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The mediating role of psychological needs in the relation between qualitative job insecurity and counterproductive work behavior

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Abstract

Purpose – The purpose of this paper is to add to the understanding of the qualitative job insecurity, i.e. the insecurity about the continuity of valued job aspects in future. Specifically, the paper examines whether qualitative job insecurity is related to counterproductive work behavior (CWB), both directed to the organization (i.e. CWB-O) and other individuals at work (i.e. CWB-I), and whether frustration of the basic psychological needs of autonomy, belongingness and competence, as defined in self-determination theory, may account for these relationships.

Design/methodology/approach – The hypothesis were examined using structural equation modeling in heterogeneous sample of Romanian employees.

Findings – Results support the hypotheses showing that feeling insecure about one's valued job aspects associates with high levels of need frustration and, therefore, also with both CWB-O and CWB-I. While each of the accounted for the associations of qualitative insecurity and CWB-O, only frustration of the need for autonomy explained its detrimental association with CWB-I.

Originality/value – This study is innovative, as it integrates and extends three different fields and has high practical relevance. The authors detail qualitative job insecurity, an increasing, but understudied

job stressor. The authors extend research on the antecedents of CWB by focussing on environmental factors. The authors develop need satisfaction, as integrative theoretical underlying mechanism.
Keywords Job analysis, Organizational behaviour, Motivation (psychology), Self-determination theory, Job stressors
Paper type Research paper

Introduction

Consecutive periods of economic recession have sparked considerable research interest in job insecurity. Within this debate, job insecurity is mostly approached in terms of quantitative job insecurity, i.e. uncertainty about one's job as such (Hellgren *et al.*, 1999), which has been shown to lead to various negative consequences for individual employees and employers (Cheng and Chan, 2008; Sverke *et al.*, 2002). In addition to quantitative job insecurity, scholars increasingly have been pointing out the importance of qualitative insecurity, i.e. feeling insecure about the future of one's valued job features. Qualitative job insecurity does not concern the threat to the continuance of their employment *per se*, but refers to the insecurity about, for example, the degree of social support in the job, the job content or the working conditions one may experience in the future (Hellgren *et al.*, 1999). In line with the idea that this type job insecurity is also an important stressor, recent research revealed that qualitative insecurity may have as negative consequences as quantitative job insecurity (see e.g. De Witte *et al.*, 2012 for a discussion).

Qualitative job insecurity might be growing as a result of continuous organizational changes. Despite its importance, studies focusing on qualitative job insecurity remain relatively scarce (De Witte *et al.*, 2010), particularly with respect to its relationship with employee behavior. In the present study, we focus on qualitative job insecurity and argue it may encourage counterproductive work behavior (CWB), which is highly prevalent and very costly for organizations. Research suggests that up to four-fifths of employees engage in at least one type of CWB (Bennett and Robinson, 2000) and the phenomenon can cost organizations hundreds of billions of dollars (Wells, 1999). In order to prevent and to counteract such detrimental behavior, it is relevant to study whether CWB may emerge at least in part from a highly prevalent job stressor such as qualitative job insecurity.

Second, although research on the impact of qualitative job insecurity is starting to grow, the process through which it exerts its impact remains unstudied. To fill this gap, the second aim of the present study is to unravel the underlying process of the qualitative job insecurity-CWB relationship. Specifically, building on self-determination theory (SDT; Deci and Ryan, 2000; Gagné and Deci, 2005), we propose that qualitative job insecurity causes frustration and frustrates the basic psychological needs for autonomy, competence and belongingness in particular. According to SDT, basic need frustration functions as a critical factor through which a particular context may lead to negative outcomes, including lower well-being, commitment and performance (Van den Broeck *et al.*, 2008). We extend this line of work by examining whether this motivational construct may also explain the relationship between job insecurity, as a particular job stressor and the behavioral outcome of CWB. Figure 1 shows our conceptual model.

In examining this model, we make at least three innovative and timely contributions to the literature on job insecurity. First, we focus on a rather under-investigated type of job insecurity, i.e. qualitative job insecurity, and thereby answer the call of De Witte *et al.* (2010) to expand our knowledge on this type of insecurity. Second, we build on Sverke *et al.* (2010) to move beyond the study of classic job insecurity outcomes

(e.g. well-being, work attitudes and in-role performance) by broadening the scope to CWB. Finally, as the literature on job insecurity has been criticized for not relying on well-established theoretical frameworks (Sverke *et al.*, 2010), we draw on SDT to ground our thinking on qualitative job insecurity. Specifically, we gain insight on the process through which job insecurity might affect employees by examining the frustration of basic psychological needs, which we hypothesize as mediators.

Notably, we add to the research on CWB too, by increasing the understanding of its antecedents and underlying mechanisms. Specifically, we expand the rather limited number of known potential predictors, which to date were mostly limited to personality and justice (e.g. Berry *et al.*, 2007). Empirical evidence for the premise that work stressors are important determinants of CWB (Hershcovis *et al.*, 2007; Fox *et al.*, 2001) is relatively lacking. Our focus on qualitative job insecurity fills this void. In addition, we unravel the process underlying the development of CWB, by studying basic need frustration. As CWB is a voluntary behavior (Bennett and Robinson, 2000), motivational phenomena such as psychological need frustration may play an importing role in provoking this type of behavior.

Finally, our study is also important in view of SDT. This is because, first, we focus on the dark side of employee functioning. SDT in general, and need satisfaction in particular, have been criticized to primarily address optimal functioning, and to be less suited to explain the dark side of human activity (Pyszczynski *et al.*, 2000). This criticism has not convincingly been refuted yet (Van den Broeck, 2012). In addition, SDT-scholars generally model need frustration as a unifying construct and do not differentiate between the needs for autonomy, competence and belongingness. We contribute to SDT by adding to the promising research on needs in the work context by exploring the role of each of the needs separately. Before detailing the hypotheses, we outline the research on qualitative job insecurity and CWB.

Qualitative job insecurity
Job insecurity can be defined as the subjective worries and fears about the desired continuity in the job situation (Davy *et al.*, 1997; Greenhalgh and Rosenblatt, 1984). Two types of job insecurity have been distinguished: quantitative job insecurity, which refers to retaining or losing one's job as a whole, and qualitative job insecurity, which pertains to the continuation of important job features (Hellgren *et al.*, 1999). While quantitative job insecurity thus refers to losing one's job altogether, qualitative job insecure employees are not so much afraid of being fired, but afraid that, for example, in their working conditions will be devaluated.

Experiencing job uncertainty has a great potential for generating stress and affecting individuals' feelings and behaviors (Lazarus and Folkman, 1984). Recent meta-analyses (Cheng and Chan, 2008; Sverke *et al.*, 2002), for example, have related quantitative job
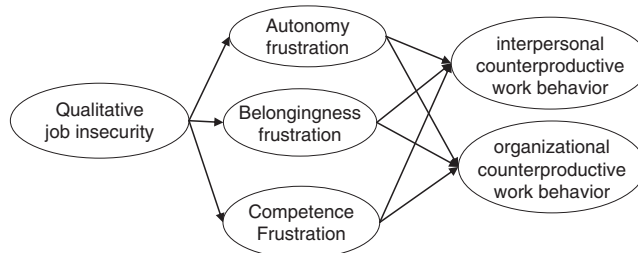

Figure 1.
The proposed
mediation model

insecurity to decreased physical health and psychological well-being, negative attitudes towards the organization and various behaviors such as decreased performance. Initial research on qualitative job insecurity suggest that also this type of job insecurity is associated with reduced physical and psychological well-being (De Witte *et al.*, 2010; Otto *et al.*, 2011; Richter *et al.*, 2013) and is related to lower commitment and career satisfaction, higher turnover intentions (Hellgren *et al.*, 1999; Otto *et al.*, 2011) and reduced work efficiency (Chirumbolo and Areni, 2010). No previous studies have focused on the relationship between qualitative job insecurity and negative work behaviors. Such evidence exists for quantitative job insecurity (De Cuyper *et al.*, 2009), but as quantitative and qualitative job insecurity are clearly different constructs (Greenhalgh and Rosenblatt, 1984; Hellgren *et al.*, 1999), such findings cannot simply be generalized. We therefore aim to study the behavioral implications of feeling insecure one's job characteristics in terms of CWB.

