

AN EMPIRICAL RESEARCH ON THE RELATIONSHIP BETWEEN JOB INSECURITY AND EMPLOYEE HEALTH & SAFETY

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ABSTRACT

The purpose of this study is to investigate the relationship among the insecurity perception of employees, health symptoms and unsafe behaviours of employees. According to a limited number of empirical researches in this field, findings imply that job insecurity perceptions of employees may result both in physical and mental health symptoms and unsafe behaviours which may in return risk the job safety. Research is limited with an application to a large company in Turkey which is in downsizing process. Findings of this particular research have once again indicated both mental and physical health symptoms are related with job insecurity perceptions.

Key Words: Job insecurity, employee health and safety

1. INTRODUCTION

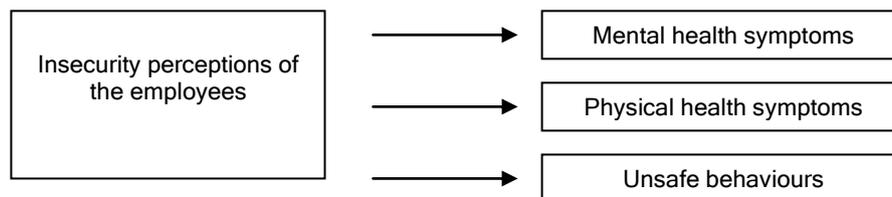
In today's environment of economic and technological change, job insecurity is recognized as a chronic condition affecting the general workforce (Ito and Brotheridge, 2007: 41). In a rapidly changing environment, characterized by intensified competition and escalating demands for flexibility and adjustment, organizations have taken to reorganizational activities such as outsourcing,

downsizing, and mergers in order to adapt to the new situation (Hellgren and Sverke, 2003: 215). Reorganizations, downsizing, and unpredictable changes associated with fusions, takeovers, outsourcing, and moving of production facilities to low salary regions produce uncertainty and turbulence in many organizations. Downsizing, often a precursor of job insecurity, is associated with different health problems (Lau and Knardahl, 2008: 172). Job insecurity is characterized by a discrepancy between the level of security a person experiences and the level he/she might prefer regarding the preservation of his/her employment status (Swaen *et al.*, 2004: 443). The employees' experience of job insecurity may be described as a combination of a perceived threat regarding their job, and the sense of powerlessness to do anything about this very threat (Storseth, 2006: 541).

Most existing research on job insecurity has focused on its negative effects on individuals as on organizations (Kinnunen *et al.*, 2000: 445). Job insecurity has become a frequently examined stressor in modern working life and scholars have found empirical support for a link between job insecurity and employee reactions. The findings thus far indicate that job insecurity is negatively related to job and organizational attitudes as well as to employee health and well-being (Hellgren *et al.*, 1999; Jonge *et al.*, 2000; Sverke *et al.*, 2002; Hellgren and Sverke, 2003; Cheng *et al.*, 2005; Nooney, 2005; Storseth, 2006; Lau and Knardahl, 2008; Cuyper *et al.*, 2008;) There has been growing interest in recent years in studying the impacts of insecure employment on health. Job insecurity has been found to be associated with a decrease in both physical and mental health status (Storseth, 2006: 541). These studies were consistent in showing that the experience of job insecurity before actual job changes increased the risks of mental and physical illnesses (Cheng *et al.*, 2005: 42; D'Souza *et al.*, 2006: 205). Studies accept that job insecurity and adverse working conditions may create physical and mental health problems during the course of one's life (Kim *et al.*, 2006: 567). On the other hand, few studies (Probst and Brubaker, 2001; Størseth, 2006; Størseth, 2007) have examined the association between job insecurity and negative safety outcomes in the work context. In Størseth's (2006) study, job insecurity was identified as a contributor to the employees' level of risk taking behavior and accepted that job insecurity was directly associated with risk taking behavior.

