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# Explaining employees' evaluations of organizational change with the job-demands resources model

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## Abstract

**Purpose** – Departing from the Job Demands-Resources (JD-R) model, the paper examined the relationship between job demands and resources on the one hand, and employees' evaluations of organizational change on the other hand.

**Design/methodology/approach** – Participants were 818 faculty members within six faculties of a Dutch university. Data were analyzed using multilevel analyses with faculty as the grouping variable.

**Findings** – For the job demands, results show that emotional demands, but not workload, are negatively related to more favorable evaluations of organizational change. Regarding job resources, results show that support from the supervisor, job control, and opportunities for professional development is associated with more favorable evaluations of organizational change. Moreover, job control and support from the supervisor buffered the negative relationship between emotional demands and favorable evaluations of organizational change.

**Research limitations/implications** – One of the clear implications of this study is that organizations should try to provide their employees with adequate resources together with the ascertaining of jobs with low job demands such that people can fulfill their job without severe adverse working outcomes. If it is impossible to reduce or optimize specific demands, additional job resources should be provided.

**Originality/value** – The finding that job resources are important in shaping evaluations of organizational change perceptions is consistent with the idea that employees with enough resources will be motivated to do their job and to be motivated to participate in change processes. Employees, who perceive their work environment and their job as highly resourceful, are more likely to anticipate into a pending change effort.

**Keywords** Evaluations, Organizational change, Resources

**Paper type** Research paper

There has been great pressure to bring about continuous change in teaching and education. For school staff, the choice is to accept the increased workloads or to try to get more resources (Hull, 2006). Moreover, working lives of teachers and faculty



members are undergoing profound and dramatic changes (Klette, 2002). As educational institutions attempt to cope with a progressively more turbulent environment, they rely increasingly on their employees to adapt to change (Armenakis and Bedeian, 1999; Stanley *et al.*, 2005). At the same time, employees often resist change for a variety of reasons stemming from individual differences and from the work context (Oreg, 2004; Stanley *et al.*, 2005).

In the examination of reactions to organizational change, change commitment refers to the positive attitudes toward the change, the alignment with the change, the intentions to support it, and the willingness to work on behalf of its successful Implementation (Herold *et al.*, 2007). We can think of evaluations of change as the set of attitudes toward change in the organization and employees' evaluations of change are a function of the degree to which the change impacts their work. Yet, our current understanding how evaluations of organizational change is related to work characteristics, i.e. job demands and job resources is limited while more and more employees are confronted with high task demands concomitant to organizational change processes (Schyns, 2003). Understanding the relationships between direct work characteristics and evaluations of organizational change will help organizations to foresee for what working environments or what jobs accepting organizational change will be easier and this information can be used to design the implementation of changes properly.

In the present study, we will examine how work characteristics, in the aftermath of organizational change, are associated with employees' evaluations of organizational change. Following Leiter and Maslach (2005), employees' evaluations of change within the organization refer to whether employees perceive that things are going better or worse within the workplace concomitant organizational change processes. Favorable evaluations of change are an important condition leading to higher acceptance of change resulting in valuable outcomes in organizations. The theoretical perspective that we use is the Job Demands-Resources (JD-R) model (Bakker *et al.*, 2003; Bakker *et al.*, 2004; Demerouti *et al.*, 2001). The JD-R model distinguishes between two main types of task characteristics: job demands and job resources. Originally, this model aims at explaining specific adverse work outcomes, e.g. emotional exhaustion, cynicism, absenteeism, and performance by job demands and job resources. The aim of the present study is to use the JD-R model to conceptualize the work environment and to explain unfavorable evaluations of organizational change by employees with this model. That is, if the work environment, conceived as individual job demands and resources, can be viewed as a determinant of attitudes toward changes. Since job resources in the JD-R model are thought to be able to buffer the negative effects of job demands on the outcome variable, we will also test for buffering effects of job resources on the relationship between job demands and evaluations of organizational change. To test the hypotheses derived from the JD-R model, we will use a sample of faculty members of a Dutch university.

### **The job demands-resources (JD-R) model**

The job demands-resources (JD-R) model (Bakker *et al.*, 2003; Demerouti *et al.*, 2001) is an overarching model that can be applied to various occupational settings, irrespective of the particular demands and resources involved. The JD-R model assumes that every job has its own specific characteristics. These specific characteristics can be classified

in two general categories: job demands and job resources. Job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological or psychological costs. Examples are high work pressure, an unfavorable physical environment, and emotionally demanding interactions with clients (Bakker *et al.*, 2003). Job resources refer to those physical, psychological, social, or organizational aspects of the job that:

- are functional in achieving work goals;
- reduce job demands and the associated physiological and psychological costs; or
- stimulate personal growth, learning, and development.

