

The how and why of the relationship between job insecurity, subjective career success, and turnover intention

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The How and Why of the Relationship Between Job Insecurity, Subjective Career Success,
and Turnover Intention

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Abstract

Prior research has established a firm link between job insecurity and turnover intention. Using prospective longitudinal data, this article expands the understanding of the relationship between job insecurity and turnover intention in two ways: (1) the direct effects of changes in perceived job insecurity on changes in turnover intentions are studied; (2) subjective career success—measured in terms of career satisfaction—as a possible intervening variable is analyzed. Data collected in three waves of measurement were tested using a diverse sample of 255 employees working across a range of industries and in different occupations. By applying multivariate latent growth analysis, both the relationship between the initial levels as well as the changes in job insecurity and turnover intention were examined. The results reveal both a direct positive effect of job insecurity on turnover intention and an indirect effect through lowering subjective career success. While the direct effect could be established for both the initial levels and the changes in job insecurity and turnover intention, the mediating effect of subjective career success was only found in the links between initial levels. Consequences for research and practice, such as more effective career management, are discussed.

Keywords: Job insecurity, subjective career success, turnover intention, longitudinal data, multivariate latent growth model

The How and Why of the Relationship Between Job Insecurity, Subjective Career Success, and Turnover Intention

As a result of the steadily increasing practice of outsourcing in private and public sectors, as well as the current rate of downsizing, mergers, and layoffs (cf. Hirsch and De Soucey 2006), feelings of insecurity and uncertainty concerning the nature and existence of employment have intensified (Kalleberg 2009; Smith 2011; Sverke and Hellgren 2002). In this context, job insecurity is defined as personal concern as to whether a job will continue (Klein Hesselink and van Vuuren 1999). Individually perceived job insecurity increases when both the perceived probability and the perceived seriousness of losing one's job grow (Dekker and Schaufeli 1995).

Job insecurity has become an intensively investigated issue in work and organizational psychology over the last 20 years due to its increased prevalence in the workforce. The research has revealed the widespread and unwanted effects of job insecurity on job attitudes (Berntson et al. 2010; Cheng and Chan 2008), work behaviors (Cheng and Chan 2008), work performance (Cheng and Chan 2008; Chirumbolo and Areni 2010; König et al. 2010), and employees' health and well-being (Cheng and Chan 2008; Chirumbolo and Areni 2010; Kinnunen et al. 2010; Vander Elst et al. 2010). In brief, the negative effects of job insecurity on both individuals and organizations are well established.

From the individual's perspective in particular, job insecurity is considered a critical stressor in contemporary work life (De Cuyper et al. 2008) because it is not only the actual job loss, but also the anticipation of such a stressful event, that represents a source of anxiety (Dekker and Schaufeli 1995). Like any other stressor, job insecurity will result in strain as well as decreased well-being and will be followed by any kind of coping strategies in order to alleviate stress (Lazarus and Folkman 1984). Indeed, a considerable amount of research has confirmed that turnover intention, defined here as an employee's intention to quit (Chen et al.

2011) is commonly used as a coping strategy, that is people with high job insecurity demonstrated high turnover intention (Berntson et al. 2010; Chirumbolo and Hellgren 2003; Dekker and Schaufeli 1995; Staufenbiel and König 2010). While most research has been based on cross-sectional data (Mauno et al. 2005; Näswall et al. 2005; Sora et al. 2010) or has focused on the long-term effects of job insecurity (De Cuyper et al. 2009; Hellgren et al. 1999; Klehe et al. 2011), there is a lack of knowledge about the extent to which the increase or decrease in levels of job insecurity over time correspond to changes in an employee's turnover intention. Changes in employees' experienced uncertainty include relevant information about an increase or decrease in their experienced stress level. A more detailed examination of the relationship between changes in job insecurity and the corresponding changes in turnover intention over time is likely to provide a better understanding of the impact of job insecurity and, therefore, to have strong theoretical and practical implications.

Besides this direct effect of job insecurity on turnover intention as a coping mechanism, we also expect to find an indirect effect through subjective career success. Indeed, job insecurity also has negative influences on job attitudes like job satisfaction and organizational commitment (cf. Sverke et al. 2002 for a review). Whereas the relationship between job insecurity and general job satisfaction has been closely examined and verified, the more specific issue of subjective career success has rarely been taken into account in this context (Otto et al. 2011). We define subjective career success as an individual's appraisal of their unfolding career progress (Heslin 2005). Thus, the subjective sense of career success is a function of how satisfied a person is with respect to the kind of career he/she aspires. In an era where responsibility for one's own career has shifted more and more from the organization to the employee (Briscoe and Hall 2006; Hall 1996), the satisfaction with one's own career trajectory gains in importance (cf. Hall 1996; Hall 2004).

Similarly, Drenzo and Greenhaus (2011) highlight in their model of job search and voluntary turnover the importance of taking responsibility for one's career. They propose that

individuals are keen to increase their career competencies in order to achieve a satisfactory career trajectory. However, it is through feelings of job insecurity that successful career development within the current organization might be impaired. When a successful career path is at risk, employees might start looking for alternatives, and as a result turnover intention may increase (Chen et al. 2011). Although theoretical assumptions and models are published, empirical verification supporting the indirect effect of job insecurity on employee turnover intention through subjective career success is still lacking.

Hence, the aim of the present study is to analyze firstly the direct effect of job insecurity on turnover intention and secondly its indirect effect through subjective career success, taking into account change over time. That is, each relationship between the three constructs—job insecurity, subjective career satisfaction and turnover intention—is examined in order to identify the links between initial levels (statistically spoken: between intercepts) and the mutual trajectories of change over time (statistically spoken: between slopes). A link between initial levels describes the relationship between the initial levels of two variables. A mutual trajectory of change describes the relationship between the change in behavior (i.e., an increase or a decrease) of one variable and the change in behavior (i.e., an increase or a decrease) of another variable. This investigation will lead to a better understanding of *how* and *why* job insecurity is linked to subjective career success and turnover intention.

