Predicting Job Strain with Psychological Hardiness, Organizational Support, Job Control and Work Overload: An Evaluation of Karasek’s DCS Model

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Predicting Job Strain with Psychological Hardiness, Organizational Support, Job Control and Work Overload: An Evaluation of Karasek’s DCS Model

Seçil BAL TAŞTAN¹

Abstract

This study focused on the investigation of how personal and situational factors and work related outcomes are associated. The study was built on “Karasek’s Model of Job Strain” called as DCS Model (Demand-Control-Support). It is aimed to assess how psychological hardiness, organizational support, job control and work overload are related with perceived job strain. In order to test the propositions of the study, an empirical study was performed in Turkey among the employees working in banking & finance organizations. According to the findings, psychological hardiness had moderate negative relationship with job strain, organizational support had strong negative relationship with job strain, job Control had strong negative relationship and work overload had strong positive relationship with job strain. The research findings were evaluated with their conceptual and practical implications.

Keywords:

Job strain, Psychological hardiness, Organizational support, Job control, Work overload, Demand-control-support model.

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1. Introduction

This study was built on Karasek's Model of Job Strain while predicting strain with job demands, personal and organizational resources, and control over work. Karasek proposed that work situations could be classified in terms of the balance they offer between the demands on the employee and level of control employee can exert over those demands, as a way to gain insight into the connection between type of occupation and health. The model was subsequently extended to consider support at work: the demand-control-support, or DCS model. Work characterized by high demands, low decision latitude, and low support decreases health and well-being. It is proposed that as a personal resource psychological hardiness—the tendency to derive meaning from stressful events—would be negatively related to job strain, while work overload as a job demand would be positively related with job strain. As it was proposed in the model of Karasek, having control over job would decrease the level of job strain and organizational support as a collection of feeling support from organization, coworkers, and supervisors would be negatively related with perceived job strain. Thus, in this study, it was suggested that as being personal, situational, demand and control factors the psychological hardiness, organizational support, work overload and job control would be related with individuals' negative outcomes of job strain at work. Initially, the study provides literature review and conceptual framework for explaining the scope and concepts of the study and for introducing the generated hypotheses of the study. Then, the study presents the methodology of the research design for examining the suggested relations as proposed in the conceptual research model.

2. Literature Review and Hypotheses Development

2.1. Job Strain

Stain is defined as affective states of the individual characterized by depleted emotional resources and lack of energy (Lee & Ashforth, 1996). Lazarus’ “transactional theory” uses the concept of strain to explain the pain which is experienced by individuals when environmental factors are perceived as overtaxing and exceeding their ability to cope with them (Lazarus & Folkman, 1987). Job strain is the behavioural, physiological, and psychological processes that occur under the influence of stress and disrupt normal functioning related to job or organizational context (Winnubst, 1993). Job strain is the outcome of stress or the
negative effects of stressful events at job. Strain can be defined as the response to stress that is manifested by the individual, and may include psychological strains such as depression or anxiety, or physical and biological strains such as disease (Karasek & Theorell, 1990). As such, job strain refers to a particular form of emotional distress arising in response to a situation involving perceived threat to an individual’s well-being at work.

Karasek (1979) proposed that job strain results from a combination of high psychological demands (such as having to work hard and fast) with little freedom to make decisions affecting work (e.g., fixed schedules; subordinate rank; piece-work pay schedule). Karasek’s DCS model classifies jobs into categories according to level of psychological demand, decision latitude or job control and perceived support from workplace. Building on this model, the potential individual and situational factors that may predict job strain has been investigated for the conceptual framework of this study.

