



Changes in Job Insecurity and Extraorganizational Outcomes: The Effects on Consumption and Major Life Decisions in Slovak Republic

Le conseguenze extra-organizzative dei cambiamenti nella job insecurity: gli effetti sui consumi e sui progetti di vita in Slovacchia

Cinzia Castiglioni^a, Michaela Hevierova^a, Edoardo Lozza^a

^a*Faculty of Psychology, Università Cattolica del Sacro Cuore, Milan, Italy*

ARTICLE INFO

Submitted: 10 July 2019
Accepted: 08 October 2019
DOI: 10.4458/2733-03

ABSTRACT

Over the last few decades several economic, political, and technological changes surrounding work have left people insecure about their jobs. Traditionally, research on insecure workers has focused on organizational consequences of job insecurity and on employees' psychophysical well-being. However, some recent studies found that job insecurity is also associated with extraorganizational outcomes related to saving and spending decision-making. The purpose of this paper is to replicate in the Slovakian context the study of Lozza et al. (2017) to examine the effect of job insecurity on such extra-organizational outcomes. Using a simulation experiment research design, 361 Slovakian participants were asked to evaluate their job insecurity and their inclination towards daily consumption and major life decisions. Results support the findings from the original study. It is shown that changes of both contract of employment and context can affect perceived job insecurity, with context (e.g., economic downturns) having a stronger influence than contract of employment. In addition, changes in job insecurity significantly affect withholding daily consumption and major life decisions', with perceived job insecurity having a greater influence on the latter. The effects of context-related specificities, such as employment protection legislation, are also discussed.

Keywords: job insecurity; temporary employment; consumer behaviour; global financial crisis.

RIASSUNTO

I cambiamenti economici, politici e tecnologici verificatisi negli ultimi anni nel mondo del lavoro hanno aumentato l'insicurezza percepita da molti lavoratori. La ricerca sull'insicurezza lavorativa si è tradizionalmente focalizzata sulle conseguenze organizzative prodotte da lavoratori insicuri e sul benessere psico-fisico. Recentemente tuttavia è aumentato l'interesse verso le conseguenze extra-organizzative dell'insicurezza lavorativa. Lo scopo di questo lavoro è replicare in un contesto slovacco lo studio di Lozza et al. (2017) che indaga gli effetti extra-organizzativi dell'insicurezza sul lavoro. Utilizzando una simulazione sperimentale, 361 partecipanti slovacchi hanno valutato la propria insicurezza lavorativa e la propria propensione a compiere sacrifici in relazione alla spesa quotidiana e a progetti di vita a lungo termine. I risultati confermano le principali evidenze dello studio originario. Cambiamenti legati sia al contratto di lavoro, sia al contesto possono influenzare l'insicurezza lavorativa percepita, in particolare i cambiamenti legati al contesto (per esempio, una recessione economica) sembrano avere maggiore influenza di quelli del contratto di lavoro. Inoltre, i cambiamenti nel livello di insicurezza lavorativa percepita aumentano le rinunce nella spesa quotidiana e nelle scelte progettuali a lungo termine. Infine, sono state esaminate alcune differenze legate alle specificità contestuali – ad esempio, la legislazione sulla protezione del lavoro.

Parole chiave: insicurezza del lavoro; lavoro temporaneo; comportamento dei consumatori; crisi finanziaria globale.

*Corresponding author
Cinzia Castiglioni
Department of Psychology, Università
Cattolica del Sacro Cuore
L.go Gemelli 1, 20123, Milan, Italy.
Phone: +39 02 7234 2907
Email: cinzia.castiglioni@unicatt.it
(C. Castiglioni)



Introduction

Over the last few decades, the global labour market has undergone several major transformations. Economic, political, and technological changes surrounding work – such as the most recent global economic recession and industrial restructuring – have left many people insecure about the future of their jobs (Benach et al., 2014; Kalleberg, 2011). Not surprisingly, the threat of job loss has become a rising social problem and the outcomes of job insecurity have become a topic of increasing concern among scholars.

We can find various definitions of job insecurity in the extant literature (for an integrative review, see Shoss, 2017). Scholars distinguish between ‘objective’ job insecurity (i.e. specific features of the job contract and temporary employment conditions) and ‘subjective’ job insecurity (i.e. the subjective perception of threat to job continuity and fear of job loss; De Witte and Näswall, 2003; Sverke et al., 2006). Other studies stress the importance of distinguishing between quantitative and qualitative job insecurity (Chirumbolo et al., 2017; Hellgren et al., 1999). Quantitative job insecurity is referred to the uncertainty about the loss or the future existence of the current employment. Qualitative job insecurity refers to perceived threats of losing valued characteristics of one’s job in such as deterioration of working conditions, lack of career opportunities, salary, important tasks and responsibilities.

When studying the outcomes of job insecurity, most scholars have focused their attention to organizational consequences. Job insecurity is negatively related to organizational outcomes such as job performance, job satisfaction, trust, job involvement and organizational commitment, and positively related to turnover and absenteeism (see Cheng and Chan, 2008; Sverke et al., 2002). Limited attention has been given to extra-organizational outcomes, except for the effects of job insecurity on declined psychophysical well-being, stress, anxiety and health related problems (Chirumbolo and Areni, 2010; De Witte et al., 2016; Ferrie, 2001).

