



Attitudes towards organizational change

What is the role of employees' stress and commitment?

Maria Vakola and Ioannis Nikolaou

Athens University of Economics and Business, Athens, Greece

Abstract

Purpose – Occupational stress and organizational change are now widely accepted as two major issues in organizational life. The current study explores the linkage between employees' attitudes towards organizational change and two of the most significant constructs in organizational behaviour; occupational stress and organizational commitment.

Design/methodology/approach – A total of 292 participants completed ASSET, a new "Organizational Screening Tool", which, among other things, measures workplace stress and organizational commitment and a measure assessing attitudes towards organizational change.

Findings – The results were in the expected direction showing negative correlations between occupational stressors and attitudes to change, indicating that highly stressed individuals demonstrate decreased commitment and increased reluctance to accept organizational change interventions. The most significant impact on attitudes to change was coming from bad work relationships emphasizing the importance of that occupational stressor on employees' attitudes towards change. The results did not support the role of organizational commitment as a moderator in the relationship between occupational stress and attitudes to change.

Research limitations/implications – A limitation of the research design could be that all measures originated from the same source resulting in possible contamination from common method variance. Further, the cross-sectional research design adopted in the present study, as opposed to a longitudinal or experimental methodology, does not allow affirmative causal explanations.

Originality/value – The present study showed that good and effective work relationships are very important in organizational change. Handling conflicts, building supportive work relationships and communicating effectively all contribute to the formulation of positive attitudes to change and, therefore, to the success of a change programme. In addition, organizations need to examine the extra workload which organizational change may create. Increase in workload is not only easily attributable to the change but it also makes change unattractive and problematic leading to non-supportive attitudes.

Keywords Organizational change, Management of change, Stress, Business policy, Greece

Paper type Research paper



Organizations continually embark on programmes of organizational change. The American Management Association reported that 84 percent of US companies were in the process of at least one major change initiative and 46 percent said that they had three or more change initiatives/programmes in progress (Peak, 1996). Also, a study conducted by the US Bureau of National Affairs (1996) reported that organizational change was a major concern for more than a third of the 396 participating organizations. These ongoing and seemingly endless efforts put a lot of strain not only on organizations but also on individuals. Organizational change challenges the "way things are done in here" and, as a result, individuals experience uncertainty and starts

having fears about the potential failure in coping with the new situation (Coch and French, 1948).

Stress at work is a well known factor for low motivation and morale, decrease in performance, high turnover and sick-leave, accidents, low job satisfaction, low quality products and services, poor internal communication and conflicts etc. (Schabracq and Cooper, 2000; Murphy, 1995; McHugh, 1993). Moreover, Chusmir and Franks (1988) argued that all the aforementioned problems are related, directly or indirectly, to stress and they have an effect on overall organizational efficiency and effectiveness. The British Industrial Society Survey (2001) indicated that 91 per cent of the 492 human resource and personnel professionals questioned believed stress to be a problem in their organization. More specifically, 36 per cent believed that it was a significant problem and 5 per cent indicated that it was a serious problem.

McHugh (1997) suggested that stress should be included in the change management agenda. She argued that people involved in the management of change need to acknowledge the fact that increased pressure and stress are put on employees because of continuous organizational change and that it is necessary for organizations to think of incorporating a stress management programme within the change management programme. Moreover, Armenakis and Bedeian (1999, p. 307) considered stress as an obstacle to change planning and implementation and they argued that:

Receptivity, resistance, commitment, cynicism, stress, and related personal reactions are clearly relevant criterion variables to be considered in the framework of planning and implementing an organizational change. Change can obviously cause cynicism and stress, thereby inhibiting success.

Mack *et al.* (1998) put emphasis on the changing nature of organizational change which is not complied with the typical unfreezing-moving-refreezing model (Lewin, 1947), since today employees don't experience this simple sequence. On the contrary, employees find themselves in a constant uncertain state and they usually never reach the refreezing state.

Therefore, although there is an agreement concerning the negative impact of stress on change processes, there isn't evidence on how stress influences change. The purpose of the current study is to explore how stress at an individual level has an impact on change at an organizational level. This paper also explores the role of organizational commitment as a moderator between stress and attitudes to organizational change.

The impact of stress on attitudes to change

The most commonly definitions of stress may be categorized into three types (Beehr and Franz, 1987). The first type is stimulus-based which considers stress as a situational or environmental based stimulus, impinging on the person. The second type is response-based, defining stress as an individual's psychological or physiological response to environmental/situational forces. The third definition, which is adopted for the purposes of the present study, applies an interactive approach often called the stressor-strain approach. It brings together the concepts put forward in the first two definitions in the sense that it defines stress as both the stimulus (source of stress or stressor) and the response (outcome or manifestation of stress or strain). Theories based on this definition are usually considered to be superior since they offer a more

“complete” view of the dynamics of stress and can account for documented differential experiences within a single situation (Arnold *et al.*, 1995).

