

The ups and downs of felt job insecurity and job performance

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Abstract

In two intra-individual studies, we examine how felt job insecurity relates to job performance. Based on conservation of resources theory, we argue that there is a negative intra-individual relation between felt job insecurity and job performance. Informational justice is expected to moderate this within-person relationship, so that the relationship between felt job insecurity and job performance is weaker when informational justice is higher than on average. Hypotheses were tested in two studies conducted over a time span of six weeks (Study 1, $N = 90$) and four weeks (Study 2, $N = 99$) in organizations undergoing some form of change. Employees reported lower levels of contextual performance (Study 1) and productivity (Study 2) in weeks that felt job insecurity was higher than usual, unless employees perceived that their organization had adequately informed them about the change. In the latter case, contextual performance and productivity levels remained intact. Our findings extend existing research by showing that intra-individual variations in felt job insecurity and informational justice help explain intra-individual variations in job performance. Our interpretation, though tentative, is that informational justice may serve as a substitute for the resources lost due to felt job insecurity.

Key words: Job insecurity; organizational change; job performance; informational justice; intra-individual variations, multi-level analysis.

The Ups and Downs of Felt Job Insecurity and Job Performance: The Moderating
Role of Informational Justice

Organizations today are in a constant flux of change: without change, organizations may lose their competitive edge and fail to meet performance benchmarks. Caught up in a transformation frenzy, what is often forgotten is that organizational performance is the aggregate of individual performance (DeNisi & Smith, 2014). Paradoxically, individual performance levels may drop in times of organizational change because of increased levels of felt job insecurity, that is, an employee's feeling that his or her job is at risk (Grunberg et al., 2006). The current paper aims to investigate *if* individuals' performance levels indeed drop when they feel insecure about their job, and *when* the presumed negative intra-individual relationship is less pronounced. In doing so, we make two specific contributions to the job insecurity literature.

First, the idea that felt job insecurity and job performance covary within individuals is based on insights from conservation of resources theory (Hobfoll, 1989). Felt job insecurity consumes resources (e.g., Schumacher et al., 2016; Vander Elst et al., 2016). The implication is that it could be difficult to maintain one's typical performance level the moment a person feels more job-insecure than he or she normally does (Schreurs et al., 2012). An adequate test of this proposition requires a within-person design (Molenaar & Campbell, 2009). Yet, most studies investigate a different question (for exceptions, see Pletzer et al., 2020; Schreurs et al., 2012), namely the extent to which interindividual differences in felt job insecurity associate with interindividual differences in job performance, concurrently (e.g., Cheng & Chan, 2008; Gilboa et al., 2008; Staufienbiel & König, 2010; Wang et al., 2014) or over time (e.g., Huang et al., 2013; Selenko et al., 2017; Wang et al., 2015). In this paper we remain true to conservation of resources theory's main tenets by investigating the extent to which intra-individual variations in felt job insecurity associate with intra-individual variations in

job performance.

Second, we investigate contextual factors that could influence the strength of the intra-individual relationship between felt job insecurity and job performance. While there is abundant evidence that the interindividual relationship between felt job insecurity and job performance differs across individuals (e.g., negative affectivity: Mak & Mueller, 2000; Näswall et al., 2007; attachment style: Jiang, 2017; psychological capital: Costa & Neves, 2017), much less is known about moderators of the intra-individual relationship. We propose that in times of organizational change it is important to study contextual moderators, and, additionally, to account for variations in the context. That is, specific phases of organizational change may require different communication strategies by the organization (Klein, 1996), and employees' perceptions of whether the organization communicated in an adequate and timely fashion (i.e., informational justice; Colquitt, 2001) may therefore also differ across the change trajectory.

Accordingly, we examine the extent to which intra-individual differences in informational justice moderate the intra-individual felt job insecurity-job performance relation. We achieve this aim in two within-person studies with different samples, measures and time lags in view of constructive replication (Lykken, 1968). Replicating the effects across studies would provide convergent evidence for the intra-individual effect of felt job insecurity on job performance and the moderating role of informational justice.

Theory and Hypotheses Development

Conservation of resources theory (Hobfoll, 1989) is currently one of the dominant theoretical frameworks for understanding the attitudinal, health, and performance-related outcomes of felt job insecurity (for a review, see De Witte et al., 2016; for an illustration, see Stiglbauer & Batinic, 2015). At the core of conservation of resources theory is the tenet that individuals are motivated to protect their current resources (conservation) and acquire new

resources (acquisition) (Hobfoll et al., 2018). Resources are defined as objects, states, conditions, and other things that people value (Hobfoll, 1989). A job may be among the most valued resources, as it provides access to other resources, for example financial income, meaning, and societal status and recognition (Selenko & Batinic, 2013). Perceived threat of job loss may lead individuals to take steps to protect their resources, and those actions are likely to result in performance decrements.