CWB
CWB is defined as "the volitional acts that harm or intend to harm organizations and their stakeholders (e.g. clients, coworkers, customers and supervisors)" (Spector and Fox, 2005, p. 151). Several types of CWB have been mentioned, including theft, aggression, sabotage and drug abuse. Bennett and Robinson (2000) grouped these types of CWB into two categories. According to these authors, CWB may be directed towards the organization (CWB-O), for example, in the form of being late at work or claiming for exaggerated reimbursement. Alternatively it may be oriented towards coworkers, labeled as interpersonal CWB (CWB-I). CWB-I includes behaviors such as acting rude toward someone at work or publicly embarrassing someone (Robinson and Bennett, 1995).

Recent meta-analyses summarizing the antecedents of CWB (Berry *et al.*, 2007; Colquitt *et al.*, 2001; Cohen-Charash and Spector, 2001; Dalal, 2005; Hershcovis *et al.*, 2007) mainly highlighted the importance of personality and organizational justice for both types of CWB. They showed, for example, that agreeable and conscientious employees will engage less in CWB-O and CWB-I, while their neurotic counterparts are more likely to engage in counterproductive acts towards the organization and other individuals. With respect to organizational justice, not receiving rewards one feels entitled to (i.e. distributive justice), being judges by unfair procedures (i.e. procedural justice) or not receiving respect, dignity or correct information (i.e. interactional justice) may prompt CWB among employees. CWB may also be spurred by organizational stressors such as interpersonal conflict (Fox *et al.*, 2001, 2007) and illegitimate tasks (Semmer *et al.*, 2010).

Against this background, some empirical evidence points at job insecurity as an important antecedent of CWB-I and CWB-O. First, quantitative job insecurity was found to be related to some types of CWB-O, such as lateness and absenteeism (Lim, 1996; Reisel *et al.*, 2010). Similarly, with respect to CWB-I, De Cuyper *et al.* (2009) argued that employees experiencing quantitative job insecurity are more inclined to start verbally attacking their coworkers and become perpetrators of bullying. The current study builds on this line of work and examines whether qualitative job insecurity may also relate to both types of CWB. Specifically, we believe that employees who experience uncertainty and anticipate unwanted future changes in the characteristics of their job may be more inclined to engage in both CWB-O and CWB-I.

The mediating role of need frustration as defined in SDT
Several explanations, both grounded in the literature on quantitative job insecurity and CWB, could be advanced to account for the relationship between qualitative job

insecurity and CWB, such as social exchange theory (Gouldner, 1960) and goal setting theory (Locke and Latham, 1990). Building on new insights in motivation theory, we propose motivation as a relevant and integrating mechanism which has been largely overlooked. Specifically, we advance SDT (Deci and Ryan, 2000) – and more specifically frustration of the basic psychological needs – as a relevant theoretical framework.

SDT is a grand theory of human motivation and sheds light on the conditions under which individuals may thrive (Deci and Ryan, 2000). Specifically, SDT argues that environments which satisfy the basic psychological needs of individuals add to the optimal functioning of those individuals, for example, in terms of well-being and adaptive behavior. Environments frustrating these basic needs will likely elicit unwanted outcomes. Three basic psychological needs have been considered essential, namely, the needs for autonomy, competence and belongingness (Van den Broeck *et al.*, 2010). The need for autonomy is defined as the inherent desire of individuals to feel psychologically free and to have authorship of their actions. It is characterized by a sense of choice and volition. Employees are frustrated in their need for autonomy when they have to work under controlling or threatening circumstances. Second, the need for competence includes the inclination of an individual to impact upon the environment and to bring about desired outcomes. This need is, for example, frustrated when employees do not know how to change a particular situation, or feel unable to do so. Finally, the need for belongingness or relatedness refers to the inherent propensity to feel loved and cared for and to return this love and care to others. These reciprocal relationships allow building close and meaningful social relationships, which are likely frustrated when employees are excluded by their colleagues or feel insecure about to whom they can relate.

A growing number of studies lend support to the proposition advanced by SDT, i.e. that need satisfaction is beneficial, while frustration of the basic needs leads to suboptimal functioning. Work-related need frustration is positively associated with employees' health problems (e.g. emotional exhaustion, psychosocial complaints), and negatively with work-related and general well-being (e.g. work engagement, life satisfaction). It furthermore relates negatively to positive attitudes such as organizational commitment and adaptive behaviors such as in-role performance (see Van den Broeck *et al.*, 2010 for an overview). Initial evidence also suggested that need frustration may also relate positively to CWB, for example, in terms of organizational deviance (Lian *et al.*, 2012). The current study aims to replicate and extend these results. Specifically, we aim to examine whether need frustration might be predictive of both CWB-O and CWB-I. Moreover, we advocate that frustration of the basic psychological needs is the explanatory mechanism through which qualitative job insecurity is associated with organizational and interpersonal CWB.

Following the literature on job insecurity and SDT, we first argue that qualitative job insecurity may relate to enhanced CWB because it frustrates the need for autonomy. By definition, qualitative job insecurity is involuntary and undesired (Greenhalgh and Rosenblatt, 1984) and hence likely affects employees' sense of choice and volition, fostering an external locus of causality (DeCharms, 1968), which lies at the core of the need for autonomy. Frustration of the need for autonomy may then prompt insecure employees to try to regain control over the work situation by means of CWB (Bennett and Robinson, 2003).

Second, qualitative job insecurity is also likely to affect CWB via the frustration of the need for competence. Employees experiencing qualitative job insecurity do not exactly know which or whether job features will change and therefore lack the

possibility to undertake actions to deal with these changes (Dekker and Schaufeli, 1995). Such a lack of self-efficacy (Bandura, 1997) ties in with the frustration of the need for competence. Moreover, qualitative job insecurity may imply changes in job content and work conditions, such as task variety and work demands (Ashford *et al.*, 1989; Greenhalgh and Rosenblatt, 1984; Hellgren *et al.*, 1999). As such, insecure workers are insecure about the competencies their future job will require and whether their personal competencies will suffice to fulfill their future goals (Locke and Latham, 1990), which equally will lead to competence frustration. Engaging in CWB may then become rather attractive as an alternative behavior in which one can feel effective, considering its instrumental role (Krischer *et al.*, 2010).