Only recently scholars have started to study other extra-organizational outcomes, such as economic behavior of insecure employees. In economic literature, some studies investigated the impact of job insecurity on household consumption (Stephens, 2004; Benito, 2006) and mixed evidence was found. Such mixed evidence might be explained by the fact that a systematic distinction between subjective and objective job insecurity is often not taken into account. In psychological literature, other recent studies took into consideration the conceptual difference between subjective and objective job insecurity and, by drawing on Conservation of Resource Theory (COR; Hobfoll, 1989), hypothesized that job insecurity is associated with two different extra-organizational outcomes related to saving/spending decision-making: daily consumption and major life decisions (Lozza et al., 2013; Lozza et al., 2017). Daily consumption is short-term and repetitive (i.e. food, clothing, cosmetics), whereas major life decisions (i.e. decisions that represent discontinuity in an employee’s life cycle, such as buying a house, getting married, having children) are long-term and less recurring. Both a cross-sectional study with a representative sample of employees (Lozza et al., 2013) and a simulation experiment research design (Lozza et al., 2017) found that subjectively insecure workers are less willing to engage in daily consumption and major life decisions. Although coming to the same conclusions, the above-mentioned studies were performed in the same country, Italy, after the most recent Global Financial Crisis (for the impact of the crisis on spending/saving decisions in the Italian context, see Lozza et al., 2016). Italy’s unstable socio-economic condition, fragile public finances situation (at the time the study was conducted, the Italian public debt was 131.8% of GDP, the second highest among European countries)¹, and high levels of unemployment rate in a rising trend (at the time the study was conducted, the unemployment rate was 12.7%, whereas the EU28 was 10.2%)² raise questions about the generalisability of such findings to other countries with different socio-economic history and background.

The present study aims to explore the cross-cultural generalisability of the original Lozza et al. (2017) findings in the Slovakian context via a replication study. Replication, that is the

¹ http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=sdg_17_40&plugin=1

² <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tipsun20&plugin=1>

reproducibility or stability of research results (Monroe, 1992), contributes to the establishment of external validity, by enabling the generalisation of findings to other populations (Barwise, 1995).

Slovak Republic can represent a good testing ground for a comparison with Italy. Since the establishment of the Slovak Republic in January 1993, Slovakia has undergone a transition from a centrally planned economy to a free market economy (for a historical review, see Buček, 2010). The decision to implement a radical transition model towards a market economy in post-socialist Czechoslovakia immediately after 1989 had painful consequences, including unemployment. During the first period (1993 to 1998) of the existence of the Slovak economy, economic growth was based mostly on increasing internal and external debt, causing problems with the high deficit of payment balance, growing foreign debt, and worsening in the field of public finance in general. A more consolidating and reform-oriented period followed from 1998 onwards, and a more stable confirmation of the positive effects of reforms started to be visible after 2004 with an increase in GDP and a decrease in unemployment. However, being the Slovak economy a very small and open economy, it could not avoid the scope of the global financial crisis in 2008, whose effects were accentuated by the so call ‘gas-crisis’ and adoption of Euro in 2009. Nonetheless, Slovak Republic has faced a robust growth and economic stability in the last few years (OECD, 2017)³. At the time this study was conducted, the fiscal situation was solid, with a public debt around 53% of GDP, far below the OECD average and below Italy. Although unemployment rate was at 13.2% – very similar to the Italian one and above EU28 – the trend had started decreasing, as confirmed by a rise in employment in the following years. To summarize, although recovering from an unstable political situation and a public debt crisis, in recent years Slovak Republic has shown signals of a steady growth which is projected to continue. At contrast, Italy has shown mediocre economic performance since early 2000 and the global crisis had a deteriorating effect on the already fragile Italian economy. In the most recent years the growth has stalled, showing no clear trend of recovery and leaving the country as the only country in EU – together with Greece – that has failed to recover to the pre-crisis levels.

To the best of our knowledge, there is a dearth of studies on job insecurity in the Slovakian context. An exception is a study by Ištoňová, and Fedáková (2015), in which both organisational predictors and individual consequences of job insecurity are analysed based on European Social Survey R5 data. Results showed that the type of employment contract (i.e. objective job insecurity) was not a significant predictor of job insecurity. Easy job replacement, low opportunities for advancement (as job characteristics) and downsizing (as an organisational characteristic), instead, were significantly associated with higher levels of job insecurity. As for the outcomes, job insecurity led to higher levels of job dissatisfaction, life dissatisfaction, and dissatisfaction with work-life balance.

By adopting Lozza et al. (2017) original simulation experiment design, the present study investigates the effects of *changes* (for the better/worse) of perceived job insecurity, rather than *states* of job insecurity on extra-organizational outcomes. In other words, it studies how changes in job insecurity can affect extra-organizational outcomes in a dynamic rather than static way (i.e. how a change – either an increase or a reduction – in job security can influence consumption and major life decisions). To achieve that, it will investigate two possible predictors of perceived job insecurity – the contract of employment and the context, in order to manipulate job insecurity – and two possible extra-organizational outcomes – the withholding of daily consumption and major life decisions’ unaffordability. By following the original study, next section will present the rationale and hypotheses, as well as the research design.

³ <http://www.oecd.org/eco/surveys/economic-survey-slovak-republic.htm>

Rationale and Hypotheses

Manipulation of job insecurity

Previous works that have analysed the relation between objective job insecurity (i.e. contract of employment) and subjective job insecurity (i.e. the subjective perception of threat to job continuity) confirm that objective job insecurity does not necessarily result in subjective job insecurity (e.g., Dekker, 2010; De Witte and Näswall, 2003). As above mentioned, this also appears to be the case for the Slovakian context (Ištoňová and Fedáková, 2015). Following Lozza et al. (2017), the manipulation of perceived job insecurity cannot rely solely on a change of contract of employment (e.g. from temporary to permanent and vice-versa). Other factors that are context-related can influence job insecurity, such as the economic stability of a country (e.g. economic downturns and recoveries; Lübke and Erlinghagen, 2014; Voon and Ma, 2014) and the internal stability of a workplace (e.g., downsizing, organizational change, lack of career opportunities; Greenhalgh and Rosenblatt, 1984; Keim et al., 2014; Sutton, 1987). In order to effectively manipulate job insecurity, both contract of employment and the above-mentioned elements from the economic and organizational context will be considered as influencing factors. Thus, the following hypotheses are given:

Hypothesis 1: A change for the worse (better) of contract of employment increases (reduces) job insecurity.

