

The Effects of Employees' Empowerment on Job Satisfaction: Empirical Analysis of the Demand-Control Model

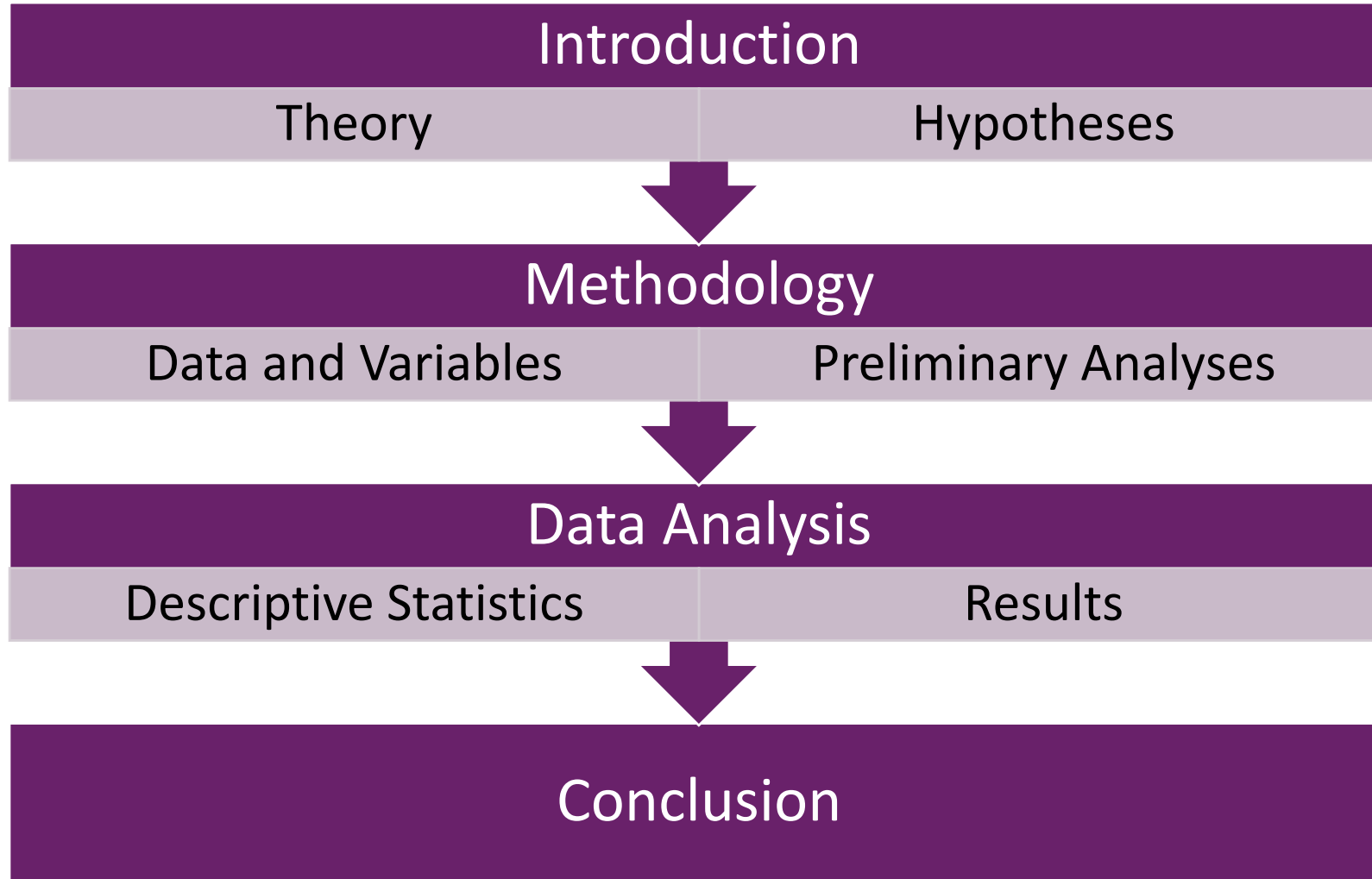
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Outline



Introduction

Employees are very important in a workplace

The introduction of employees' empowerment practices

Focus on individual forms – decision making opportunities, information sharing practices, and incentive schemes.



