectively. We created latent interaction terms (planning*reappraisal, planning*distraction, reappraisal*distraction, planning*reappraisal*distraction) using the Latent Moderated Structural Equation Modeling (LMS; Klein & Moosbrugger, 2000) approach implemented in *Mplus* using the XWITH function (e.g., Maslowsky et al., 2015).

3. Results

See Table 1 for means, standard deviations, correlations, and reliabilities of study variables.

3.1. Measurement models

Confirmatory factor analysis for habitual coping strategies indicated adequate fit for a three-factor solution ($\chi^2 = 221.26$, $df = 24$, $p < .01$; RMSEA = 0.097; CFI = 0.944; TLI = 0.916; see Supplementary Table 1 for standardized loadings).

Table 2 represents the results from comparing the configural, weak factorial, strong factorial invariance, and (partial) strict factorial invariances models for job insecurity across time to one another. We could not retain the strict invariance hypothesis, so we tested for partial strict invariance by releasing the equality constraint on one job insecurity item across two of the five measurement points. As the differences between the models were below the cut-off, we retained the partial strict factorial invariance measurement model for job insecurity over time (see Supplementary Table 2 for standardized loadings).

Table 1
Means, correlations, and reliabilities of study variables.

	Mean	SD	1	2	3	4	5	6	7	8
1. T1 job insecurity	2.33	0.93	(0.74)							
2. T2 job insecurity	2.62	1.06	0.52**	(0.76)						
3. T3 job insecurity	2.52	1.01	0.48**	0.66**	(0.75)					
4. T4 job insecurity	2.28	0.95	0.58**	0.63**	0.65**	(0.81)				
5. T5 job insecurity	2.15	0.89	0.60**	0.56**	0.56**	0.69**	(0.75)			
6. Planning	3.93	0.72	-0.15**	-0.06	-0.09*	-0.13*	-0.21**	(0.80)		
7. Reappraisal	3.61	0.82	-0.06	-0.04	-0.08	-0.09	-0.14**	0.51**	(0.80)	
8. Distraction	3.23	0.96	0.21**	0.08	0.03	0.04	0.05	0.15**	0.30**	(0.87)

* $p < .05$.
** $p < .01$.

Table 2
Measurement invariance of job insecurity.

Measurement models	Chi-square	df	p	RMSEA	ΔRMSEA	CFI	ΔCFI	TLI
Configural invariance	176.23	50	<.01	0.053		0.97		0.936
Weak factorial invariance	214.73	58	<.01	0.055	0.002	0.962	0.008	0.932
Strong factorial invariance	249.41	66	<.01	0.056	0.001	0.956	0.006	0.93
Strict factorial invariance	327.08	78	<.01	0.06	0.004	0.94	0.016	0.919
Partial strict factorial invariance	290.52	76	<.01	0.056	0	0.948	0.008	0.929

Note. Df = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation.

3.2. Unconditional piecewise latent growth curve model

The piece-wise latent growth model had adequate fit ($\chi^2 = 375.79$, $df = 82$, $p < .01$; $RMSEA = 0.06$; $CFI = 0.93$; $TLI = 0.91$). However, model results showed a misspecification around the job insecurity latent factor at measurement point T5. We re-estimated the model by freeing the factor loading for T5 in the second slope (Liu et al., 2016). The new piece-wise latent growth model also showed adequate fit ($\chi^2 = 312.51$, $df = 81$, $p < .01$; $RMSEA = 0.06$; $CFI = 0.94$; $TLI = 0.93$), and the T5 loading was estimated at 2.73. Table 3 shows the coefficients for initial levels and slopes for shock and adjustment phases.

The estimated mean trajectory for job insecurity is illustrated in Fig. 2. Overall, job insecurity increased during the shock phase, and then decreased during the adjustment phase, thereby providing support for Hypotheses 1 and 2. The intercept of job insecurity was not significantly related to either the shock trajectory or the adjustment trajectory. There was a negative correlation between the two slopes, meaning steeper increases in job insecurity during the shock phase were followed by steeper decreases in the adjustment phase of the pandemic.