Secord and Beckman (1969, p. 167) defined attitudes as certain regularities of an individual's feelings, thoughts and predispositions to act toward some aspect of his environment. Arnold *et al.* (1995) indicated that “attitudes reflect a person's tendency to feel, think or behave in a positive or negative manner towards the object of the attitude”. According to Elizur and Guttman (1976), attitudes toward change in general consist of a person's cognitions about change, affective reactions to change, and behavioral tendency toward change. Researchers have therefore, identified various employees' responses to an organizational change ranging from strong positive attitudes (i.e. “this change is essential for the organization to succeed”) to strong negative attitudes (i.e. “this change could ruin the company”), (Piderit, 2000). Therefore, change can be received with excitement and happiness or anger and fear while employees' response to it may range from positive intentions to support the change to negative intentions to oppose it.

Positive attitudes to change were found to be vital in achieving organizational goals and in succeeding in change programmes (Eby *et al.*, 2000; Martin, 1998; Kotter, 1996; Gilmore and Barnett, 1992). Although change management literature has provided practice with frameworks and methodologies to understand and manage change, the results are quite disappointing. The brutal fact, as Beer and Nohria (2000) described it, is that 70 per cent of all change initiatives fail. The number one reason why organization change initiatives fail is resistance to change (Deloitte & Touche, 1996), which is closely linked with the development of negative attitudes to change. Employee attitudes toward change can impact their morale, productivity and turnover intentions (Iacovini, 1993; Eby *et al.*, 2000).

Many studies suggested that organizational change efforts can be very stressful experience for individuals (Elrod and Tippet, 2002; Grant, 1996). Emotions and responses to change can be so intensive that the literature in organizational change has compared them with individual responses to traumatic changes such as death and grief (Henderson-Loney, 1996; Grant, 1996; Kubler-Ross, 1969). For example, Perlman and Takacs (1990) argued that there is a big similarity between the stages that an individual goes through dealing with death described by Kubler-Ross (1969) and the stages they identified that individuals go through when they experience organizational change. More specifically, they noted that there are many emotional states that a person can experience during change processes, which are equilibrium, denial, anger, bargaining, chaos, depression, resignation, openness, readiness and re-emergence (Perlman and Takacs, 1990).

All these responses to change which are directly related, and in some cases constitute resistance to change are normal since the change process involves going from known to the unknown (Bovey and Hede, 2001). The topic of resistance to change, which is directly related with positive or negative attitudes to change, is well acknowledged in the literature as a critical success or failure factor (Trader-Leigh, 2001; Strebel, 1996; Kotter, 1996; Regar *et al.*, 1994). Other evidence suggests that negative attitudes to change have negative consequences for the organization. More specifically, perceived increased pressure coming from change implementation among state government employees was associated with increased stress, and as a result, was associated with lower job satisfaction and increased intentions to quit (Rush *et al.*,

1995). Similarly, Schweiger and DeNisi (1991) report low job satisfaction and organizational commitment as a result of a merger.

Armenakis *et al.* (1993) indicated that beliefs, perceptions and attitudes are critical in successful change. Unless the majority of staff perceives that the organization develops supportive organizational mechanisms to change, such as top management commitment, allocation of resources, rewards, training, participation in the planning and implementation etc., (McHugh, 1993) change will be a stressful experience. Stress caused by organizational change will result in creating negative attitudes toward change, and therefore stress will become an inhibitor to change. So we suggest that a negative relationship exists between stress level sources of stress and attitudes towards organizational change.

Organizational commitment, stress and attitudes to change

Porter *et al.* (1976) defined organizational commitment as the relative strength of an individual's identification and involvement in a particular organization. Mowday *et al.* (1982) conceive commitment as an attitude that reflects the nature and quality of the linkage between an employee and an organization. It is a state in which an individual identifies with a particular organization and its goals and wishes to maintain membership in order to facilitate these goals. It is argued that commitment often establishes an exchange relationship in which individuals attach themselves to the organization in return for certain rewards from the organization (Buchanan, 1974). Individuals come to organizations with certain needs, skills, expectations and they hope to find a work environment where they can use their abilities and satisfy their needs. When an organization can provide these opportunities, the likelihood of increasing commitment is increased. It is obvious that this exchange doesn't mean exploitation of employees. Commitment can be characterized by at least three related factors; a strong acceptance of the organization's values and goals, a willingness to exert considerable effort on behalf of the organization and a strong desire to maintain membership in the organization. As a result, commitment is determined by a range of organizational and individual factors such as personal characteristics, structural characteristics, work experience and role related features.

There is evidence in the change management literature identifying the role of organizational commitment in a change context. Many authors indicated that organizational commitment plays an important role in employee's acceptance of change (Darwish, 2000; Cordery *et al.*, 1993). Iverson (1996) suggested organizational commitment as the second most important determinant after union membership of attitudes toward organizational change. More specifically, Lau and Woodman (1995) argued that a highly committed employee is more willing to accept organizational change if it is perceived to be beneficial. But other researchers indicated that a highly committed employee may resist to change if he/she perceives it as a treat for his/her own benefit. These findings suggest that there might be an influence of organizational commitment on attitudes to organizational change. Other research also indicated that organizational commitment is a better predictor of behavioral intentions than job satisfaction within a change context (Iverson, 1996; Iverson and Roy, 1994). Employees with high organizational commitment are more willing to put more effort in a change project and, therefore, it is more likely to develop positive attitudes towards organizational change (Iverson, 1996; Guest, 1987). Similarly, Guest (1987) suggested

that organizational commitment mediated the total causal effects of positive affectivity, job security, job satisfaction, job motivation and environmental opportunity on organizational change. Therefore, it is hypothesized that a positive relationship exists between organizational commitment and attitudes to change.