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The benefits and costs of these practices have been theoretically analysed using Demand-Control model

Model suggests that an employee's well being depends on the balance between the job demands and job control (Karasek, 1979)

Empowerment practices affect job satisfaction through job control factors inherent in these practices; however, the direction of effect may be affected by the level of job demands associated with the presence of the practices (Wood, 2008; De Witte et al., 2007; Noblet et al., 2006; Noblet and Rodwell, 2009; Mikkelsen et al., 1999; Morrison et al., 2003; Akerboom and Maes, 2006).

Introduction

| Author | Aim of Study | Data | Empirical Approach | Findings (job satisfaction as dependent variable) |
|----------------------------|--|--|--|---|
| Cox et al. (2006) | Relationship between Employee Involvement and Participation (EIP) and job satisfaction | WERS98 | Linear and ordered logit estimations | Joint presence of the EIP practices was more significant in predicting job satisfaction than single EIP practice. |
| Cox et al. (2009) | Effectiveness of employees' participation practices and job satisfaction | WERS2004 | Linear regressions | <ul style="list-style-type: none"> Employees' perceptions of participatory practices were more influential in predicting job satisfaction than management approaches to employees' participation. Manager's effectiveness in employees' participation processes was an important predictor of job satisfaction. |
| Wood and de Menezes (2011) | Relationship between high involvement management and employees' wellbeing (anxiety-contentment and job satisfaction) | WERS2004 | Weighted multi-level regression models | <ul style="list-style-type: none"> They found a positive relationship consultative management on job satisfaction. They also found a positive relationship between job control and job satisfaction. |
| Berg (1999) | The impact of a participatory atmosphere on job satisfaction | Data on US steel industry | Ordered logit estimation | They found that employees, who (i) are involved in problem solving groups that entail the utilisation of skills and knowledge, (ii) have cordial relationships with their employers and (iii) believe that the firm is committed to ensuring a work-life balance, tend to have a higher probability of job satisfaction |
| Mohr and Zoghi (2008) | High involvement work design' and job satisfaction in Canadian workplaces | 1999-2002 Canadian Workplace and Employee Survey | Ordered probit estimations | They found that suggestion schemes, information sharing, task teams and quality circles were positively and significantly related to overall job satisfaction |
| Zatzick and Iverson (2011) | Job satisfaction and absenteeism in high-involvement work systems | 1999-2002 Canadian Workplace and Employee Survey | Hierarchical linear modelling | They found a positive relation between job satisfaction and employees' involvement |
| Westhuizen et al. (2012) | Impact of culture on participative decision-making and job satisfaction | European Values Study (EVS) | Ordered logistic estimation | They found that employees are more likely to experience higher levels of job satisfaction when their freedom to participate in decisions increases. |

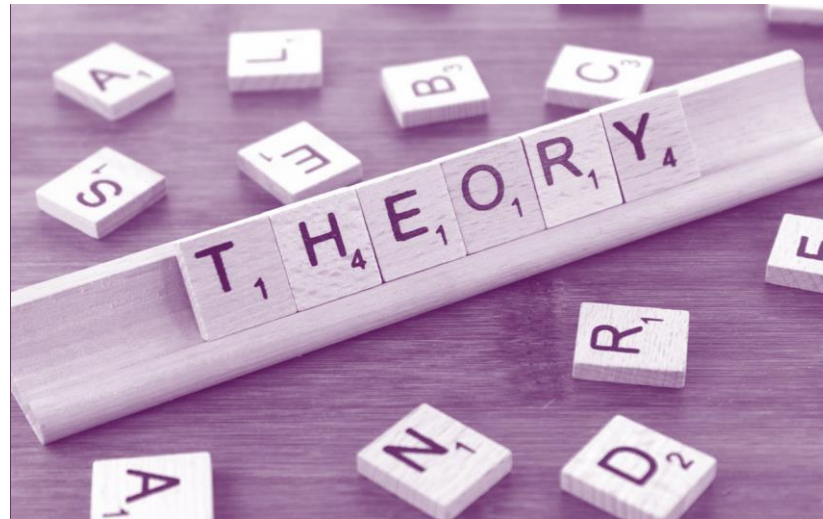
Theory: Demand-Control Model

Emphasis on job demands and the degree of decision authority and skills discretion

Job demands – quantity and pace of work associated with the job, e.g. work overload, work intensity

Job control – how employees make decisions about work and working conditions and their ability to utilise their skills.