Resources may be located at the level of the organization at large (e.g. pay, career opportunities, or job security); interpersonal and social relations (e.g. supervisor and coworker support, team climate); the organization of work (e.g. role clarity, participation in decision making); or at the level of the task (e.g. skill variety, task identity, task significance, autonomy, or performance feedback) (Bakker *et al.*, 2003). The central assumption in the JD-R model is that job demands evoke a stress process, because they lead to energy depletion, whereas a lack of job resources evokes a withdrawal process, because it undermines employee motivation and learning. The model proposes that the development of adverse working outcomes (i.e. burnout) for employees follows the following fundamental processes (Demerouti *et al.*, 2001). Job demands lead to overtaxing and in the end, to exhaustion. Lack of resources complicates the meeting of job demands, which further leads to adverse outcomes, including reduced motivation, cynicism, or withdrawal behaviors. The model further assumes that job resources are capable of buffering the effects of job demands on adverse work outcomes (Bakker *et al.*, 2005; Demerouti *et al.*, 2001).

Studies generally support the assumptions of the JD-R model, not only for the original claim of burnout as outcome variable, but also for various other adverse work outcomes. For instance, job demands and resources have been shown to be related to work-to-family conflict (Voydanoff, 2004), job dissatisfaction (Janssen *et al.*, 2004), absenteeism (Bakker *et al.*, 2003) or conversely presenteeism (Demerouti *et al.*, 2009), performance (Bakker *et al.*, 2004), and work engagement (Schaufeli and Bakker, 2004) in a way that is consistent with the predictions of the JD-R model.

In the present study, we will expand the JD-R model and examine the associations of job demands and resources with evaluations of organizational change, since the implementation of organizational change may easily evoke adverse working outcomes. Point of departure is that essentially burnout involves evaluation processes (e.g. negative evaluations of oneself or negative evaluations of others, see Janssen *et al.*, 1999). In the present study, we want to predict the favorableness of evaluations of organizational change processes from the work environment: Which combination of job demands and resources is associated with more favorable associations of organizational change? Analogous to the original JD-R model, job demands and job resources will then be associated with evaluations of change.

A positive attitude toward organizational changes and the adaptation of the required new behaviors by employees is essential for a successful implementation of changes. Therefore, negative evaluations of organizational change are a serious threat for organizational development, particularly when there is a considerable group of

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employees deploying resistance and this unwillingness is persistent. Typically, although most employees eventually adapt to change, there are some distinct stages in the aftermath of organizational changes (Luecke, 2003):

- (1) *Shock*. In the shock phase, people feel threatened by the change process; often they become immobilized and shut down in order to protect themselves. It is also possible that they feel unsafe, timid, and unable to act;
- (2) *Defensive retreat*. In the defensive retreat stage employees may get angry what has been done to them, even as they hold on to accustomed ways of doing things;
- (3) *Acknowledgment*. Eventually, most people cease denying the fact of change, and acknowledge that they have lost something;
- (4) *Acceptance and adaptation*. Most people at some time internalize the change, make needed adaptations, and move on (Luecke, 2003).

This stages model of Luecke about how people deal with change and eventually accept it, emphasized that although most people work through the four stages, some will get stuck in defensive routines and channel their energy into negative evaluations of organizational change process. It seems no overstatement that one of the main tasks of change management and organization development is the proper management of employees' attitudes and evaluations. The appropriate strategies, such as empathy, support, communication, and participation and involvement, have received considerable attention in the organizational development literature (Cummings and Worley, 2005). Little attention however, has been given to the impact of job demands and job resources, though these may also have a direct association with evaluations of organizational change because they represent the context in which changes take place and at the same time the direct, individual work environment.

The faculty members in the present study can be looked at as ground-level implementors of change (Lau and LeMahieu, 1997). Change initiatives for these faculty members typically have an important impact on their work situation, e.g. how their work is accomplished, and change initiatives ask unequivocally for their effort to make change a success (see Eby *et al.*, 2000).

### *Job demands*

Jobs with high demands exhaust employee's mental and physical resources and therefore lead to adverse outcomes through the depletion of energy (i.e. a state of exhaustion) (Bakker *et al.*, 2003). Two important job demands for university staff are workload and emotional demands of the job. Workload is a rather broad concept; it may refer to work time commitments, such as the number of hours devoted to paid work and work-related activities (Jimmieson *et al.*, 2004), but it also has been conceptualized as time pressure, referring to the perception of having too many things to do and not enough time to do them (Frone *et al.*, 1997). The concept of emotional demands seems to be especially important in the present study, because of the (direct) contacts with students by the faculty members. Emotional demands refer to those aspects of the job that require sustained emotional effort because of (extensive) contacts with students (Van Vegchel *et al.*, 2004).

Although it is possible that high job demands are associated with positive feelings of accomplishment, it is probably more realistic to assume that high job demands

deplete one's energy reservoir. When job demands are continuously greater than supporting power of employees, the resulting energy depletion may undermine efforts to actively participate in change initiatives, and it becomes more likely that the employee will develop negative attitudes toward organizational change initiatives.