Hypothesis 2: A change for the worse (better) of context increases (reduces) job insecurity.

Testing the afore-mentioned hypotheses is a preliminary step in the study, as it will allow to make sure that the simulation experiment design is effective in manipulating job insecurity.

Extra-organizational outcomes of changes in job insecurity

After testing the effectiveness of job insecurity manipulation, the impact of changes in job insecurity on two extra-organizational outcomes (i.e. daily consumption and major life decisions) has been examined. A threat to job continuity and, therefore, to income continuity, may reduce individuals' sense of agency and disengage people from both daily consumption and the possibility to attain life goals (i.e. major life decisions; Fryer, 1986). As Lozza et al. (2017) suggest, there are both empirical and theoretical reasons to believe that job insecurity and these potential extraorganizational outcomes are related. From an empirical perspective, macro-economic research has pointed out that job insecurity can relate to both spending (Benito, 2006; De Lucia and Meacci, 2005; Stephens, 2004) and saving (job insecurity as a motivation to save monthly income; Bessho and Tobita, 2008). From the theoretical perspective of the Conservation of Resource Theory (COR; Hobfoll, 1989), job security can be identified as a valuable resource (Selenko et al., 2013) and insecurity about continuity in a job situation threatens valued resources, such as salary or social status (Jahoda, 1982). Since 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' (Hobfoll, 1989:516), stable employment (e.g., permanent job contract, solid organization, and secure context) can be considered as a resource that is valued by employees not only for its own purpose (Jahoda, 1981; Warr, 1987) but also for its ability to facilitate the attainment of other valuable resources (e.g., housing, food, clothing, income). Thus, both a perceived or actual loss of job security can motivate insecure employees to withdraw from other activities that demand their resources, reducing their consumption or withholding/postponing some major life decisions, in an effort to avoid further loss and minimize net loss of resources (Hobfoll, 2001).

In order to test whether a change of job insecurity (a threat to a valuable resource) affects extraorganizational decision-making so that a balance of other valued resources is maintained, the following hypotheses are given:

Hypothesis 3: A change that increases (diminishes) job insecurity, directly predicts an increase (reduction) in withholding daily consumption.

Hypothesis 4: A change that increases (diminishes) job insecurity, directly predicts increased (reduced) life projects' unaffordability.

Method

Participants

A sample of 361 Slovakian participants took part in the study (mean age = 28.0, s.d. = 9; 75.6% females; 76.5% single; 71.5% graduated; 36.5% non-permanent employee). A convenience sampling technique was used through personal contacts, social media and web-based recruitment. Anonymity was guaranteed to all participants.

Following Lozza et al.'s (2017) research design, a sequence of 2 different scenarios (out of 4 available scenarios) was presented to each participant, for a total of 12 different sequences. The sample size allowed us to have approximately 30 respondents for each sequence, and the 12 different groups were comparable for sex, age, and employment. Two chi-square tests of independence were performed to examine the relation between groups and sex, and between groups and employment. The relation between these variables was non-significant for both sex ($\chi^2(11, 361) = 18.932, p = n.s.$) and employment ($\chi^2(22, 361) = 23.226, p = n.s.$). In addition, a one-way ANOVA was used to compare age between groups, and results were not significant ($F(11, 361) = 1.383, p = n.s.$). Taken together, these results suggest that groups are equivalent. The different sequences allowed us to examine how perceived job insecurity is affected by (1) a change of employment condition (from permanent to temporary and vice-versa) in a stable context (either secure or insecure); (2) a change of context (from secure to insecure and vice-versa) maintaining the same employment condition (either permanent or temporary); (3) a change of both employment condition and context.

Procedure and instrument

In keeping with the replication purpose of this study, we adopted the same procedure and instrument of Lozza et al. (2017). We presented scenarios in an online questionnaire in which we manipulated two antecedents of job insecurity: (1) contract of employment (temporary vs. permanent) and (2) context (secure vs. insecure). The temporary (permanent) employment condition corresponds to a fixed-term (on-going) job contract, while the insecure (secure) context corresponds to a period of economic crisis (out of the crisis), working in a not solid (solid) company with scarce (good) opportunities for career advancement. The use of fictitious scenarios in the experimental questionnaire was necessary in order to manipulate the perceived job security/insecurity (see Rationale and Hypotheses). Although such experimental design is of lower external validity than if real working conditions of participants were used, it allows testing the impact of changes in job insecurity on extra-organizational outcomes in both directions – that is, moving from a condition of perceived job insecurity to a condition of perceived job security, and vice-versa. The simulation experiment is a 2 (temporary employment vs. permanent employment) x 2 (secure context vs. insecure context) factorial design, which resulted in 4 different scenarios: (1) secure – temporary; (2) insecure – temporary; (3) insecure – permanent; (4) secure – permanent (see Table 1).