2.2. Job Demand-Control-Support Model

Karasek’s (1979) Job Demands-Control-Support (DCS) Model was subsequently extended to consider support at work control over work and the demands of the job that the individual face in the workplace. It has been indicated that work characterized by high demands, low decision latitude, and low support decreased employee health and well-being (Dollard & Winefield, 1998; de Jonge, Bosma, Peter & Siegrist, 2000). Psychological job demands, or workload, are defined by Karasek (1979) as psychological stressors present in the work environment (e.g., high pressure of time, high working pace, difficult and mentally exacting work). The concept "job decision latitude" has been described as the employee's ability to control his/her own activities and skill usage (Karasek & Theorell, 1990). According to DCS model view, psychological strains are a consequence of the joint effects of the demands of a job and the range of job control available to the employee (de Jonge & Kompier, 1997). These joint effects are also called interaction effects. DCS model proposed that the strongest adverse strain reactions (e.g., poor health and well-being) will occur when job demands are high and employee's control is low (i.e. so-called high strain jobs). In addition, the model suggested that work motivation, well-being, learning and growth will occur in situations where both job demands and
employee's control are high (i.e. so-called active jobs) (de Jonge et al., 2000, p.1318).

Further, the expanded three dimensional demand-control-support (DCS) model theory argued that the origins of work strain were situated primarily in the structural or organizational aspects of the work environment rather than in personal attributes or demographics (Karasek, 1979). The model predicted that employees with jobs combining high demands, low control, and low support from supervisors or co-workers were at the highest risk for psychological or physical disorders (job strain) (Johnson & Hall, 1988; Bruin & Taylor, 2006). There has been empirical support in the literature that the job strain can be an outcome of the interaction effects of the work dimensions. Empirical research on the DCS model have reported that studies have provided support for interaction effects between demand and control predicting strain (e.g., Schnall, Landsbergis, & Baker, 1994; Hurrell & McLaney, 1989; Perrewe & Anthony, 1990; Spector, 1987; Dollard et al., 2002). Based on the recent reviews of the DCS model (de Jonge & Kompier, 1997; Kristensen, 1995; Schaubroeck & Merritt, 1997; Rodrigues, Bravo, Peiro, & Schaufeli, 2001; Nomura, Nakao, Takeuchi, & Yano, 2009) it is argued that the framework is appropriate for further empirical investigation. Thus, this study has been built on DCS model framework proposing that employee job strain could be hypothesized with the job demands, personal and organizational resources, and control over work. In sum, the study focused on the investigation of how personal and situational factors and work related outcomes are associated with the negative work outcome of perceived job strain.

In the following section, the concepts that are examined as the factors predicting job strain will be introduced and the generated hypotheses of the study will be presented.

2.3. Psychological hardiness: A resource for coping with strain

Included in the relational model of stress, Folkman and Lazarus (1986) offers two major processes, cognitive appraisal and coping, as the basis for stress evaluation and resolution. It is argued that the individuality effects how each person approaches, views, and reacts to a stressor (Lazarus and Folkman, 1984). Moreover, in their model, Osipow and Spokane (1987) proposed that coping behaviours mediate the stress-
strain relationship and that “given equal amounts of stress, strain will be moderated by coping” (Richard & Krieshok, 1989, p. 118). On the other side, cognitive appraisal or emotional regulation (Gross, 1998) effect an individual’s subjective perception and evaluation of the strain as well as its personal significance. As positive psychology approach asserted, positive psychological capacities of individuals’ have roles in cognitive appraisals and coping mechanisms related to any negative conditions (Seligman, 2002). Thus, these are the theories and models that have formed the theoretical basis of the relationship between psychological hardiness and job strain.

As being one of the personal resources, psychological hardiness is defined as the tendency to derive meaning from stressful events. In the late 1970s Kobasa (1979) introduced the concept of psychological hardiness and suggested that hardiness moderates the relationship between stressful life events and negative individual outcomes, such as illness, mental health, job stress, strain, etc. Psychological hardiness is a personality characteristics which function as a resistance resource in the encounter with stressful life events or work conditions (Kobasa, Maddi, & Kahn, 1982). Hardiness has been described as the ability to understand the external conditions accurately and to make a desirable decision about oneself (Shepperd & Kashani, 1991; Funk, 1992). It was also indicated that psychological hardiness is a set of mental qualities that has been found to distinguish resilient from non-resilient people (Bartone, 2012, p.1). Psychological hardiness plays a basic role in life quality and to create a balance among different dimensions of life. People who have low hardiness will hurt more by harmful elements in long term while people with high hardiness apparently have natural or acquirable security against the stressful elements of both workplace and life.