One way to protect resources is by investing additional resources (Hobfoll et al., 2018). For example, employees engage in coping, both emotion-focussed (e.g., venting, rumination) and problem-focussed (e.g., investing in job search), and this consumes resources. Eventually, the pool of resources will get depleted, and employees are left strained and unable to maintain performance levels. Another way in which job-insecure employees might seek to protect resources is by deliberately investing less energy into their work tasks. This serves two purposes: they withdraw from the source of stress and use resources to invest in actions that are more likely to provide the greatest return (Baltes, 1997; Hobfoll, 2001). The anticipated return can be emotional (e.g. social support in view of coping with anxiety and strain) or instrumental (e.g., finding a new job). In concert, the combined strategy of investing and defending resources leads to scaling down on the performance in the endangered job and hence performance decrements in light of other priorities (Halbesleben & Bowler, 2007).

Within-Person Variation in Felt Job Insecurity and Job Performance

Conservation of resources theory explains what happens *when* individuals feel job insecure about their job: when employees feel more insecure than on average, they will invest resources strategically and reduce performance. This reasoning requires an intra-individual research design, particularly since both felt job insecurity and job performance are volatile (Beal et al., 2005; Schreurs et al., 2012). Levels of felt job insecurity may vary considerably

within persons over time, often along with rumours and shock events during organizational change (Pletzer et al., 2020; Schreurs et al., 2012). Job performance also shows meaningful variation over time. Individuals are not always capable of performing “at their best” and they perform better/worse at some times than at others (Beal et al., 2005).

Accordingly, we seek to examine the extent to which week-level fluctuations in felt job insecurity negatively affect job performance in that week:

Hypothesis 1: There is a negative intra-individual association between felt job insecurity and job performance.

Informational Justice as Moderator and Substitute of Felt Job Insecurity

Based on the *resource substitution* hypothesis (Hobfoll et al., 1990), we advance the intra-individual hypothesis that felt job insecurity impacts job performance differently according to the level of informational justice. In line with COR (Hobfoll, 2001), we reason that resources, such as informational justice, are especially important in the context of (potential) resource losses, such as weeks with high levels of felt job insecurity. Our argument for our intra-individual moderation hypothesis is twofold. First, informational justice varies significantly within individuals (Loi et al., 2009), and perhaps even more so in the context of organizational change. It is common practice for organizations to update employees regularly about the ongoing change. Though probably unintended, this does not necessarily lead to information accumulation. Information, particularly at the very first stages of the change, can be confusing and sometimes even contradictory (Bordia et al., 2006). Put differently, the adequacy of the information that is provided by the organization varies from time to time on different dimensions which together shape employee perceptions: employees perceive information as more or less accurate, complete and/or abstract (Bernerth et al., 2007). Second, in conservation of resources jargon, informational justice is a resource because it provides individuals with knowledge that aids in the acquisition of other resources

or, as in this study, in tempering potential resource loss through substitution. Resource substitution implies that potential loss in one domain can be compensated for by resources from another domain that serve the same purpose. Informational justice may serve as a substitute for felt job insecurity, because it may carry information about people's level of *job control*.

Felt job insecurity elicits feelings of powerlessness and lack of control (Greenhalgh & Rosenblatt, 1984). Contrarily, informational justice helps people to make sense of the situation and to cope with difficulties in understanding, predicting and controlling their environments (Jiang & Probst, 2014; König et al., 2010; Vander Elst et al., 2010; Vander Elst et al., 2014). Specifically, people will use fairness-related information to decide whether or not their authorities can be trusted (Colquitt & Rodell, 2011; van den Bos, 2001). When the company communicates more unfairly than usual, individuals will feel vulnerable and the uncertainty of their job more salient. In contrast, when the company communicates more fairly than usual, individuals will feel more in control and better able to cope with felt job insecurity. Accordingly, informational justice may act as a key resource for employees to regain a feeling of control over the situation. As such, informational justice is hypothesized to compensate for the loss of resources (i.e., control) due to felt job insecurity. The additional resources will help employees in keeping their levels of job performance intact. Some scholars have discussed the buffering role of fairness perceptions in the context of job insecurity (Sora et al., 2010; Wang et al., 2015), however without an account of intra-individual variation in fairness perceptions. Thus, we hypothesize the following:

Hypothesis 2: Intra-individual variation in informational justice moderates the intra-individual effect of felt job insecurity on job performance, such that when informational justice is higher than on average, the relation between felt job insecurity and job performance becomes less negative.