Focus: Decision authority



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Two major propositions

Combination of high levels of job demands and low levels of control results in job stress

The presence of high levels of job control and high levels of job demand promotes personal growth, learning, motivation and skills acquisition

Joint presence of job demands, and job control showcases four types of jobs

Hypotheses

Employees are less likely to be satisfied with different facets of the job in the presence of high levels of job demands.

Employees are more likely to be satisfied with various aspects of the job when they have control over different aspects of their work.

The joint presence of a high level of job demands and less control opportunities is negatively related to various forms of job satisfaction.



And the Answer is...

A high level of job control moderates the negative consequences of a high level of job demands.

Job control and EO policies are complementary.

EO policies moderates the negative effects of job demands on job satisfaction.

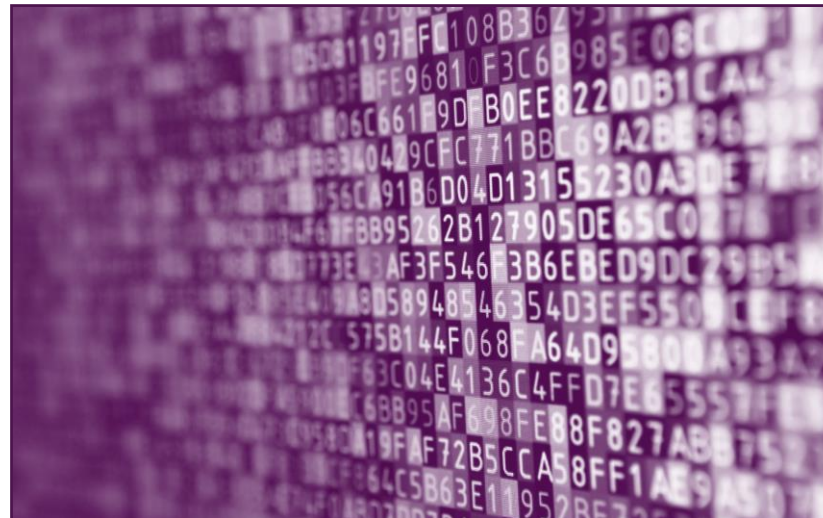
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Data

2011 British WERS

Employee and workplace data
on a representative sample of
workplaces

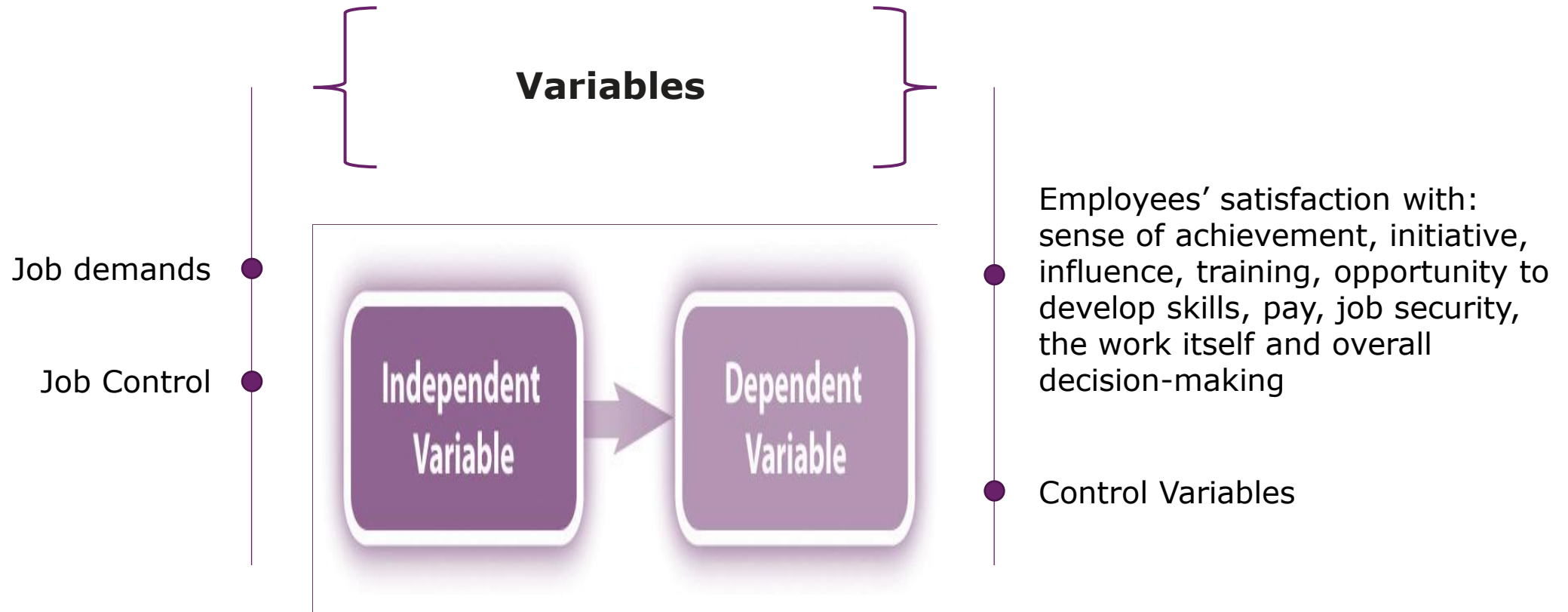
Interviews conducted with the
most senior personnel managers
and questionnaires distributed
to employees.