Job Insecurity as a Stressor

The explanation of the interrelationship between job insecurity, subjective career success and turnover intention is based on Hobfoll's (1989) stress theory "the model of conservation of resources", a commonly used theory in this research context (Chen et al. 2011; De Cuyper et al. 2012a; De Cuyper et al. 2012b; König et al. 2010). The basic idea of this theory is that "people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources" (p. 516).

Resources are defined as “those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (p. 516). In our research context, we focus primarily on the resource “employment”, a non-material condition according to Hobfoll (1989).

As indicated by Hobfoll (1989), stress is caused not only by the actual loss of resources, but also by the threat that resources may be lost and a lack of resource gain after resource investment. Transferred into our research context, this means that employees who are confronted with job insecurity may fear the loss of their job, which will trigger symptoms of strain.

The Direct Effect: Job Insecurity Predicts Turnover Intention

The model of conservation of resources predicts that stress causes individuals to strive to minimize loss of resources. In a context where an employee fears he/she may lose their job, one option the individual may take to reduce this risk is to search for and to accept a new job that offers a higher level of job security. This reaction to a high level of job insecurity is demonstrated in Blau’s (2007) longitudinal study over a period of one year: individuals’ turnover behavior correlated with their job search activity and was explained by job insecurity. These links are also displayed in Drenzo and Greenhaus’ (2011) model of job search and voluntary turnover: Individuals conduct job searches in order to increase their career opportunities, career competences, and employability and, ultimately, to be prepared for job loss in periods of high job insecurity. Consequently, individuals demonstrate voluntary turnover if a good opportunity is found, instead of simply changing their job because they are forced to by job loss.

Besides job insecurity, an additional and highly relevant factor explaining turnover behavior in Blau’s (2007) study was the intention to leave the organization. As previous research has indicated (Griffeth et al. 2000; Steel 2002), turnover intention is the best predictor of whether an employee will indeed leave the organization or not. For this reason,

in our study we test an individual's reaction to job insecurity by measuring one's turnover intention. We assume that employees react to a high level of job insecurity over time with a high level of turnover intention, a relationship which is widely confirmed (Berntson et al. 2010; Chirumbolo and Hellgren 2003; Dekker and Schaufeli 1995; Staufenbiel and König 2010).

An initially high level of job insecurity places certain demands on an employee. If over time that level of job insecurity systematically increases, this can be experienced as particularly stressful because it may be indicative of the potential loss of job and job-related factors which are essential for an individual's well-being. Imagine the following situation: Two employees in the same organization report an identical, relatively high level of job insecurity (e.g., a rating of 4 on a 5-point Likert scale). While one employee's job insecurity has increased from 2 to 4, the other employee's job insecurity has decreased from 5 to 4. These respective change-over-time differences are not reflected in their identical levels of job insecurity but may indeed have a significant effect on their respective turnover intentions (cf. Chen et al. 2011). This effect is in line with Hobfoll's (1989) model which indicates that an increase in job insecurity triggers the threat of a loss of resources regardless of the initial level of that job insecurity.

Based on these findings, we made the following two predictions concerning the relationship between both the initial level of job insecurity and turnover intention and the change in job insecurity and turnover intention (see Figure 1; the letters associated with the arrows (paths) refer to our hypotheses):

Hypothesis 1a: Initial level of job insecurity is positively related to initial level of turnover intention.

Hypothesis 1b: The greater the rate of increase in job insecurity, the greater the rate of increase in turnover intention.

 Insert Figure 1 about here

The Indirect Effect: Subjective Career Success as the Intervening Variable

After focusing on the direct link between job insecurity and turnover intention, we will proceed with arguments for the indirect link through subjective career success. Once again, we use Hobfoll's (1989) model "conservation of resources", which is based on two main principles. One principle states that, "Individuals are motivated to gain resources. This motivation drives people to invest resources in order to enrich their resource pool." (p. 520). Transferred into our research context, we conclude that individuals invest time and energy into their employment to accumulate resources like money and socioeconomic status and also to enhance their competencies, career trajectory, and career success. Investment in one's own career is gaining in importance, particularly at the current time, when organizations are reducing their input and shifting the responsibility of career planning to their employees. In line with this shift in responsibility (Briscoe and Hall 2006; Hall 1996), subjective satisfaction with one's own career success is a relevant subjective indicator for career progression (Hall 2004). Thereby, subjective career success is defined as the "individuals' subjective judgments about their career attainments" (Ng et al. 2005, pp. 368–369).

In cases of high job insecurity, successful career development within the current organization might be jeopardized. Otto et al. (2011) showed that restricted career development possibilities result in low subjective career success. Thus, low subjective career success is one of the negative consequences of job insecurity. To replicate Otto et al.'s findings in a cross-sectional design, we assume that we will find a negative effect of initial level of job insecurity on initial level of subjective career success.

Moreover, a mutual trajectory of change between job insecurity and subjective career success is expected. In other words, unrelated to the initial level of experienced job insecurity, individuals might face an increase or decrease in their sense of job insecurity over

time. This development may be reflected in a change of an individual's subjective career success appraisal. Accordingly, we suppose that changes in job insecurity predict a change in subjective career success.

Hypothesis 2a: Initial level of job insecurity is negatively related to initial level of subjective career success.

Hypothesis 2b: The greater the rate of increase in job insecurity, the greater the rate of decline in subjective career success.

The second part of the indirect link between job insecurity and turnover intention concerns the relationship between subjective career success and turnover intention. According to Hobfoll (1989), an interesting job with promising career opportunities and corresponding subjective career success belongs to the resources of non-material conditions. Again, individuals are concerned about retaining and protecting this resource.

