Does Perceived Job Insecurity Affect Mental Health? Evidence from the 2021 Chinese General Social Survey

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Introduction

With rising global competition, industrial shifts, and economic recessions, an increasing number of employees face concerns about layoffs. The instability and unpredictability of labor markets impose significant psychological burdens on workers, often resulting in adverse health outcomes linked to job insecurity. Understanding the relationship between job insecurity and health is crucial for informing interventions aimed at improving workers' well-being. Previous research has established a connection between perceived job insecurity and poor health outcomes. After accounting for demographic, socioeconomic, and job characteristics, as well as prior health conditions, perceived job insecurity was found associated with deteriorating health among U.S. workers (Burgard et al. 2009). Similarly, McDonough (2000), using a national sample of Canadian adults, reported that high levels of job insecurity lead to lower self-rated health, increased psychological distress, and increased use of medication for symptom relief.

This study investigates the impact of perceived job insecurity on self-rated mental health using data from the 2021 Chinese General Social Survey (CGSS), a nationally representative sample. Employing structural equation modeling, we examine the relationship between the latent construct of

perceived job insecurity and various measures of mental well-being. We hypothesize that perceived job insecurity will be negatively associated with these mental well-being indicators, suggesting potential detrimental effects of perceived job insecurity on psychological health measures.

H1: Perceived job insecurity will be negatively associated with self-rated mental health.

H2: Perceived job insecurity will be negatively associated with self-rated mental health among different

H3: Perceived job insecurity will be negatively associated with self-rated mental health among different

Data and Methods

Data

CGSS

Measures

job insecurity: how to measure, 5;

mental health: how to measure, 3;

control variables: which variables, 2;

Analytical approach

model; estimator: "WLSMV", why?; which parameter (coeffient); MGA: how to do, which statistics? survey weights (we only use for descriptive as this stage)?

we treat working hours as continuous variable, and other variables as ordinal categorical variables. For those variables measuring job insecurity, the larger the value, the higher the insecurity. For those measuring mental health, the larger the value, the better the health.

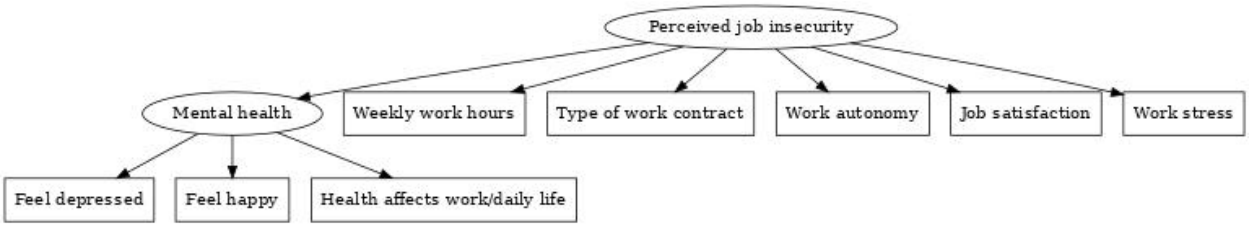

Figure 1: structural equation model for perceived job insecurity and mental health

Results

Table 1 presents the weighted descriptive statistics of the variables used in the analysis. The sample consists of 993 respondents, with an average of 49.92 weekly work hours. A small proportion of respondents have an indefinite term work contract, while the majority have a fixed-term contract. Most respondents report that they have mainly control over their work and are satisfied with their jobs. The majority of respondents report that they rarely or sometimes experience work stress. Regarding mental health, most respondents report that they rarely or sometimes feel depressed and often or always feel happy. The majority of respondents indicate that their health never affects their work or daily life. The sample is almost evenly split by sex, with around 86% of respondents not being members of the Chinese Communist Party (CCP).

Table 1: Weighted descriptive statistics (N = 993)

Variable	Mean (SD) / Percent
Weekly work hours	49.92 (16.15)
Type of work contract	
Infinite term	26.0%
Fixed term	40.5%
No contract	33.5%
Work autonomy	
Completely controlled by self	13.2%
Mainly controlled by self	51.0%
Mainly controlled by others	22.5%
Completely controlled by others	13.2%
Job satisfaction	
Very satisfied	12.1%
Satisfied	50.0%
Neutral	30.7%
Dissatisfied	5.2%
Very dissatisfied	2.0%
Work stress	
Rarely	41.0%
Sometimes	32.9%
Often	17.7%
Always	8.3%
Feel depressed	
Always	0.8%
Often	3.7%
Sometimes	20.5%
Rarely	28.6%
Never	46.4%
Feel happy	
Never	0.7%
Rarely	3.1%
Sometimes	13.1%
Often	61.2%
Always	21.8%
Health affects work/daily life	
Always	0.2%
Often	1.8%
Sometimes	9.9%
Rarely	24.7%