Lau and Woodman (1995) indicated that each individual determines through his/her perceptual filters whether change is a threat or a benefit. Each individual's unique "schema" of what change is or of what change represents adds to the formulation of attitudes and reactions to change. This argument supports the approach of the existence of individual differences both in the perception of the change event (stressor) and in the causal relationship between perceived change event (stressor) and stress level. There are a number of moderators that have an impact on the perception of change event and on the cause of stress (Mack *et al.*, 1998). Apart from personality dimensions such as locus of control or A/B type of personality, organizational commitment has been identified as a moderator (Mack *et al.*, 1998; Sullivan and Bhagat, 1992). These moderators affect the individual's ability to cope with the change event, the individual's ability to cope with sources and outcomes of stress and the individual's perception of the change event. Therefore, we hypothesize that organizational commitment moderates the relationship between occupational stress and attitudes towards change.

Method

Participants and procedure

A total of 292 employees from various Greek organizations participated in the current study; 119 (41.8 per cent) were males and 166 (58.2 per cent) were females. The majority of the participants were between 37 and 55 years of age (53.3 per cent) or 21 to 36 years old (38.6 per cent). A total of 145 of them (51.6 per cent) were employed in clerical-secretarial positions, 38 (13.5 per cent) in technical/professional positions, 25 (9 per cent) in managerial positions and finally 20 (7.1 per cent) were employed in supervisory positions. The remaining, were employed in skilled-manual and sales or marketing positions. A total of 154 (54.4 per cent) were married, 24 (8.5 per cent) lived with their partner, and 82 (29 per cent) were single. Regarding their educational background, 69 (24 per cent) were high-school graduates, 35 (12.2 per cent) had graduated from a college or further education institute, 133 of them (46.2 per cent) were university graduates, and 39 (13.5 per cent) had postgraduate degrees.

Participants completed a self-report questionnaire pack, which incorporated the measures of attitudes to change and occupational stress. In addition, personal and demographic data relating to age, gender, marital status and educational background were also collected. Half of the individuals completed the attitudes to change measure first and half second, in order to control for order effect. Researchers informed the participants about confidentiality issues and that they had the right to withdraw from the study at any time and any stage.

Measures

Occupational stress. Stress was measured through ASSET (Cartwright and Cooper, 2002), a new "Organizational Screening Tool" which is the advanced form of the well-established and extensively used Occupational Stress Indicator – OSI (Cooper *et al.*, 1988). However, OSI is primarily intended for use with White Collar and

Managerial workers and is very long and time consuming to complete. Therefore, ASSET has been developed, which is shorter and applicable to all occupations. It has already been used successfully in health care organizations with adequate evidence of construct and discriminant validity both in the UK (Johnson, 2001; Johnson and Cooper, 2003) and also in Greece (Nikolaou and Tsaousis, 2002). According to the authors, ASSET is a very effective tool in diagnosing occupational stress, combining both the sources and the effects of stress. ASSET conceptualizes occupational stress as influenced by a variety of sources (each of them consisting an independent scale), such as work relationships, work-life balance, overload, job security, control, resources and communication, pay and benefits, as well as an evaluation of the employee's perception of the potential sources of stress that relate to the fundamental nature of the job itself (e.g. physical working conditions, type of tasks and the amount of satisfaction from the job, etc.) named "Aspects of the Job". An overall Job Stress Index was calculated and used for the purposes of the current study, based on the sum of all the stress indicators described by ASSET. A high score in the overall job stress index indicates increased perception of the stressors associated with high stress levels.

Simultaneously, it is recognized that occupational stress affects directly organizational commitment as well as physical health and psychological well being. These are the outcomes of occupational stress. In the current study, we will focus only on organizational commitment. ASSET divides Organizational Commitment in two sub-scales; Commitment of the Organization to the Employee (COE) and Commitment of the Employee to the Organization (CEO). High score in both scales indicates increased commitment. The former measures the extent to which individuals feel that their organization is committed to them, whereas the latter measures the degree that employees feel loyal and committed to the organization.

Attitudes to change. Attitudes to change were measured with the Attitudes to Change Questionnaire (ACQ) developed by Vakola *et al.* (2003). The scale consists of 29 items (14 positive and 15 negative), and asks from the participants to rate the extent to which they agree with each item on a five-point scale ranging from strongly disagree (1) to strongly agree (5). A typical item of the positive attitude scale is: "I am looking forward to changes within my work environment". An example of a negative item is: "When a new organizational change programme is initiated, I emphatically show my disagreement". The negatively stated items were reversed so that a high score to indicate positive attitudes towards organizational change.

Work satisfaction – turnover intentions. The respondents were also asked to indicate on a seven-point scale their global employee satisfaction levels (1 = highly dissatisfied, 7 = highly satisfied) and their turnover intentions (1 = highly unlikely to leave the company within the next six months, 7 = very likely to leave the company within the next six months).

Results

Descriptive data

Table I presents the descriptive statistics along with the alpha reliabilities for the variables used in this study.