Maddi (2004) saw hardiness as a construct with the three mentioned components or attitudes that together make people able to turn stressful situations from potential threats into opportunities. Individuals identified as hardy are believed to have a greater capacity for dealing effectively with life’s challenges (Allred & Smith, 1989). Accordingly, individuals high in hardiness are hypothesized to be better able to withstand the negative effects of life stressors and, consequently, are less likely than individuals low in hardiness to become ill and strained. Their resistance to strain presumably results from perceiving
life changes as less stressful (Kobasa, 1979) or from having more resources at their disposal to cope with life changes (Kobasa, 1982). In support of this assumption, Kobasa et al. (1982) indicated that hardy executives were more likely to remain healthy under conditions of high stress than were nonhardy executives. It was also mentioned that those high in psychological hardiness showed greater commitment – the abiding sense that life is meaningful and worth living (Contrada, 1989). Roth, Wiebe, Fillingim, & Shay (1989, p.136) reported that life events, fitness, hardiness, and health were significantly related while hardiness was found to have stress-resistance effects. The recent empirical studies have also reported the negative correlation of high psychological hardiness with negative individual outcomes (e.g., Britt, Adler, & Bartone, 2001; Bartone, 2012; Kalantar, Khedri, Nikbakht, & Motvalian, 2013; Khaledian, Hasanvand, & Pour, 2013). Klag & Bradley (2004) found a strong relationship between stressful daily experiences and mental health problems and reported that psychological hardiness had an intervening variable role in that relationship. Soderstrom, Dolbier, Leiferman, & Steinhardt, (2000) demonstrated that there was a significant association between hardiness from one side and perceived symptoms of mental health problems on other side. Another study found that having high score in hardiness was a valid predictor of self-efficacy and the individuals who were high in terms of hardiness also showed a better function with respect to indexes of mental health, anxiety, depression as well as physical complaints (Nishizaka, 2002). Consistent with those results, Schellenberg (2005) reported that coping strategies and psychological hardiness were negatively related with the effects of depression and increased physical and psychological wellbeing among the adults.

Consequently, based on the premise that psychological hardiness as a coping resource reduces the interactional effects of work demands and decreases the level of perceived job strain, we would expect job strain to be negatively correlated. The first hypothesis of this study is suggested as follows:

H1: Psychological hardiness is negatively related to perceived job strain.
2.4. Organizational support

Social exchange theory viewed employment as the trade of effort and loyalty for tangible benefits and social rewards (e.g., Bateman & Organ, 1983; Brief & Motowidlo, 1986; Etzioni, 1961; Mowday, Porter, & Steers, 1982; Organ & Konovsky, 1989). When one person treats another well, the reciprocity norm obliges the return of favorable treatment. To the extent that both the employee and the employer apply the reciprocity norm to their relationship, favorable treatment received by either party is reciprocated, leading to beneficial outcomes for both employee and the employer (Rhoades & Eisenberger, 2002, p.698).

Organizational rewards and favorable job conditions such as pay, promotions, job enrichment, fairness, supervisor support, rewards, and job conditions contribute to Perceived Organizational Support (POS) theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Organizational support theory (Eisenberger et al., 1986; Shore & Shore, 1995) supposed that to determine the organization’s readiness to reward increased work effort and to meet socio-emotional needs, employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well-being. An employee believes that these contributions result from the organization’s, supervisors, or co-workers' voluntary actions. According to POS theory, there are psychological processes underlying consequences of POS. On the basis of the reciprocity norm, POS should produce a felt commitment to organization’s welfare and to help the organization reach its objectives, the caring, approval, and respect resulted by POS should fulfil socio-emotional needs, increase social identity, increase employees’ performance, positive attitudes and coping with stressful work events (Rhoades & Eisenberger, 2002). These processes should have favourable outcomes both for employees (e.g., increased job satisfaction, heightened positive mood, decreased job strain, higher well-being) and for the organization (e.g., increased affective commitment and performance, reduced turnover).