Finally, qualitative job insecurity may also frustrate the need for belongingness, and therefore relate to CWB. This is because first, for employees qualitative job insecurity might signal a change in their exchange relation with the organization (Gouldner, 1960). Specifically, it may imply a breach of the psychological contract in which employees expect job security in return for their loyalty (De Cuyper and De Witte, 2008; Rousseau, 1995), thereby frustrating employees' need for belongingness. Second, qualitative job insecurity may frustrate the need for belongingness by involving changes regarding one's supervisor or colleagues, as well as changes in other work characteristics with possible repercussions for collaborations (Hellgren *et al.*, 1999). When employees have to switch work teams as part of relocation, for example, their need for belongingness is likely frustrated. Finally, qualitative job insecurity may lead to belongingness frustration as it equally affects the general social atmosphere, as insecurity has been shown to stimulate gossip or rumor and elicit competition and conflicts among colleagues (Bordia *et al.*, 2006; De Cuyper *et al.*, 2009). Because job insecure employees are likely frustrated in their need for belongingness, they might be tempted to engage in CWB to restore equity in their relationship with the organization (Jones, 2009; Reisel *et al.*, 2010)

This reasoning ties in with several evolutions in the literature. For example, Vander Elst *et al.* (2012) provided first evidence on the role of need frustration in relations of job insecurity with burnout and engagement. The current study complements this work, by studying qualitative, rather than quantitative job insecurity and focusing on a behavioral outcome, i.e. CWB rather than well-being. Similarly to the study of Vander Elst *et al.* (2012), we modeled the frustration of each of the needs for autonomy, competence and belongingness separately in the job insecurity-outcome relationship. When lumping all needs into one general score for need frustration, as is often done (e.g. Lian *et al.*, 2012), the needs can be compensatory, such that the findings are due to a particular need but not the others. Modeling frustration of each of the needs as separate factors allows for the test that each of the needs is equally essential for employee functioning as argued in SDT (Deci and Ryan, 2000). Notable, the separation of the needs furthermore aligns with the literature on job insecurity and CWB outlined above suggesting that each of the needs may intervene as mediating variable in the qualitative job insecurity-CWB relationship.

We expect qualitative job insecurity to be related to both CWB-O and CWB-I via need frustration. First of all, job insecure employees may retaliate against the organization, which they likely hold accountable for the emergence of job insecurity. Job insecurity may also lead to CWB-I. Specifically, we expect CWB-I to result from qualitative job insecurity and consequent basic needs frustration through two mechanisms. First, employees experiencing qualitative insecurity have high levels of frustration, which makes them highly irritated. Such irritation may then make them less tolerant, leading to interpersonal

negative acts, which may be perceived by them as revitalizing (Salin, 2003). Second, need frustration because of qualitative job insecurity may lead to CWB-I because of displaced aggression, which refers to "the tendency to aggress against someone other than the source of strong provocation because aggressing against the source of such provocation is too dangerous" (Neuman and Baron, 2011, p. 217). Because expressing frustration and aggression the organization may be risky, individuals may redirect their aggression toward a more convenient target, such as coworkers (Marcus-Newhall *et al.*, 2000).

In short, we expect that qualitative job insecurity may lead to need frustration and, hence, CWB-O and CWB-I. Specifically, we propose:

H1. The relationship between qualitative job insecurity and organizational CWB is mediated by frustration of the needs for autonomy (*H1a*), belongingness (*H1b*) and competence (*H1c*) at work.

H2. The relationship between qualitative job insecurity and interpersonal CWB is mediated by frustration of the needs for autonomy (*H2a*), belongingness (*H2b*) and competence (*H2c*) at work.

Method

Procedure and participants

We collected a sample of Romanian workers via two routes. First, a market research company selected participants via a snowball procedure. In four Romanian cities, randomly selected participants filled out a paper-and-pencil questionnaire at home, which were handed to the operators. After completion of the questionnaire, each participant was asked to recommend a friend or acquaintance for participation and these leads were followed up to a total of 400 respondents. Second, questionnaires were collected via an online platform. A number of participants, who had participated before in online research and had approved to be contacted again for such volunteer work, received a direct invitation by e-mail. Additionally, some of them also forwarded the announcement to friends. In total, 69 questionnaires were collected through this method, but 18 of the online questionnaires were discarded due to missing data, resulting in a final sample size of 451 participants.

The age of the participants varied between 19 and 65 years old ($M = 35.63$; SD $= 9.92$). More than half of the participants (58 percent) were female. With regard to professional level, 3 percent of the respondents were unskilled blue-collar workers, 12 percent were skilled blue-collar workers, 25 percent were lower level white-collar workers (e.g. typist, secretary, operator), 25 percent were intermediate white-collar workers (e.g. programmer, instructor, representative), 26 percent were upper white-collar worker (e.g. administrator, engineer, teacher) and 8 percent held a managerial jobs. Most participants (93 percent) worked under full-time contracts and 92 percent were employed on a permanent base.

Measures

Qualitative job insecurity. Qualitative job insecurity was measured with a four-item scale, tapping into similar aspects as the items of De Witte *et al.* (2010). Sample items read "I feel insecure about the characteristics and conditions of my job in the future" and "Chances are, my job will change in a negative way." Participants were asked to rate the items on a five-point scale ranging from 1 (totally disagree) to 5 (totally agree).

Psychological need frustration. Need frustration was measured using the 18-item Work-related Basic Need Satisfaction Scale which was validated by Van den Broeck *et al.* (2010), which covers three dimensions of need frustration, with six items each: autonomy frustration (e.g. "In my job, I feel forced to do things I do not want to do"), belongingness frustration (e.g. "I don't really feel connected with other people at my job") and competence at work frustration (e.g. "I doubt whether I am able to execute my job properly"). Participants were asked to rate the items on a five-point scale ranging from 1 (totally disagree) to 5 (totally agree).

CWB. Organizational CWBs and interpersonal CWB were measured with the 12 and seven items of the Workplace Deviance Scale, respectively (Bennett and Robinson, 2000). Sample items are "Take an additional or longer break than is acceptable at your workplace" and "Say something hurtful to someone at work." Participants were asked to rate the items on a five-point scale from 1 (never) to 5 (daily).

Analysis

Internal consistencies, means, standard deviations and correlations between the variables can be found in Table I. Qualitative job insecurity related positively to frustration of each of the three needs and CWB-O, but not to CWB-I. Frustration of the needs for autonomy, competence and belongingness related positively to CWB-O, but only autonomy frustration correlated significantly with CWB-I. Both types of CWB were positively related, as were the three need frustration types.

The data were further analyzed using structural equation modeling by means of the AMOS 20 software package. We tested for common method bias by comparing three models: (M1) the hypothesized six-factor model (i.e. qualitative job insecurity, autonomy frustration, belongingness frustration, competence frustration, CWB-I and CWB-O), (M2) a model in which all items loaded on a single factor, and (M3) a model in which the items loaded on their expected factor as well as on a latent common method factor (Podsakoff *et al.*, 2003). To examine the divergent validity of the constructs, we compared (M1) the six-factor measurement model to (M4) a five-factor model where CWB-I and CWB-O were replaced by a single CWB factor, and (M5) a four-factor model, where the three needs were merged into a common factor, next to qualitative job insecurity and CWB-O and CWB-I.

We then tested the structural relationships following the method recommended by Anderson and Gerbing (1988), by employing five structural models (Table II): (M1) the saturated structural model, in which all constructs related to one another, (M6) the null model in which the constructed were unrelated, (M7) the partial mediation model, and (M8) the full mediation model. These models were compared based on a logical progression and the most parsimonious of the equally well-fitting models was accepted (Anderson and Gerbing, 1988). To assess the statistical significance of the mediation effects shown by this model, we used the bootstrap method (Mallinckrodt *et al.*, 2006; Preacher and Hayes, 2008). In total, 5000 bootstrap samples were created from the original data in the best-fitting structural model. The bootstrap samples were run with the bias corrected method to estimate the path coefficients. Direct and indirect effects, together with the associated 95 percent confidence intervals were also computed. If the confidence interval excludes zero, then the indirect effect is considered statistically significant.