Table 1. Scenarios for the simulation research design

		CONTEXT	
		Secure	Insecure
EMPLOYMENT	Temporary	<ul style="list-style-type: none"> • Fixed-term contract • Out of the crisis, solid company with good opportunities for career advancement 	<ul style="list-style-type: none"> • Fixed-term contract • Economic crisis, not solid company with scarce opportunities for career advancement
	Permanent	<ul style="list-style-type: none"> • On-going contract • Out of the crisis, solid company with good opportunities for career advancement 	<ul style="list-style-type: none"> • On-going contract • Economic crisis, not solid company with scarce opportunities for career advancement

Participants were firstly asked to imagine being in a condition of temporary/permanent employment and in a secure/insecure context (Time 1). In each scenario, regardless of the conditions, they were told to imagine being paid a net monthly salary of € 950⁴, which was kept stable in order not to influence the perceived job insecurity. After reading the scenario, participants responded to a list of items from three different scales. All scales were translated into Slovakian and Cronbach- α for all slovakian scales was estimated. Back translation of all items was done by a native Slovak speaker who is also fluent in Italian (bilingual):

- Job insecurity (Chirumbolo et al., 2015), Cronbach- α =.90. It was composed of 5 items (e.g. “I am afraid I will get fired”) and respondents were asked to express their agreement/disagreement on a 5-points Likert-type scale (1 = strongly disagree to 5 = strongly agree);
- Withholding daily consumption (Lozza et al., 2017), Cronbach- α =.85. Respondents answered the question “How likely it is that you will decide to reduce/withhold your daily consumption in the following categories?” in relation to 10 different market sectors, on a 5-points Likert-type scale (1 = very unlikely to 5 = very likely);
- Major life decisions’ affordability (Lozza et al., 2017), Cronbach- α =.88. Respondents answered the question “How likely it is that you could afford to...” in relation to 8 different long-term life projects (1 = very unlikely to 5 = very likely). Reversed scores were used during analyses.

In the following step (Time 2), participants were asked to imagine that 3 months had passed and either their employment condition, or the context, or both had changed (for the better or for the worse) and responded again to the list of items from the above-mentioned scales.

Statistical analysis

Two-way independent ANOVAs were conducted to test the effects of changes of contract of employment and context on job insecurity (Hypothesis 1 and 2) and assess the effectiveness of the research design in manipulating job insecurity. Structural equation modelling (SEM) was used to test whether changes in job insecurity affect withholding consumption and major life decisions’ unaffordability (Hypothesis 3 and 4). For each analysis, difference scores⁵ (or change scores) were estimated, by subtracting measures at Time 1 from measures at Time 2 (see also Lozza et al., 2017).

⁴ Average net monthly salary in Slovakia at the time of collection according to Statistical Office of Slovak Republic <https://slovak.statistics.sk>

⁵ The use of difference scores has many advantageous features. Not only they are easy to interpret, but they also help remove unexplained variance (Thomas & Zumbo, 2012). They offer reliable estimates of true change, and they are useful whenever it is reasonable to assume that intraindividual differences vary between persons (Gollwitzer et al., 2014).

Results

Effects of contract of employment and context on job insecurity

In order to verify the effectiveness of the simulation experiment design in manipulating job insecurity, we tested if a change of contract of employment and/or context led to lower/higher levels of job insecurity.

To quantify the difference between scores in job insecurity observed at two occasions of measurement, we subtract job insecurity at Time 1 from job insecurity at Time 2, and we obtain a difference score (from now on, Δ JI). A two-way independent ANOVA was conducted on the influence of two independent variables (change of contract and change of context) on the change of job insecurity (Δ JI). Both change of contract and change of context included three levels (worsened, stable, improved). Sex and age were included as covariates (and resulted non-significant). No statistical differences between groups were found for the main socio-demographic characteristics.

Results (Figure 1) indicated a significant main effect on Δ JI for changes in contract of employment and context, $F(9, 351) = 39.947, p < .001, \eta^2 = .52$. In particular, the main effect for contract of employment yielded an F ratio of $F(2, 351) = 5.622, p < .01, \eta^2 = .03$, whereas the main effect for context yielded an F ratio of $F(2, 351) = 149.5444, p < .001, \eta^2 = .46$. No interaction effect was found.

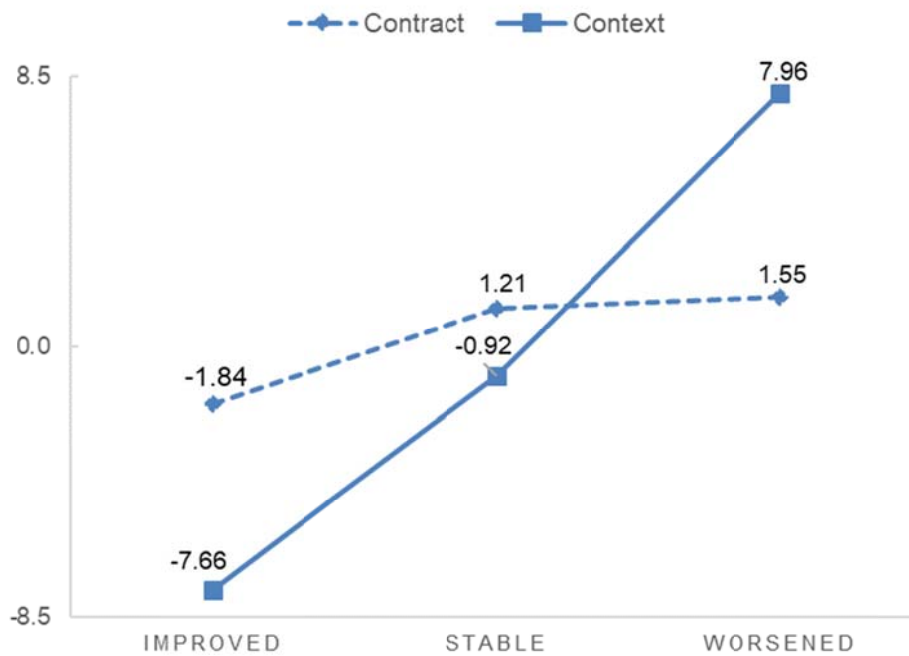
As predicted by Hypothesis 1, Bonferroni post-hoc tests revealed that changes for the worse related to contract of employment ($M = 1.55, SD = 8.50$) significantly increase Δ JI, whereas changes for the better reduce it ($M = -1.84, SD = 9.02$). The difference between the two conditions was statistically significant.