3.3. Conditional growth of job insecurity on coping strategies

Results of this analysis are summarized in Table 4. Planning was negatively related to the intercept of job insecurity, while distraction was positively related to the intercept of job insecurity. Reappraisal was unrelated to the intercept. In the shock phase, distraction was associated with less increase in job insecurity. There was a marginally significant positive effect of planning on job insecurity, meaning that higher levels of habitual planning were related to steeper increases in job insecurity in the shock phase. Also in the shock phase, distraction was associated with less increases in job insecurity. Therefore, results did not support Hypotheses 3a and 4a, but did support Hypothesis 5a. In the adjustment phase, only planning was negatively related to the slope of job insecurity. In other terms, those who used planning habitually were more likely to experience decreases in job insecurity during the adjustment phase of the pandemic, thereby providing support for Hypothesis 3b. We could not find support for Hypotheses 4b and 5b.

We did not observe any two- or three-way interaction effects of coping on job insecurity for either the shock or adjustment slopes (Table 5). There was, however, a negative significant interaction effect of planning and reappraisal on the intercept of job insecurity, implying that using reappraisal in combination with planning strengthens the negative relationship between planning and the intercept of job insecurity. We also found a negative three-way interaction effect on the intercept of job insecurity, meaning that the use of distraction in conjunction with reappraisal and planning is associated with even more job insecurity than the use of one strategy or the joint use of reappraisal and planning only (see supplementary materials for details about the simple slope analysis of the three-way interaction effect on the job insecurity intercept).

4. Discussion

We investigated the trajectory of job insecurity during the pandemic across a theorized shock phase, followed by an adjustment phase, and how different habitual coping strategies moderated the trajectory of job insecurity during the shock and adjustment phases. Our results based on a piece-wise growth model show that, as expected, job insecurity increased during the shock phase and decreased in the adjustment phase, which implies adaptation processes. Pronounced increases in job insecurity during the shock trajectory were associated with pronounced decreases in the adjustment trajectory: Hence, employees who showed a strong initial reactivity experienced less job insecurity later on. Supporting our predictions, we found that the pandemic was related to people experiencing more job insecurity, predominantly during the shock phase. This is in line with Rudolph et al. (2020), who speculated about the pandemic's implications for job insecurity, and Lin et al. (2021), who found that job insecurity was predicted by pandemic-specific event

Table 3
Estimates of piecewise univariate growth of job insecurity.

	Mean (SE)	Variance (SE)	1	2
1. Intercept	2.34** (0.04)	0.67** (0.10)		
2. Trajectory during shock phase	0.15** (0.02)	0.07** (0.02)	<0.01	
3. Trajectory during adjustment phase	-0.18** (0.02)	0.07** (0.02)	0.01	-0.07**

Note. Values reported are unstandardized estimates. SE = standard error.