The purpose of this study therefore is determined in this context in order to investigate the relationship among the insecurity perception of employees and health symptoms and unsafe behaviours of employees. The research model and the hypotheses below:

Figure 1: Hypothesized associations between insecurity perceptions of employees and their physical health indicators, mental health indicators, unsafe behaviours



Hypothesis 1: There is a significant statistical relationship among the job insecurity perceptions of employees and their physical health indicators (physical symptom)

Hypothesis 2: There is a significant statistical relationship among the job insecurity perceptions of employees and their mental health indicators (mental symptom)

Hypothesis 3: There is a significant statistical relationship among the job insecurity perceptions of employees and their unsafe behaviours

2. METHOD

2.1. Sample

The data used in this study were collected from a Turkish shipyard company, which is downsizing. The shipyard, which the research is done, is in operation for 15 years and its field of activity is ship production. Although there were 400 people working only 6 months ago, because of downsizing, there were only 200 employees left at the time of the research. Of the survey forms that are handed to and collected back from the company management, 125 out of returned 147 (62%) were valid and taken into consideration in the research. 70% of the employees are under the age of 32. 49% has primary school degree and 44% is high school graduate. 40% of the employees parted the research is working in this company more than 4 years.

2.2. Measures

Perceived job insecurity was measured with seven items (Cronbach's alpha= ,9242) adapted from the previous studies (Hellgren and Sverke, 2003; Størseth, 2006) The scale was anchored with strongly disagree (1) and strongly agree (5). The measurement of physical and mental health complaints was based on a 16-item inventory reflecting the experience (1=never; 5=always) of various symptoms. These items were adapted from the Størseth's study (2006). Unsafe behaviours were measured by sixteen items (Cronbach's alpha= ,8566)

concerning on the job risk taking behaviour. These items were adapted from Seo's (2005) and Størseth's (2006) studies. The scale was anchored with strongly disagree (1) and strongly agree (5).

2.3. Statistical analysis

Data gained is analyzed with SPSS for Windows 11.5. To measure the reliability of the survey tool, Cronbach's alpha value is calculated. In order to test the hypotheses the analyses of Pearson Correlation and linear regression are used.

3. RESULTS

In order to examine the correlations between the applied measures, index variables were computed for each of the constructs. Table 1 presents the correlation matrix for all the included indices, along with their Cronbach's alpha values.

Table 1: Correlation Matrix and Cronbach's Alpha Values

	1	2	3	4	Cronbach's Alpha
1.Job Insecurity	1.00				0.942
2.Physical health complaints	0.370**	1.00			0.900
3.Mental health complaints	0.495**	0.621**	1.00		0.901
4.Unsafe Behaviours	0.60	0.27	0.25	1.00	0.856

**p<0.01

Correlation analyses results indicate a positive and significant relationship among job insecurity and physical health complaints ($r= 370$, $p<0.01$); also, a positive and significant relationship among mental health complaints and job insecurity. ($r= 495$, $p<0.01$). These results support the hypotheses H1 and H2. According to the correlation analysis among job insecurity and unsafe behaviours of the employees, there is no significant relationship. Taking this result into account, the hypothesis H1 is rejected.

Table 2 indicates the results of the regression analysis, which is used to measure the effect of employees' job insecurity perceptions on mental health complaints.

Table 2: Effect of job insecurity on mental health complaints

	R ²	F	β	t	p
Job insecurity	.245	39.905	.495	6.317	0.000

AN EMPIRICAL RESEARCH ON THE RELATIONSHIP
BETWEEN JOB INSECURITY AND EMPLOYEE HEALTH & SAFETY

According to regression analysis findings shown on Table 2; insecurity perceptions of employees represents the 24,5% of the variance in mental health complaints. F value is significant at 0,01 significance level. Positive β value indicates the increasing effect of job insecurity on mental health complaints. Table 3 indicates the findings of the regression analysis to measure the effect of employees' job insecurity perceptions on physical health complaints.