From the JD-R model, it follows that job demands will be associated with adverse work outcomes, thus we formulate the following hypothesis.

- H1.* Job demands, i.e. workload; and emotional demands, will be negatively related to favorable evaluations of organizational change.

### *Job resources*

From the large number of job resources in the working context, we choose two direct task characteristics (namely job control and opportunities for professional development) and support from the supervisor to be included in the study. Job control, or autonomy, refers to the amount of decision latitude the employee has in order to deal with various job elements or employees' ability to control their own activities and skill usage (De Jonge *et al.*, 1999). Work environments that offer job control and opportunities for professional development may foster the willingness to dedicate one's abilities to the task and yield positive outcomes (Bakker and Geurts, 2004) instead of developing negative attitudes, such as unfavorable evaluations of organizational change. Increasingly, organizations recognize that employees will be more effective when they are given more control over how they meet increasing job responsibilities and how to shape their professional development (see Schaubroeck *et al.*, 2001). This will also contribute to a more positive attitude toward change, as employees will see more personal opportunities to influence the consequences for their job, and may evaluate the proposed changes less as threats, and more as (career) opportunities.

Support from the supervisor is probably one of the most well known types of resources that have been proposed as a potential buffer against adverse work outcomes (e.g. Van Emmerik, 2002, Haines *et al.*, 1991). Support from the supervisor is likely to be associated with organizational change initiatives and favorable evaluations of organizational change. In the study of Antoni, with 104 respondents evaluating a change process (2004), the effects of support from the supervisor could not be tested directly, but it was shown that perceived openness of one's colleagues towards change enhanced participation opportunities and supported change attitudes. From this study, it seems to follow, that decisions of employees to participate or not to participate positively in the change process is based on their perceptions of participation opportunities and support from the supervisor and on their general attitude towards change. Van Knippenberg and Van Knippenberg (2005) noted that the ability to commit people to change is often seen as a key aspect of effective leadership and argue that employee's willingness to participate in organizational-change programs can be seen as a measure of leader effectiveness.

Support from the supervisor may have direct but also indirect effects on employees through the work environment. A supportive work environment enhances employee well being and helps protect employees from tension, depression, emotional exhaustion, and health complaints. Supervisors can build a positive work environment by being supportive (Gilbreath, 2004). We conceptualize leadership as an aspect of the faculty climate, which is a variable that reflects shared faculty

members' perceptions of support from the supervisor. Implicit is the idea that faculty members working in the same faculty are likely to perceive similar leadership behaviors. This idea that leadership can also be conceptualized at the aggregate level is consistent with the approach of treating leadership as a climate aspect by Chen and Bliese (2002) and Griffin and Mathieu (1997).

From the JD-R model, it follows that job resources are associated with work engagement and accordingly we formulate the following hypothesis.

- H2.* Job resources, i.e. support from the supervisor; job control; and opportunities for professional development, will be positively related to favorable evaluations of organizational change.

### *The buffering role of job resources*

To date, the proposition in the JD-R model that has received little attention is that job resources may buffer the impact of job demands on adverse working outcomes. Different job resources are thought to be able to play the role of buffer for different job demands. This buffering hypothesis is consistent with the Demand-Control model of Karasek (1979) but extends this model by asserting that specific job resources can play the role of buffer for specific job demands. Which job demands and resources play a role in a certain organization depends on the specific job characteristics that prevail. This buffering hypothesis also agrees with Diener and Fujita's (1995) findings that there are many potential resources that can facilitate the achievement of specific goals, implying that various goals are likely to be influenced by various resources. Finally, the buffer hypothesis is consistent with Kahn and Byosiere (1992), who argue that a buffering effect can occur between any pair of variables in the stress-strain relationship.

Several studies supported the buffering hypothesis. Bakker *et al.* (2003) in their study among four home-care organizations, found that the impact of job demands (e.g. workload, physical demands, and patient harassment) on feelings of exhaustion was reduced when home-care professionals possessed many job resources, including social support, feedback, financial rewards, professional development, and coaching. Recently, Bakker *et al.* (2005) found in their study among employees working for an institute for higher education that several job resources (e.g. job control, social support from colleagues, a high-quality relationship with the supervisor, and performance feedback) were capable of buffering the impact of work overload on exhaustion. Similarly, Van Vegchel *et al.* (2005) found in their study among 405 nursing home employees that high rewards buffered the relationship between job demands and sickness absenteeism. From the latter study, it appeared that resources are important for reducing adverse working outcomes (i.e. sickness/absence duration). Thus, an additional goal of the present study was to consider the role of job resources as a buffer of the effects of job demands on the evaluations of organizational change among faculty members. The expected moderating effect that job resources may have on the relation between job demands and the evaluations of organizational change can be explained in terms of a buffering hypothesis. According to this buffering hypothesis, employees who have access to more job resources are better able to cope well with organizational change than employees who have less access to job resources. Consequently, the latter group of employees scoring low on job resources is expected to

be more vulnerable to the effects of job demands and will score lower on the evaluations of organizational change.