Most of the scales used in the study showed good internal consistency. The alpha for the attitudes towards change scale was 0.92, whereas the alphas for the ASSET ranged from 0.49 (Aspects of the job) to 0.80 (Work Relationships). Due to the fact that

ER 27,2	Scale	N of items	Mean	SD	Alpha
	Attitudes towards organizational change	29	102.87	15.08	0.92
	Employee satisfaction	1	4.75	1.47	–
	Turnover intentions	1	2.22	1.87	–
166	<i>Occupational stress indicators</i>				
	Work relationships (WR)	8	23.13	7.34	0.80
	Work-life balance (WLB)	4	11.56	5.71	0.57
	Overload (OV)	4	11.13	4.31	0.76
	Job security (JS)	4	11.66	4.38	0.60
	Control (Cntrl)	4	13.29	4.22	0.68
	Resources and communication (RC)	4	12.96	4.31	0.67
	Pay and benefits (PB)	1	3.47	1.74	–
	Aspects of the job (AJ)	8	23.69	5.73	0.49
	Overall job stress index	37	110.77	25.30	0.89
	<i>Organizational commitment variables</i>				
	Commitment of the organization to the employee	5	20.13	5.09	0.82
	Commitment of the employee to the organisation	4	15.94	4.12	0.75

Table I.
Means, standard deviations and alphas of attitudes to change and occupational stress variables ($n = 292$)

the “Work-Life Balance”, “Job Security” and “Aspects of the Job” sub-scales demonstrated very low internal consistency (below 0.60) they were not included in the subsequent analyses. The alpha for the Overall Job Stress Index used in the current study is 0.89. Similarly, the alpha reliability coefficients for the Organizational Commitment subscales were also acceptable.

Attitudes to change, occupational stress, and demographic data

Table II shows the statistically significant relationships of the Attitudes to Change scale and Occupational Stress indicators with demographic variables such as gender, age, and education.

In order to investigate whether gender affects both attitudes to change and stress at work, independent t -tests were conducted. As can be seen in Table II, females scored higher than males on attitudes towards organizational change scale [$t(280) = -3.32$, $p = 0.001$] suggesting that males tend to be more reluctant than females towards organizational change. In terms of occupational stress males also scored significantly higher than females on a number of scales, namely work relationships, overload, and the overall job stress index, demonstrating thus higher levels of occupational stress compared to females. Males also scored higher in organizational commitment (commitment of the employee to the organization). As far as age is concerned, no differences were identified among the four age groups of our sample. Education also showed a positive impact on attitudes towards change, as employees with higher education are better equipped to meet new challenges at work (Iverson, 1996). Educational level was also negatively related with one of the two types of organizational commitment (commitment of the organization to the employee). Finally, these demographic characteristics were not linked to employee satisfaction and turnover intentions.

Measure	Sex	Age	Education (yrs)
Statistical criterion	<i>t</i>	<i>F</i>	<i>r</i>
<i>Attitudes towards organizational change</i>	– 3.32**	0.29	0.14*
Employee satisfaction	0.67	0.45	– 0.07
Turnover intentions	– 0.90	0.37	0.08
<i>Occupational stress indicators</i>			
Work relationships (WR)	2.52*	0.62	0.00
Overload (OV)	3.38**	0.35	0.01
Control (Cntrl)	– 0.15	0.87	0.00
Resources and communication (RC)	– 0.09	1.39	– 0.02
Pay and benefits (PB)	1.70	0.85	0.02
Overall job stress index (OJSI)	2.14*	0.30	0.04
<i>Organisational commitment variables</i>			
Commitment of the organisation to the employee (COE)	1.54	2.10	– 0.12*
Commitment of the employee to the organisation (CEO)	3.09*	1.17	– 0.04

Notes: * $p < 0.05$; ** $p < 0.01$. Gender was coded as “1” for male and “2” for female; Age was coded in groups: “1: below 21-years-old”, “2: 21 to 36-years-old”, “3: 37 to 55-years-old”, “4: 55 plus”

Table II.
Attitudes to change,
occupational stress and
demographic data
($n = 292$)

Predicting attitudes to change from occupational stress and organizational commitment

The inter-correlation matrix of the study's variables is reported in Table III. Attitudes to change demonstrated statistically significant correlations with a number of occupational stressors, as assessed by the ASSET model, namely work relationships ($-0.25, p < 0.01$), overload ($-0.18, p < 0.01$) pay and benefits ($-0.14, p < 0.05$) and overall job stress index ($-0.20, p < 0.01$), confirming our first hypothesis. A positive relationship is also identified between commitment of employee to the organization and positive attitudes to change ($0.13, p < 0.05$), confirming the respective hypothesis of the current study. Although the latter correlation is weak, it is in line with the majority of the literature identifying links between employees' commitment and organizational change (e.g. Darwish, 2000; Iverson, 1996).

Further, we explored the predictive validity of occupational stressors on attitudes towards organizational change. The results of the regression analysis (see Table IV), controlling for demographics, showed that the block of the occupational stressors predicted almost 7 per cent of the positive attitudes' total variance [R^2 change = 0.07, $F(5,271) = 4.16, p < 0.001$]. However, only work relationships predicted attitudes towards change at a statistically significant level ($\beta = -0.22, p < 0.001$). These results indicate that bad work relationships is a very significant inhibitor of employees' positive attitudes towards organizational change.