Given recommendations in the literature (e.g. Coffman and MacCallum, 2005) to use unidimensional observed variables in modeling latent variables, job insecurity was modeled using all its items as observed variables, frustration of the needs for

Variables	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Gender	1.57	0.50	—							
2. Age	35.41	9.90	-0.06	—						
3. Qualitative job insecurity	2.01	0.84	0.10*	-0.03	(0.91)					
4. Autonomy frustration	2.68	0.62	0.04	-0.03	0.34**	(0.70)				
5. Belongingness frustration	2.23	0.68	0.01	0.01	0.27**	0.36**	(0.79)			
6. Competence frustration	1.79	0.64	-0.02	-0.01	0.28**	0.35**	0.35**	(0.83)		
7. CWB-O	1.68	0.51	-0.08	-0.16**	0.15**	0.32**	0.26**	0.23**	(0.82)	
8. CWB-I	1.54	0.56	-0.15**	-0.18**	-0.01	0.19**	0.03	0.08	0.62**	(0.81)

Notes: $n = 451$. Gender was encoded 1 for male, 2 for female; scale reliabilities on the diagonal. *$p < 0.05$; **$p < 0.01$

Table I.
Correlations, reliabilities, means, standard deviations

Model	χ^2	df	χ^2/df	CFI	NNFI	SRMR	RMSEA	Model comparison	$\Delta\chi^2$	Δdf	p
M1 saturated model	383.06	137	2.80	0.95	0.93	0.05	0.06				
M2 one-factor model	3,056.23	152	20.11	0.36	0.28	0.20	0.21	M2-M1	2,673.17	15	<0.001
M3 common factor model	240.15	118	2.04	0.97	0.96	0.04	0.05	M1-M3	142.91	19	<0.001
M4 five-factor model	549.87	142	3.87	0.91	0.89	0.07	0.08	M4-M1	166.81	5	<0.001
M5 four-factor model	1,079.29	146	7.39	0.79	0.76	0.09	0.12	M5-M1	696.23	9	<0.001
M6 null model	947.53	152	6.23	0.82	0.80	0.20	0.11				
M7 partial mediation model	383.06	137	2.80	0.95	0.93	0.05	0.06				
M8 full mediation model	387.48	139	2.79	0.95	0.93	0.05	0.06	M8-M7	4.42	2	0.110

Table II.
Fit indices of
SEM analyses

autonomy, competence and belongingness were each measured using three parcels of two items, CWB-O was modeled based on three parcels including two to three items each, while CWB-I was composed of three parcels including four items each. The model goodness-of-fit was evaluated by using absolute fit indices like the chi-square statistic, root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR). We also included the non-normed fit index (NNFI) and comparative fit index (CFI) as relative fit indices. Values smaller than 0.08 for SRMR and 0.06 for RMSEA and values > 0.95 for the NNFI and CFI are considered to indicate a good fit (Hu and Bentler, 1999).

Before testing the hypotheses, we controlled whether the method of data collection (i.e. paper-and-pencil method vs online), as well as a series of background variables (i.e. full-time vs part-time and temporary workers vs employees working on a permanent base) could have influenced respondents' answers. No differences were found between the respondents answering via paper-and-pencil method vs participants providing the information online. Full-time workers ($M_{\text{full-time}} = 1.69$; $SD_{\text{full-time}} = 0.51$) scored higher on CWB-O compared to part-time workers ($M_{\text{part-time}} = 1.49$; $SD_{\text{part-time}} = 0.57$; $t(448) = -2.17$, $p < 0.05$), while temporary workers reported more job insecurity ($M = 2.53$; $SD = 1.03$) compared to workers employed on a permanent base ($M = 1.97$; $SD = 0.80$; $t(449) = 3.88$, $p < 0.001$). We checked for possible relationship of the background variables of age and gender with the study variables via their respective correlations (Table I). Age correlated significantly with both types of CWB, such that older employees engaged less in CWB-O and CWB-I. Females reported more qualitative job insecurity and less CWB-I.

Because of the differences among employees with different contracts and the correlations of age and gender with the study variables, we tested our models for full-time and part-time as well as permanent and temporary employed separately. These models did not differ in terms of structural paths. In addition, we also tested the models including age and gender as control variables, but as the results did not change and for reasons of parsimoniousness, we decided not to keep them in the final versions. The results of these tests are available from the corresponding author.
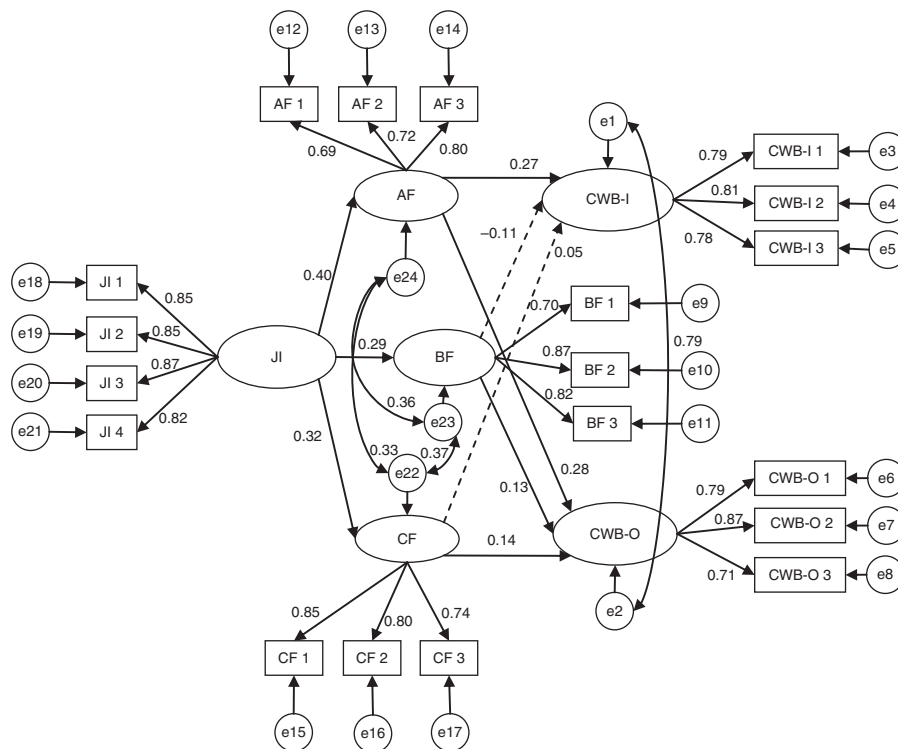
Results

With respect to model testing, first comparisons of the alternative models (see Table II) indicated that common method bias was unlikely to significantly distort participant responses. The hypothesized model M1 fitted the data better than (M2) the one-factor model. The fit of M1 was not superior to the fit of (M3) the common method factor model. Within the latter model, the common method factor explained < 8 percent of the variance. This is well below the average of 25 percent found by Williams *et al.* (1989), suggesting that common method variance does not significantly influence our results. We therefore decided to work with model M1 to test the study hypotheses (Podsakoff *et al.*, 2003).