Never	63.4%
Sex	
Female	45.4%
Male	54.6%
Party membership	
CCP	13.1%
Non-CCP	86.9%

Table 2 presents the results of the structural equation model examining the relationship between perceived job insecurity and mental health, using WLSMV estimation. The model exhibits a Comparative Fit Index (CFI) of 0.94 and a Root Mean Square Error of Approximation (RMSEA) of 0.07, both of which are considered acceptable. For the measurement models, all factor loadings for the latent variable mental health are significant at the 0.01 level, while three out of four factor loadings are significant for the latent variable perceived job insecurity at the 0.1 level. The analysis reveals that perceived job insecurity negatively affects mental health, with a coefficient of -0.11 at the 0.01 significance level. In essence, higher perceived job insecurity correlates with poorer mental health, thereby supporting H1.

Table 2: Structural equation model results for the relationship between perceived job insecurity and mental health

	Estimate	Std. Err.	z	p
		Factor Loadings		
Perceived job insecurity				
Weekly work hours	1.00^{+}			
Type of work contract	-0.01	0.01	-0.49	0.624
Work autonomy	0.02	0.01	1.88	0.060
Job satisfaction	0.14	0.02	6.75	0.000
Work stress	0.13	0.02	6.85	0.000
Mental health				
Feel depressed	1.00^{+}			
Feel happy	0.64	0.06	11.65	0.000
Health affects work/daily life	0.93	0.08	12.32	0.000
		Regression Slopes		
Mental health				
Perceived job insecurity	-0.11	0.02	-6.60	0.000

		Fit Indices	
χ^2(df)	102.92		
CFI	0.94		
TLI	0.91		
RMSEA	0.07		
Scaled χ^2(df)	130.71(19)		0.000

$^{+}$Fixed parameter

Table 3 illustrates the results of the structural equation model that separately evaluates males and females without constraints. This model has a CFI of 0.93 and an RMSEA of 0.07, suggesting an acceptable fit. The findings indicate that perceived job insecurity adversely impacts mental health for both genders. However, the effect is more pronounced for females, with a coefficient of -0.15, compared to males, who have a coefficient of -0.10. To assess whether the relationship between perceived job insecurity and mental health is invariant between males and females, a constrained model equalizing the structural coefficients was tested. Table 4 details the results of the constrained model, which maintains the same CFI of 0.93 and RMSEA of 0.07 as the unconstrained model. Nonetheless, the chi-square test reveals that the constrained model fits significantly worse than the unconstrained model, indicating that the relationship is not invariant across genders. Therefore, females experience a more severe mental health decline due to perceived job insecurity, thus supporting H2.

Table 3: Perceived job insecurity and mental health among different sex categories without constraints

	Female		Male	
	Estimate	Std. Err.	Estimate	Std. Err.
		Factor Loadings		
Perceived job insecurity				
Weekly work hours	1.00^{+}		1.00^{+}	
Type of work contract	0.03	0.02	-0.02	0.02
Work autonomy	0.00	0.02	0.03^{**}	0.01
Job satisfaction	0.18^{***}	0.05	0.13^{***}	0.03
Work stress	0.17^{***}	0.04	0.14^{***}	0.03
Mental health				
Feel depressed	1.00^{+}		1.00^{+}	
Feel happy	0.59^{***}	0.07	0.66^{***}	0.08

Health affects work/daily life	0.93^{***}	0.11	0.88^{***}	0.09
		Regression Slopes		
Mental health				
Perceived job insecurity	-0.15^{***}	0.04	-0.10^{***}	0.02
		Fit Indices		
χ^2(df)	125.32			
CFI	0.93			
TLI	0.90			
RMSEA	0.07			
Scaled χ^2(df)	$156.47(38)^{***}$			

$^{+}$Fixed parameter

* p<0.1, ** p<0.05, ***p<0.01

Table 4: Perceived job insecurity and mental health among different sex categories without constraints

	Female		Male	
	Estimate	Std. Err.	Estimate	Std. Err.
		Factor Loadings		
Perceived job insecurity				
Weekly work hours	1.00^{+}		1.00^{+}	
Type of work contract	0.02	0.02	-0.03	0.02
Work autonomy	0.00	0.02	0.04^{**}	0.02
Job satisfaction	0.16^{***}	0.03	0.15^{***}	0.03
Work stress	0.15^{***}	0.03	0.15^{***}	0.03
Mental health				
Feel depressed	1.00^{+}		1.00^{+}	
Feel happy	0.60^{***}	0.07	0.65^{***}	0.08
Health affects work/daily life	0.95^{***}	0.11	0.86^{***}	0.09
		Regression Slopes		
Mental health				
Perceived job insecurity	-0.12^{***}	0.02	-0.12^{***}	0.02
		Fit Indices		
χ^2(df)	126.87			
CFI	0.93			
TLI	0.90			
RMSEA	0.07			
Scaled χ^2(df)	$154.09(39)^{***}$			