The last set of analyses explored our last hypothesis, regarding the moderating effect of organizational commitment on the relationship between Occupational Stress and Attitudes towards Organizational Change. Following the guidelines of Cohen and Cohen (1983) and Baron and Kenny (1986) two moderated multiple regression analyses were carried out for both types of commitment and attitudes towards change (see Table V). In both cases the overall job stress index was entered first in the equation

Table III.
Inter-correlation matrix
of the study's variables
(*n* = 292)

	ES	TI	WR	OV	Cntrl	RC	PB	QJSI	COE	CEO
Attitudes towards organizational change	0.10	0.00	- 0.25**	- 0.18**	- 0.11	- 0.11	- 0.14*	- 0.20**	0.06	0.13*
Employee satisfaction		- 0.25**	- 0.28**	- 0.09	- 0.30**	- 0.33**	- 0.25**	- 0.37**	0.45**	0.32**
Turnover intentions			0.07	0.03	0.08	0.02	0.12*	0.13*	- 0.22**	- 0.11
Work relationships				0.48**	0.41**	0.60**	0.38**	0.84**	- 0.31**	- 0.15**
Overload					0.22**	0.42**	0.33**	0.68**	- 0.03	0.16**
Control						0.57**	0.20**	0.58**	- 0.31**	- 0.24**
Resources and communication							0.32**	0.73**	- 0.40**	- 0.25**
Pay and benefit								0.48**	- 0.27**	- 0.20**
Overall job stress index									- 0.32**	- 0.14*
Commitment of the organisation to the employee										0.73**

Notes: ES=Employee satisfaction, TI=Turnover intentions, WR=Work relationships, OV=Overload, Cntrl=Control, RC=Resources and communication, PB=Pay and benefits, QJSI=Overall job stress index, COE= Commitment of the organization to the employee, CEO= Commitment of the employee to the organization. * *p* < 0.05, ** *p* < 0.01

followed by organizational commitment and the interaction term. The results of the regression analyses showed that the two types of organizational commitment do not moderate the relationship between occupational stress and attitudes towards change, rejecting thus the last hypothesis of the study.

Discussion

The analysis of the results confirms a relationship between occupational stress and attitudes towards organizational change. Almost all occupational stressors (apart from control and resources-communication) were related to negative attitudes to change. Stress created by bad work relationships, overload and unfair pay and benefits can cause negative attitudes toward organizational change and, therefore, inhibit change processes. More specifically, lack of a socially supportive environment, as expressed by bad work relationships, was found to be the strongest predictor of negative attitudes towards change, as shown in the regression analysis. Further, job insecurity may also become an obstacle to change, although this scale of the stress measure was not included in the analysis due to low internal consistency. Evidence from the literature

	<i>R</i>	Adj <i>R</i> ²	<i>R</i> ² change	<i>F</i> change	β
<i>Step 1 – Control variables</i>					
Gender					0.19**
Age	0.27	0.06	0.07	7.31	0.07
Education					0.19**
<i>Step 2 – Predictors</i>					
Work relationships					-0.22**
Overload					-0.08
Control	0.37	0.11	0.07	4.16	-0.06
Resources and communication					0.09
Pay and benefits					-0.03
Notes: Dependent variable: attitudes towards organizational change. * $p < 0.05$; ** $p < 0.01$					

Table IV.
Multiple regression
analysis, regressing the
block of occupational
stress indicators on
attitudes towards
organizational change,
controlling for
demographics ($n = 292$)

Predictors	<i>R</i>	Adj <i>R</i> ²	<i>R</i> ² change	<i>F</i> change	β
<i>Step 1</i>					
Overall job stress index	0.20	0.04	0.04	12.13	-0.20**
<i>Step 2</i>					
Perceived commitment of organization to employee	0.20	0.03	0.00	0.00	0.00
<i>Step 3</i>					
Interaction	0.20	0.03	0.00	0.36	-0.03
<i>Step 1</i>					
Overall job stress index	0.20	0.04	0.04	12.13	-0.18**
<i>Step 2</i>					
Perceived commitment of employee to organization	0.23	0.04	0.01	3.45	0.10
<i>Step 3</i>					
Interaction	0.23	0.04	0.00	0.46	-0.04
Notes: Dependent variable: attitudes towards organizational change. * $p < 0.05$; ** $p < 0.01$					

Table V.
The moderating effect of
organizational
commitment on the
relationship between
occupational stress and
attitudes towards
organizational change
($n = 292$)

suggests that job security is associated with organizational commitment, which is associated with positive attitudes to organizational change (Morris *et al.*, 1993).

The findings of the multiple regression analyses showed that work relationships predict strongly attitudes to organizational change indicating the important role of this factor in a change context. Evidence from the change management literature reports a link between social support and employee adjustment indicating that a socially supportive workplace was correlated with lower emotional exhaustion scores (LaRocco *et al.*, 1980). Similarly, Woodward *et al.* (1999) indicate that supportive colleagues play an important role in employees efforts to cope with stress in organizational change, although Cunningham *et al.* (2002) report a very limited contribution of job related interpersonal relationships to prediction of readiness for organizational change. Individuals with more social support tend to experience higher levels of physical and mental health during stressful life events (Mallinckrodt and Fretz, 1988). Supportive and positive work relationships were found to be helpful when individuals attempt to cope with organizational change (Shaw *et al.*, 1993).