Meaningful information from
2,680 workplaces out of 7,134
workplaces (response rate of
38%).

Employee questionnaires
distributed to 81% of the
workplaces. 21,981
questionnaires were returned and
this accounts for 50% response
rate.

Detailed information on employee-
management relationship, job
satisfaction, motivation issues,
consultation mechanisms,
incentive schemes, EO policies,
workplace characteristics and
employee characteristics



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Preliminary Analyses

To test hypotheses 3-5, we conduct PCA on the measures of job demands and job control.

After undertaking the PCA, missing cases are detected in the components. Imputation method is used in dealing with the missing values.

47 observations (out of 403 observations) with missing cases could not be imputed. These observations are dropped.

Our feasible sample consists of 20,549 observations.



HD & HC: takes the value of 1 when job demands is greater than -0.07 and job control is greater than 0.26; zero otherwise.

HD & LC: takes the value of 1 when job demands is greater than -0.07 and job control is less than or equal to 0.26; and takes the value of 0 otherwise.

LD & HC: takes the value of 1 when job demands is less than or equal to -0.07 and job control is greater than 0.26; and takes the value of 0 otherwise.

LD & LC: takes the value of 1 when job demands is less than or equal to -0.07 and job control is less than or equal to 0.26; and zero otherwise.

Descriptive Statistics

| | Mean | Standard Deviation | Minimum | Maximum |
|---------------------------|------|-----------------------|---------|---------|
| Types of Jobs | | | | |
| High Demand& High control | 0.24 | 0.43 | 0 | 1 |
| High Demand& Low control | 0.24 | 0.43 | 0 | 1 |
| Low Demand& High control | 0.27 | 0.44 | 0 | 1 |
| Low Demand& Low control | 0.26 | 0.44 | 0 | 1 |

Descriptive Statistics

| | Workplaces with 5 or more employees | |
|--|-------------------------------------|-------|
| | Females | Males |
| | % | % |
| Contract | | |
| Permanent | 0.923 | 0.934 |
| Temporary | 0.035 | 0.031 |
| fixed period | 0.041 | 0.033 |
| Occupation | | |
| Higher & Lower managerial and professional occupations | 0.349 | 0.294 |
| Intermediate occupations | 0.323 | 0.234 |
| Lower occupational category | 0.324 | 0.469 |

Descriptive Statistics

| | Workplaces with 5 or more employees | |
|--------------------------------|-------------------------------------|-------|
| | Females | Males |
| | % | % |
| Union Member | | |
| No, have never been | 0.477 | 0.428 |
| No, but have been | 0.156 | 0.185 |
| Yes | 0.362 | 0.384 |
| Tenure | | |
| less than 1 year | 0.115 | 0.109 |
| less than 2 year | 0.100 | 0.092 |
| less than 5 year | 0.249 | 0.231 |
| less than 10 years | 0.242 | 0.243 |
| 10 years or more | 0.292 | 0.321 |
| Marital Status | | |
| Single | 0.199 | 0.218 |
| married or living with partner | 0.675 | 0.719 |
| divorced/ separated | 0.095 | 0.053 |
| Widowed | 0.020 | 0.007 |
| Supervisor | 0.304 | 0.365 |