Second, as recommended by Anderson and Gerbing (1988), we applied a selection algorithm on the five models defined in the analysis section. The results of the comparison procedure are shown in Table II. We started by comparing the partial mediation model (M7) to the full mediation model (M8). No significant difference was found between M8 and M7. M8 is more parsimonious model than to M7 as two parameters are not included: the direct effects from the IV to the DVs. The Anderson and Gerbing (1988) algorithm indicates that if constrained models are not statistically different from the saturated models, the constrained models should be chosen. We

therefore preferred M8 above M7. The results thus show that psychological need frustration fully mediated the relationship between job insecurity and both CWB-I and CWB-O. Figure 2 displays the final structural model.

Direct and indirect effects were estimated based on bootstrapping method and are presented in Table III. The results indicate that the two indirect effects in the mediations were statistically significant. Frustration of the basic psychological needs for autonomy, competence and belongingness at work thus mediated the relationships between qualitative job insecurity and both types of CWB. For CWB-O, the standardized estimate for the indirect effect was 0.20; 95 percent CI = [0.14; 0.26], $p < 0.001$. Notably, each of the three needs is likely to carry these results, as frustration of the needs for autonomy ($H1a$), belongingness ($H1b$) and competence ($H1c$) all related to CWB-O, and the specific indirect effects from qualitative job insecurity to CWB-O are all statistically significant. Full support for $H1$ was found.

For CWB-I, the standardized estimate for the indirect effect was 0.09; 95 percent CI = [0.04; 0.15], $p < 0.001$. Remarkably, solely the need for autonomy seemed to be responsible for this indirect effect, as it was the only need which was significantly related to CWB-I, and for which the specific indirect effect was statistically significant. Therefore, only $H2a$ was corroborated. As frustration of the needs for belongingness

Notes: Continuous lines show statistically significant results, while dashed lines indicate that the result was not statistically significant

Figure 2.
The proposed mediation
model (M8)

	β	95% CI	p	B	95% CI	p
Direct effects						
JI → AF	0.40	[0.30; 0.49]	<0.001	0.26	[0.19; 0.34]	<0.001
JI → BF	0.29	[0.19; 0.39]	<0.001	0.23	[0.15; 0.32]	<0.001
JI → CF	0.32	[0.22; 0.42]	<0.001	0.27	[0.18; 0.35]	<0.001
AF → CWB-I	0.27	[0.14; 0.41]	<0.001	0.28	[0.14; 0.44]	<0.001
AF → CWB-O	0.28	[0.15; 0.41]	<0.001	0.28	[0.14; 0.43]	<0.001
BF → CWB-I	−0.11	[−0.24; 0.03]	0.135	−0.09	[−0.21; 0.03]	0.135
BF → CWB-O	0.13	[0.00; 0.25]	0.048	0.10	[0.00; 0.21]	0.048
CF → CWB-I	0.05	[−0.09; 0.18]	0.498	0.04	[−0.08; 0.15]	0.503
CF → CWB-O	0.14	[0.00; 0.27]	0.045	0.11	[0.00; 0.20]	0.047
Indirect effects						
JI → CWB-I	0.09	[0.04; 0.15]	<0.001	0.06	[0.03; 0.10]	<0.001
JI → CWB-O	0.20	[0.14; 0.26]	<0.001	0.12	[0.09; 0.17]	<0.001
JI → AF → CWB-I	0.11	[0.06; 0.17]	<0.001	0.07	[0.04; 0.12]	<0.001
JI → AF → CWB-O	0.11	[0.06; 0.18]	<0.001	0.07	[0.04; 0.11]	<0.001
JI → BF → CWB-I	−0.03	[−0.08; 0.01]	0.111	−0.02	[−0.05; 0.00]	0.110
JI → BF → CWB-O	0.04	[0.00; 0.08]	0.035	0.02	[0.00; 0.05]	0.036
JI → CF → CWB-I	0.02	[−0.03; 0.06]	0.462	0.01	[−0.02; 0.04]	0.470
JI → CF → CWB-O	0.05	[0.00; 0.10]	0.039	0.03	[0.00; 0.06]	0.038

Table III.
Direct and indirect effects
in the proposed model

Notes: Standardized and unstandardized values are shown, with their respective 95 percnt bias-corrected confidence intervals and significance levels. JI, qualitative job insecurity; AF, autonomy frustration; BF, belongingness frustration; CF, competence frustration; CWB-O, organizational counterproductive work behavior; CWB-I, interpersonal counterproductive work behavior

and competence were not significantly related to CWB-I, and the specific indirect effects were not significant, *H2b* and *H2c* were not corroborated.

Discussion

The primary aim of this study is to advance the literature on job insecurity. In addition to the growing research on quantitative job insecurity, the current study taps into its qualitative counterpart, thereby answering the call for more research on this type of job insecurity (De Witte *et al.*, 2010; Sverke *et al.*, 2002). In addition to initial studies attesting to the detrimental associations of qualitative job insecurity with employee well-being (De Witte *et al.*, 2010), we examined whether qualitative job insecurity also has relevance for a behavioral outcome of high importance for organizations (Hershcovis *et al.*, 2007), i.e. CWB, directed towards both the organization (CWB-O) and individuals (CWB-I). We additionally aimed to uncover the process underlying the job insecurity-CWB relationships. Tying in with the recent broad motivational framework of SDT (Deci and Ryan, 2000), we advanced that qualitative job insecurity relates to both CWB-O and CWB-I because it frustrates the basic psychological needs of autonomy, competence and belongingness, of which the satisfaction is essential for employee thriving (Van den Broeck *et al.*, 2010).

The results highlight the detrimental associations of qualitative job insecurity with each of the basic needs. In line with the notion that qualitative job insecurity is involuntary, uncontrollable and obstructs the relations at work, qualitative job insecurity related to frustration of the basic needs for autonomy, competence and belongingness, respectively. These finding complement the study of Vander Elst *et al.* (2012) which

showed that also quantitative job insecurity frustrates each of the basic needs. In addition, the current results indicate that through need frustration, qualitative job insecurity relates to both CWB-O and CWB-I, thereby providing evidence for our hypotheses.

With respect to CWB-O, these results reflect a full mediation model. Qualitative job insecurity related positively to CWB-O and the partial mediation model did not significantly explain additional variance compared to the full mediation model. This shows that employees feeling uncertain about their valued job characteristics are more likely to engage in counterproductive behaviors, such as coming late or taking long breaks, because it taps into the basic psychological needs. Qualitative job insecurity is thus likely to be experienced as threatening or rejecting, and employees respond to such frustration by engaging in counterproductive behaviors towards the source of their frustration, i.e. the organization which cannot guarantee qualitative job security. This finding aligns with the CWB literature suggesting that organizational are most likely to elicit counterproductive behavior which primarily targets the organization (Berry *et al.*, 2007).

Only little spill over to CWB-I seems to takes place. Specifically, the correlations do not show a direct relationship between feeling insecure about one's job characteristics and CWB-I. A positive indirect relationship between these variables through psychological need frustration, and the need for autonomy in particular, emerged. The current results suggest that under conditions of job insecurity, engaging in CWB-I is mostly a matter of regaining locus of causality and becoming an origin of one's behavior again, rather than a pawn (DeCharms, 1968). This indicates that CWB resulting from need frustration because of qualitative job insecurity may spill over to others, who are not the source of the insecurity, but nevertheless represent easy targets to leash out. These results add to the literature on job insecurity by showing that this phenomenon may not only have repercussions for the individuals at stake, or the organization, but could also spill over to other groups. Future research could aim to further disentangle this process and examine, for example, the importance of displaced aggression in this relationship (Marcus-Newhall *et al.*, 2000). Such research could also contribute to the literature on CWB, as it may shed further light on the differential direct antecedents of CWB-I and CWB-O and hence on their divergent validity (see Berry *et al.*, 2007 for a similar discussion).