Table 3: Effect of job insecurity on physical health complaints

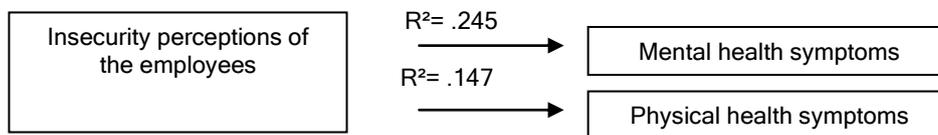
	R ²	F	β	t	p
Job insecurity	.147	19.552	.370	4.422	0.000

According to regression analysis findings shown on Table 3; insecurity perceptions of employees represents the 14,7% of the variance in physical health complaints. F value is significant at 0,01 significance level. Positive β value indicates the increasing effect of job insecurity on mental health complaints.

4. DISCUSSION

The purpose of this study is to investigate the relationship among the insecurity perception of employees, health symptoms and unsafe behaviours of employees. For this purpose, the literature is reviewed and thus; the model, hypotheses and measure tool are developed. The significant findings on the relation among job insecurity perceptions and health complaints, in a downsizing company, are consistent with and therefore support the hypotheses H1 and H2. Thus, H1 and H2 are accepted. Regression analysis findings lead us to the effects of job insecurity perceptions of employees on their physical and mental health. However, no significant relation is found among insecurity perceptions and unsafe behaviours.

Figure 2: The results



All the results are limited to the company in which the research is conducted. This research is based on only one company in Turkey, therefore, we cannot make any generalization. Any other research may result in different findings. In this research, no direct effect of job insecurity on unsafe behaviour is observed.

There may be a possible indirect effect. Therefore, for further researches, an expanded new model including some organizational factors as mediating variables may be developed. Job safety and employee healths are vital elements of job life quality in a company. It is deemed that more researches on the relations among job insecurity; job safety and employee health will contribute the limited empirical literature in this field.

Appendix A. Items in the Job Insecurity Questionnaire

1. I am worried about having to leave my job before I would like to.
2. There is a risk that I will have to leave my present job in the year to come.
3. I feel uneasy about losing my job in the near future.
4. Cutbacks are frequently discussed.
5. Departments have been/may be merged.
6. It is a risk for company closedown.
7. There are rumours concerning changes at workplace.

Appendix B. Items in the Physical and Mental Health Questionnaire

1. Headache
2. Neck pain
3. Upper back pain
4. Low back pain
5. Arm pain
6. Shoulder pain
7. Migraine
8. Leg pain during physical activity
9. Extra heartbeats
10. Heat flushes
11. Sleep problems
12. Tiredness
13. Dizziness
14. Anxiety
15. Sadness
16. Opression

Appendix C. Items in the Unsafe Behaviours Questionnaire

1. I wear a hard hat in designated areas
2. I wear eye protection in designated areas
3. I follow all safety rules
4. I do not correct slip/trip/fall hazards
5. I clean my work area when I am finished doing a task
6. I harness and tie off properly before working at an unprotected elevation of over 4 feet
7. I keep grain dust accumulation below 1/8" in my work area

AN EMPIRICAL RESEARCH ON THE RELATIONSHIP
BETWEEN JOB INSECURITY AND EMPLOYEE HEALTH & SAFETY

- 8.I secure a hot work permit before cutting or welding within 30 feet of the elevator
- 9.I do not secure a permit before entering a bin that has grain in it
- 10.I lock out all conveyor belts before sweeping under or near pulleys
- 11.I do not report near misses that I experience or witness
- 12.I work clear of the influence of drugs and alcohol
- 13.I apply a secured grate over draw-offs while bin cleaning
- 14.I don't have time to follow the safety rules
- 15.I have to break rules in order to get the job done
- 16.I must take chances in order to get my job done

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Muhteşem BARAN, Pelin KANTEN,
Selahattin KANTEN and Murat YAŞLIOĞLU

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