We test our hypotheses in two studies, which differ in sample, measures and time lags, as described in the respective studies below. Those differences serve constructive replication and allow stronger inferences and results that are more generalizable.

Study 1

Research and Organizational Context

Data were collected in three companies, all undergoing some form of organizational change at the time of data collection. We were asked to assist the human resource departments of the companies in monitoring the change by periodically surveying employees. We decided to aggregate the data from the three companies based on the following similarities. First, we monitored the initial stages of organizational change in all three organizations: employees in the organization had been informed about the upcoming change but the change was not yet installed or only very recently so. As such, all three companies were still in an early change phase. Second, organizational change in the three organizations served a similar strategic goal, namely increasing efficiency in view of future prosperity. Third, layoffs were not intended as part of the change. Note, however, that there can be a discrepancy between intentions at the level of the organization and how this is perceived by employees: job insecurity is inherently subjective (De Witte, 1999). In the upcoming paragraph, we will provide more background information on each of the companies and the organizational changes.

Company A is an information technology organization operating within the healthcare industry. After years of prosperity, the organization went through financial and operational difficulties during the economic recession, which forced a merger with one of the largest organizations of their industry. The merger caused a number of strategic, structural, and procedural changes. We were able to collect data during the transition phase. Company B is an organization executing national government rules and regulations regarding environmental

ecological issues on a regional scale. Similar to Company A, Company B was planning for a merger causing various structural and procedural changes in the very near future. The objective to merge with external organization(s) was also to improve quality and efficiency. Company C is active in the pipeline industry. The company is a family-owned business primarily operating in areas such as pipeline construction, project management, disassembly and shutdown planning. Shortly before the start of our study, a new manager was appointed and introduced procedural and operational changes. These organizational changes, as for the other two companies, needed to ensure future prosperity.

Procedure and Participants

Based on the contact details provided by the company, a random sample of employees received an e-invitation providing them with the link to the online questionnaire(s). Participants were asked to complete one general questionnaire at the beginning of the study and three follow-up questionnaires every two weeks over the course of six weeks. Our focus upon the initial stages of organizational change and relatively short intervals between measurement points was based on the assumption of constant changes and dynamics in the first stages of the process and this probably increased within-person variability in insecurity. For example, in times of organizational change it is not uncommon for employees to receive contradictory or confusing information that will cause rumours to spread and feelings of job insecurity to quickly fluctuate (Bordia et al., 2006; Pletzer et al., 2020; Schreurs et al., 2012). Moreover, the time interval was chosen after consultation with the participating companies. Participants generated their own unique code to enable matching of questionnaires for analysis and maintain confidentiality. The general questionnaires were all administered when employees had been informed about the changes.

Participants who did not fill out the general questionnaire, or only one of the bi-weekly questionnaires, were removed from further analyses. The final sample consisted of

ninety individuals. Those individuals provided data to the general questionnaire, and in addition responded to at least two of the three bi-weekly questionnaires (N Company A = 60; N Company B = 15; N Company C = 15). From these 90 individuals, we obtained 244 usable responses to the bi-weekly questionnaires out of the possible 270 responses, yielding a 90 percent response rate across weeks and individuals. Participants had a mean age of 43.7 (SD = 9.7). Of the respondents, 42 percent are female. About 19 percent of the participants obtained a high school degree, 16 percent obtained a vocational degree, 24 percent had a higher educational level and 41 percent had a university degree. The average working hours were 35.6 (SD = 10.9) hours. The average organizational tenure was 8.9 (SD = 8.4) years and the average job tenure was 6.9 (SD = 7.9) years. About 11 percent of the participants were working in a management position.

Measures

General questionnaire measures

We included task and contextual performance as measures of job performance. Task performance refers to behaviours that are formally recognised as part of the job and bear a direct relation to the organization's technical core (Motowidlo & van Scotter, 1994).

Contextual performance refers to discretionary and voluntary behaviours that are believed to directly promote the effective functioning of an organization, without necessarily influencing a person's target productivity directly (Motowidlo & van Scotter, 1994).