According to Thompson & Prottas (2006), support is a resource that helps people cope with job stress through supportive relationships with others (Collins, 2008). Additionally, Shrestha & Mishra (2014) have found support for hypothesized direct relationships between job stress and psychological strain, different moderating variables, and outcome variables but none of the variables moderated job stress - psychological
strain relationship. Several studies have addressed that perceived organizational support is helpful in reducing the traumatic consequences of work stress. Studies by Cropanzano, Howes, Grandey, & Toth (1997), Venkatachalam (1995), and Shrestha and Mishra (2014) showed that POS was negatively associated with strains experienced in the workplace. Furthermore, being a pioneering reference, as it was proposed in the model of Karasek (1979), organizational support as a collection of feeling support from organization, coworkers, and supervisors would be negatively related with perceived job strain. Organizational support theory provides predictions regarding antecedents and outcomes of POS and along with the framework of POS, various empirical studies have been applied. Therefore, in this study, we attempted to investigate POS’s hypothesized consequence and more elaborated studies in the literature have highlighted these relationships (e.g., Pcon, Salleh, & Senik, 2007; Harris, Harris, & Harvey, 2007; Dawley, Houghton, & Bucklew, 2010; Bogler & Nir, 2012; Weaver, 2015).

Thus, in support to the previous arguments, the second hypothesis of this study is suggested as follows:

H2: Organizational support is negatively related to perceived job strain.

2.5. Job control

As we have noted previously, Karasek’s (1979) DCS model classified jobs into categories according to level of psychological demand and of decision latitude or job control. This model theorizes that the range of control over one’s environmental situation is a crucial dimension in determining health on the one hand, and active behaviour/learning on the other (Karasek, Siegrist, & Theorell, 1998). Job control is defined as “the degree to which the job provides substantial freedom, independence and discretion in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman and Oldham, 1975). It was argued that job control is a crucial determinant of intrinsic motivation and it affects employees’ perceptions of their authority to initiate, perform, and complete the tasks at work (Fernet, Guay, & Senécal, 2004). This refers to a person’s level of control over job and organizational decisions; lack of job control is hypothesized to have a multiplicative interaction with the level of demand in affecting job strain (Karasek et al., 1998). As it was proposed in the model of
Karasek, having control over job would decrease the level of job strain. Moreover, this context of high job control leads to active behavior in workers, to new learning, to challenge, to a sense of mastery, and self-efficacy (Karasek & Theorell, 1990; Theorell & Karasek, 1996). In their study, Elovinio, Kivimäki, & Helkama (2001) reported that job control had negative contribution to perceived job strain. In sum, high job control may have a potential to decrease job strain. Thus, the third hypothesis of this study is suggested as follows.

H3: Perceived job control is negatively related to perceived job strain.

2.6. Work overload

As mentioned previously, Karasek’s (1979) dynamic model of job strain regarded work overload as being the high demands of work which increase job strain. Work overload is defined as the perception that available resources such as time and energy are inadequate to meet the work demands and expectations of work senders (supervisors) (Leiter and Schaufeli 1996). Work overload describes a perception that a person has too much to do. In addition, work overload is defined as being asked to do too much work and being asked to do work that is too difficult (Ali and Farooqi, 2014, p.23).

Work overload has been cited as a major strain on employees’ physical and mental health and had negative effects on organizations’ overall outcomes (e.g., Van der Doef & Maes, 1999; De Jonge, Dollard, Dormann, Le Blanc, & Houtman, 2001; Bruin & Taylor, 2006; Bakker & Demerouti, 2008; Morter, 2010; Bozkurt, Aytac, Bondy, & Emirgil, 2012; Vanishree, 2014; Taştan, 2014a; Taştan, 2014b). Work overload has been positively related to strain, stress, intention to turnover, and negatively related to OCB, commitment, work engagement, and job related well-being (e.g., Dollard & Winefield, 1998; Park & Wilson, 2003; Mansell & Brough, 2005; Thiagarajan, Chakrabarty, & Taylor, 2006; Malik, 2011; Malik, Sajjad, Hyder, Ahmad, Ahmed, & Hussain, 2013; Karimi, Omar, Alipour, & Karimi, 2014). The research found that occupational stress that occurred due to some factors like work overload, lack of job security, work relations with others has negatively correlated to job satisfaction (Paktinat & Rafeei, 2012). Ali and Farooqi (2014) indicated that stress and strain in job due to different issues like work overload, coworkers behavior, etc become harmful not for himself but for the
organization which negatively affected the job satisfaction and well-being. Further, Ilies, Dimotakis, & De Pater (2010) reported that high work overload negative effects on individuals' psychological and physiological reactions and emphasized that the implications of perceived work overload for well-being.