- H3.* Job resources, i.e. job control; support from the supervisor; and opportunities for professional development, will buffer the relationship between job demands and evaluations of organizational change. More specifically, employees scoring high on job resources will be less vulnerable for the negative effects of job demands on the favorableness of evaluations of organizational change than employees scoring low on job resources.

## Method

### *Participants*

The study was part of a greater research project carried out in 2005 among employees of a Dutch university (Teams in Schools Wave 2005). This university offers a wide variety of programs (e.g. in technology, science and engineering, commerce and administration, health care), organized in six faculties, with 46 departments, and support staff (administration, ICT, and central staff). The university has about 25,000 students. The data collection took place after organizational restructuring and it is important to note that this was not a downsizing initiative nor were any layoffs involved. Thus, strictly speaking, employees could not suffer from survivor syndrome or the guilty feeling that colleagues were laid off instead of oneself because every teacher retained his/her contract of employment.

After announcements through the internal media, all 2933 employees (faculty and non-faculty, i.e. line/staff personnel) received an informative letter about the study from the project team, together with the questionnaire and a return envelope, at their home address. The confidentiality and anonymity of the data were emphasized. Participants were requested to fill out the questionnaire at home and to post it in a special box placed at their department. A total of 1,584 employees (faculty members and line/staff) filled out and returned the questionnaire (overall response rate was 54 per cent).

For the present study, we only used the information of faculty members and excluded the information of line/staff personnel. The sample of merely faculty members was comprised 832 faculty members: 403 men (48 per cent) and 429 women (52 per cent). The mean age of the sample was 48.4 (SD = 9.0) years. The average number of years of working experience within this institute was 11.3 (SD = 8.7). Data were analyzed using multilevel analyses with faculty as the grouping variable, since change initiatives are implemented at the faculty level.

## Measures

*Evaluations of organizational change.* Employee's reactions to organizational change are commonly defined in terms of perceptions about the processes through which change has been implemented. We developed eight items to assess employees' evaluations of organizational change to reflect a range of favorable and unfavorable assessments. The items were:

- (1) Usually I know what my faculty wants to accomplish with organizational change initiatives;
- (2) Most change initiatives do not end up with positive results;



- (3) Change initiatives within this faculty usually make sense;
- (4) I know what the consequences of change initiatives are for my work;
- (5) I am satisfied with the way change is managed within this faculty;
- (6) Management takes interests of employees into consideration when implementing change initiatives;
- (7) Management provides enough time and resources to implement change initiatives; and
- (8) I get enough opportunities to be involved in change initiatives.

Except for item two, the items were reverse coded so that higher scores referred to more positive evaluations of organizational change. Participants could respond to each of the statements using a five-point rating scale (1 = completely disagree, 5 = completely agree). The internal consistency of the scale was satisfactory (Cronbach's alpha = 0.88).

*Job demands.* Two job demands were included in the present study. Work overload was measured with a short scale developed by Bakker *et al.* (2003). The scale included three items that refer to quantitative, demanding aspects of the job (e.g. time pressure, working hard). Items are scored on a five-point scale, ranging from 1 = never to 5 = always. Alpha = 0.86.

*Emotional demands* was based on a scale developed by Van Veldhoven and Meijman (1994). The scale included six items. A sample item is "Is your work emotionally demanding?" (1 = never, 5 = always). Alpha = 0.81.

*Job resources.* Job control was measured with a short scale developed by Bakker *et al.* (2004). It includes three items particularly referring to decision authority (i.e. freedom of action in accomplishing the formal work task). A sample item is "I can decide myself how I execute my work". Alpha = 0.74. Opportunities for professional development was measured with the three-item scale of Bakker *et al.* (2003) (i.e. opportunities to learn new things). An example item is "My work offers me the opportunity to learn new things". Alpha = 0.90. Supportive relationships at work can serve to alleviate the stress associated with organizational change. Following Kraimer and Wayne (2004), we therefore included a work-related source of social support in this study: supervisor support. We examined supervisor support in terms of leader-member exchange (Graen and Uhl-Bien; Liden *et al.*, 1993; Scandura and Schriesheim, 1994). LMX refers to the quality of the interpersonal exchange relationship between an employee and his/her supervisor and has been shown to be a significant predictor of numerous work attitudes (Liden *et al.*, 1993). Consistent with this research, we measured "Support from supervisor" with Scandura and Schriesheim's (1994) seven-item measure of the Leader-Member Exchange (LMX) from the member perspective (Alpha = 0.94) All three job resources measures were scored on a five-point scale (1 = never, 5 = always).