Task and contextual performance were measured with four items each, taken from Williams and Anderson's (1991) and Van Dyne and LePine's (1998) scale, respectively. The referent for each item was changed so that respondents provided the performance rating from the perspective of their supervisor rather than from their own perspective (for a similar approach, see Schat & Frone, 2011). Accordingly, a sample item for task performance reads: "According to my supervisor, I meet formal performance requirements of my job"

(Cronbach's alpha = .96). A sample item for contextual performance reads: "According to my supervisor, I look for ways to make our organization more successful" (Cronbach's alpha = .70). All items were rated on response categories ranging from "never" (1) to "very often" (5).

Covariates: age and company dummies. We controlled for age because of the stereotype that older workers are less productive than younger workers (Posthuma & Campion, 2009). Taking the supervisor's perspective may lead employees to account for age stereotypes when judging their own performance. Furthermore, as our data were collected from three organizations, we also controlled for the potential influence of difference in organizational culture and created two company dummies (Company A = IT-firm and Company B = non-profit).¹

Bi-weekly questionnaire measures

Felt job insecurity was measured using three items taken from Schreurs et al. (2012). The items are based on earlier work from Borg and Elizur (1992) and De Witte (2000), and were slightly adapted to emphasize affect: while cognitive and affective job insecurity are generally highly correlated, some studies have shown that they are distinct and that affective job insecurity is more proximal to employee outcomes (e.g., Huang et al., 2010). Consistent with the majority of studies in this field, the items referred to the worry related to keeping or losing the job as such and not to specific features of the job (De Witte et al., 2010). The items were introduced with the time reference of the last two weeks: "In the last two weeks, it made me anxious that I might become unemployed"; "In the last two weeks, I felt insecure about the future of my job" and "In the last two weeks, I feared that I might lose my job." Responses were given on a 5-point scale ranging from 1 (completely disagree) to 5

¹ We also ran the analyses without controlling for organizations. Results were virtually similar and can be obtained upon request.

(completely agree). Cronbach's alphas, calculated for each time moment, were .93, .88, .92 respectively. Comparing the means of weekly job insecurity between the organizations did not reveal any significant differences. This seems to strengthen our arguments that the data can be aggregated.

Informational justice was measured using three items taken from Bouckenoghe et al. (2009). Items asked employees to evaluate the quality of change communication in their organization. Quality of change communication refers to how clearly, frequently, and transparently information about the change is communicated. Similarly, informational justice refers to the extent to which the organization shares change-related information in a candid, thorough, and timely manner (Colquitt, 2001). As such, our measure captures employees' informational justice perceptions. A sample item was: "In the last two weeks, the organization has been candid in its communications about the change to you." Responses were given on a 5-point scale ranging from 1 (completely disagree) to 5 (completely agree). Cronbach's alphas were .79, .82, and .79.

Task and contextual performance were assessed with four items each, taken from Williams and Anderson's (1991) and Van Dyne and LePine's (1998) scale, respectively. Items were adapted to facilitate the measurement of bi-weekly changes and to reflect the supervisor's perspective. A sample item for task performance reads: "According to my supervisor, in the last two weeks I met formal performance requirements of my job." A sample item for contextual performance reads: "According to my supervisor, in the last two weeks I looked for ways to make our organization more successful." Responses were given on a 5-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). Cronbach's alphas were .97, .95, and .94 for task performance, and .82, .71, and .76 for contextual performance.

Data Analyses

Data were structured such that the measurements at the bi-weekly-level (244 measurement points, Level 1) were nested within persons (90 employees, Level 2). To account for the dependent nature of the measurements at Level 1, we conducted multilevel analysis using Stata/SE 12.0. Level-2 predictor variables were centred around the grand mean, and Level-1 predictor variables was centred around the person mean to rule out interpretations referring to stable between-person differences (Enders & Tofighi, 2007).

We conducted separate analyses for each of the dependent variables and did so in a stepwise manner. First, we conducted preliminary analyses to confirm the factor structure. A crucial step entailed a multilevel confirmatory factor analysis (MLCFA) for task and contextual performance to investigate the factor structure on Level-1 and Level-2.

Furthermore, a multiple group CFA was conducted, including the first wave of data collection, to assess whether the instrument was understood similarly in the different companies. Hence, configural, metric, and scalar invariance were assessed comparing Company A on the one hand and Company B and Company C on the other hand.