Employees may perceive a decrease in subjective career success as stressful and frustrating because, according to Hobfoll (1989), this decline can either be interpreted as a loss or decline of resources or it indicates a progressively dissatisfying career trajectory. To avoid such a decline of resources or to reinvest in one's own career development, employees may search for a new job with better career options (Bidwell and Briscoe 2010; Drenzo and Greenhaus 2011). We assume this would be shown by increased turnover intention. Yet thus far, to the best of our knowledge, no former study has investigated the interrelationship between change in subjective career success and change in turnover intention. However, Chen et al. (2011) found comparable results in their study regarding the mutual trajectory of change between job satisfaction and turnover intention; in particular, individuals with a decline in job satisfaction showed an increase in their intentions to leave the job.

Furthermore, Arthur, Khapova, and Wilderom's (2005) proposition indicates support for our

assumption. They stated that individuals who change organizations voluntarily are likely to view their careers as successful.

Moreover, we would expect to find a link between initial levels between subjective career success and turnover intention. We argue that employees with a low initial level of subjective career success show high turnover intention (Joo and Park 2010) because they are not satisfied with their career so far, and they therefore attempt to improve it (Arthur et al. 2005). Our expected link between initial subjective career success and initial turnover intention may turn out to yield similar results as provided by the considerable amount of research concerning the cross-sectional job satisfaction-turnover intention link (Chirumbolo and Hellgren 2003; Davy et al. 1997; De Moura et al. 2009; Griffeth et al. 2000; Hom and Griffeth 1991; Moynihan and Landuyt 2008).

Based on these findings and arguments, we assume the following hypotheses:

Hypothesis 3a: Initial level of subjective career success is negatively related to initial level of turnover intention.

Hypothesis 3b: The greater the rate of decline in subjective career success, the greater the rate of increase in turnover intention.

Method

Overview

We tested our hypotheses with longitudinal data collected from a larger project of a representative annual telephone survey of employees in Switzerland (see also, Feierabend et al. 2011; Gerber et al. 2009a; Gerber et al. 2009b). Participants took part in three telephone interviews in spring 2007, 2008, and 2009. These one-year intervals was chosen based on previous studies regarding appropriate time lags for studying similar constructs (e.g., Berntson et al. 2008; Cable and DeRue 2002; Carless and Arnup 2011; Hellgren and Sverke 2003; Weigl et al. 2010; Wong et al. 1995). Longitudinal data from all three waves of measurement are reported here for the first time.

Procedure and Participants

The data were collected using a telephone interview asking predefined questions. To recruit the sample in 2007, telephone numbers were randomly drawn from all those registered in Switzerland (except from the Italian speaking part of the country). From a baseline sample of 1,370 participants in 2007, we selected 431 participants (31.5% participation rate) who were willing to take part in the second wave of measurement. In the last wave of measurement, 255 participants were interviewed a third time (response rate: 59%). Non-attendance was due to unattainability, retirement, or lack of interest. Finally, the following analyses were performed with those 255 employees who participated in all three interviews (spring 2007 (T1), spring 2008 (T2), and spring 2009 (T3)).

The employees included in the sample were employed at least 40% and aged between 16 and 65 years. Self-employed individuals and those in an apprenticeship were excluded from the study due to the focus of the bigger research project in which the data collection was embedded.

The present sample comprised 43% female employees. Participants' average age was 46 years ($SD = 8.6$ years) and their average work experience within the organization was 10 years ($SD = 8.4$ years). About 35% of the participants held a Bachelor's, Master's or equivalent degree. The employees were spread over a wide range of industries. A total of 65% of the participants were full-time, while 4.3% were temporary or contract employees.

To ensure that there was no systematic bias in the study sample, chi-square and unpaired t-tests were first used to compare the final sample ($N = 255$) with the dropout rate between T2 and T3 (176 people), and second, to compare the final sample with the baseline sample at T1 (1370 participants). Participants with complete data for all three waves of measurement did not differ from the dropout between T2 and T3 with respect to socio-demographic characteristics like sex ($\chi^2 = 0.07, p = .59$), age ($t(336) = -0.83, p = .41$),

organizational tenure ($t(327) = 1.13, p = .26$), education ($\chi^2 = 1.16, p = .28$), percentage of full-time employees ($\chi^2 = 0.52, p = .47$), and temporary employees ($\chi^2 = 3.25, p > .07$), as well as the examined construct variables at T1, as in job insecurity T1 ($t(429) = -0.65, p = .52$), subjective career success T1 ($t(429) = 0.78, p = .44$), and turnover intention T1 ($t(429) = 1.28, p = .20$). Additionally, participants with complete data for all three waves of measurement did not differ from the 2007 baseline sample with respect to socio-demographic characteristics like sex ($\chi^2 = 0.40, p = .53$), organizational tenure ($t(419) = 0.22, p = .83$), education ($\chi^2 = 0.03, p = .87$), and percentage of full-time employees ($\chi^2 = 0.93, p = .63$), as well as the construct variables examined at T1, as in job insecurity T1 ($t(1368) = 0.41, p = .68$) and subjective career success T1 ($t(1368) = 0.01, p = .99$). However, participants included in the final sample were slightly older ($t(447) = -3.14, p = .002$), had fewer temporary contracts ($\chi^2 = 5.45, p = .02$), and had had a slightly lower turnover intention at T1 ($t(1368) = 2.10, p < .04$) than the 2007 baseline sample.

Measures

All measures were assessed at all three times of measurement.

Job insecurity. Two items on job insecurity were adapted from Borg's (1992) job insecurity scale: "I suspect that I will lose my job in the near future" and "I feel uneasy with the thought that I could lose my job in the near future". Items used a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's alpha for the two items was .53 (T1), .79 (T2), and .77 (T3).