** $p < .01$.

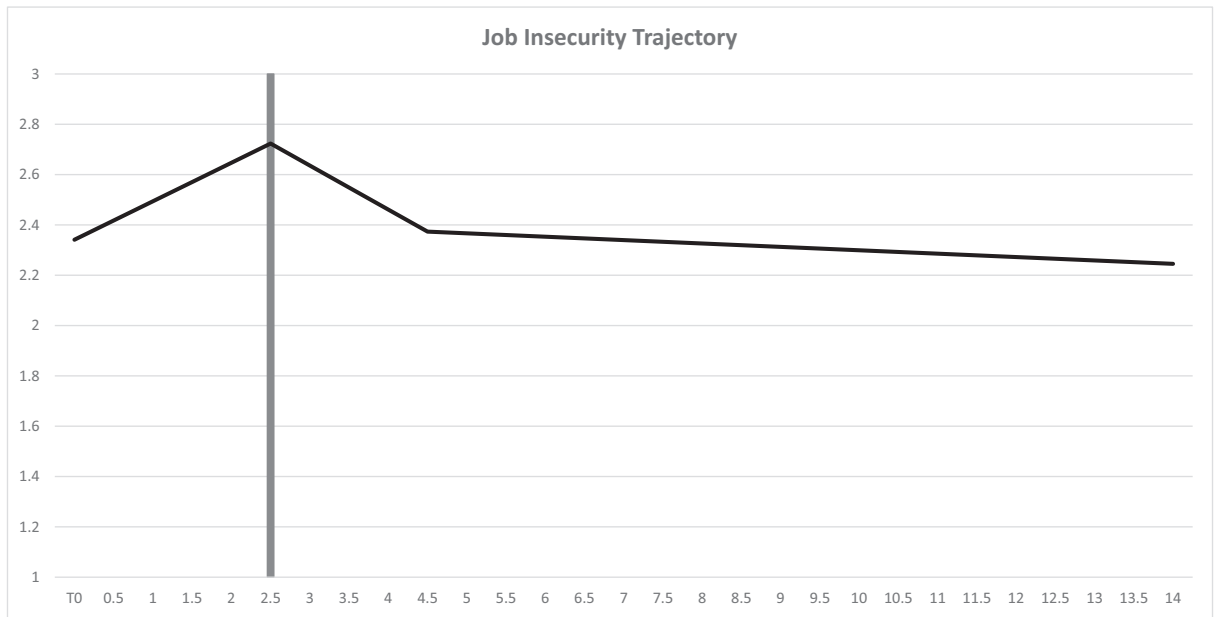


Fig. 2. Job insecurity trajectory based on a piecewise latent growth model.

Note. The original scale of job insecurity was measured on a scale from 1 to 5. For ease of visualization, we display the scale from 1 to 3. The vertical line represents the transition point, when the stimulus bill was passed.

Table 4

Unstandardized estimates of conditional growth of job insecurity on coping strategies.

	Main effects		
	Intercept	S1 ^a	S2 ^b
Planning	-0.42** (0.10)	0.09 [†] (0.05)	-0.09* (0.05)
Reappraisal	0.09 (0.09)	-0.04 (0.05)	0.04 (0.04)
Distraction	0.34** (0.05)	-0.06* (0.03)	0.01 (0.02)

Note. Values in parentheses are standard errors of the estimates.

^a S1 is the slope of job insecurity during the shock phase.

^b S2 is the slope of job insecurity during the adjustment phase.

* $p < .05$.

** $p < .01$.

[†] $p = .08$.

Table 5

Unstandardized estimates of conditional growth of job insecurity on coping strategies, including interaction effects.

	Main + two-way interaction effects			Main + two- and three-way interaction effects		
	Intercept	S1 ^a	S2 ^b	Intercept	S1	S2
Planning	-0.52** (0.12)	0.08 (0.05)	-0.07 (0.05)	-0.49** (0.12)	0.08 (0.06)	-0.07 (0.05)
Reappraisal	0.13 (0.11)	-0.02 (0.05)	0.02 (0.04)	0.15 (0.11)	-0.02 (0.05)	0.01 (0.05)
Distraction	0.34** (0.06)	-0.06 (0.03)	0.01 (0.02)	0.44** (0.07)	-0.05 (0.04)	-0.01 (0.03)
Planning * reappraisal	-0.31** (0.10)	0.01 (0.05)	0.02 (0.04)	-0.37** (0.10)	<-0.01 (0.05)	0.04 (0.04)
Planning * distraction	-0.10 (0.15)	-0.03 (0.08)	0.07 (0.08)	-0.15 (0.15)	-0.03 (0.08)	0.07 (0.09)
Reappraisal * distraction	0.10 (0.12)	0.05 (0.07)	-0.08 (0.08)	0.12 (0.12)	0.05 (0.07)	-0.08 (0.08)
Planning * reappraisal * distraction				-0.23* (0.10)	-0.02 (0.05)	0.04 (0.05)

Note. Values in parentheses are standard errors of the estimates.

^a S1 is the slope of job insecurity during the shock phase.