Notably, these results are also important in view of SDT as they show that frustration of particular needs, but not others, may fuel particular behavior. These relations may even be more complex than previously assumed. Interestingly, while autonomy frustration associated with higher CWB-I, the current results seem to suggest that frustration of the need for belongingness tended to relate negatively CWB-I. Although in the current analysis this relation failed to reach significance ($p = 0.14$), this may suggest that the frustration of the basic need for belongingness may potentially hold job insecure employees from acting negatively towards their colleagues. By refraining from CWB-I, job insecure employees may want to restore or intensify their relations with their coworkers as an alternative route to satisfy their need for belongingness. Future research, however, needs to further disentangle these results. In all, this study extends the literature on SDT as to date most research included basic need satisfaction as a mediator between, for example, a supportive work climate (e.g. Baard *et al.*, 2004) or job characteristics (Van den Broeck *et al.*, 2008) and employee well-being and task performance, but did not focus on contextual performance. This study adds to the literature focusing on the antecedents and impacts of need frustrating environments, for example, in terms of abusive leadership

(Lian *et al.*, 2012), or of quantitative job insecurity (Vander Elst *et al.*, 2012) and studies counterproductive behavior both as a broad outcome variable and by separately analyzing CWB-O and CWB-I.

Limitations
Several limitations of the current study could be addressed in future research. A first methodological limitation is that this study draws on self-reports, which may have increased the risk for common method bias and other response biases such as social desirable responding. Note, however, that the data were collected independently of the organization the employees were working for, which might have decreased the risk for social desirable answers. During data collection, we followed the guidelines of Podsakoff *et al.* (2003) to decrease this risk for common method variance, for example, by stressing that there would be no right or wrong answers. The test for common method variance suggested that our results were not contaminated. Future studies may nevertheless want to rely on objective measures. As individual perceptions lie at the core of the definition of job insecurity and need satisfaction is an inherent state, potentially CWB may be most successful route to incorporate other reports. Staufenbiel and König (2010) already related quantitative job insecurity to other reports of in-role and extra-role performance. Future work could extend this line of work towards CWB. Notably, we also took measures to avoid social desirable responding, as we stressed anonymity and we used a frequency scale rather than an agreement scale to measure CWB. While the former taps into past behaviors, the later mostly involves attitude evaluations, which are more prone to halo and schema effects and lead to inflated relations with other aspects of one's functioning (Spector *et al.*, 2010).

Second, this study is limited by its cross-sectional nature, which prevents drawing causal conclusions. In presenting our model from qualitative job insecurity over need frustration to CWB, we followed the dominant approach in the job insecurity literature. Hellgren and Sverke (2003) convincingly showed that job insecurity influenced employee well-being, rather than the other way around. Similarly, CWB is dominantly considered to emerge out of stressors, rather than to evoke them (Hershcovis *et al.*, 2007; Fox *et al.*, 2001). Finally, both theoretical and empirical work within SDT considers need satisfaction or frustration to emerge out of environmental aspects and to give rise to individual functioning. It may also be interesting to explore the reversed pattern and study whether CWB may add to motivation, which then decreases job insecurity. Such relationships would be in line with the suggestion that CWB might be enacted as a mean to restore feelings of control and competence (Bennett and Robinson, 2003) and the finding that employees' self-worth may also affect their feelings of insecurity over time (Kinnunen *et al.*, 2003).

Third, data collection was conducted via a snowball sampling procedure, which has been criticized for the lack of representativeness and selection bias problems (Baltar and Brunet, 2012). Snowball sampling was used here to increase the confidence of respondents and their willingness to participate, as to date few studies on work-related behavior have been conducted among such Romanian employees to date. Future studies may nevertheless aim to study the generalizability of these results towards representative or occupation-specific samples, potentially also in other western and non-western societies. Such studies may also want to scrutinize these relations in highly heterogeneous samples and pay attention to the role of, for instance, full-time vs part-time work and permanent vs temporary work. Research on these background variables is currently inconclusive, for example, regarding their impact on job

insecurity (Laine *et al.*, 2009 vs Näswall and De Witte, 2003). Differences regarding these groups may be of high practical relevance and future studies may want to take stock on their impact in representative samples.

Finally, from a theoretical point of view, future research may want to expand the current model and examine both quantitative and qualitative job insecurity and their relations to a host of outcomes, including well-being, attitudes and behavior in one comprehensive model. Such research would allow investigating the relative importance of both types of insecurity on a broad spectrum of outcomes related to employee thriving (e.g. De Witte *et al.*, 2012). In addition, such research could aim to shed further light on the relative importance of the needs for autonomy, competence and belongingness relative to other potential mechanism such as locus of causality (DeCharms, 1968), goal obstruction (Locke and Latham, 1990) and self-efficacy (Bandura, 1997) and psychological contract breach (Rousseau, 1995), which seem to be closely related to these needs, respectively. Intriguingly, the current results favor the full mediation model, suggesting that frustration vs satisfaction of the basic psychological needs is the essential mechanism through which qualitative job insecurity associates with CWB. These results fit with the expectations of SDT and previous empirical studies that the basic psychological needs may indeed be a comprehensive unifying mechanism capturing many processes through which the work environment impacts on employees (Rosen *et al.*, in press). Finally, future work could also elaborate on CWB, and particularly CWB-O as an outcome of job insecurity and need frustration. Specifically, as CWB-O may be broken down into different types (e.g. abuse, sabotage, withdrawal; Spector *et al.*, 2006), further research may examine which of these types is affected most in job insecure and need frustrating circumstance.

Practical implications
Despite these limitations and need for future research, the current results are relevant for practice. Specifically, they show that increased feelings of job insecurity may generate unwanted outcomes for both individuals (e.g. in terms of well-being and health) and organizations, for example, in terms of CWB-O and CWB-I. Changes that are made to employees' jobs, for example, in view of mergers or cost-cutting, may thus lead to high costs. To prevent such negative outcomes, employers should aim to avoid or diminish qualitative job insecurity, for example, by providing adequate information or reassurance that employees' valued job features will remain constant. In addition, employers should try to buffer the relationship between experiencing qualitative insecurity and need frustration, for example, by allowing employees to have voice in the change process or implement changes to increase satisfaction of the need for autonomy, by providing feedback on potential outcomes of the change process to stimulate competence satisfaction and by fostering social support and trust among employees and their supervisors to satisfy the need for belongingness. Finally, under circumstances of insecurity, employers should invest in preventing need frustration from resulting in CWB-O and CWB-I, for example, by helping employees to channel their frustrations towards more beneficial behaviors.

Conclusions
Our study contributes to the understanding of qualitative job insecurity by demonstrating that it is associated with both CWB-O and CWB-I via frustration of the basic psychological needs. In studying this model, we advance the research on job

insecurity by: first, focusing on the importance of having one's valued job aspects (i.e. qualitative job insecurity) rather than one's job as such (i.e. quantitative job insecurity) threatened; second, studying behavioral outcomes of qualitative job insecurity directed towards the organization (i.e. CWB-O) and others at work (i.e. CWB-I), thereby also filling a void in the CWB-literature; and third, exploring the mediating mechanism through which job insecurity relates to these outcomes in terms of the frustration of the needs for autonomy, competence and belongingness, thereby highlighting their relevance in the dark side of employee functioning and their differential impact. This study thus holds theoretical relevance in the realm of job insecurity, CWB and SDT. The results are also practically relevant. As we highlight the different steps through which qualitative job insecurity leads to unwanted outcomes, we can point at different measures employers can take to avoid the demotivating and unwanted behavioral outcomes of qualitative job insecurity.