Subjective career success. We operationalized subjective career success in terms of Greenhaus et al.'s (1990) career satisfaction scale. Instead of the whole 5-item scale, a selection of three items was used because this study was part of a bigger project and survey space was limited. The selected items, based on face validity, were: "I am satisfied with the success I have achieved in my career", "I am satisfied with the progress I have made towards

meeting my overall career goals”, and “I am satisfied with the progress I have made towards meeting my goals for advancement”. Participants based their responses on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach’s alpha was .86 (T1), .86 (T2), and .85 (T3).

Turnover intention. We measured turnover intention using two items developed by Guest and Conway (2004). The first item was: “How likely is it that you will voluntarily leave this organization in the following year?” The responses were measured on a 4-point Likert scale ranging from 1 (*very unlikely*) to 4 (*very likely*). For the second item, participants had to choose one out of four ordinal ordered statements that matched their preference best (e.g., “I am currently in the process of trying to leave this job.”). Cronbach’s alpha for the two items was .77 (T1), .74 (T2), and .66 (T3).

Control variables. We controlled for age, education, and change of employer, which the literature has shown to be influential on one to several of our examined constructs (Cheng and Chan 2008; Chirumbolo and Areni 2010; Klehe et al. 2011; Mauno et al. 2005; Moynihan and Landuyt 2008). Age was reported in years; education (1 = Bachelor or Master degree, 0 = lower education level), and change of employer (0 = no employer change, 1 = employer change) were measured with dichotomous variables. Change of employer was coded with one general variable, representing a time period of two years. Moreover, we expected a relationship between change of employer and age (Crossley et al. 2007). Thus, these variables were allowed to co-vary in the latent growth model.

Data Analysis

Analyses are based on a latent growth modeling (LGM) approach with maximum likelihood estimation (AMOS 19.0; Arbuckle 2010). LGMs are the most flexible models to study inter-individual differences in intra-individual change (cf. Duncan et al. 2006; Preacher et al. 2008). In order to explain whether the initial status of one variable is related to the

initial status of another variable and also whether, over a period of time, change in one variable corresponds with change in another variable, the individual intercepts and slopes from one construct can be correlated to those of other constructs (Duncan et al. 2006). As a result of measurement errors being taken into consideration, it is possible to estimate unbiased true change trajectories for each person taking part. Furthermore, several fit indices are available that allow the comparison of competing models according to their fit to the data (Blunch 2008; Geiser 2010).

In particular, the goodness-of-fit of the estimated models was evaluated by an established set of indices and conventional rules of thumb for their cut-offs (Blunch 2008; Duncan et al. 2006). A score lower than 3.0 on the relative χ^2/df -test signifies an acceptable fit and a score below 2.0 is the sign of a good fit. Tucker Lewis Index (TLI) and Comparative Fit Index (CFI; Bentler 1990) should be .90 or higher. A score that falls below .08 on the Root Mean Square Error of Approximation (RMSEA) is satisfactory, and a score below 0.5 indicates a good fit. The 90% confidence interval (CI_{RMSEA}) and the p -value for the test that RMSEA exceeds .80 in the overall population are reported. Different models were compared to each other by means of the χ^2 -difference test (Blunch 2008; Bühner 2006).

In the first step of our analysis and in order to test our measurement model, we conducted a confirmatory factor analysis (CFA) of the 21 respective items (for each of the three points in measurement, two items of job insecurity, three items of subjective career satisfaction, and two items of turnover intention were included). Several a priori factor models were compared, including one-, three-, six-, and nine-factor models. In the one-factor model, all 21 items were combined in one single factor. In the three-factor models, either all items from the same wave or all items from the same constructs across measurement points were combined in a factor. In the six-factor models, for each wave of measurement the items of two constructs were systematically combined to one factor, whereas the items of the

remaining construct built another factor to test the empirical distinctness of the three constructs. In the nine-factor model, each construct across each point in measurement represented a factor. Consistent with common practice, measurement errors from the same items across a period of time were allowed to co-vary across waves in order to account for their non-independence (Geiser 2010). This practice also applies to all subsequent analyses.

Additionally, measurement invariance was tested in order to confirm that the nature of the measurement instruments did not change across time. For this purpose, the relationships between indicators of a construct and the construct itself should remain unchanged across the three waves of data collection (weak factorial invariance) (Chan 1998; Geiser 2010).

The second step in our analyses involved developing a multivariate latent growth model (MLGM). We modeled the individual growth curves for job insecurity, subjective career success, and turnover intention across the three waves of data collection. In particular, each construct was composed of an *intercept* representing the initial value (to test the links between initial levels) and a *slope* representing change (to test the mutual trajectories of change), based on the latent variables.

Factor loadings linking the intercept to the latent variables per year were set to 1. Factor loadings linking the slope to the latent variables per year represent the relative time spans (number of years) between the first assessment of the study variables and each subsequent wave of data collection. Setting them to 0 for T1, 1 for T2, and 2 for T3, linear growth curves (i.e., *linear slopes*) were modeled.

Based on this MLGM and by means of regression paths, we could assess the degree to which intercepts and slopes of two or more variables of interest predicted one another. These regression paths provided information concerning the extent to which change in one variable coincided with change in a second variable. Their magnitude and statistical significance allowed for a test of our hypotheses.

In step three, time-invariant control variables (age, education, and change of employer) were included in the MLGM. Based on previous research results, all intercepts and slopes were regressed on one or all control variables in order to estimate unbiased associations between the construct measures.