Post-hoc tests also showed significant differences between stable condition ($M = 1.21, SD = 10.00$) and changes for the better, but not between stable condition and changes for the worse. Similarly, a change for the worse from a secure to an insecure context ($M = 7.96, SD = 6.60$) increases Δ JI when compared to a change for the better ($M = -7.66, SD = 7.00$), as suggested by Hypothesis 2. Post-hoc tests also showed significant differences between stable condition ($M = -0.92, SD = 6.71$) and both changes for the worse and for the better.

It should also be noted that changes of contract of employment do not have the same impact on job insecurity as changes of context. As suggested by the different effect size, the change of context ($\eta^2 = .46$) has a much greater impact than the change of contract of employment ($\eta^2 = .03$). Further comments on these results will be provided in the Discussion section.

To summarize, we can assume that the simulation experiment successfully managed to manipulate job insecurity levels. These preliminary results lay the basis to test the other hypotheses about the effects of changes in job insecurity on extra-organizational outcomes.

Figure 1. Influence of changes in contract of employment and context on job insecurity



Impact of changes in job insecurity on extra-organizational outcomes

In order to assess the impact of changes in job insecurity on extra-organizational outcomes, change scores⁶ (measurement at Time 1 subtracted from Time 2) were calculated for all items of withholding daily consumption (from now on, Δ consumption) and major life decisions' unaffordability (from now on, Δ MLD). No statistical differences between groups were found for the main socio-demographic characteristics. Structural equation modelling (SEM) in AMOS (Arbuckle, 2003) was used to conduct the analyses. The model was estimated using Maximum Likelihood with robust standard errors and evaluated using the chi-square and approximate fit statistics, based on Hu and Bentler (1999). These included: Root Mean Square Error of Approximation (RMSEA) $<.08$; Confirmatory Fit Index (CFI) $\geq .95$; and Tucker-Lewis Index (TLI) $\geq .95$.

Measurement model properties were examined first, using confirmatory factor analysis (CFA). Confirmatory factor analysis showed adequate fit for both job insecurity (CMIN/DF = .884, $p = n.s.$, CFI = 1.00, RMSEA = .00, LO90 = .00, HI90 = .07), daily consumption (CMIN/DF = 3.235, $p < .001$, CFI = .95, RMSEA = .08, LO90 = .06, HI90 = .10), and major life decisions (CMIN/DF = 3.921, $p < .001$, CFI = .97, RMSEA = .09, LO90 = .07, HI90 = .11).

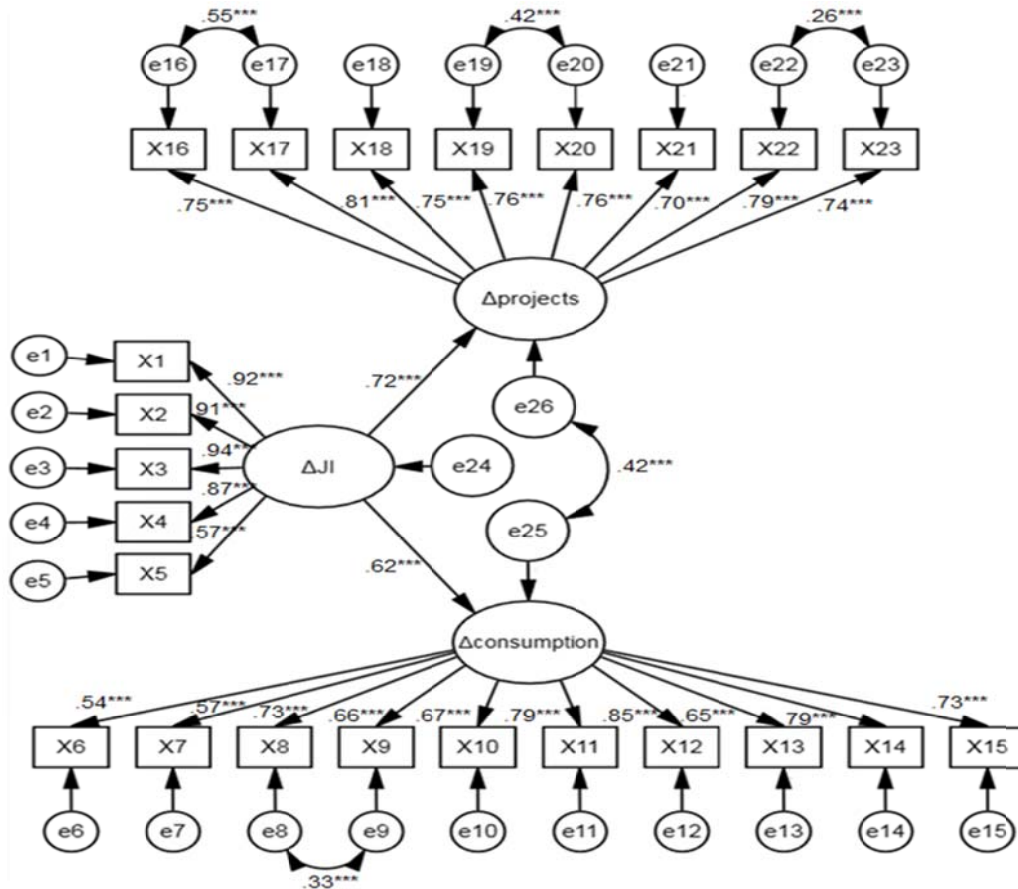
Following, a model was tested (Figure 2). Results showed that the proposed model provided adequate fit to the data, CMIN/DF = 1.841, CFI = .96, TLI = .97, RMSEA = .05 (LO90 = .04, HI90 = .06) with standardized factor loadings ranging from .53 to .95 (median standardized loading = .75). Correlated measurement errors were incorporated in the model when justifiable from a theoretical point of view following Lozza et al. (2017). They include the correlation between Δ consumption' and Δ MLD' errors, as both these variables involve saving/spending decision-making which can be affected by a loss of resources (as suggested by COR theory).