^b S2 is the slope of job insecurity during the adjustment phase.

* $p < .05$.

** $p < .01$.

characteristics. Also, in line with our predictions, the adjustment trajectory was generally characterized by decreases in job insecurity.

4.1. Job insecurity growth and habitual coping strategies

The growth of job insecurity during the shock phase of the pandemic was negatively affected by distraction. However, no effects were observed for planning and reappraisal on job insecurity during the shock phase. These findings suggest that in uncontrollable contexts, problem-focused coping strategies that are geared towards modifying the situation may not be useful. Distraction, in contrast, was effective at mitigating increases in job insecurity during the shock phase, which implies that it may help to reduce the experience of stressors during uncontrollable situations, albeit for the short-term. Reappraisal, which was thought to be effective at mitigating job insecurity increases during the shock phase, was unrelated to changes in job insecurity during that period. A potential explanation could be that reappraisal requires a positive mindset, which aids in coming up with positive reinterpretations of events (Fredrickson, 2004). In the pandemic, people generally showed less positive affect, which would make coming up with positive reappraisals all the more challenging (Zacher & Rudolph, 2021).

At the adjustment phase, we found that planning was effective at reducing job insecurity, but reappraisal and distraction were unrelated to changes in job insecurity. This suggests that planning is a relatively effective strategy at reducing job insecurity, but it may take some time to kick in. As planning is one aspect of proactive coping (e.g., Aspinwall, 2011), our results are in line with Koen and Parker (2020), who showed that proactive coping, operationalized as proactive career behaviors, reduced job insecurity perceptions for people whose employment contracts are about to expire. Furthermore, our findings echo the discussion in Langerak et al. (2022), who found no effect for proactive coping strategies on job insecurity measured a week later, and suggested that this may either be due to the pandemic—in which the effectiveness of proactive coping may be more limited, or may be a sign that proactive coping needs time to take effect. Particularly surprising was that reappraisal did not have a role in reducing job insecurity in the adjustment phase, despite its association with positive affect and well-being (see Gross & John, 2003). This could be because reappraisal is more successful at reducing strain reactions, while more active strategies like planning are more successful at modifying the stressor itself. Relatedly, our three-item measure of job insecurity did not capture affective job insecurity, which reflect worry and anxiety about the potential loss of one's job, and this could explain why reappraisal did not have an effect on our measure of job insecurity (Jiang & Lavaysse, 2018). This may imply that coping with cognitive perceptions of stressors may be more effective through the use of active strategies that would modify the stressor. All in all, our pattern of findings echoes Akkermans' (2018) proposition on the importance of incorporating contextual processes, such as macro-level crises, in mainstream career theories, as the context can significantly affect the degree to which people can modify their situations.

We did not observe any two- or three-way interaction effects of coping strategies on the slopes of job insecurity, which means that habitual use of combinations of strategies did not predict changes in job insecurity, above and beyond single strategy use. This could be because combinations of coping strategies, particularly combinations of problem-focused forms of coping and emotion-/avoidance-focused forms of coping may be more useful to reduce stressor-strain reactions than to reduce the stressor itself. More research is needed to qualify these findings.

4.2. Theoretical implications

Our research offers several theoretical contributions. First, our findings show the value of adopting a temporal approach to stressors during critical events such as a pandemic. In fact, adopting a temporal approach has shown us that people do adjust their stressor perceptions over time. Previous research examined adaptation from the lens of subjective well-being, consistently observing that, after a negative or a positive event, subjective well-being can recover (e.g., Diener et al., 2006). Even in the case of the pandemic, research has found that psychological symptoms generally decreased over time, which supports adaptation theories (e.g., Michel et al., 2021). Yet, to the best of our knowledge, previous research has not investigated adaptation from the lens of the trajectory of the stressor itself. In this study, we show that investigating the trajectory of a stressor can be useful in understanding how people respond to major crises. For example, our findings show that stronger shocks to stressors may be related to less adjustment over time, and this is something that future research could investigate. Taken together, our findings show that even in the context of the pandemic, people adjusted over time, which speaks to how adaptable humans are.