Results

Inter-Correlations Across all Measures

For clarification, we provide all means, standard deviations, and inter-correlations of the primary constructs at each of the three waves of measurement (Table 1). All constructs showed relatively high test-retest stability (correlations varied between .30 and .61). In addition, the correlations in this table provide some preliminary support for our hypotheses: Apart from one exception—correlation between subjective career success and turnover intention at T2—job insecurity, subjective career success, and turnover intention measures are correlated with one another at all three points of measurement. All these values were estimated using PASW Statistics 18.0.

Insert Table 1 about here

Measurement Model of Job Insecurity, Subjective Career Success and Turnover

Intention

The measurement model was tested by allocating the respective 21 construct items to a one-factor model (general factor), to two different three-factor models (which combined all items either from the same wave across constructs or the same constructs across measurement points), and to a nine-factor model (job insecurity, subjective career success, and turnover intention for each of the three waves of measurement) by means of a CFA. The nine-factor model showed a good fit ($\chi^2(138) = 218.71$; $p < .001$; $\chi^2/df = 1.59$; TLI = .95; CFI = .97; RMSEA = .048; $CI_{RMSEA} = [.036; .060]$, $p = .60$), and the best fit compared to the alternatively tested measurement models. To confirm the empirical distinctness of the three

constructs, we systematically combined items from two constructs under one factor, which resulted in three alternative six-factor models (cp., Weigl et al. 2010). None of them yielded acceptable fit (see Table 2).

Furthermore, the supported nine-factor model was tested for weak factorial invariance (measurement invariance). Factor loadings of the same items across the three waves of measurement were constrained so that they were equal for T1, T2, and T3. This applied only to the factor loadings of subjective career success, because the factor loadings for both job insecurity and turnover intention were a priori set to 1 to achieve an identified model (Bühner 2006). The resulting change in chi-square was non-significant ($\Delta\chi^2(4) = 2.07, p = .72$). Accordingly, subjective career success was metric invariant across time, and the invariance constraints were retained in subsequent analyses.

 Insert Table 2 about here

Multivariate Latent Growth Model of the Relationship between Job Insecurity, Subjective Career Success and Turnover Intention

The measurement model was supplemented and transformed into a MLGM, where, in line with the hypotheses, job insecurity predicts subjective career success and turnover intention, and subjective career success also predicts turnover intention. Additionally and in accordance with the MLGM literature, the slopes were regressed on all intercepts (Duncan et al. 2006; Preacher et al. 2008). The MLGM fit the data reasonably well ($\chi^2(166) = 248.95; p < .001; \chi^2/df = 1.50; TLI = .96; CFI = .97; RMSEA = .044; CI_{RMSEA} = [.032; .055], p = .79$; Table 2).

Based on missing theoretical justification for the regression paths of the intercepts on the slopes and to test a more parsimonious model, a MLGM was tested without any regression paths of the intercepts on the slopes (see Figure 1). The resulting change in chi-

square was non-significant ($\Delta\chi^2(6) = 4.19, p = .65$). Thus, these deleted regression paths were retained in subsequent analyses.

As a final step, the time-invariant control variables were included in the MLGM. To find the best fit, we followed a stepwise approach. First of all, regression paths from all control variables (age, education, change of employer) on all intercepts and slopes were set. Moreover, in accordance to theoretical considerations, two control variables were allowed to co-vary (change of employer and age). The MLGM with the included time-invariant control variables fit the data well ($\chi^2(219) = 347.65; p < .001; \chi^2/df = 1.59; TLI = .94; CFI = .95; RMSEA = .048; CI_{RMSEA} = [.038; .057], p = .62$; Table 2). In order to find a more parsimonious model, the regression paths of control variables on slopes were deliberately deleted. However, the model fit significantly worsened ($\Delta\chi^2(9) = 25.10; p < .003$). A stepwise approach showed that the regression paths from the control variables age and education on all slope factors could be deleted, but not the regression paths from the control variable change of employer. In particular, deleting the mentioned regression paths resulted in a non-significant change in chi-square ($\Delta\chi^2(6) = 6.64, p = .36$).

For this final model, all growth parameter estimates were significant except for the slope of subjective career success (see Tables 3). That is, the mean level of job insecurity and turnover intention increased considerably over time. Furthermore, participants' initial levels for all three factors differed noticeably, as did their growth curves for job insecurity and turnover intention but not for subjective career success. The intercepts and slopes for job insecurity and subjective career success interrelated significantly (see Figure 2).

 Insert Table 3 about here

Hypotheses Testing

For testing the hypotheses, the MLGM was used with the included time-invariant control variables in order to estimate unbiased associations between the constructs in focus.

While in a MLGM without control variables the same paths were statistically significant, only those values from the model with the included control variables are reported.

Supporting Hypothesis 1a, initial job insecurity (intercept) had a positive influence on initial turnover intention (intercept; $\beta = .40, p < .001$; Figure 2). Participants with higher job insecurity reported a higher turnover intention than participants with lower job insecurity. Supporting Hypothesis 1b, job insecurity change (slope) had a positive influence on turnover intention change (slope; $\beta = .26, p = .05$). In addition to the link between initial job insecurity and initial turnover intention, participants with a higher increase in their job insecurity showed more growth in their turnover intention.

Supporting Hypothesis 2a, initial job insecurity (intercept) had a negative influence on initial subjective career success (intercept; $\beta = -.36, p < .001$). Participants with higher job insecurity reported lower subjective career success than participants with lower job insecurity. Job insecurity change had no effect on changes in subjective career success (slope; $\beta = .01, p = .99$). Accordingly, Hypothesis 2b was not supported.

Supporting Hypothesis 3a, initial subjective career success (intercept) had a negative influence on initial turnover intention (intercept; $\beta = -.18, p = .03$). Participants with higher subjective career success reported lower turnover intention than participants with lower subjective career success. An increase in subjective career success had no effect on changes in initial turnover (slope; $\beta = -.34, p = .09$). Accordingly, Hypothesis 3b was not supported.