Thus, the forth hypothesis of the study is suggested as follows.

H4: Work overload is positively related to perceived job strain.

Consequently, the research model for this research study is presented with the below framework in Figure 1. The proposed model consists the independent variables of psychological hardiness, organizational support, job control, and work overload and the dependent variable of job strain.

![Research Model](image)

**Figure 1.** The research model

3. The Methodology

3.1. Data and Sample

To test the propositions, a field survey using questionnaires was conducted between June 2015 and February 2016. Statistical population in this study included 252 banking&finance employees of seven banking&finance organizations in İstanbul-Turkey. The number of employees including in these seven bank&finance organizations was 290 employees. 252 questionnaires returned and none of the questionnaire forms were eliminated. 252 responses were used for data analyses, thus the response rate was 86% (=252/290). In terms of demographic findings, (69.7%) of respondents were females, and the remaining (30.3%) were males. In terms of the age group of respondents, 23.2% of
them were between 22-29 years, whereas 26.5% fell into the 30-36 age group, whereas 49% were the 37-45 age group, only 1.3% were above 46. As for the educational levels of the banking & finance employees, the majority were university degree holders (89.9%), a few of the respondents had master degree (4.7%), and some of them has Higher Education degree from banking & insurance services programmes (5.4%).

3.2. Measurement Instruments

The self-rated questionnaire was designed to test the four hypotheses and consisted of 80 questions. Six-point Likert scales were used for measuring the items (from 1=Strongly Disagree to 6=Strongly Agree). The introduction section of the questionnaire asked the demographic variables of the respondents such as gender, age, education level, current position and years of service in the organizations. The measures used in the research are described as below:

"Measurement of Job Strain (12 items)": Goldberg’s (1978) 12-item General Health Questionnaire (GHQ12) was selected to measure the feeling of job strain. This measure is covering a range of psychiatric symptoms: somatic, anxiety, depression, self-esteem, stress, negative affectivity and social dysfunction (Tait, French & Hulse, 2003).

"Measurement of Psychological Hardiness (18 items)": The Personal Views Survey III-R is the most current version of personal views based on Kabasa’s original PH scale (1979). 18 items measuring 3 sub-components were used. The scale measured commitment, control and challenge sub-component. However, the total hardiness score consistently had stronger correlation than any of its components supporting the contention that PH is a hierarchical construct subsuming the 3 subcomponents.

"Measurement of Work Overload (4 items)": 4 items of Moore’s (2000) Perceived Work Overload Scale were designed to measure work overload perceptions of the participants.

"Measurement of Job Control (10 items)": Job control is assessed by the Maastricht Autonomy Questionnaire (MAQ; de Jonge, 1995). The MAQ consists of 10 items and measures the worker’s opportunities to determine a variety of task elements, like the method of working, the pace of work and the work goals.
"Measurement of Organizational Support (36 items)"; 36 items of Eisenberger et al.’s (1986) POS scale was used to measure support from organization, supervisor, and co-workers.

4. Findings

4.1. Descriptive findings

For reliability evaluation we utilized Cronbach's alpha. The Cronbach's alpha reliability of all the 5 variables were more than 0.7, which indicates that all the scales demonstrated good reliability (Table 1).

Content and construct validity for evaluating the validity of the questionnaires. To test the content validity, after devising a framework for the questionnaire, we asked 5 professors to modify it if needed. These professors evaluated all the implemented criteria in the questionnaire and confirmed it. Further, Confirmatory Factor Analysis (CFA) was used to investigate the construction of the questionnaire. The results of the CFA of research variables indicated that all the mentioned criteria have been measured in these questionnaires. CFA results of the variables of revealed good fitness of the models, showing that the selected indicators were good representatives for each research variables (Table 2).