Additionally, we estimated the unconditional means model (null Model), including the intercept as the only predictor. We then added time (coded 0 to 2) to the equation to account for a possible linear trend in the dependent variable. Next, we compared a model in which the slope of time was fixed to an identical model in which the slope of time was allowed to vary across individuals. Based on the fit indices and log likelihood difference test we opted for a random-intercept, random-slope model for task performance, and a random-intercept, fixed-slope model for contextual performance. Next, we added the Level-2 covariates as well the general component of the respective performance outcome (Model 1). We added general level of performance because this is arguably the best predictor of (bi-)weekly performance and would provide a more conservative test. In Model 2, Level-1 felt job insecurity was entered, together with Level-1 informational justice, which served as the moderator. Finally,

in Model 3, the felt job insecurity \times informational justice interaction term was added. The improvement of each model over the previous one was tested using the difference between the respective likelihood ratios. This difference follows a chi-square distribution (degree of freedom equal to the number of new parameters added to the model).

Results

Descriptive statistics and correlations among the study variables are shown in Table 1. For the within-person variables, these correlation coefficients are based on mean scores of each participant aggregated over the multiple measurement points. Felt job insecurity was negatively related to contextual performance but unrelated to task performance. Task and contextual performance were positively related. Informational justice related positively to contextual performance but was not related to felt job insecurity.

[Insert table 1 about here]

Preliminary Analyses

Prior to testing the hypotheses, we conducted two analyses to confirm the factor structure. First, the MLCFA indicated that the model including two factors (task performance and contextual performance) on both levels demonstrated the best fit (CFI = .964; TLI = .948; RMSEA = .068; $-2*LL = 3408.638$). Second, the comparability of the companies was assessed, in which Company B and Company C were analysed as one group due to the smaller sample size. Scalar invariance was achieved for task performance, whereas partial scalar invariance was achieved for contextual performance. Hence, the factor structure proved suitable for the subsequent analyses. Afterwards, we ran null models to examine within-person and between-person variability in the within-person data. As shown in Table 2, the within-person variance components for the bi-weekly measures ranged from 0.17 to 0.32. The between-person variance components ranged from 0.37 to 0.79. The percentage of total variance in each of the bi-weekly variables residing within persons ranged from 27.3% to

42.7%. Thus, the amount of within-person variability was not trivial, suggesting it was appropriate to utilize multilevel analysis to partition the variability of our study variables into within- and between-person components.

[Insert table 2 about here]

Test of Hypotheses²

Hypothesis 1 states that felt job insecurity and job performance are negatively associated within individuals. Failing to support Hypothesis 1, no significant relation was found between felt job insecurity and task performance (results reported in Table 3) or contextual performance (results reported in Table 4). At Level 2, general task performance was positively related to bi-weekly task performance. General contextual performance was positively related to bi-weekly contextual performance. Employees from Company B had significant lower task and contextual performance ratings than Company C employees. Contextual performance decreased with age.

[Insert tables 3 and 4 about here]

Hypothesis 2 postulates that bi-weekly informational justice moderates the impact of bi-weekly felt job insecurity on bi-weekly task and contextual performance, such that the relation is less negative when informational justice is high rather than low. Bi-weekly felt job insecurity and informational justice did interact in predicting contextual performance (right-hand column of Table 4), but not in predicting task performance (right-hand column of Table 3). Thus, hypothesis 2 was partially supported.³

We plotted the significant interaction for contextual performance at three levels of informational justice (i.e., -1SD, 0, +1SD, Bauer & Curran, 2005) and conducted simple

² The way hypotheses are tested assumes an immediate response: respondents react immediately upon feelings of job insecurity. A plausible assumption is that reactions come only after some time. Analyses suggesting such delayed response show similar results. Results from the cross-lagged path analysis can be obtained upon request.

³ We also ran the analyses without general level of performance as a control variable. Results are virtually similar and can be obtained upon request.

slope tests. The interaction is depicted in Figure 1. The simple slope test shows that felt job insecurity is negatively related to contextual performance when the information is perceived as less fair than it is on average ($b=-0.25$, $t=-2.43$, $p<.05$). Although there is a trend toward an increase in contextual performance when informational justice is high, the slope is not significantly different from zero ($b = 0.13$, $t=1.43$, $p=.16$).

[Insert figure 1 about here]

Study 2

Research and Organizational Context

We were approached by a clerical non-profit organization to investigate the impact of a change in leadership on employee efficiency levels. The company provides a wide range of health-related services. Shortly before the company contacted us, a new branch manager had been appointed with the aim to introduce a stronger managerial and business culture to ensure future success. Organizational changes included updates to current business operations and processes, and the development and delivery of new services. The latter spurred changes to the structure of the organizational chart with old business units being restructured and new ones being created.

