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The role of emotional intelligence and personality variables on attitudes toward organisational change

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Abstract *Although the role of organisational characteristics in the change process has been extensively analysed and discussed in the literature, individual characteristics, which are equally crucial for the success of change, have been neglected. Therefore, the purpose of the present study is to add a different way of looking and working with organisational change by focusing on individuals' emotions and personality traits. This paper explores how emotional intelligence and the "big five" dimensions of personality can facilitate organisational change at an individual level by exploring the relationship between these attributes and attitudes toward organisational change. The sample consisted of 137 professionals who completed self-report inventories assessing emotional intelligence, personality traits and attitudes towards organisational change. The results confirmed that there is a relationship between personality traits and employees' attitudes toward change. Similarly, the contribution of emotional intelligence to the attitudes to change was found to be significant, indicating the added value of using an emotional intelligence measure above and beyond the effect of personality. The practical implications of these findings are discussed in relation to the phases of a change project.*



As organisations try to survive and remain competitive, they are reorganising, re-engineering, downsizing and implementing new technology. In other words, they constantly try to change. These ongoing and seemingly endless efforts can put a lot of strain not only on organisations but also on individuals. Beer and Nohria (2000) argue that 70 per cent of change programs fail because of lack of strategy and vision, lack of communication and trust, lack of top management commitment, lack of resources, lack of change management skills, resistance to change etc. Research dealing with organisational change has mainly focused on organisational factors neglecting the person-oriented issues. Although some

researchers have called for more focus on micro-level of organisational change, this research remains limited (Bray, 1994; Judge *et al.*, 1999; Wanberg and Banas, 2000).

According to Judge *et al.* (1999), people-oriented research in organisational change explored issues of charismatic or transformational leadership, the role of top management in organisational change and the phenomenon of resistance to change, without considering the psychological traits or predispositions of individuals experiencing the change, which are equally crucial for its success. Nevertheless, they argued that individual difference variables, such as locus of control, positive affectivity, openness to experience and tolerance for ambiguity play an important role in employees' work attitudes (e.g. organisational commitment, satisfaction) as well as they predict self and supervisory assessments of coping with change. King and Anderson (1995) also indicated the role of individual differences along with previous bad experiences of change as responsible for high levels of negative attitudes and resistance to change.

Another significant construct, which has not been extensively investigated, is the role of emotions in organisational change, since the typical organisational change paradigm focuses on problem-based models underestimating the impact of emotions (Vince and Broussine, 1996). Because of the strength of reactions attached to organisational change, researchers of change have begun to consider emotional undercurrents of change (Mossholder *et al.*, 2000). For example, O'Neill and Lenn (1995) revealed by interviewing managers the types and depth of emotions (e.g. anger, cynicism, anxiety, resentment, resignation) displayed by those involved or affected by change activities.

Additionally, Huy (1999, p. 326) suggests that "well channelled emotional dynamics can lead to the realisation of radical or second-order change. For firms faced with an increasingly dynamic environment, emotional energy represents a largely unexploited, yet ready resource. Well tapped, it will enable organisations to realise strategic stretch". Fiol and O'Connor (2002) also established that emotional energy is essential to mobilise and sustain radical change in combination with cognitive interpretations.

Briner (1999) claims that one of the reasons why there is a resurgence of interest to emotions at work is first, the large number of organisations operating in the service sector and second the popularisation of the construct of emotional intelligence (EI). George and Jones (2001), discussing a theoretical model of the individual change process, propose that emotionally intelligent employees will be more likely to be adaptable in emotional reactions to discrepancies signalling the need for change, since these people are more adaptive and responsive to their emotions and moods with better knowledge and understanding of the feelings they are experiencing. Subsequently, the current study explores the role of personality and EI in attitudes toward

organisational change through the assessment of personality traits and the ability of the individual to manage his/her own emotions.

Attitudes to change

Secord and Beckman (1969) 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, p. 167) 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, consists of a person's cognitions about change, affective reactions to change, and behavioural tendency toward change. Researchers have therefore, identified various employees' responses to an organisational change ranging from strong positive attitudes (i.e. "this change is essential for the organisation 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.

Other studies showed that positive attitudes to change were found to be vital in achieving organisational goals and in succeeding in change programmes (Eby *et al.*, 2000; Gilmore and Barnett, 1992; Kotter, 1996; Martin, 1998). Also, Schweiger and DeNisi (1991) suggested that uncertainty attached to organisational and personal changes that usually follow mergers and acquisitions creates negative attitudes to change which lead to some dysfunctional outcomes such as low job satisfaction, stress, low organisational commitment and low trust in the organization.

Emotions and responses to change can be so intensive that the literature in organisational change has compared them with individual responses to traumatic changes such as death and grief (Grant, 1996; Henderson-Loney, 1996; Kubler-Ross, 1969). Perlman and Takacs (1990), for example, 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 organisational change. More specifically, they noted that there are many emotional states that a person can experience during change processes such as equilibrium, denial, anger, bargaining, chaos, depression, resignation, openness, readiness and re-emergence.