Most of the work on LMX has focused on LMX relationships as dyads within work groups. Within complex organizations, as Graen and Uhl-Bien (1995) argue, this is not representative of the nature of leadership situations, which are characterized most often by a leader and multiple members working together in some type of work unit or team. Rather than independent dyads, LMX should be viewed as systems of interdependent dyadic relationships, or network assemblies (Graen and Scandura, 1987). So-called group assessments (i.e. in the present study the assessment of faculty

members within different faculties) seem to be very useful in measuring job characteristics and employees' attitudes (Frese and Zapf, 1988; Spector, 1992). In the analyses, we used support from the supervisor at the (aggregate) faculty level. The mean value of within-faculty agreement for support from the supervisor or LMX among the six faculties was 0.94 (SD = 0.02). On the basis of prevailing criteria for sufficient agreement (e.g. Klein and Kozlowski, 2000; Simons and Peterson, 2000) these values suggest appropriateness of aggregating individual responses to the faculty level.

*Background variables.* A number of background variables that may act as confounders because of their associations with job demands, were controlled in the analyses (Rodriguez *et al.*, 2001). Gender (male = 0, female = 1), mean tenure in this organization (in years), number of hours employed (per week) was included in the analyses.

## Results

Table I presents means, standard deviations, and correlation coefficients for all measures included in the study. As expected, workload ( $r = -0.12, p < 0.01$ ) and emotional demands ( $r = -0.30, p < 0.01$ ) are negatively associated with evaluations of organizational change. Job control ( $r = 0.40, p < 0.01$ ), opportunities for professional development ( $r = 0.48, p < 0.01$ ), and support from the supervisor ( $r = 0.29, p < 0.01$ ) are positively related to evaluations of organizational change.

Analysis of variance for evaluations of organizational change by faculty showed that 12 per cent of the variance is at the faculty level ( $p < 0.01$ ); that is, 12 per cent of the variance is explained by the grouping structure in the population. Given this 12 per cent explained variance and although we have only six faculties at level 2, we have chosen to perform multilevel analyses (six level 2 units is mentioned as the absolute minimum by Kreft and De Leeuw, 1998). Table II presents the results of multilevel analyses for employees' evaluations of organizational change.

In the first step of the analysis, the intercept-only model was estimated, i.e. the model that contains no explanatory variables (Hox, 2002). The second step included gender, tenure, hours employed, job demands, and job resources (including the aggregate measure of support from the supervisor). Mean unit size did not contribute to the explanation of evaluations of organizational change and was not included in the final analysis. In the third step, the six possible two-way job demands x resources interaction terms were added. Because a unit-level variable was used to predict individual-level outcomes, the level 1 variables used in the interaction terms were grand mean centered (Hofmann and Gavin, 1998). The results of step 3 are only considered when the introduction of the product terms led to significant interaction coefficients; otherwise, we refer to step 2 for the statistics of possible main effects (Cohen and Cohen, 1975).

*H1* stated that job demands are negatively related to evaluations of organizational change. Table II shows this negative relationship between emotional demands and favorable evaluations of organizational change ( $\gamma = -0.16, p < 0.01$ ), but workload is not significantly related to evaluations of organizational change ( $\gamma = -0.03$ , ns). Thus, *H1* receives mixed support: *H1a* is not supported, but *H1b* is supported. *H2* stated that job resources are positively related to evaluations of organizational change. Table II shows that support from the supervisor ( $\gamma = 0.58, p < 0.05$ ), job control

	Mean	SD	1	2	3	4	5	6	7	8
Evaluations of change	2.63	0.75								
Gender	0.51	0.50	0.02							
Tenure	11.36	8.67	-0.08	-0.19**						
Hours	27.76	9.19	-0.06	-0.26**	0.13**					
Workload	3.46	0.93	-0.12*	0.10**	-0.04	0.13**				
Emotional demands	2.07	0.62	-0.30**	-0.04	0.08*	0.13**	0.37**			
Job control	3.64	0.73	0.40**	0.00	-0.12**	0.02	-0.06	-0.21**		
Opportunities for profession development	3.55	0.91	0.48**	0.12**	-0.11**	-0.02	-0.04	-0.26**	0.49**	
Support from supervisor	3.11	0.22	0.29**	0.12**	-0.05	-0.03	-0.01	-0.14**	0.14**	0.27**

Notes: \* $p < 0.05$ ; \*\* $p < 0.01$

**Table I.**  
I. Means, standard  
deviations, and Pearson  
correlations

	Model 1		Model 2		Model 3	
	$\gamma$	SE	$\gamma$	SE	$\gamma$	SE
<i>Fixed part</i>						
Intercept	2.57**	0.10	-0.27	0.77	0.93	0.75
Gender			0.11*	0.05	0.11*	0.05
Tenure			0.00	0.00	0.00	0.00
Hours			0.00	0.00	0.00	0.00
Workload (W)			-0.03	0.02	0.76*	0.35
Emotional demands (ED)			-0.16**	0.04	-0.06	0.51
Job control (JC)			0.19**	0.03	0.19**	0.03
Opportunities for profession. development (OPD)			0.25**	0.03	0.25**	0.03
Support supervisor (SS)			0.58	0.25	0.55	0.25
SS x W					-0.25*	0.11
SS x ED					-0.04	0.17
JC x W					-0.06	0.04
JC x ED					0.11*	0.05
OPD x W					0.01	0.03
OPD x ED					-0.09	0.05
<i>Random part</i>						
Level 1 intercept variance (SD)	0.49 (0.02)**		0.36 (0.02)**		0.36 (0.02)**	
Level 2 intercept variance (SD)	0.06 (0.04)		0.01 (0.01)		0.01 (0.01)	
Deviance	1784.62		1524.96		1510.50	