Insert Figure 2 about here

Effects of Control Variables

The beta effects of the control variables can be seen in Table 4. We found that change of employer is significantly related to the initial level of job insecurity and turnover intention, and is also significantly related with the slope of subjective career success and turnover

intention. This reflects the fact that participants with high initial levels of job insecurity and turnover intention changed employers more often, and that a change of employer increased the growth of subjective career success whereas turnover intention declined. We also found that participants with higher levels of education (Bachelor, Master's or comparable degree) were more satisfied with their career. Moreover, younger participants stated that they had lower subjective career success and a higher turnover intention. Finally, high turnover intention was predicted by having a higher education.

 Insert Table 4 about here

Discussion

The main focus of our study was to clarify the how and why of the relationship between job insecurity and employee turnover intention. To get an extended understanding of this link, both the direct effect of job insecurity on turnover intention and the indirect effect mediated by subjective career success was examined. To our knowledge, this is the first study to investigate this indirect effect through subjective career success. Furthermore, in our research the commonly tested links between initial levels were supplemented by the investigation of the mutual trajectories of change, a focus that has to our knowledge not been adopted so far.

The Direct Effect

In our first hypothesis, we tested the direct link between job insecurity and turnover intention. We expected both a positive link between initial levels and a positive mutual trajectory of change between job insecurity and turnover intention. In line with previous research, we found job insecurity to be negatively associated with turnover intention on an initial level (Berntson et al. 2010; Chirumbolo and Hellgren 2003; Dekker and Schaufeli 1995; Staufenbiel and König 2010). Besides replicating this link between initial levels, as previous studies have done, we also revealed a negative mutual trajectory of change. In

particular, changes over time in job insecurity led to corresponding changes over time in turnover intention. Thus, both aspects of job insecurity, the initial level and the trajectory of change over time, seem to affect employees' turnover intention. We argue that an employee's attempt to leave the organization and find a more secure job is caused by one's present fear as well as an increase in fear about losing that job (Dekker and Schaufeli 1995). Losing the job would denote the loss of a highly valued resource and, hence, be experienced as a strain (Hobfoll 1989). To cope with the stress caused by losing such a valued resource, the employee's turnover intention increases and he/she therefore searches for a more secure job (Sverke et al. 2002).

The Indirect Effect

The indirect effect of job insecurity on turnover intention through subjective career success was tested in our second and third hypotheses. In particular, we anticipated a relationship between job insecurity and subjective career success, as well as a relationship between subjective career success and turnover intention. In line with Otto et al.'s (2011) findings and our own assumptions, we found that the higher the general perceived threats of job loss (job insecurity) on an initial level were, the less satisfied the employees were with their career. This result supports our assumption that in an insecure job situation, employees feel that their satisfying career trajectory is impaired, which is reflected in low appraisal of subjective career success. This finding is meaningful when considering that, particularly at the current time, one's own career and satisfaction with one's own career gains in importance (Hall 2004).

Moreover, as shown by the negative association of the initial level of subjective career success and the initial level of turnover intention, dissatisfaction with one's own career results in high intention to quit. This finding reinforces our assumption that satisfaction with one's own career is important for many employees (Hall 2004). If career satisfaction is

impaired, as indicated by low subjective career success, employees search for alternatives and show high turnover intention. To sum up, the indirect effect through subjective career success is an important effect to consider when discussing the link between initial levels of job insecurity and turnover intention.

In contrast to the significant indirect relationship at the initial level, the slopes of job insecurity and subjective career success, as well as subjective career success and turnover intention, were not related with each other. Three different explanations could be relevant in understanding why the expected relationships were not found. Firstly, changes in subjective career success might not be affected by changes in job insecurity, but they might, however, be related to an unknown third variable. The very low insignificant covariance between the slope of job insecurity and the slope of subjective career success would support this assumption. Furthermore, the mutual trajectory of change between subjective career success and turnover intention should also be considered. This relationship didn't reach significance because of the high standard error. This finding suggests that the predictive power is small and should not be interpreted. Secondly, according to Spurk et al.'s (2011) longitudinal study to validate the subjective career success scale, career satisfaction remained more or less stable over a time span of two years. The mean of the subjective career success slope did not reach significance in their sample of 1,273 participants, which is similar to our findings. It seems that subjective career success is not a volatile state that adapts quickly to context factors; rather, it seems to be influenced by long lasting conditions. The third explanation attributes the lack of significance in the mutual trajectories of change to a statistical artifact. The variance in the slope of subjective career success was insignificant. This is an inhibitive factor in finding a significant association between the investigated constructs (Preacher et al. 2008). We conclude that subjective career satisfaction has a central function in the link between initial levels between job insecurity and turnover intention but not when examining their mutual trajectories of change.

Additional Findings

To analyze the employees' turnover behavior following high job insecurity, low subjective career success and high turnover intention would be an interesting extension of our research design. Unfortunately, our data were lean and insufficient for a broad analysis and an inclusion of turnover in the latent growth model. Firstly, we only know about change of employer but not about the voluntariness of the turnover. Secondly, the turnover rate for T2 (6%) and for T3 (4%) are low and we are missing information about the future turnover rate following turnover intention T3. Therefore, we did not postulate any hypotheses; instead, we used change of employer over a period of two years as a control variable.

Nevertheless, the link between change of employer as a time-invariant control variable and job insecurity, subjective career success, and turnover intention revealed interesting additional information. Participants who changed their employer over a time span of two years had a higher initial level of job insecurity and turnover intention. This suggests that both a feeling of high job insecurity and the intention to turnover triggered a change of employer, which is in line with previous research (Blau 2007; Griffeth et al. 2000). Moreover, the change of employer during the period of two years was related to an increase in subjective career success and a decline in turnover intention. These results further support our theory: In stressful and frustrating periods with high job insecurity, individuals strive to minimize a loss of resources by searching for and accepting a new job (cf. Hobfoll 1989). In the new job, however, the employees are able to rid themselves of some tension, that is they are more satisfied with their career success, and therefore respond with lower turnover intention.