The model (Figure 2) shows that changes that increases (diminishes) job insecurity, directly predict an increased (reduction) in withholding both daily consumption and major life decisions, thus

⁶ Change scores allow to use difference-in-differences regression equations, as they account for the unobserved idiosyncratic individual characteristics of participants by determining the net effect of perceived job insecurity on extra-organizational outcomes (see also Lozza et al., 2017).

supporting both Hypothesis 3 and Hypothesis 4. In addition, job insecurity seems to have a greater influence on major life decisions ($\beta = .72$) rather than daily consumption ($\beta = .62$).

Figure 2. The effect of changes in job insecurity on withholding daily consumption and major life decisions' unaffordability. Standardized parameter estimates for the final model



Note: *** $p < .001$

Discussion

The study reported here adds to the necessary base of (cross-cultural) replication studies needed for empirical generalisation (Barwise, 1995) by conducting a simulation experiment designed by Lozza et al. (2017) in the Slovakian context. Being a replication study, it allows to extend the generalisability of the original results and to gain a deeper understanding of the variables involved. In addition, it expands the literature on two understudied topics in job insecurity: job insecurity in Slovakian context and the effects of changes of job insecurity on extraorganizational outcomes.

Several key findings are worth of mentioning. First, it confirms that changes of both contract of employment and context can affect perceived job insecurity (Hypothesis 1 and Hypothesis 2). In line with Lozza et al. (2017) findings, context appears to have a greater influence than contract of employment, thus suggesting that security derived from the context (i.e. working in a not solid company during an economic downturn vs. working in a solid company in a benign economic environment) has a stronger influence on job security, while the contract of employment is secondary. It should also be noted that, contrary to results from Italian context, no significant differences on job insecurity were found between a stable condition and a change for the worse in terms of contract of employment. This may be explained by the weakness of employment protection

legislation (EPL) in Slovak Republic⁷. Differences in labour market conditions and regulations (such as employment protection legislation, labour laws, and unions membership) were suggested as possible explanation for differences in job insecurity by other studies too (e.g., Muñoz de Bustillo and De Pedraza, 2010; Svalund et al., 2016). Balz (2017) observed that the existing gap between permanent and temporary employees in Europe regarding perceived job security significantly increases when both components of EPL – that is job security provisions, indicating the ‘protection gap’ between permanent and temporary employees, and specific regulations on the use of temporary contracts – are strong. Compared to other European countries, Slovak Republic is the country with the lowest ratio of how many temporary employees feel insecure compared to their permanent counterparts. In other words, this means that Slovakian permanent employees feel as insecure as their temporary counterparts. Given the much stronger impact that context has on job insecurity compared to contract of employment, the question arises whether the focus upon differences between temporary and permanent employees is still relevant in the aftermath of the economic crisis (De Cuyper et al., 2018). In fact, the most recent Global Financial Crisis brought about widespread feelings of job insecurity that are less manageable by the organizations (Chung and Van Oorschot, 2011). The implication is that perceived job insecurity may cause insecurity among all employees, temporary and permanent alike, because such feelings are rooted in the larger economic environment that is by definition uncontrollable.

A second key finding is that changes in job insecurity significantly affect withholding daily consumption and major life decisions’ in the hypothesized direction (Hypothesis 3 and Hypothesis 4). This result confirms previous findings in the Italian context (Lozza et al., 2013; Lozza et al., 2017). In line with the original study, perceived job insecurity has a greater influence on major life decisions than on daily consumption. Such result might be related to the fact daily consumption cannot being reduced beyond reasonable limits. For example, consumption of food can be reduced and compress only to a certain extent, and it is not something that people can entirely give up.

Overall, the present replication study supports the evidence from the original Lozza et al. (2017) study, by confirming that (1) changes in context have a greater influence than changes in contract of employment on job insecurity and that (2) changes in job insecurity significantly affect extraorganizational outcomes such as daily consumption and major life decisions. Such results are strengthened by the fact that Italy and Slovakia are two very different context from both a cultural and socio-economic point of view (see Introduction).

As with all research, this study faced limitations and suggests avenues for future research consideration. A simulation experiment design is – by definition – artificial and may lack external validity, as job insecurity should be lived rather than just being imagined through fictitious future scenarios. At the same time, the choice to use a simulation experiment design can be justified by that job insecurity reflects a forecast about an event, specifically a loss event, which might or might not happen at some point in the future. In addition, we performed a manipulation check which proved the effectiveness of the experimental design. A further limitation is the single source bias (SSB), which arises when overlapping variability is due to data collected from a single source (Campbell & Fiske, 1959). Moreover, the study relies on self-reported data rather than on actual behavior.