**Table II.** Multilevel estimates for models predicting evaluations of organizational change initiatives

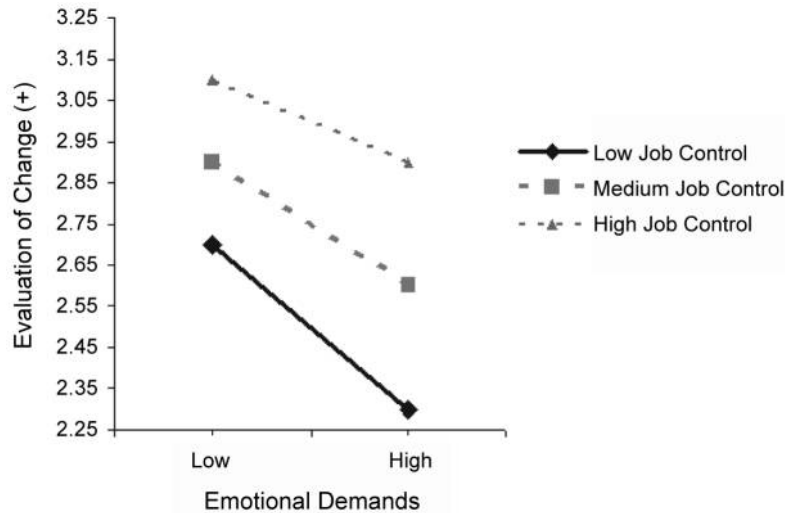
**Notes:** The  $\gamma$  values reported are unstandardized coefficients. After the estimation of the intercept-only model (i.e. model 1), the variables were entered in two steps. Model 2 included gender, tenure, hours, two types of job demands, and three types of job resources, including the aggregate measure of LMX. In model 3 the interaction terms were added. \* $p < 0.05$ ; \*\* $p < 0.01$

( $\gamma = 0.19, p < 0.01$ ), and opportunities for professional development ( $\gamma = 0.25, p < 0.01$ ) are significantly and positively associated with evaluations of organizational change. Thereby,  $H2$  is supported for all three-job resources.

*Buffering effects of job resources*

$H3$  stated that job resources buffer the relationship between job demands and favorableness of evaluations of organizational change. More specifically, it was predicted that employees with high levels of job resources would be less vulnerable for the negative effects of job demands on the evaluations of organizational change than employees with low levels of job resources. As can be seen in Table II, two interaction terms added to the prediction of employees' evaluations of organizational change. Following the recommendations of Cohen and Cohen (1983) and Aiken and West (1991), graphical displays of these relationships were plotted to facilitate the interpretation of these significant interactions.

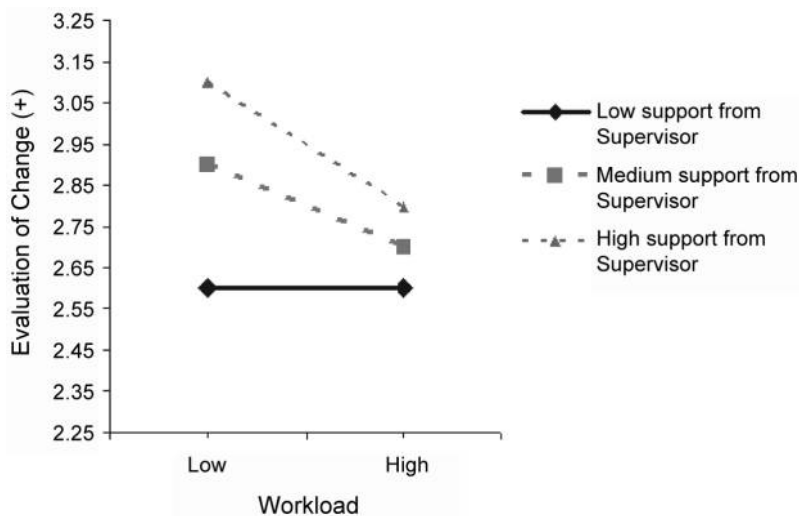
Figure 1 depicts the job control x emotional demands interaction. Overall, employees scoring high on job control score more positive on evaluations of change than employees scoring low on job control. As expected, job control, buffers the negative relation between emotional demands and the evaluations of change. When employees experience high job control, emotional demands hardly influences the



**Figure 1.**  
Graphical presentation of  
the moderating role of job  
control on the relationship  
between emotional  
demands and evaluations  
of organizational change

evaluations of change. When employees however experience low job control, the evaluations of change is far less positive when emotional demands are high. These results confirm our *H3a*.