Another issue, linked to employees' attitudes towards change is the administration of appropriate human resource functions, such as training (British Industrial Society, 2001). Employees need to feel adequately trained and informed especially during change because effective communication reduces fear and uncertainty and, therefore, resistance to change. Pay and benefits is another occupational stressor associated with negative attitudes to change. Financial rewards determine the type of lifestyle that an individual can lead and they are perceived to indicate the individual's value to the organization (Cartwright and Cooper, 2002). They are also important in a change context since they facilitate change institutionalisation. For example, participation in change programmes should be included in employee's performance appraisals and rewarded in order to reinforce such behaviours.

Furthermore, the results showed demonstrated a positive relationship between organizational commitment and positive attitudes to change confirming evidence from the literature showing that organizational commitment is one of the most important determinants of successful organizational change (Iverson, 1996). The more employees identify with their organizations the higher their commitment to their organization and the greater their willingness to accept organizational change (Cordery *et al.*, 1993). Similarly, Guest (1987) suggests that organizational commitment will result in willingness to accept organizational change. The current results further support previous findings on the significance of employees' commitment on successful organizational change interventions (e.g. Iverson, 1996; Lau and Woodman, 1995) in a non-English culture, such as Greece.

The present study has several practical implications for managers and organizations facing organizational change. First, it was shown that good and effective work relationships are very important in organizational change. Handling conflicts, building supportive work relationships, communicating effectively all contribute to the formulation of positive attitudes to change and, therefore, to the success of a change programme. Second, organizations need to examine the extra workload which organizational change may create. If, for example, the new and the old system are continued in parallel for some period during or after the change implementation resulting in extra workload, employees may create negative attitudes to change and, as a result, be reluctant to contribute to the change. Increase in

workload is not only easily attributable to the change but it also makes change unattractive and problematic leading to non-supportive attitudes. Therefore, organizations need to plan the change carefully in order to create a well-structured work environment and a well-balanced work schedule to reduce stress and uncertainty.

The current study has also a series of limitations. A limitation of the research design could be that all measures originated from the same source resulting in possible contamination from common method variance. Common method variance, in this case refers to the problem that occurs when the same participant completes all the measures using the same type of paper-and pencil response format. The correlation between the measures will be higher than it ideally should be because participants will apply the same biases to each task. However, the emergence of multiple factors in the results of the factor analyses (Cartwright and Cooper, 2002) weighs against significant influence from common method variance (Begley, 1998). Further, even if it exists, there is no reason to expect that the differences in correlations among attitudes to change, occupational stress and organizational commitment are due to the effect of common method variance, since its presence would not be expected to exert differential bias on the observed relationships.

Further, the cross-sectional research design adopted in the present study, as opposed to a longitudinal or experimental methodology, do not allow affirmative causal explanations. Future studies would profit from use of additional measures to cross-validate findings of the relationships among workplace stress (e.g. electro-physiological measures of stress) and organizational commitment (e.g. absenteeism, turnover, etc.) and organizational change.

In their attempt to successfully cope with continuous changes in their business environment, organizations frequently embark on planned change interventions. Nowadays, this is more and more the rule rather than the exception. The current research findings highlight the need for acknowledging the significant effect of occupational stress on employees' attitudes towards organizational change. It is essential then that this acknowledgement be followed up by problem-solving action through stress management initiatives incorporated within the change programme; subsequently, the stress factor is placed on the change management agenda. It is suggested then that organizations implementing change should take into account the findings of the present study and attempt to address the issue of employee well being by actively ensuring that the increased demands being placed on employees, as a consequence of the change process are counteracted with sufficient support. By doing so, organizations become healthier for existing and more attractive for prospective employees.

References

- Armenakis, A. and Bedeian, A. (1999), "Organisational change: a review of theory and research in the 1990 s", *Journal of Management*, Vol. 25 No. 3, pp. 293-315.
- Armenakis, A.A., Harris, S.G. and Mossholder, K.W. (1993), "Creating readiness for organizational change", *Human Relations*, Vol. 46 No. 6, pp. 681-702.
- Arnold, J., Cooper, C. and Robertson, I.T. (1995), *Work Psychology: Understanding Human Behaviour in the Workplace*, Pitman Publishing, London.
- Baron, R.M. and Kenny, D. (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-82.