Table 1. Mean and Reliability values of the variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>N of items</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Strain</td>
<td>12</td>
<td>4.88</td>
<td>.42</td>
<td>0.85</td>
</tr>
<tr>
<td>Organizational</td>
<td>36</td>
<td>3.48</td>
<td>.55</td>
<td>0.86</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>18</td>
<td>3.46</td>
<td>.52</td>
<td>0.84</td>
</tr>
<tr>
<td>Hardiness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Control</td>
<td>10</td>
<td>3.03</td>
<td>.71</td>
<td>0.89</td>
</tr>
<tr>
<td>Work Overload</td>
<td>4</td>
<td>4.67</td>
<td>.48</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Table 2. Fitness indices of research variables based on CFA

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/df</td>
<td>2.5034</td>
<td>2.5263</td>
<td>2.2853</td>
<td>2.3676</td>
<td>2.7265</td>
<td>&lt; 3</td>
</tr>
</tbody>
</table>
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4.2. Test of hypotheses: the relations of psychological
hardiness, organizational support, job control and work overload
with job strain

For testing the hypotheses, Pearson's Correlation Analysis was
conducted. According to Table 3 Psychological Hardiness had moderate
negative relationship with job strain \( r = -0.366; p < 0.01 \). Organizational
Support had strong negative relationship with job strain \( r = -0.594; p < 0.01 \). Job Control had strong negative relationship with job strain \( r = -0.582; p < 0.01 \) and finally Work Overload had strong positive
relationship with job strain \( r = 0.624; p < 0.01 \). The correlations
indicated that the existence of perceived work overload is likely to
increase employees’ perceived job strain, while psychological hardiness,
organizational support and control over work are likely to decrease the
level of perceived job strain. The documented results indicated that H1,
H2, H3 and H4 were supported.

Table 3. Correlations between variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Job Strain</td>
<td>1</td>
<td>-.366**</td>
<td>-.582**</td>
<td>-.594**</td>
<td>.624**</td>
</tr>
<tr>
<td>2.Psy.Hard.</td>
<td>-.366**</td>
<td>1</td>
<td>.233**</td>
<td>.205**</td>
<td>-.124**</td>
</tr>
<tr>
<td>3.Job control</td>
<td>-.582**</td>
<td>.233**</td>
<td>1</td>
<td>.225**</td>
<td>-.208**</td>
</tr>
<tr>
<td>4.Org.Support</td>
<td>-.594**</td>
<td>.205**</td>
<td>.225**</td>
<td>1</td>
<td>-.193**</td>
</tr>
<tr>
<td>5.W.overload</td>
<td>.624**</td>
<td>-.124**</td>
<td>-.208**</td>
<td>-.193**</td>
<td>1</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
4.3. The contributions of psychological hardiness, organizational support, job control, and work overload on job strain

For assessing the contributions of the independent variables on job strain multiple regression analysis was performed. It was seen that there were significant positive impacts of perceived work overload on job strain. In addition, psychological hardiness, organizational support and job control had significant negative impacts on job strain. Table 4 displays the ANOVA results on the overall model and the results indicate significance (F = 42,563, p<0,05).

Table 4. Model summary of regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.703(a)</td>
<td>0.625</td>
<td>0.651</td>
<td>0.46575</td>
</tr>
</tbody>
</table>

Predictors: (Constant), work overload, organizational support, job control, psychological hardiness

Table 5. Summary results of coefficients of regression analysis

<table>
<thead>
<tr>
<th>Dependent Variable: Job strain</th>
<th>Beta</th>
<th>t Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.726</td>
<td></td>
<td>0.020</td>
</tr>
<tr>
<td>Psy.Hardiness</td>
<td>-0.344</td>
<td>3.719</td>
<td>0.010</td>
</tr>
<tr>
<td>Org.Support</td>
<td>-0.537</td>
<td>2.223</td>
<td>0.000</td>
</tr>
<tr>
<td>Job Control</td>
<td>-0.526</td>
<td>4.175</td>
<td>0.000</td>
</tr>
<tr>
<td>Work Overload</td>
<td>0.598</td>
<td>4.223</td>
<td>0.000</td>
</tr>
</tbody>
</table>