References

Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.

Ashford, S.J., Lee, C. and Bobko, P. (1989), "Content, causes and consequences of job insecurity: a theory-based measure and substantive test", *Academy of Management Journal*, Vol. 4 No. 4, pp. 803-829.

Baard, P.P., Deci, E.L. and Ryan, R.M. (2004), "Intrinsic need satisfaction: a motivational basis of performance and well-being in two work settings", *Journal of Applied Social Psychology*, Vol. 34 No. 10, pp. 2045-2068.

Baltar, F. and Brunet, I. (2012), "Social research 2.0: virtual snowball sampling method using Facebook", *Internet Research*, Vol. 22 No. 1, pp. 57-74.

Bandura, A. (1997), *Self-Efficacy: The Exercise of Control*, W.H. Freeman, New York, NY.

Bennett, R.J. and Robinson, S.L. (2000), "Development of a measure of workplace deviance", *Journal of Applied Psychology*, Vol. 85 No. 3, pp. 349-360.

Bennett, R.J. and Robinson, S.L. (2003), "The past, present and future of workplace deviance research", in Greenberg, J. (Ed.), *Organizational Behavior: The State of the Science*, 2nd ed., Erlbaum, Mahwah, NJ, pp. 247-281.

Berry, C.M., Ones, D.S. and Sackett, P.R. (2007), "Interpersonal deviance, organizational deviance and their common correlates: a review and meta-analysis", *Journal of Applied Psychology*, Vol. 92 No. 2, pp. 410-424.

Bordia, P., Jones, E., Gallois, C., Callan, V. and DiFonzo, N. (2006), "Management are aliens! Rumors and stress during organizational change", *Group and Organization Management*, Vol. 31 No. 5, pp. 601-621.

Cheng, G.H.-L. and Chan, D.K.-S. (2008), "Who suffers more from job insecurity? A meta-analytic review", *Applied Psychology: An International Review*, Vol. 57 No. 2, pp. 272-303.

Chirumbolo, A. and Areni, A. (2010), "Job insecurity influence on job performance and mental health: testing the moderating effect of the need for closure", *Economic and Industrial Democracy*, Vol. 31 No. 2, pp. 195-214.

Coffman, D.L. and MacCallum, R.C. (2005), "Using parcels to convert path analysis models into latent variable models", *Multivariate Behavioral Research*, Vol. 40 No. 2, pp. 235-259.

Cohen-Charash, Y. and Spector, P.E. (2001), "The role of justice in organizations: a meta-analysis", *Organizational Behavior and Human Decision Processes*, Vol. 86 No. 2, pp. 278-321.

Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C.O. and Ng, K.Y. (2001), "Justice at the millennium: a meta-analytic review of 25 years of organizational justice research", *Journal of Applied Psychology*, Vol. 86 No. 3, pp. 425-445.

Dalal, R.S. (2005), "A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior", *The Journal of Applied Psychology*, Vol. 90 No. 6, pp. 1241-1255.

Davy, J.A., Kinicki, A.J. and Scheck, C.L. (1997), "A test of job security's direct and mediated effects on withdrawal cognitions", *Journal of Organizational Behavior*, Vol. 18 No. 4, pp. 323-349.

DeCharms, R. (1968), *Personal Causation: The Internal Affective Determinants of Behavior*, Academic Press, New York, NY.

Deci, E.L. and Ryan, R.M. (2000), "The 'What' and 'Why' of goal pursuits: human needs and the self-determination of behavior", *Psychological Inquiry*, Vol. 11 No. 4, pp. 227-268.

De Cuyper, N., Baillien, E. and De Witte, H. (2009), "Job insecurity, perceived employability and targets' and perpetrators' experiences of workplace bullying", *Work and Stress*, Vol. 23 No. 3, pp. 206-224.

De Cuyper, N. and De Witte, H. (2008), "Job insecurity and employability among temporary workers: a theoretical approach based on the psychological contract", in Näswall, K., Hellgren, J. and Sverke, M. (Eds), *The Individual in the Changing Working Life*, Cambridge University Press, Cambridge, pp. 88-107.

Dekker, W.A. and Schaufeli, W.B. (1995), "The effects of job insecurity on psychological health and withdrawal: a longitudinal study", *Australian Psychologist*, Vol. 30 No. 1, pp. 57-63.

De Witte, H., De Cuyper, N., Handaja, Y., Sverke, M., Näswall, K. and Hellgren, J. (2010), "Associations between quantitative and qualitative job insecurity and well-being. A test in Belgium banks", *International Studies of Management and Organizations*, Vol. 40 No. 1, pp. 40-56.

De Witte, H., De Cuyper, N., Vander Elst, T., Vanbelle, E. and Niesen, W. (2012), "Job insecurity: review of the literature and a summary of recent studies from Belgium", *Romanian Journal of Applied Psychology*, Vol. 14 No. 1, pp. 11-17.

Fox, S., Spector, P.E. and Miles, D. (2001), "Counterproductive work behavior (CWB) in response to job stressors and organizational justice: some mediator and moderator tests for autonomy and emotions", *Journal of Vocational Behavior*, Vol. 59 No. 3, pp. 291-309.

Fox, S., Spector, P.E., Goh, A. and Bruursema, K. (2007), "Does your coworker know what you're doing? Convergence of self- and peer-reports of counterproductive work behavior", *International Journal of Stress Management*, Vol. 14 No. 1, pp. 41-60.

Gagné, M. and Deci, E.L. (2005), "Self-determination theory and work motivation", *Journal of Organizational Behavior*, Vol. 26 No. 4, pp. 331-362.

Gouldner, A.W. (1960), "The norm of reciprocity: a preliminary statement", *American Sociological Review*, Vol. 25 No. 2, pp. 161-178.

Greenhalgh, L. and Rosenblatt, Z. (1984), "Job insecurity: toward conceptual clarity", *Academy of Management Review*, Vol. 9 No. 3, pp. 438-448.

Hellgren, J. and Sverke, M. (2003), "Does job insecurity lead to impaired well-being or vice versa? Estimation of cross-lagged effects using latent variable modeling", *Journal of Organizational Behavior*, Vol. 24 No. 2, pp. 215-236.

Hellgren, J., Sverke, M. and Isaksson, K. (1999), "A two-dimensional approach to job insecurity: consequences for employee attitudes and well-being", *European Journal of Work and Organizational Psychology*, Vol. 8 No. 2, pp. 179-195.

Hershcovis, M.S., Turner, N., Barling, J., Arnold, K., Dupré, K.E., Inness, M., LeBlanc, M.M. and Sivanathan, N. (2007), "Predicting workplace aggression: a meta-analysis", *Journal of Applied Psychology*, Vol. 92 No. 1, pp. 228-238.

Hu, L. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling*, Vol. 6 No. 1, pp. 1-55.

Jones, D.A. (2009), "Getting even with one's supervisor and one's organization: relationships among types of injustice, desires for revenge, and counterproductive work behaviors", *Journal of Organizational Behavior*, Vol. 30 No. 4, pp. 525-542.

Kinnunen, U., Feldt, T. and Mauno, S. (2003), "Job insecurity and self-esteem: evidence from cross lagged relations a 1 year longitudinal sample", *Personality and Individual Differences*, Vol. 35 No. 3, pp. 617-632.

Krischer, M.M., Penney, L.M. and Hunter, E.M. (2010), "Can counterproductive work behaviors be productive? CWB as emotion-focused coping", *Journal of Occupational Health Psychology*, Vol. 15 No. 2, pp. 154-166.