Source: author's computation based on WERS2011

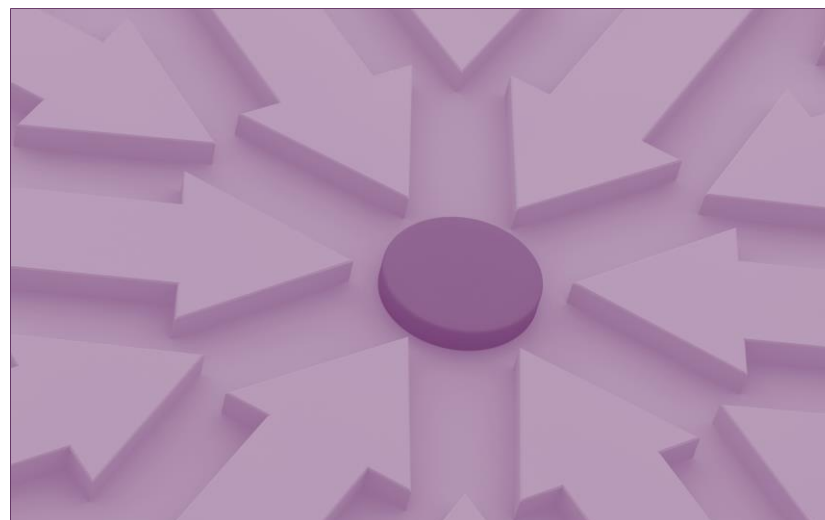
Note: Percentages are based on the total proportion of females (11,553) and males (8,996) in the dataset.

Empirical Strategy

Analysis is conducted individually for various forms of satisfaction

The nested nature of the data raises the question about multilevel models.

The use of ordered logit models are considered, and the parallel regression assumption is tested.

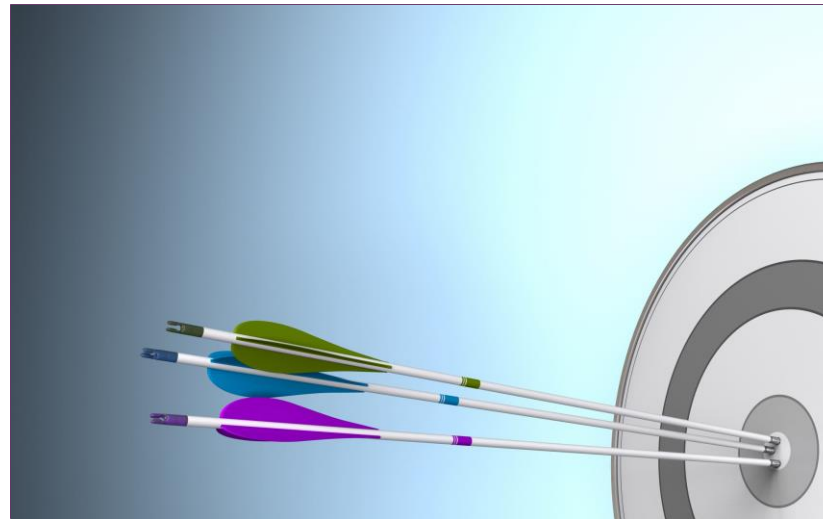


- Response variables are recoded into binary variables
- Logit models are estimated.
- We test for endogeneity by estimating a recursive simultaneous bivariate Probit model.

Result – Union Membership and Job Satisfaction

Union membership is negatively related to satisfaction with skills and involvement in decisions and positively related to satisfaction with pay and work itself.

The relationship between union membership and job satisfaction may be as a result of reverse causality.



Test for exogeneity – Union membership is not endogenous for seven dimensions of job satisfaction.

Support for the explanation of the reverse causality between union membership and pay satisfaction.