R=0,705; R²=0,638; F Value=52,563; p<0,05

The overall R² is .628 suggesting that psychological hardiness, organizational support, job control and work overload combine to explain approximately 64% of the variance in perceived job strain among the banking and finance staff. The results of Table 5 show that work overload statistically significantly contributed to job strain (β = 0.598, t = 4.223, p < 0,05). Psychological hardiness negatively contributes to perceived job strain and this construct also showed statistical significance (β = -0.344, t = 3.719, p < 0,05). In addition, according to the beta coefficients and p-values, organizational support (β = -0.537, t = 2.223, p < 0,05) and job control (β = -0.526, t = 4,175, p < 0,05) also negatively contributed to job strain significantly.
5. Conclusion and discussion

This study focused on the investigation of how personal and situational factors and work related outcomes are associated. The study was built on “Karasek’s Model of Job Strain” called as DCS Model (Demand-Control-Support). In the study, the role of job demands, personal and organizational resources, and control over work in their negative work outcome of perceived job strain was assessed. Building on Karasek’s (1979) DCS model, the potential individual and situational factors that may predict job strain has been investigated for the conceptual framework of this study. For the aim of the study, an empirical study was conducted in Turkey by involving the participation of banking and finance staff working in seven banking & finance organizations located in Istanbul.

As a result of the survey, some hints were found regarding the potential associates of personal resources and situational factors of work and organization to perceived job strain. All four factors including Karasek’s model and personal resource had significant moderate and high relations with job strain. As being one of the personal resources, psychological hardiness is found to be negatively related with perceived job strain. As it was indicated by Kobasa (1979) and Maddi (2004), psychological hardiness is a tendency to derive meaning from stressful events and in turn it helped employees to cope with job strain. Additionally, the results of this study showed that organizational support was negatively related with job strain and this result supported the implications of Thompson and Prottas (2006) and Collins (2008) who indicated that organizational support was a resource that helped individuals cope with job strain through supportive relationships within the workplace. On the other side, this study revealed that perceived job control was negatively related to perceived job strain and this result showed consistency with Karasek’s (1979) and Karasek and Theorell's (1990) arguments. These scholars claimed that having control over job would decrease the level of job strain while high job control was also leading to active behaviors of employees. In addition, the findings of this study supported Eloainio et al.'s (2001) study in which they reported that job control had negative contribution to perceived job strain. Furthermore, the descriptive results showed that the magnitude of work overload was higher than the magnitude of job control and organizational support among the banking & finance sector staff. It is
found that banking & finance staff reported high perceived job strain (M=4.87) and low job control (M=3.02). This is a question for occupational health and modern empowering organization since the level of job strain has been found as relatively high. These results may provide implication for Turkish banking and finance sector. The findings of this study may contribute to the literature and the works on positive organizational behaviour and workplace stress. Thereby, this study may provide further guidance to organizations for developing strategies to cope with the problems of workplace stress, strain and high workload. It is suggested that when efficient strategies are implemented like training, job enrichment, job rotation, motivation and reward systems, the current problems of work overload and strain could be reduced. Thus, this study is valuable for addressing these problems and to offer some hints to overcome the problems of work overload which increase the job strain at work. It is believed that when the job strain is high, the employee performance, engagement, commitment and well-being are also expected to be affected negatively. Therefore, coping with work overload and job strain can be beneficial for the organizations for increasing employee health, well-being, satisfaction, performance and efficiency. As a concluding remark, it is suggested that unhealthy job work overload and job strain among the employees can ultimately influence their intellectual and social abilities which in turn effects the organizational health, performance and efficiency in long-term. By considering these issues, this study may provide implications for practice as well as the academic literature. By taking some appealing findings of the study, it is also seen that the findings of the study are consistent with the literature studies. The previous empirical and theoretical knowledge is supported with the results of this study and showed consistency with the previous implications.

As a limitation, it is suggested that the sample size should be larger in order to enable better generalizability of the findings. The scope of research was restricted because target population was limited to employees of seven banking and finance sector organizations in Istanbul-Turkey. The same respondents answered all questions related to each of the variables (self-report problem). Further surveys can be designed in a way that organizational support related questionnaire is filled by multiple sources –self reported and supervisor/colleague reported-, in order to prevent same-source bias. Further researches can be conducted on large-
scale organizations, sectors, education, health, etc. and also in different cities or countries for generalizing findings.

**References**


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