Limitations and Future Research

Although the present investigation makes an important contribution to the job insecurity-turnover intention literature, there are two critical issues that need to be addressed

further. The first limitation for consideration is that all the measurements were based on self-reported data. This increases the common method bias and the magnitude of the relationship may be inflated (Podsakoff et al. 2003). However, Spector (2006) has argued that common method bias has to be accepted when investigating highly subjective constructs which can not be measured differently, other than by asking the respondents themselves. Secondly, as already discussed above, the circumstances surrounding the change of employers were not measured but should be considered in future research in order to explore the theoretical idea if employees with high job insecurity and low subjective career success react by changing their employer.

Furthermore, future research should focus on the role of career satisfaction, particularly by investigating the trajectory of change over time in more detail. Although our findings indicated that job insecurity change is unrelated to subjective career success change, this link might be found for some specific subgroups. For instance, people with a high managerial competence anchor (Feldman and Bolino 1996), a high focus on career (Wrzesniewski et al. (1997), a high independent or promotion-oriented career orientation (Gerber et al. 2009b) might show a decrease in career satisfaction when job insecurity increases because they are more concerned about their subjective career success.

Practical Implications

Based on the results of the present study, there are two major practical implications to point out. Firstly, the finding that job insecurity affects both turnover intention and subjective career success indicates two different possibilities of reacting to the threat of job loss. On the one hand, the direct effect can be understood as a coping strategy where turnover intention is expressed by the search for alternatives in order to buffer the negative effects of a potential job loss and a consequent deterioration of well-being (Berntson et al. 2010; Chirumbolo and Hellgren 2003; Dekker and Schaufeli 1995). The indirect effect, on the other hand, can be understood as a more proactive evaluation of one's own job situation where turnover

intention is based more on increasing dissatisfaction with one's own career success than on reacting to a threat. In career coaching, it is useful to increase people's awareness of these different ways of reacting to potential job loss and, in particular, to strengthen the more proactive path. In order to design proper retention measures, it is important for companies to know that job insecurity is not only a possible threat to people but also reduces the subjective sense of success with the on-going employment situation.

The second implication concerns the mutual trajectory of change in job insecurity and turnover intention. This may be taken as an indication of a concurrent and continuous (re-)evaluation of different aspects of the employment situation. Accordingly, employees should ensure that a continuous exchange about their career paths takes place between them and their managers. In companies without such HR instruments, employees should proactively ask for a discussion about their future career opportunities with their line manager.

Conclusion

The present investigation was undertaken in order to increase the understanding of how and why job insecurity affects employee turnover intention. In particular, we analyzed the direct and indirect effect of job insecurity on turnover intention through subjective career success and how these links vary when focusing on the links between initial levels and on mutual trajectories of change. Three main findings should be mentioned. Firstly, according to the predicted direct effect, job insecurity predicted turnover intention when analyzing the link between initial levels and the mutual trajectory of change. This suggests that job insecurity does matter, both for individuals coping with stress and impaired well-being triggered by insecurity and planning their career, as well as for organizations concerned with their employee retention management (Berntson et al. 2010; Chirumbolo and Hellgren 2003; Griffeth and Hom 2001; Kozlowski et al. 1993; Otto et al. 2001). Secondly, in the future two foci are relevant when examining the effects of job insecurity on turnover intention: the

initial level and the change development. Thirdly, subjective career success explains additional variance in the initial level of turnover intention in terms of an indirect effect between job insecurity and turnover intention. Consequently, one could conclude that individuals are not only concerned about preserving their paid job but also about their own career.

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Table 1

Descriptive Statistics, Pearson Correlations, and Reliabilities

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Sex ^a	.57	.50											
2. Age	43.80	8.65	.02										
3. Education ^b	.35	.48	.07	-.14*									
4. Organization tenure	10.46	8.52	.10	.45**	-.07								
5. Employer change ^c	.11	.31	.12	-.09	.10	-.15*							
6. Job insecurity T1	2.09	.94	-.08	-.04	.04	-.03	.17**	(.53)					
7. Job insecurity T2	1.79	.87	-.13*	-.01	.01	.03	.15*	.42**	(.79)				
8. Job insecurity T3	1.86	.75	-.07	-.05	-.03	-.01	.08	.40**	.59**	(.77)			
9. Subj. career success T1	4.01	.80	-.00	.05	.14*	.00	-.12	-.22**	-.29**	-.27**	(.86)		
10. Subj. career success T2	4.04	.74	.01	.17**	-.01	.09	-.03	-.17**	-.26**	-.23**	.61**	(.86)	
11. Subj. career success T3	3.99	.69	.08	.11	.03	.04	.00	-.30**	-.28**	-.29**	.60**	.65**	(.85)
12. Turnover intention T1	1.82	.83	.08	-.24**	.12*	-.12	.27**	.28**	.18**	.11	-.22**	-.16**	-.15*
13. Turnover intention T2	1.78	.84	.08	-.29**	.11	-.17**	.13*	.26**	.29**	.23**	-.22**	-.12	-.20**
14. Turnover intention T3	1.76	.78	.10	-.18**	.15*	-.04	-.01	.20**	.21**	.26**	-.11	-.12	-.24**

Table 1 (Cont.)

12	13	14
(.77)		
.45**	(.74)	
.30**	.50**	(.66)

Note. $N = 255$. ^a0 = female, 1 = male. ^b0 = low education, 1 = high education. ^c0 = no employer change, 1 = employer change.

* $p < .05$; ** $p < .01$. Scale reliabilities are reported along the diagonal in parentheses.