- Beehr, T.A. and Franz, T.M. (1987), "The current debate about the meaning of job stress", in Ivancevich, J.M. and Ganster, D.C. (Eds), *Job Stress From Theory to Suggestion*, Haworth Press, New York, NY, pp. 5-18.
- Beer, M. and Nohria, N. (2000), "Cracking the code of change", *Harvard Business Review*, Vol. 78 No. 2, pp. 133-41.
- Begley, T.M. (1998), "Coping strategies as predictors of employee distress and turnover after an organisational consolidation: a longitudinal study", *Journal of Occupational and Organizational Psychology*, Vol. 71 No. 4, pp. 305-29.
- Bovey, W. and Hede, A. (2001), "Resistance to organisational change: the role of cognitive and affective processes", *Leadership & Organizational Development Journal*, Vol. 22 No. 1, pp. 372-82.
- British Industrial Society (2001), *Managing Best Practice*, No. 83, *Occupational Stress*, British Industrial Society, London, pp. 4-23.
- Buchanan, B. (1974), "Building organizational commitment: the socialisation of managers in work organisations", *Administrative Science Quarterly*, Vol. 19 No. 4, pp. 533-46.
- Bureau of National Affairs (1996), *Bureau of National Affairs Special Survey Report: Human Resources Outlook*, Bureau of National Affairs, Washington, DC.
- Cartwright, S. and Cooper, C.L. (2002), *ASSET: An Organisational Stress Screening Tool*, Robertson Cooper Limited and Cubiks, London.
- Chusmir, L.H. and Franks, V. (1988), "Stress and the woman manager", *Training and Development Journal*, Vol. 10 No. 1, pp. 66-70.
- Coch, L. and French, J. (1948), "Overcoming resistance to change", *Human Relations*, Vol. 1 No. 4, pp. 512-32.
- Cohen, J. and Cohen, P. (1983), *Applied Multiple Regression/correlation Analysis for the Behavioral Sciences*, Lawrence Erlbaum Associates, Hillsdale, NJ.
- Cooper, S.L., Sloan, S.J. and Williams, S. (1988), *Occupational Stress Indicator. Management Guides*, NFER Nelson, Windsor.
- Cordery, J., Sevastos, P., Mueller, W. and Parker, S. (1993), "Correlates of employee attitude toward functional flexibility", *Human Relations*, Vol. 46 No. 6, pp. 705-23.
- Cunningham, C., Woodward, C., Shannon, H., MacIntosh, J., Lendrum, B., Rosenbloom, D. and Brown, J. (2002), "Readiness for organizational change: a longitudinal study of workplace, psychological and behavioural correlates", *Journal of Occupational and Organizational Psychology*, Vol. 75 No. 1, pp. 377-92.
- Darwish, Y. (2000), "Organizational commitment and job satisfaction as predictors of attitudes toward organization change in a non-western setting", *Personnel Review*, Vol. 29 No. 5-6, pp. 6-25.
- Deloitte & Touche (1996), "Executive survey of manufacturers", available at: www.dtcg.co/research
- Eby, L., Adams, D., Russell, J. and Gaby, S. (2000), "Perceptions of organizational readiness for change: factors related to employee's reactions to the implementation of team-based selling", *Human Relations*, Vol. 53 No. 3, pp. 419-28.
- Elizur, D. and Guttman, L. (1976), "The structure of attitudes toward work and technological change within an organization", *Administrative Science Quarterly*, Vol. 21 No. 1, pp. 611-23.
- Elrod, D. and Tippet, D. (2002), "The 'death valley' of change", *Journal of Organizational Change Management*, Vol. 15 No. 3, pp. 273-91.

-
- Gilmore, T.N. and Barnett, C. (1992), "Designing the social architecture of participation in large groups to effect organizational change", *The Journal of Applied Behavioral Science*, Vol. 28 No. 4, pp. 534-48.
- Grant, P. (1996), "Supporting transition: how managers can help themselves and others during times of change", *Organizations and People*, Vol. 3 No. 1, p. 4.
- Guest, D. (1987), "Human resource management and industrial relations", *Journal of Management Studies*, Vol. 24 No. 5, pp. 503-21.
- Henderson-Loney, J. (1996), "Tuckman and tears: developing teams during profound organizational change", *Supervision*, Vol. 57 No. 3, p. 5.
- Iacovini, J. (1993), "The human side of organizational change", *Training and Development Journal*, Vol. 47 No. 1, pp. 65-8.
- Iverson, R.D. (1996), "Employee acceptance of organizational change: the role of organizational commitment", *The International Journal of Human Resource Management*, Vol. 7 No. 1, pp. 122-49.
- Iverson, R.D. and Roy, D. (1994), "A causal model of behavioural commitment: evidence from a study of Australian blue-collar employees", *Journal of Management*, Vol. 20 No. 1, pp. 15-41.
- Johnson, S.J. (2001), "Occupational stress among social workers and administration workers within a social services department", unpublished MSc Dissertation, University of Manchester Institute of Science and Technology, Manchester.
- Johnson, S. and Cooper, C. (2003), "The construct validity of the ASSET stress measure", *Stress and Health*, Vol. 19 No. 1, pp. 181-5.
- Kotter, J.P. (1996), "Leading change, why transformation efforts fail", *Harvard Business Review on Change*, HBS Press, Harvard, MA.
- Kubler-Ross, E. (1969), *On Death and Dying*, Touchstone, New York, NY.
- LaRocco, J., House, J. and French, J. (1980), "Social support, occupational stress and health", *Journal of Health and Social Behaviour*, Vol. 21 No. 2, pp. 202-18.
- Lau, C. and Woodman, R.C. (1995), "Understanding organizational change: a schematic perspective", *Academy of Management Journal*, Vol. 38 No. 2, pp. 537-54.
- Lewin, K. (1947), "Frontiers in group dynamics", *Human Relations*, Vol. 1 No. 1, pp. 5-41.
- McHugh, M. (1993), "Stress at work: do managers really count the costs?", *Employee Relations*, Vol. 15 No. 1, pp. 18-32.
- McHugh, M. (1997), "The stress factor: another item for the change management agenda?", *Journal of Organisational Change Management*, Vol. 10 No. 4, pp. 345-62.
- Mack, D.A., Nelson, D.L. and Campbell-Quick, J. (1998), "The stress of organizational change: a dynamic process model", *Applied Psychology: An International Review*, Vol. 47 No. 2, pp. 219-32.
- Mallinckrodt, B. and Fretz, B. (1988), "Social support and the impact of job loss on older professionals", *Journal of Counselling Psychology*, Vol. 35 No. 1, pp. 281-6.
- Martin, M. (1998), "Trust leadership", *Journal of Leadership Studies*, Vol. 5 No. 1, pp. 41-8.
- Morris, T., Lydka, H. and O'Creevy, M. (1993), "Can commitment be managed? A longitudinal analysis of employee commitment and human resource policies", *Human Resource Management Journal*, Vol. 3 No. 3, pp. 21-42.
- Mowday, R., Porter, L. and Steers, R. (1982), *Employee-Organization Linkages: The Psychology of Commitment, Absenteeism and Turnover*, Academic Press, New York, NY.
- Murphy, L.R. (1995), "Managing job stress: an employee assistance/human resource management partnership", *Personnel Review*, Vol. 24 No. 1, pp. 41-50.