Despite such limitations, the study still presents several points of interest and relevance at both theoretical, methodological, and pragmatic, level. At theoretical level, it confirms the importance of distinguishing between ‘objective’ and ‘subjective’ job insecurity. In particular, in periods of economic downturns and economic recession, the ‘objective’ difference between temporary and permanent contracts of employment may become less relevant for employers’ perceived job security. At methodological level, by focusing on perceived changes in job insecurity (i.e. within research design), this simulation experiment study overcomes both the limits of cross-

⁷ According to the most recent estimates by OECD Statistics (https://stats.oecd.org/Index.aspx?DataSetCode=EPL_OV) the strictness of employment protection for individual dismissals is SK = 1.84, IT = 2.68, OECD = 2.04 for regular contracts, and SK = 1.75, IT = 2.00, and OECD = 1.72 for temporary contracts. In other words, both components of ELP are stronger in Italy than in Slovak Republic. Compared to other OECD countries, Slovakian ELP components are rather weak, especially for permanent workers.

sectional studies (i.e. between research design) and the unfeasibility of performing this kind of variables manipulation in longitudinal studies. Finally, at pragmatic level, these findings suggest that, in order to reduce job insecurity, policy-makers should not merely rely on social policies addressed to temporary workers but should also take into account how the general socio-economic context is perceived from both temporary and permanent workers. In fact, in line with some recent literature (Lozza et al., 2017; De Cuyper et al., 2018), it appears that in the aftermath of the most recent economic crisis the difference between temporary and permanent employees may be less relevant than it used to be in a context of stability and economic growth. Other variables, such as the stability of the organizational and economic environment, may play a pivotal role in determining how secure or insecure employees feel, regardless of their contract of employment.

In conclusion, perceived job insecurity appears to be detrimental not only to organizational wellness and individual psychophysiological wellbeing, but also to the socio-economic development of a country. Understanding the theoretical underpinnings of the relation between job insecurity and extra-organizational outcomes is the first and preliminary step to develop employment policies aimed at relaunching the economy of a country and enhance citizens' wellbeing.

Author Contributions

The authors contributed equally to this manuscript.

Compliance with Ethical Standards

Conflict of interest

The authors declare that they have no competing interests.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent

Each participant dealt with the process of informed consent.

References

- Arbuckle, J. L. (2003). Amos 5.0. *Chicago, IL: SPSS.*
- Balz, A. (2017). Cross-National Variations in the Security Gap: Perceived Job Insecurity among Temporary and Permanent Employees and Employment Protection Legislation. *European Sociological Review*, 33(5), 675–692. <https://doi.org/10.1093/esr/jcx067>
- Barwise, P. (1995). Good Empirical Generalizations. *Marketing Science*, 14(3_supplement), G29–G35. <https://doi.org/10.1287/mksc.14.3.G29>

- Benach, J., Vives, A., Amable, M., Vanroelen, C., Tarafa, G., & Muntaner, C. (2014). Precarious Employment: Understanding an Emerging Social Determinant of Health. *Annual Review of Public Health, 35*(1), 229–253. <https://doi.org/10.1146/annurev-publhealth-032013-182500>
- Benito, A. (2006). Does job insecurity affect household consumption? *Oxford Economic Papers, 58*(1), 157–181. <https://doi.org/10.1093/oeq/gpi041>
- Bessho, S., & Tobita, E. (2008). Unemployment risk and buffer-stock saving: An empirical investigation in Japan. *Japan and the World Economy, 20*(3), 303–325. <https://doi.org/10.1016/j.japwor.2007.03.001>
- Buček, J. (2010). The financial and economic crisis in Slovakia – its spatial aspects and policy responses. *Financial crisis in Central and Eastern Europe: from similarity to diversity. Warszawa: Scholar*, 190–208.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*(2), 81–105. <https://doi.org/10.1037/h0046016>
- Cheng, G. H.-L., & Chan, D. K.-S. (2008). Who Suffers More from Job Insecurity? A Meta-Analytic Review. *Applied Psychology, 57*(2), 272–303. <https://doi.org/10.1111/j.1464-0597.2007.00312.x>
- Chirumbolo, A., & 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, 31*(2), 195–214. <https://doi.org/10.1177/0143831X09358368>
- Chirumbolo, A., Urbini, F., Callea, A., Lo Presti, A., & Talamo, A. (2017). Occupations at risk and organizational well-being: an empirical test of a job insecurity integrated model. *Frontiers in psychology, 8*, 2084. <https://doi.org/10.3389/fpsyg.2017.02084>
- Chung, H., & van Oorschot, W. (2011). Institutions versus market forces: Explaining the employment insecurity of European individuals during (the beginning of) the financial crisis. *Journal of European Social Policy, 21*(4), 287–301. <https://doi.org/10.1177/0958928711412224>
- De Cuyper, N., Piccoli, B., Fontinha, R., & De Witte, H. (2018). Job insecurity, employability and satisfaction among temporary and permanent employees in post-crisis Europe. *Economic and Industrial Democracy, 0143831X18804655*. <https://doi.org/10.1177/0143831X18804655>
- De Lucia, C., & Meacci, M. (2005). *Does Job Security Matter for Consumption? An Analysis on Italian Microdata* (SSRN Scholarly Paper No. ID 936322). Retrieved from Social Science Research Network website: <https://papers.ssrn.com/abstract=936322>
- De Witte, H., & Näswall, K. (2003). 'Objective' vs 'Subjective' Job Insecurity: Consequences of Temporary Work for Job Satisfaction and Organizational Commitment in Four European Countries. *Economic and Industrial Democracy, 24*(2), 149–188. <https://doi.org/10.1177/0143831X03024002002>
- De Witte, H., Pienaar, J., & De Cuyper, N. (2016). Review of 30 Years of Longitudinal Studies on the Association Between Job Insecurity and Health and Well-Being: Is There Causal Evidence?. *Australian Psychologist, 51*(1), 18–31. <https://doi.org/10.1111/ap.12176>
- Dekker, F. (2010). Labour flexibility, risks and the welfare state. *Economic and Industrial Democracy, 31*(4), 593–611. <https://doi.org/10.1177/0143831X10365927>
- Ferrie, J. E. (2001). Is job insecurity harmful to health? *Journal of the Royal Society of Medicine, 94*(2), 71–76. <https://doi.org/10.1177/014107680109400206>
- Fryer, D. (1986). Employment deprivation and personal agency during unemployment: A critical discussion of Jahoda's explanation of the psychological effects of unemployment. *Social Behaviour, 1*(1), 3–23.