Figure 2 shows the results for leader support. The evaluations of change are particularly low when there is lack of leader support, and this is irrespective of extent of workload. When however, the supervisor is more supportive, the level of workload does make a difference in the evaluations of change. The evaluations of change are particularly positive, when leader support is high, and workload is low. With these results, *H3b* is not supported.



**Figure 2.**  
Graphical presentation of  
the moderating role of  
support from the  
supervisor on the  
relationship between  
workload and evaluations  
of organizational change

## Discussion

The central aim of the present study was to explain evaluations of organizational change from job demands and job resources in a sample of faculty members in a Dutch university of professional education. The research question investigated in this paper is a logical extension of research on burnout resulting from excessive job demands and inadequate job resources to another adverse psychological outcome: negative evaluations of organizational change. As such, the paper helps to advance our understanding of the consequences of job demands and job resources.

We tested and expanded the JD-R model resources (Bakker *et al.*, 2003; Demerouti *et al.*, 2001). The JD-R model assumes that two categories of job characteristics – job demands and job resources – play a key role in the development of adverse work outcomes. The results of the present study showed that emotional job demands were indeed negatively related to evaluations of organizational change, whereas job resources (job control, opportunities for professional development, and support from the supervisor) were positively related to evaluations of organizational change. Further, two buffering relationships of job resources on the relationship between job demands and evaluations of organizational change were found conform the JD-R model.

With respect to the testing of the buffering hypothesis, the two interactions that were significant were the interaction between job control and emotional demands and the interaction between workload and support from the supervisor. Conform our expectations, job control, buffered the negative relation between emotional demands and the evaluations of change. However, although employees scoring high on support from the supervisor are more positive in the evaluations of change, there was no buffer effect. The results suggest that the positive effect of job resources, e.g. leader support, only is present under conditions of low job demands. One explanation of these contradictory findings is that in this specific situation (organizational change) job control and support from the supervisor do not stand for the same type of resources. Job control refers to the control work processes and signifies that employees can actively be involved in the ability to make decisions and the opportunity to exercise control over the work to be accomplished. Certainly, that is highly important during organizational change processes and may provide employees with a sense of control and mastery. In contrast, support from the supervisor was measured in terms of the quality of the interpersonal exchange relationship between an employee and his/her supervisor. Although support from the supervisor can be very comforting for employees, this type of resource may not offer employees real, concrete handles to deal with this organization. To disentangle this issue, future research could make a difference between various types of support from the supervisor. For instance, Aycan and Eskin (2005) distinguish between instrumental and emotional support from the supervisor. Instrumental support from the supervisor refers to the provision of direct assistance and advice. Emotional support from the supervisor refers to emphatic understanding and listening, and genuine concern for the well-being of the employee. It is possible that especially emotional support from the supervisor is a very adequate in feeling helped and concerned for but not an adequate resource for buffering stress relationships.

It was clear that under the condition of high support from the supervisor those with low workload show most favorable evaluations of organizational change. This

underscores the importance of support from the supervisor in combination with different levels of workload when explaining evaluations of organizational change. Contrary to our expectations support from the supervisor buffered the impact of workload on evaluations only when the latter was low. As Bakker *et al.* (2005), emphasized, employees do not experience work overload isolated without having some kind of support or interaction with their supervisor. Consequently, future research should examine combinations of work characteristics when explaining the experience of adverse working conditions in relation to evaluations of organizational change.

Multilevel analyses made it possible to specify cross-level interactions, i.e. to specify processes between the individual and the aggregate level that allow those individuals to be differentially influenced by certain aspects of the context (Snijders and Bosker, 1999). Ignoring the nested structure of the data may produce unreliable standard errors and result in misspecification of the models (Hox, 2002; Snijders and Bosker, 1999). In addition, observations from the same group are generally more similar than observations from different groups, which violate the assumption of independence of the observations. However, although initial testing for explained variance for evaluations of organizational change initiatives by the faculty level showed that 12 per cent of the variance was at the faculty level ( $p < 0.01$ ), not much variance was explained in the multilevel analyses when adding the variables. Future research may add other support variables at the group level, and focus perhaps on specific aspects of perceived organizational support (Eisenberger *et al.*, 1986) or support from colleagues at the aggregate level (Van Emmerik, 2002) to gain more insight in group level phenomena explaining evaluations of organizational change.

### Limitations

The first and most important limitation is that we used a cross-sectional design. This means that common-method variance may have influenced the results and that we cannot draw firm conclusions about the directions of the effects. Several previous studies have shown that the demands and resources are predictors of adverse work outcomes rather than outcomes (Schaufeli and Enzmann, 1998). But, due to this cross-sectional design, we are reluctant to suggest causal relationships from the analyses and we caution against any causal interpretation of the results and it is recommended to examine these issues more in depth using longitudinal designs in future studies.