Although the sector is different, there are clear similarities between the organizations in Study 1 and this organization. As in Study 1, the first general questionnaire was administered when employees had been informed about the upcoming organizational changes. Organizational change was monitored at the onset, when change was dynamic and plenty. Furthermore, the change process had a similar strategic goal, without planned layoffs. Those similarities provide an excellent context for constructive replication, with variations in terms of both timing of follow-up and measures.

Procedure and Participants

After having met with the CEO, the board and an employee representative, all

employees (N = 335) were invited to participate in the study. They received a letter describing the study and the confidentiality assurances. Participants were asked to complete one general questionnaire at the beginning of the study and follow-up questionnaires every week (vs. bi-weekly in Study 1) over the course of four weeks. Like in Study 1, this time interval was chosen based on practical and theoretical considerations. Booklets, comprising the general and weekly questionnaires, were distributed in team meetings. Participants were asked to fill out the booklets per week and to keep the booklets until the end of the survey period and to return them in sealed boxes.

From the 335 employees, 99 (30%) employees participated and returned the booklets. We obtained 351 usable responses from 95 employees to the weekly questionnaires out of 396 possible responses, yielding a response rate of 88 percent across weeks and individuals. The average respondent is between 35 and 49 years old ($SD = 0.7$), has an average organizational tenure of 9.3 years ($SD = 7.9$ years), and has a part-time (20 hours) contract. About 54 percent of the participants obtained a high school degree, 7 percent obtained a vocational degree, 32 percent had a higher educational level and 7 percent had a university degree. Because of strong anonymity concerns and the high rate of female workers in the organization (80%), we were not allowed to ask for gender.

Measures

General questionnaire measures

Productivity was used as an indicator of job performance. Productivity is defined as an employee's perception of how much work s/he has accomplished, or the feeling of being productive (Luong & Rogelberg, 2005). *General level of productivity* was measured using four items developed by Luong and Rogelberg (2005). Participants were asked to indicate on a scale from 1 (*completely disagree*) to 5 (*completely agree*) how much they agree with items such as: "On a typical workday I am productive" (Cronbach's alpha = .75).

Covariates. We controlled for age for the same reasons as mentioned above.

Weekly questionnaire measures

Felt job insecurity was measured using the three same items as in Study 1, plus the item “I am worried about the continuation of my career.” The items now referred to the previous week (vs. two weeks). Cronbach’s alphas were .94, .90, .90 and .88.

Informational justice was measured using five items adapted from Bordia et al. (2004). Respondents were asked to rate the change-related information provided by the company in the previous week on a 5-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). A sample item is: “Last week, I received sufficient information about the planned changes in the company” Cronbach’s alphas were .97, .97, .98, and .98.

Productivity was measured using four items developed by Luong and Rogelberg (2005), for example: “Last week, I was productive.” Responses were given on a 5-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). Cronbach’s alphas were .76, .80, .79 and .78.

Data Analyses

Similar to Study 1, time-varying (i.e., weekly) measures (351 measurement points, Level-1) were nested within persons (95 employees, Level-2). Accordingly, we conducted multilevel analysis using Stata/SE 12.0 to account for the dependent nature of the measures at Level 1. Age and general productivity were centred around the grand mean; felt job insecurity and informational justice were centred around the person mean (Enders & Tofighi, 2007).

We followed the same step-by-step approach as described in Study 1. We conducted a MLCFA to investigate the factor structure on Level-1 and Level-2. We estimated the unconditional means model (null model), entered time (coded 0 to 3), and compared the random-intercept fixed-slope model with the identical model in which the slope of time was

allowed to vary across individuals. Based on the fit indices and log likelihood difference test we continued the analyses using a fixed-slope model. We then entered general productivity and age as Level-2 covariates (Model 1). In Model 2, Level-1 felt job insecurity and informational justice were added. In Model 3, the felt job insecurity \times informational justice interaction term was added. The improvement of each model over the previous one was tested using the difference between the respective likelihood ratios.

Results

Descriptive statistics and correlations among the study variables are shown in Table 5. The only significant correlation found was between general productivity and aggregated weekly productivity.

[Insert table 5 about here]

Preliminary Analyses

The MLCFA, including the factor structure on both Level-1 and Level-2, demonstrated a good fit with the data (CFI = .986; TLI = .957; RMSEA = .063; $-2*LL = 2413.002$). Afterwards, we ran null models to examine within-person and between-person variability in weekly felt job insecurity, informational justice and productivity. As shown in Table 2, the within-person variance components for the weekly measures ranged from 0.15 to 0.46. The between-person variance components ranged from 0.14 to 1.08. The percentage of total variance in each of the weekly variables residing within persons ranged from 29.7% to 55.5%. These results suggest that all weekly variables substantially fluctuate over time, and that the application of a within-person design and use of multilevel analyses is justified.