Second, our findings show the value of considering individual differences in the way people respond to macro-level crises. In fact, our findings show that people adjust their experience of job insecurity during an extraordinary event over time, and this, to a certain extent, is dependent on the coping strategies that they habitually use. This underlines the importance for future research to consider individual differences in response to crises. Specifically, people who habitually use planning were, on the long-run, more successful at mitigating job insecurity compared to others, even though this effect took some time to show. This finding may suggest that habitual planning aided in building up some resources in the shock phase (e.g., consult with higher-ups, network with alternative organizations). These resources, in turn, were useful in reducing the insecurity during the adjustment phase. This notion is in line with previous research that suggests that proactive coping helps accumulate resources which might be used at a later time to manage stressors (Aspinwall, 2011). The finding that planning was more effective at reducing job insecurity also resonates with the transactional theory of stress (Lazarus & Folkman, 1987). In this theory, problem-focused forms of coping (e.g., planning) target the stressor itself by preventing or eliminating it, whereas emotion-focused forms of coping (e.g., reappraisal) target the emotional distress associated with the stressor. Perhaps problem-focused forms of coping play an important role in reducing the stressor itself, whereas emotion-focused forms of coping play an important role in reducing strain reactions. To advance the job insecurity literature, future research could thus examine whether problem-focused forms of coping and emotion-focused forms of coping target cognitive and affective dimensions of

job insecurity, respectively (see also [Langerak et al., 2022](#)).

Third, our results show that the pandemic is a unique event in which established relations between psychological constructs may behave differently. For instance, while coping should usually be negatively related to stressor levels (e.g., [Koen & Parker, 2020](#)), our findings show that certain forms of coping only pay off at the adjustment phase. This is in line with [Zacher and Rudolph \(2021\)](#), who show that at early stages of the pandemic, coping was responsible for no to modest changes in subjective well-being. As such, researchers should pay more attention and theorize more about behaviors and cognitions during extraordinary macro-level events like pandemics, economic recessions, and other disasters (e.g., [Akkermans et al., 2018](#); [Morgeson et al., 2015](#)).

4.3. Practical implications

Our research offers several practical implications. First, job insecurity increased in the early weeks of the pandemic, and that even planning, which was effective at reducing job insecurity on the long-run, took time to show this effect. As such, we recommend that managers and practitioners manage people's job insecurity perceptions by clearly and transparently communicating to their workers their layoff plans, and whether these plans are temporary or permanent (see also [Rudolph et al., 2020](#)). Second, participants who used high levels of planning were better able to manage job insecurity in the adjustment phase compared to others. Previous findings show that planning requires some coping resources, such as job control ([Spector, 2002](#)), and work involvement ([Stiglbauer & Batinic, 2015](#)). Further, coping with work-related changes, such as those that occur in a pandemic (e.g., restaffing, layoffs) may require some career resources, like social and human capital resources (for a review, see [Hirschi, 2012](#)). Therefore, we encourage practitioners to provide their staff with contextual and informational resources that facilitate planning (e.g., transparency of communication, information about alternative options outside the organization), and with career resources that facilitate dealing with organizational change (e.g., training and skills development opportunities, mentorship, social support networks). In doing so, workers who are facing an imminent job loss, be it anticipated (e.g., contract end) or not (e.g., due to a crisis) are well-informed and better equipped to deal with the situation. Third, we encourage workers who are experiencing job insecurity to focus on problem-focused coping strategies such as planning, as this strategy seem to be most effective for adjusting to job insecurity on the long-run, even though it may take a while before its effectiveness shows.