Results

[illegible]

Results

| | Satisfaction with: | | | | | | | | |
|-----------------------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------------------|
| | Achievement | Initiative | Influence | Training | Skills | Pay | Job security | Work itself | Involvement in decisions |
| Main Predictors | | | | | | | | | |
| Job Control | | | | | | | | | |
| Over tasks | 0.243*** (0.037) | 0.391*** (0.038) | 0.582*** (0.039) | 0.043 (0.041) | 0.142*** (0.041) | 0.072** (0.033) | 0.096* (0.055) | 0.163*** (0.036) | 0.113** (0.046) |
| Over pace | -0.021 (0.035) | -0.038 (0.036) | 0.009 (0.036) | 0.031 (0.037) | 0.032 (0.037) | 0.078*** (0.030) | 0.109** (0.052) | -0.020 (0.034) | 0.024 (0.043) |
| On how to do task | 0.080* (0.044) | 0.298*** (0.046) | 0.197*** (0.047) | 0.080* (0.048) | 0.175*** (0.048) | 0.015 (0.039) | 0.110* (0.067) | 0.120*** (0.043) | 0.023 (0.056) |
| Over order of task | -0.023 (0.042) | 0.184*** (0.042) | 0.112*** (0.042) | 0.067 (0.045) | 0.036 (0.045) | -0.001 (0.036) | 0.055 (0.061) | -0.075* (0.040) | 0.099** (0.050) |
| Over working time | 0.003 (0.023) | 0.022 (0.025) | 0.113*** (0.025) | 0.085*** (0.026) | 0.101*** (0.025) | 0.101*** (0.020) | 0.029 (0.035) | -0.050** (0.023) | -0.042 (0.028) |
| Job demands | | | | | | | | | |
| Work overload | -0.094** (0.044) | -0.020 (0.045) | -0.120*** (0.041) | -0.225*** (0.045) | -0.186*** (0.045) | -0.081** (0.036) | -0.089 (0.069) | -0.106** (0.043) | -0.041 (0.057) |
| Work intensity | 0.501*** (0.054) | 0.268*** (0.056) | 0.115** (0.051) | -0.055 (0.056) | -0.059 (0.057) | -0.239*** (0.049) | -0.274*** (0.091) | 0.369*** (0.053) | 0.013 (0.071) |
| Timing demand | -0.074** (0.038) | -0.063 (0.039) | -0.139*** (0.034) | -0.106*** (0.037) | -0.174*** (0.038) | -0.097*** (0.031) | -0.122** (0.059) | -0.112*** (0.036) | -0.049 (0.048) |
| Types of Jobs (ref: LD_HC) | | | | | | | | | |
| High Demand and High Control | -0.061 (0.082) | 0.101 (0.091) | -0.030 (0.075) | 0.054 (0.082) | 0.014 (0.090) | -0.105 (0.066) | 0.009 (0.107) | -0.091 (0.080) | -0.098 (0.099) |
| High Demand and Low Control | -0.243*** (0.091) | -0.099 (0.101) | -0.203** (0.089) | 0.168* (0.098) | 0.138 (0.105) | -0.165** (0.080) | 0.179 (0.127) | -0.209** (0.094) | -0.234** (0.112) |
| Low Demand and Low Control | -0.268*** (0.073) | -0.109 (0.078) | -0.174** (0.073) | 0.084 (0.081) | 0.086 (0.085) | 0.053 (0.064) | 0.015 (0.102) | -0.113 (0.074) | -0.088 (0.092) |
| Demand x EO Policy | -0.117* (0.066) | -0.104 (0.067) | 0.019 (0.060) | 0.081 (0.064) | 0.195*** (0.067) | 0.091* (0.055) | 0.085 (0.109) | -0.120* (0.063) | -0.038 (0.085) |
| Control x EO Policy | 0.109** (0.046) | 0.099** (0.048) | 0.176*** (0.054) | -0.010 (0.051) | -0.029 (0.048) | -0.047 (0.042) | -0.080 (0.077) | 0.111** (0.043) | 0.041 (0.060) |

Key points

In line with the D-C model, job demands and job control are negatively and positively related to various forms of job satisfaction.

Work intensity is positively related to satisfaction with achievement, initiative, influence and work itself.

Support for the argument that job demands may not necessarily have negative effects on different forms of job satisfaction.

CONCLUSION



The effects of being in different types of jobs were also confirmed except in the case of active jobs.

The importance of the presence of EO policies is also confirmed.

Analysis of specific measures of practices and various forms of job satisfaction are necessary.

Thank You!

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