Table 2

Latent Growth Modeling Results

	χ^2	<i>df</i>	χ^2/df	TLI	CFI	RMSEA [CI]
CFA						
CFA: 1 factor (general factor)	1500.75***	174	8.63	.37	.47	.173 [.165; .181]***
CFA: 3 factors (each wave combined across constructs)	787.78***	165	4.76	.69	.75	.122 [.113; .130]***
CFA: 3 factors (each construct combined across waves)	703.17***	165	4.26	.73	.79	.113 [.105; .122]***
CFA: 6 factors (job insecurity-subj. career success combined)	526.07***	156	3.37	.80	.85	.097 [.088; .106]***
CFA: 6 factors (job insecurity-turnover intention combined)	474.17***	156	3.04	.83	.87	.090 [.080; .099]***
CFA: 6 factors (subj. career success-turnover intention combined)	511.88***	156	3.28	.81	.86	.095 [.086; .104]***
CFA: 9 factors (covariance of residuals associated with same item)	218.71***	138	1.59	.95	.97	.048 [.036; .060] ns
CFA: 9 factors (invariance across waves) ^a	220.79***	142	1.56	.95	.97	.047 [.034; .058] ns
MLGM (time-invariant control variables excluded)						
MLGM: Basic model	248.95***	166	1.50	.96	.97	.044 [.032; .055] ns
MLGM: Effects of intercepts on slopes excluded ^b	253.14***	172	1.47	.96	.97	.043 [.031; .054] ns
MLGM (time-invariant control variables included)						
MLGM: CV on all intercepts and slopes	347.65***	219	1.59	.94	.95	.048 [.038; .057] ns
MLGM: CV on all intercepts and only CoE on slopes: Final model^c	354.29***	225	1.58	.94	.95	.048 [.038; .057] ns
MLGM: CV only on intercepts ^d	372.75***	228	1.64	.93	.95	.050 [.041; .059] ns

Note. $N = 255$. CV = control variables; CoE = change of employer. χ^2 = chi-square discrepancy; *df* = degrees of freedom; χ^2/df = relative chi-square;

TLI = Tucker Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; CI=90% Confidence Interval; Δdf

= change in degrees of freedom; $\Delta\chi^2$ = change in chi-square.

* $p < .05$; ** $p < .01$; *** $p < .001$.

^a Invariant factor loadings; compared to unconstrained model: $\Delta\chi^2(4) = 2.07, p = .72$.

^b Effects of intercepts on slopes excluded; compared to LGM basic model: $\Delta\chi^2(6) = 4.19, p = .65$.

^c MLGM final Model; compared to CV on all intercepts and slopes: $\Delta\chi^2(6) = 6.64, p = .36$.

^d MLGM CV only on intercept; compared to CV on all intercepts and CoE on slopes: $\Delta\chi^2(3) = 18.46, p < .001$.

Table 3

Means and Variances for Growth Parameter Estimates of Job Insecurity, Subjective Career Success, and Turnover Intention

	<u>Intercept</u>		<u>Slope</u>	
	Mean	Variance	Mean	Variance
Job insecurity	.86***	.39***	.06*	.07**
Subj. career success	2.81***	.29***	-.03	.04
Turnover intention	2.71***	.34***	-.08*	.07*

Note. $N = 255$.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 4

Beta Effects of Age, Education, and Employer Change on the Latent Growth Parameter in the Conditional Model

	<u>Job insecurity</u>		<u>Subj. career success</u>		<u>Turnover intention</u>	
	Intercept	Slope	Intercept	Slope	Intercept	Slope
Age	-.03		.13*		-.29***	
Education ^a	-.11		.12*		.15**	
Employer change ^b	.27***	-.16	-.04	.20*	.33***	-.28*

Note. $N = 255$. ^a0 = low education, 1 = high education. ^b0 = no employer change, 1 = employer change.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 1. Theoretical model: The interrelationship of job insecurity (JI), subjective career success (SCS), and turnover intention (TI) separated along links between initial levels and mutual trajectories of change.

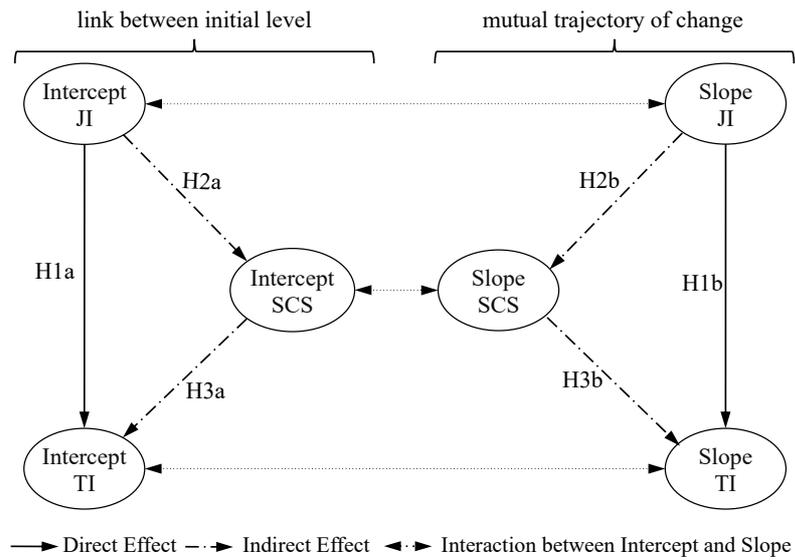


Figure 2. Conditional associative model for job insecurity (JI), subjective career success (SCS), and turnover intention (TI) over time.

Note. $N = 255$. Measurement models and control variables are not displayed for clarity reasons. Entries are standardized regression weights [unstandardized regression weights; standard errors] $*p < .05$; $**p < .01$.