Laine, M., van der Heijden, B.I.J.M., Wickström, G., Hasselhorn, H.-M. and Tackenberg, P. (2009), "Job insecurity and intent to leave the nursing profession in Europe", *International Journal of Human Resource Management*, Vol. 20 No. 2, pp. 420-438.

Lazarus, R.S. and Folkman, S. (1984), *Stress, Appraisal and Coping*, Springer, New York, NY.

Lian, H., Ferris, D.L. and Brown, D.J. (2012), "Does taking the good with the bad make things worse? How abusive supervision and leader-member exchange interact to impact need satisfaction and organizational deviance", *Organizational Behavior and Human Decision Processes*, Vol. 117 No. 1, pp. 41-52.

Lim, V.K.G. (1996), "Job insecurity and its outcomes: moderating effects of work-based and nonwork-based social support", *Human Relations*, Vol. 49 No. 2, pp. 171-194.

Locke, E.A. and Latham, G.P. (1990), *A Theory of Goal Setting and Task Performance*, Prentice Hall, Englewood Cliffs, NJ.

Mallinckrodt, B., Abraham, T.W., Wei, M. and Russell, D.W. (2006), "Advance in testing statistical significance of mediation effects", *Journal of Counseling Psychology*, Vol. 53 No. 3, pp. 372-378.

Marcus-Newhall, A., Pedersen, W.C., Carlson, M. and Miller, N. (2000), "Displaced aggression is alive and well: a meta-analytic review", *Journal of Personality and Social Psychology*, Vol. 78 No. 4, pp. 670-689.

Näswall, K. and De Witte, H. (2003), "Who feels insecure in Europe? Predicting job insecurity from background variables", *Economic and Industrial Democracy*, Vol. 24 No. 2, pp. 189-215.

Neuman, J.H. and Baron, R.A. (2011), "Social antecedents of bullying: a social interactionist perspective", in Einharsen, S., Hoel, H., Zapf, D. and Cooper, G.L. (Eds), *Bullying and Harassment in the Workplace: Developments in Theory, Research and Practice*, CRC Press, New York, NY, pp. 201-225.

Otto, K., Hoffmann-Biencourt, A. and Mohr, G. (2011), "Is there a buffering effect of flexibility for job attitudes and work-related strain under conditions of high job insecurity and regional unemployment rate?", *Economic and Industrial Democracy*, Vol. 32 No. 4, pp. 609-630.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.

Preacher, K.J. and Hayes, A.F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*, Vol. 40 No. 3, pp. 879-891.

Pyszczynski, T., Greenberg, J. and Solomon, S. (2000), "Toward a dialectical analysis of growth and defensive motives", *Psychological Inquiry*, Vol. 11 No. 4, pp. 301-305.

Reisel, W.D., Probst, T.M., Chia, S.-L., Maloles, C.M. and König, C.J. (2010), "The effects of job insecurity on job satisfaction, organizational citizenship behavior, deviant behavior and negative emotions of employees", *International Studies of Management and Organizations*, Vol. 40 No. 1, pp. 74-91.

Richter, A., Näswall, K., Bernhard-Oettel, C. and Sverke, M. (2013), "Job insecurity and well-being: the moderating role of job dependence", *European Journal of Work and Organizational Psychology*, Vol. 23 No. 6, pp. 816-829.

Robinson, S.L. and Bennett, R.J. (1995), "A typology of deviant workplace behaviors: a multidimensional scaling study", *Academy of Management Journal*, Vol. 38 No. 2, pp. 555-572.

Rosen, C.C., Ferris, D.L., Brown, D., Chen, Y. and Yan, M. (in press), "Perceptions of organizational politics: a need satisfaction Paradigm", *Organizational Science*, Vol. 25 No. 4, pp. 1026-1055.

Rousseau, D.M. (1995), *Psychological Contracts in Organisations: Understanding Written and Unwritten Agreements*, Sage Publications, Thousand Oaks, CA.

Salin, D. (2003), "Ways of explaining workplace bullying: a review of enabling, motivating and precipitating structures and processes in the work environment", *Human Relations*, Vol. 56 No. 10, pp. 1213-1232.

Semmer, N.K., Tschan, F., Meier, L.L., Facchin, S. and Jacobshagen, N. (2010), "Ilegitimate tasks and counterproductive work behavior", *Applied Psychology: An International Review*, Vol. 59 No. 1, pp. 70-96.

Spector, P.E. and Fox, S. (Eds) (2005), "The stressor-emotion model of counterproductive work behavior", *Counterproductive Work Behavior: Investigations of Actors and Targets*, APA, Washington, DC, pp. 151-174.

Spector, P.E., Bauer, J.A. and Fox, S. (2010), "Measurement artifacts in the assessment of counterproductive work behavior and organizational citizenship behavior: do we know what we think we know?", *Journal of Applied Psychology*, Vol. 95 No. 4, pp. 781-790.

Spector, P.E., Fox, S., Penney, L.M., Bruursema, K., Goh, A. and Kessler, S. (2006), "The dimensionality of counterproductivity: are all counterproductive behaviors created equal?", *Journal of Vocational Behavior*, Vol. 68 No. 3, pp. 446-460.

Staufenbiel, T. and König, C.J. (2010), "A model for the effects of job insecurity on performance, turnover intention and absenteeism", *Journal of Occupational and Organizational Psychology*, Vol. 83 No. 1, pp. 101-117.

Sverke, M., Hellgren, J. and Näswall, K. (2002), "No security: a meta-analysis and review of job insecurity and its consequences", *Journal of Occupational Health Psychology*, Vol. 7 No. 3, pp. 242-264.

Sverke, M., De Witte, H., Näswall, K. and Hellgren, J. (2010), "European perspectives on job insecurity: editorial introduction", *Economic and Industrial Democracy*, Vol. 31 No. 1, pp. 175-178.

Van den Broeck, A. (2012), "Work motivation: a conceptual and empirical overview and suggestions for the future avenues from the perspective of self-determination theory", *Psychology of Human Resources Journal*, Vol. 2 No. 2, pp. 15-32.

Van den Broeck, A., Vansteenkiste, M., De Witte, H. and Lens, W. (2008), "Explaining the relationships between job characteristics, burnout and engagement: the role of basic psychological need satisfaction", *Work and Stress*, Vol. 22 No. 3, pp. 277-294.

Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B. and Lens, W. (2010), "Capturing autonomy, competence and relatedness at work: construction and initial validation of the work-related basic need satisfaction scale", *Journal of Occupational and Organizational Psychology*, Vol. 83 No. 4, pp. 981-1002.

Vander Elst, T., Van den Broeck, A., De Witte, H. and De Cuyper, N. (2012), "The mediating role of frustration of psychological needs in the relationship between job insecurity and work-related well-being", *Work and Stress*, Vol. 26 No. 3, pp. 252-271.

Wells, J.T. (1999), "A fistful of dollars", *Security Management*, Vol. 43 No. 8, pp. 70-75.

Williams, L.J., Cote, J.A. and Buckley, M.R. (1989), "Lack of method variance in self-reported affect and perceptions at work: reality or artifact?", *Journal of Applied Psychology*, Vol. 74 No. 3, pp. 462-468.

Further reading

Loi, R., Lam, L.W. and Chan, K.W. (2012), "Coping with job insecurity: the role of procedural justice, ethical leadership and power distance orientation", *Journal of Business Ethics*, Vol. 108 No. 3, pp. 361-372.

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