$^{+}$Fixed parameter

* p<0.1, ** p<0.05, ***p<0.01

The relationship between perceived job insecurity and mental health is further analyzed among CCP and non-CCP residents. Table 5 provides the results of the structural equation model for

these groups without any constraints. The model reports a CFI of 0.93 and an RMSEA of 0.07, signifying a good fit. The analysis shows that perceived job insecurity has a significantly negative effect on mental health for both CCP and non-CCP residents. However, the negative impact is stronger for non-CCP residents, with a coefficient of -0.12, compared to CCP residents, who have a coefficient of -0.05. To determine whether this relationship is invariant between CCP and non-CCP residents, a constrained model equalizing the structural coefficients was tested. Table 6 presents the results of the constrained model, which also maintains the same CFI of 0.93 and RMSEA of 0.07 as the unconstrained model. However, the chi-square test indicates that the constrained model is significantly worse than the unconstrained model, suggesting that the relationship is not invariant between the two groups. Consequently, non-CCP residents experience a more pronounced decline in mental health due to perceived job insecurity, thereby supporting H3.

Table 5: Perceived job insecurity and mental health among different sex categories without constraints

	Non-CCP		CCP	
	Estimate	Std. Err.	Estimate	Std. Err.
		Factor Loadings		
Perceived job insecurity				
Weekly work hours	1.00^{+}		1.00^{+}	
Type of work contract	0.00	0.01	-0.03	0.02
Work autonomy	0.02	0.01	-0.03^{*}	0.01
Job satisfaction	0.15^{***}	0.03	0.12^{***}	0.02
Work stress	0.14^{***}	0.03	0.13^{***}	0.02
Mental health				
Feel depressed	1.00^{+}		1.00^{+}	
Feel happy	0.69^{***}	0.06	0.25^{**}	0.10
Health affects work/daily life	0.94^{***}	0.08	0.73^{***}	0.21
		Regression Slopes		
Mental health				
Perceived job insecurity	-0.12^{***}	0.02	-0.05^{***}	0.01
		Fit Indices		
χ^2(df)	135.64			
CFI	0.93			
TLI	0.90			
RMSEA	0.07			
Scaled χ^2(df)	$154.83(38)^{***}$			

$^{+}$Fixed parameter
* p<0.1, ** p<0.05, ***p<0.01

Table 6: Perceived job insecurity and mental health among different sex categories without constraints

	Non-CCP		CCP	
	Estimate	Std. Err.	Estimate	Std. Err.
		Factor Loadings		
Perceived job insecurity				
Weekly work hours	1.00^{+}		1.00^{+}	
Type of work contract	0.00	0.01	−0.04	0.02
Work autonomy	0.02	0.01	−0.03	0.02
Job satisfaction	0.13^{***}	0.02	0.15^{***}	0.03
Work stress	0.12^{***}	0.02	0.16^{***}	0.02
Mental health				
Feel depressed	1.00^{+}		1.00^{+}	
Feel happy	0.71^{***}	0.06	0.23^{**}	0.09
Health affects work/daily life	0.98^{***}	0.08	0.63^{***}	0.17
		Regression Slopes		
Mental health				
Perceived job insecurity	-0.09^{***}	0.01	-0.09^{***}	0.01
		Fit Indices		
χ^2(df)	143.75			
CFI	0.93			
TLI	0.90			
RMSEA	0.07			
Scaled χ^2(df)	$162.85(39)^{***}$			

$^{+}$Fixed parameter
* p<0.1, ** p<0.05, ***p<0.01

Further steps

- we haven't used survey weights for SEM analysis, but we are still trying to find the package that can handle this
- we will continue enhancing current writing and analysis

Appendix

See more infomation on GitHub: https://github.com/petertbz/SurvMeth687Project

References

Burgard, S. A., Brand, J. E., and House, J. S. (2009), "Perceived job insecurity and worker health in the United States," *Social Science & Medicine*, 69, 777–785. https://doi.org/10.1016/j.socscimed.2009.06.029.

McDonough, P. (2000), "Job Insecurity and Health," *International Journal of Health Services*, 30, 453–476. https://doi.org/10.2190/BPFG-X3ME-LHTA-6RPV.