- Nikolaou, I. and Tsaousis, I. (2002), "Emotional intelligence in the workplace: exploring its effects on occupational stress and organizational commitment", *The International Journal of Organizational Analysis*, Vol. 10 No. 2, pp. 327-42.
- Peak, M.H. (1996), "An era of wrenching corporate change", *Management Review*, Vol. 85 No. 1, p. 7.
- Perlman, D. and Takacs, G.J. (1990), "The ten stages of change", *Nursing Management*, Vol. 21 No. 4, p. 33.
- Piderit, S.C. (2000), "Rethinking resistance and recognizing ambivalence: a multidimensional view of attitudes toward and organizational change", *Academy of Management Review*, Vol. 25 No. 4, pp. 783-94.
- Porter, L., Crampon, W. and Smith, F. (1976), "Organizational commitment and managerial turnover: a longitudinal study", *Organizational Behaviour and Human Performance*, Vol. 15 No. 1, pp. 87-98.
- Regar, R., Mullane, J., Gustafson, L. and DeMarie, S. (1994), "Creating earthquakes to change organizational mindsets", *Academy of Management Executive*, Vol. 8 No. 4, pp. 31-46.
- Rush, M., Schoel, W. and Barnard, S. (1995), "Psychological resiliency in the public sector: 'hardiness' and pressure for change", *Journal of Vocational Behavior*, Vol. 46 No. 1, pp. 17-39.
- Schabracq, M.J. and Cooper, C.L. (2000), "The changing nature of work and stress", *Journal of Managerial Psychology*, Vol. 15 No. 3, pp. 227-42.
- Schweiger, D. and DeNisi, A. (1991), "Communicating with employees following a merger: a longitudinal field experiment", *Academy of Management Journal*, Vol. 34 No. 1, pp. 110-35.
- Secord, P. and Backman, C. (1969), *Social Psychology*, McGraw-Hill, New York, NY.
- Shaw, J., Fields, M., Thacker, J. and Fisher, C. (1993), "The availability of personal and external coping resources: their impact on job stress and employee attitudes during organizational restructuring", *Work and Stress*, Vol. 7 No. 3, pp. 229-46.
- Strebel, P. (1996), "Why do employees resist change?" *Harvard Business Review on Change*, HBS Press, Harvard, MA.
- Sullivan, S. and Bhagat, R. (1992), "Organizational stress, job satisfaction and job performance: where do we go from here?", *Journal of Management*, Vol. 18 No. 2, pp. 353-74.
- Trader-Leigh, W. (2001), "Resistance to organizational change: the role of cognitive and affective processes", *Leadership & Organization Development Journal*, Vol. 22 No. 8, pp. 372-82.
- Vakola, M., Tsaousis, I. and Nikolaou, I. (2003), "The role of emotional intelligence and personality variables on attitudes toward organizational change", *Journal of Managerial Psychology*, Vol. 19 No. 1, pp. 88-110.
- Woodward, C., Shannon, H., Cunningham, C., McIntosh, J., Lendrum, B., Rosenbloom, D. and Brown, J. (1999), "The impact of re-engineering and other cost reduction strategies on the staff of a large teaching hospital: a longitudinal study", *Medical Care*, Vol. 37 No. 6, pp. 547-55.

Further reading

- Dunham, R.B., Grube, J.A., Gardner, D.G., Cummings, L.L. and Pierce, J.L. (1989), "The development of an attitude toward change instrument", paper presented at the Academy of Management Annual Meeting, Washington, DC.
- Meyer, J.P. (1997), "Organizational commitment", in Cooper, C.L. and Robertson, I.T. (Eds), *International Review of Industrial and Organizational Psychology*, Wiley, Chichester, pp. 175-228.