Test of Hypotheses

In support of Hypothesis 1, after entering the interaction term, felt job insecurity was negatively related to productivity (right-hand column of Table 6). At Level-2, general productivity was positively related to weekly productivity.

[Insert table 6 about here]

In support of Hypothesis 2, the interaction term between felt job insecurity and informational justice was significant (right-hand column of Table 7). We plotted the interaction similar as to Study 1 (see Figure 2). The simple slope test shows that felt job insecurity is negatively associated with productivity when informational justice is low ($b=-0.38, t=-3.26, p<.01$) or average ($b=-0.16, t=-2.38, p<.05$). However, felt job insecurity was unrelated to productivity for high levels of informational justice ($b = 0.06, t=0.62, p=.54$).

[Insert figure 2 about here]

Discussion

The overall aim across the two studies was to investigate the within-person relation between felt job insecurity and job performance, and to account for the moderating role of time-varying informational justice. Our theoretical argument was that informational justice compensates for the loss of resources due to felt job insecurity. The pattern of findings across the two studies suggest that the within-person association between felt job insecurity and job performance is less negative when informational justice is high rather than low. Yet, the results differed according to job performance indicator: informational justice moderated the within-person relationship between felt job insecurity and both contextual performance (Study 1) and productivity (Study 2), but not task performance (Study 1). The findings of our studies generate implications for theory and practice.

Theoretical Implications

Our study is based on assumptions derived from conservation of resources theory (Hobfoll, 1989), but provides a more accurate account by focusing upon intra-individual differences. First, we tested the assumption that a person's performance level drops the moment he or she feels more job-insecure than he or she normally does. A within-person design is needed yet not commonly used to answer the hypothesis (Molenaar & Campbell,

2009). Our data show that 29% (Study 1) and 32% (Study 2) of the variance in felt job insecurity occurred at the person level, which is considerably more than the 17% observed by Schreurs and colleagues (2012) but less than the 48% reported by Pletzer and colleagues (2020). These numbers speak to the importance of decomposing variability in felt job insecurity into within-person and between-person components. However, whereas the results from Study 2 are consistent with the majority view that felt job insecurity interferes with job performance, the results from Study 1 are not: felt job insecurity and job performance were unrelated. Accordingly, our conclusion is that job insecurity research may benefit from considering both sources of variance, yet this is not the “one and only” explanation to understand inconsistent results on the relation between job insecurity and job performance.

Second, the observation that informational justice acted as a moderator aligns with our interpretation that informational justice serves as a substitute for the resources lost because of felt job insecurity. Informational justice could provide employees with a sense of control that is threatened when employees feel insecure. This then helps employees to keep up discretionary effort and productivity. This interpretation is tentative, and may need further follow-up. Another route for follow-up concerns the role of time-varying moderators of felt job insecurity relation with job performance. Inspiration can be found in recent work on within-individual fluctuations in fair treatment (Matta et al., 2017).

Though unexpected, the differentiated pattern based on specific indicators of job performance may also align with insights from conservation of resources theory. In particular, the interaction between felt job insecurity and informational justice contributed in explaining contextual performance and productivity, yet not task performance. This could be interpreted in two ways. First, aligning with insights from conservation of resources theory, this could suggest that employees are capable of investing resources strategically. When treated fairly and staying in the organization is an option, they devote extra effort toward

contextual performance and productivity because these behaviours are more likely to be noticed, valued and ultimately returned by higher-ups than task performance, and as such, serve as a strategy to job preservation. Second, task performance falls under the heading of habitual behaviour that is based on daily routines and habits, and may be less sensitive to daily variations in felt job insecurity. Although changes in felt job insecurity may lead employees to more strategically allocate resources, by themselves these changes may not be sufficiently impactful to override deeply entrenched routines and behavioural patterns.