- Gollwitzer, M., Christ, O., & Lemmer, G. (2014). Individual differences make a difference: On the use and the psychometric properties of difference scores in social psychology: Reliability of difference scores. *European Journal of Social Psychology, 44*(7), 673–682. <https://doi.org/10.1002/ejsp.2042>
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job Insecurity: Toward Conceptual Clarity. *Academy of Management Review, 9*(3), 438–448. <https://doi.org/10.5465/amr.1984.4279673>
- Hellgren, J., Sverke, M., & Isaksson, K. (1999). A Two-dimensional Approach to Job Insecurity: Consequences for Employee Attitudes and Well-being. *European Journal of Work and Organizational Psychology, 8*(2), 179–195. <https://doi.org/10.1080/135943299398311>
- Hobfoll, S. E. (2001). The Influence of Culture, Community, and the Nested-Self in the Stress Process: Advancing Conservation of Resources Theory. *Applied Psychology, 50*(3), 337–421. <https://doi.org/10.1111/1464-0597.00062>
- Hobfoll, S. F. (1989). Conservation of Resources: A New Attempt at Conceptualizing Stress. *The American Psychologist; Washington, 44*(3), 513.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55.
- Ištoňová, L., & Fedáková, D. (2015). Predictors and consequences of job insecurity: Comparison of Slovakia and Estonia. *Studies of Transition States and Societies, 7*(3), 21–37.
- Jahoda, M. (1981). Work, employment, and unemployment: Values, theories, and approaches in social research. *American Psychologist, 36*(2), 184–191. <https://doi.org/10.1037/0003-066X.36.2.184>
- Jahoda, M. (1982). *Employment and Unemployment: A Social-Psychological Analysis*. CUP Archive.
- Kalleberg, A. L. (2011). *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s-2000s*. Russell Sage Foundation.
- Keim, A. C., Landis, R. S., Pierce, C. A., & Earnest, D. R. (2014). Why do employees worry about their jobs? A meta-analytic review of predictors of job insecurity. *Journal of Occupational Health Psychology, 19*(3), 269–290. <http://0-dx.doi.org.opac.unicatt.it/10.1037/a0036743>
- Lozza, E., Bonanomi, A., Castiglioni, C., & Bosio, A. C. (2016). Consumer Sentiment after the Global Financial Crisis. *International Journal of Market Research, 58*(5), 671–691. <https://doi.org/10.2501/IJMR-2015-075>
- Lozza, E., Castiglioni, C., & Bonanomi, A. (2017). The effects of changes in job insecurity on daily consumption and major life decisions. *Economic and Industrial Democracy, 0143831X17731611*. <https://doi.org/10.1177/0143831X17731611>
- Lozza, E., Libreri, C., & Bosio, A. C. (2013). Temporary employment, job insecurity and their extraorganizational outcomes. *Economic and Industrial Democracy, 34*(1), 89–105. <https://doi.org/10.1177/0143831X12436617>
- Lübke, C., & Erlinghagen, M. (2014). Self-perceived job insecurity across Europe over time: Does changing context matter? *Journal of European Social Policy, 24*(4), 319–336. <https://doi.org/10.1177/0958928714538215>
- Monroe, K. B. (1992). On replications in consumer research: Part I. *Journal of Consumer Research, 19*(1), i-ii.
- Muñoz de Bustillo, R., & de Pedraza, P. (2010). Determinants of job insecurity in five European countries. *European Journal of Industrial Relations, 16*(1), 5–20. <https://doi.org/10.1177/0959680109355306>
- Selenko, E., Mäkikangas, A., Mauno, S., & Kinnunen, U. (2013). How does job insecurity relate to self-reported job performance? Analysing curvilinear associations in a longitudinal sample. *Journal of Occupational and Organizational Psychology, 86*(4), 522–542. <https://doi.org/10.1111/joop.12020>
- Shoss, M. K. (2017). Job Insecurity: An Integrative Review and Agenda for Future Research. *Journal of Management, 43*(6), 1911–1939. <https://doi.org/10.1177/0149206317691574>

- Stephens, M. (2004). Job Loss Expectations, Realizations, and Household Consumption Behavior. *The Review of Economics and Statistics*, 86(1), 253–269. <https://doi.org/10.1162/003465304323023796>
- Sutton, R. I. (1987). The Process of Organizational Death: Disbanding and Reconnecting. *Administrative Science Quarterly*, 32(4), 542–569. <https://doi.org/10.2307/2392883>
- Svalund, J., Saloniemi, A., & Vulkan, P. (2016). Attitudes towards job protection legislation: Comparing insiders and outsiders in Finland, Norway and Sweden. *European Journal of Industrial Relations*, 22(4), 371–390.
- Sverke, M., Hellgren, J., & Näswall, K. (2006). Job insecurity: A literature review. Arbetslivsinstitutet.
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7(3), 242–264. <https://doi.org/10.1037/1076-8998.7.3.242>
- Thomas, D. R., & Zumbo, B. D., (2012). Difference scores from the point of view of reliability and repeated-measures ANOVA: In defense of difference scores for data analysis. *Educational and Psychological Measurement*, 72(1), 37–43.
- Voon, J. P., & Ma, Y. C. (2014). Global financial crisis and perceptions of job insecurity: The China case. *Journal of Behavioral and Experimental Economics*, 53, 138–148. <https://doi.org/10.1016/j.socecc.2014.09.002>
- Warr, P. (1987). *Work, unemployment, and mental health*. New York, NY, US: Oxford University Press.