A second limitation is that we used a specific group of professionals, namely faculty members. This means that future research is needed to clarify the generalizability of our findings to other occupations and organizations. While we expect that the presence of interaction effects should not necessarily vary with occupation, the relevant job demands and job resources may be different (see also Bakker *et al.*, 2005). Finally, the response rate of 54 per cent might limit the generalizability of the findings. It should be noted however, that this falls well within the norm of 40-80 per cent for this type of respondents (Baruch, 1999).

### Managerial implications

The present study focused on evaluations of organizational change. Since change processes are so pervasive within modern organizations, and it is unlikely that organizations could ever completely eliminate evaluations of organizational change

(Jex, 2002), employees' reaction to change processes deserve greater attention by practitioners and researchers alike. The finding that job resources are be important in shaping evaluations of organizational change perceptions is consistent with the idea that employees with enough resources will be motivated to do their job and to be motivated to participate in change processes. Employees, who perceive their work environment and their job as highly resourceful, are more likely to anticipate into a pending change effort. Other ways to reduce negative evaluations of organizational change are introducing organizational changes in a way that decreases the potential for resistance. For instance, by providing employee participation, in the implementation of the organizational changes, or by maintaining a high level of communication with employees throughout the change process (Jex, 2002). In this study, no attention is paid to the type of changes that are involved. These might not only be technology and efficiency driven, but actually aimed at increasing job resources. Further, as shown in the study of Worrall *et al.* (2004) with 830 managers from the UK, some types of change are more harmful than others, for instance, redundancy and delayering are more harmful than other types of change. Also, when employees do not see the necessity for change, or the benefit for their work performance, resistance is indeed a normal response. Therefore, including in research the types of change, and the intended effects of the job demands and job resources, seems a relevant direction for future research.

We tested the assumptions of the JD-R model and extended this model to explain evaluations of organizational change. Change agents often view evaluations of organizational change as something that must be overcome in order for change to be successful. However, some caution is in place. According to Schermerhorn *et al.* (2002), it may be helpful to view evaluations of organizational change as feedback change agents can use to facilitate the implementation of the change initiative. Supervisors can play an important role in facilitating and supporting employees, and by recognizing that when people resist change, they are defending something important and that appears threatened by the change attempt (Schermerhorn *et al.*, 2002). As Bordia *et al.* (2004) summarized previous studies: Employees generally prefer to receive information from their supervisors and others within the organizational hierarchy, rather than from external sources. In addition, organizations should invest in communication programs aimed at providing information dissemination and participative decision-making. In particular, it is important for organizations to emphasize the benefits of the change process at both the individual and organizational level (Cartwright *et al.*, 2007).

We concentrated on evaluations of organizational change, as an attitude that is formed jointly from the work environment and the change initiatives by the organization and shows unwillingness to make or support a change. Not dealing adequately with such attitudes may prompt employees to exhibit withdrawal behaviors. For instance, intention to leave can be viewed as one of the behavioral indicators of employee evaluations of organizational change because dissatisfied employees are likely to choose exit as a direct response when they do not believe the situation is likely to improve (Daly and Geyer, 1994; Oreg, 2006). Similarly, fatigue can also be viewed as a behavioral indicator of employee evaluations of organizational change because employees who feel they do not have any control over the change processes may react with tiredness when they believe that they will not be able to improve the situation.



One of the clear implications of this study is that organizations should try to provide their employees with adequate resources together with the ascertaining of jobs with low job demands such that people can fulfill their job without severe adverse working outcomes. Moreover, attitudes, such as intrinsic job satisfaction, and job characteristics perceptions, and for instance job engagement (Bakker and Demerouti, 2008), may even improve after the change process is completed when a system-wide approach to change is used (Tiernan *et al.*, 2002). If it is impossible to reduce or optimize specific demands, additional job resources should be provided. For example, the help of a colleague and the freedom to take a break before or after the rush hour may be valuable support. The task of organizations is to design and implement those job resources that can effectively buffer the effect of the job demands (Bakker *et al.*, 2005) beyond the opportunities of social support at the workplace (Van Emmerik, 2004).

By defining support from the supervisor as an aggregate level variable, we did not include the direct effects of supervisor behavior. However, these direct effects should not be ignored. Differences in supervision style may have major effects on employees' attitudes and well-being (Gilbreath, 2004). Therefore, we also recommend that supervisors monitor and manage especially their own behavior and, as Gilbreath (2004, p. 114) suggests, "Those who are unable or unwilling to do so should not supervise others". Future studies may want to incorporate leadership research more than we did and to elaborate on issues related to task-oriented and relationship-oriented behavioral, LMX, leader substitutes, and transformational leadership. This leadership research might give additional conceptual arguments with respect to the influence of job resources on employees' evaluations of organizational change.

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