Strengths, Limitations and Suggestions for Future Research

A notable strength is that we tested the hypotheses by using a two-study constructive replication design. Rather than simply duplicating findings using identical methods, a constructive replication aims to identify a given pattern of relationships by testing if a theoretical argument holds under conditions of *different* methods and measurements (Lykken, 1968); in our case by using different time intervals (i.e. bi-weekly over a period of six weeks in Study 1 vs. weekly over a period of 4 weeks in Study 2) and measures of informational justice (e.g., different scales), felt job insecurity (three vs. four items) and job performance (e.g., supervisor-perspective for task performance and contextual performance in Study 1; self-perspective for productivity in Study 2). Other aspects in the design were quite similar: in particular, relatively short follow-ups were planned at the start of the change process, the change had a similar strategic goal in the participating organizations and did not include any layoffs. This combination of similarities and differences embedded in constructive replication allows for a greater confidence in the validity of the research findings.

Nevertheless, our study also has several potential limitations. First, we collected data based on self-reports. This raises concerns about common-method variance. To address this issue, we centred the (bi-)weekly predictor variables around the person-mean. Additionally, common method bias is less likely to be a cause for concern when interactions effects are

observed, and when variables of interest are measured over time (Podsakoff et al., 2003). Since we were unable to collect supervisory job performance ratings, we changed the reference point for task and contextual performance to improve the measure's construct validity. We asked respondents to provide the performance rating from the perspective of their supervisor rather than from their own perspective (Schat & Frone, 2011). Schoorman and Mayer (2008) demonstrated that perspective change ratings correlate more strongly with actual supervisory ratings than direct employee self-reports. Nevertheless, perspective change measure may still include relational aspects that could induce bias. For example, employees who feel treated badly by their supervisor may provide lower ratings, whereas employees who have a good relationship with their supervisor may provide higher ratings. Therefore, future research may include data from multiple sources, including actual supervisor-ratings. Note that we did not include perspective change for productivity (Study 2) for two reasons. A first reason is that *different* measures are part of our goal of constructive replication. A second reason is that such perspective change is perhaps more difficult when short-term productivity is concerned: supervisors may not have sufficient observation chances.

A second limitation is that our research design prohibits strong claims about the causal direction of the relationships and that we cannot rule out the possibility of reversed causation. Based on theory and previous research findings, we have argued that intra-individual felt job insecurity predicts job performance (e.g., Gilboa et al., 2008), but job performance may also predict felt job insecurity.

A third limitation is that our samples may not be representative for the organizations: we could not make comparison between those who did and did not respond. Possible selection mechanisms could have affected the strength of relationships, yet we are unsure if and in what direction. Note however, that response remained high in follow-up surveys.

Our study took place in the context of organizational changes. Organizational changes

challenge the status-quo, and this is threatening to people. The threat associated with organizational change often increases feelings of job insecurity amongst employees (Staufenbiel & König, 2010). The potential resource loss is thus very prevalent in change situations, and requires a process of sense-making which the organization can facilitate by, for example, providing information when and as needed. Therefore, we think that especially change contexts provide an interesting stage for job insecurity research. At the same time, it may be interesting to study whether our proposed intra-individual relationship between job insecurity and performance can be observed in other contexts as well.

Another challenging route for future research could be to dig deeper into potential explanations for the effect of felt job insecurity. Future research could for instance study the relation between felt job insecurity and employees' job performance on newly assigned tasks for which no known procedure is readily available or routines have been developed. Similarly, the effects of felt job insecurity may be more pronounced for less common and more fine-grained measures of job preservation. Behavioural examples include concession-making (e.g., lower pay, longer hours; Otto et al., 2010), deference to authority (Schreurs et al., 2015), presenteeism (Miraglia & Johns, 2016), and hoarding knowledge (Wang & Noe, 2010). Another challenging route could be to probe the role of informational justice in more detail. For example, a plausible idea is that informational justice accumulates over time: employees gradually learn more about the change, which can be modelled as a growth model. Equally interesting here would be to see what happens when information over the weeks is inconsistent or contradictory. Carving out the role that (in)variability of informational justice perceptions plays in the relation between insecurity and employee outcomes may be an interesting road for future research (Matta et al., 2017).

Practical Implications

Unmanaged feelings of insecurity might be one of the reasons why many change

programs fail to deliver the desired results. Success in a changing environment might not depend on avoiding insecurity but instead on managing it (Van den Bos, 2009). In this respect, informational justice is vital for employees, arguably because it could provide a sense of control, and is therefore imperative for an effective implementation of organizational changes (Bordia et al., 2004). HR managers may want to use the observation that informational justice in any specific week alleviates the negative relation between felt job insecurity and both contextual performance and productivity. HR managers may be trained in observing signals of informational injustice (Farmer & Meisel, 2012), and then use their observation to provide adequate organizational communication during the different phases of restructuring, perhaps against the common practice to pay less attention to communication during organizational change.

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