4.4. Limitations and future directions

Our study is not without limitations. First, our Wave 1 measure started the eve the pandemic was announced by the WHO. This implies that many participants were already experiencing the implications of the pandemic, albeit to a lesser extent. Therefore, we were unable to capture a pre-pandemic baseline measure of job insecurity, and conclusions about transition from pre- to post-pandemic job insecurity cannot be made ([Bliese et al., 2017](#)). Nevertheless, although layoffs in March 2020 were 2.4 times higher than in March 2019, it was nothing compared to the difference between April 2019 and 2020 (24.42 times; see [Fig. 1](#)). Therefore, we expect that people's experience of stress was at its peak between March and April, and we can see this transition in the data as evidenced by the increase in job insecurity. We encourage researchers to use data from large databanks as these may have repeated-measures before, during (and after) COVID-19. A second limitation is that we considered the role of habitual, not situational coping strategies. As such, we did not examine the dynamics of coping over time, as well as the effects of switching strategies at different time points ([Bonanno & Burton, 2013](#); [Ford et al., 2019](#)). Note that the correlations between habitual planning (measured at Wave 1) and the means of planning measured at Waves 2 to 5 ranged from 0.23 to 0.31, suggesting some degree of variability in use of planning over time. In contrast, reappraisal and distraction showed less variability over time, with correlations for Waves 2 to 5 ranging from 0.48 to 0.60 for reappraisal and 0.45 to 0.48 for distraction.

Third, although we examined three common coping strategies (planning, reappraisal, and distraction) within broader coping categories (problem-focused, emotion-focused, and avoidance-focused coping categories), we did not examine specific behaviors or cognitions that people engage in to carry out these different strategies. Future research could, for instance, investigate what type of planning facilitates job search and/or job preservation behaviors, and how these relate to the reduction of job insecurity over time. Fourth, while common in longitudinal designs, we must acknowledge there was attrition across the different waves of the survey. Results of our attrition analyses do suggest moderate differences on job insecurity between those who remained in the survey and those who dropped out. Therefore, our data were not missing completely at random (MCAR). However, *Mplus* deals with missing values using FIML, which is a recommended method for non-MCAR data (e.g., [Wang et al., 2017](#)). Future research can investigate whether certain types of items trigger people to drop out of the survey, and whether there are ways to mitigate these dropout effects. Fifth, macro-level crises, such as pandemics, presumably constrain people's pool of resources ([Akkermans et al., 2018, 2020](#)), and accordingly, coping effectiveness. In this research, we did not assess people's access to these resources throughout the pandemic. Investigating these resources would be an important endeavor for future research to investigate pandemic-induced loss spirals ([Hobfoll, 1989](#)), as well as the effects of these spirals and cycles on adjustment inequality over time. For example, future research could investigate the role of resources such as social support ([Aspinwall & Taylor, 1997](#); [Langerak et al., 2022](#)) or career resources ([Hirschi, 2012](#)) in facilitating the effects of coping strategies on job insecurity.

4.5. Conclusion

In this study, we investigated the rise and fall of job insecurity over time from March to June 2020 as the COVID-19 pandemic unfolded. Further, we looked at the effect of habitual coping profiles on this piecewise trajectory. Results indicated that job insecurity

steeply increased from mid-March to late-March, and then decreased until June. Importantly, habitual distraction mitigated the initial increase in job insecurity but was inconsequential during the adjustment phase. Overall, the most effective strategy at eventually reducing job insecurity during the adjustment phase was habitual planning. Despite limitations, our study highlights the importance of investigating the extent to which psychological constructs, such as coping strategies, influence the trajectory of stressors over time.

CRedit authorship contribution statement

Elissa El Khawli: Conceptualization, Methodology, Investigation, Formal analysis, Writing – original draft, Writing – review & editing. **Anita C. Keller:** Conceptualization, Methodology, Formal analysis, Writing – review & editing, Supervision. **Maximilian Agostini:** Investigation, Formal analysis, Writing – review & editing. **Ben Gützkow:** Investigation, Formal analysis, Writing – review & editing. **Jannis Kreienkamp:** Investigation, Formal analysis, Writing – review & editing. **N. Pontus Leander:** Project administration, Writing – review & editing. **Susanne Scheibe:** Conceptualization, Methodology, Formal analysis, Writing – review & editing, Supervision, Funding acquisition.

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.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jvb.2022.103792>.

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