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 is well acknowledged in the literature as a critical success or failure factor (Kotter, 1996; Regar *et al.*, 1994; Strebel, 1996; Trader-Leigh, 2002). Unless the majority of staff perceives that the organisation develops

supportive organisational mechanisms to change such as top management commitment, allocation of resources, rewards, training, participation in the planning and implementation, successful change implementation will be at risk.

Change management literature showed that apart from beliefs, perceptions and attitudes which are critical in successful organisational change (Armenakis *et al.*, 1993; Schalk *et al.*, 1998; Weber and Weber, 2001), there are some individual difference variables, such as personality traits and EI that seem to differentiate individual responses to change. The following sections aim at analysing personality factors and attributes of EI as predictors of attitudes toward organisational change.

Personality in organisational settings

The field of personality has been dominated for the past two decades by the five-factor model of personality (FFM) (Goldberg, 1990; John, 1990; McCrae and John, 1992). The five factors usually labelled neuroticism (the tendency to experience negative affect, such as anxiety, insecurity and psychological distress), extraversion (the quantity and intensity of interpersonal interaction and activity level), openness to experience (the proactive seeking and appreciation of new experiences), agreeableness (the quality of one's interpersonal interaction along a continuum from compassion to antagonism), and conscientiousness (the amount of persistence, organisation and motivation in goal-directed behaviours) (Costa, 1996; Piedmont and Weinstein, 1994) have provided personality psychology with a clear measurement framework and are responsible for the resurgence of interest to personality in the field of work and organisational psychology.

These five factors have been identified across a number of cultures and radically different languages, providing further support for the existence of the FFM and its universal application (McCrae and Costa, 1997). Apart from the American/English languages, the factor structure of the FFM has been replicated in German, Dutch, Italian, Hungarian, Spanish, Chinese, Japanese, Belgian, Israeli, Estonian, Finnish, Croatian, Greek, and Czech. For an excellent review in cross-cultural research as well as for a comparison between lexical studies among languages, see Saucier *et al.*, in press).

What is of most interest for human resource professionals is the application and utility of the FFM in occupational settings. A number of meta-analytic studies have demonstrated the predictive validity of the FFM in occupational settings (e.g. Barrick and Mount, 1991; Salgado, 1997; Tett *et al.*, 1991), bringing a number of researchers to propose a moratorium on meta-analyses on the relationship among the FFM and job performance criteria (Barrick *et al.*, 2001; Salgado, 2003). They propose that future studies should focus on how personality traits are related to occupational criteria and the resolution of the bandwidth-fidelity dilemma (Ones and Viswesvaran, 1996). De Fruyt and

Salgado (2003) argue that personality traits, as described by the FFM, not only predict different facets of job performance, but they also affect a range of additional work outcomes, such as job satisfaction, job commitment, voluntary turnover, absenteeism, etc., claiming that “the attention on traits . . . is thus legitimate, because predictive validity is ultimately the most important criterion to decide on the usefulness of concepts or theories” (De Fruyt and Salgado, 2003, p. 124).

The FFM may also be used as an appropriate framework in studying individual differences and attitudes toward organisational change. Lau and Woodman (1995, p. 538) argued that attitudes toward organisational change depend on individual’s change schemata which are defined as “mental maps representing knowledge structures of change attributes, and relationships among different change events”. These researchers suggested that there are significant relationships between such schemata and the reactions of individuals to change and more importantly, they noted that these schemata are significantly affected by personality.

Other research has related openness to experience to effective coping and adjustment. More specifically, McCrae and Costa (1986) indicated a positive relationship between openness to experience and utilisation of effective coping mechanisms in order to deal with stressful events in life. Therefore, openness to experience is a dimension that can be related to positive attitudes toward change, since it describes employees who can demonstrate effective coping mechanisms, are open to new ideas and suggestions and are tolerant and perceptive. Agreeableness, which describes people as compliant, soft-hearted and good natured, avoiding tensions and disagreement in the workplace (Costa and McCrae, 1992), is also a variable which is expected to be related with positive attitudes toward change, since it is expected that employees with high score on agreeableness will be more reluctant to resist and more keen to follow new policies and procedures, as may be applied by a new organisational change. The dimension of conscientiousness, which describes people with self-discipline, ambition and competence (Costa and McCrae, 1992), is expected to correlate positively to positive attitudes toward change, since employees with high score on this dimension are dutiful and tend to adhere strictly to principles and obligations initiated by management. Finally, neuroticism, which describes people as worrying, nervous and anxious is expected to be linked positively with negative attitudes towards organisational change, since the introduction of organisational change is usually associated with increased stress levels and insecurity amongst employees. On the basis of these findings, we hypothesize that:

- H1.* Attitudes toward organisational change will be positively associated with openness to experience, agreeableness, and conscientiousness, and negatively associated with neuroticism.

EI in workplace

The concept of EI was firstly introduced by Salovey and Mayer (1990) as a type of social intelligence, separable from general intelligence, which involves the ability to monitor one's own and others' emotions, to discriminate among them, and to use the information to guide one's thinking and actions. In a later attempt, they expanded their model and defined EI as the ability of an individual to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth (Mayer and Salovey, 1997).

On the other hand, Goleman (1998a, p. 317), who was responsible for the popularization of the concept, has defined EI as "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships". He formulated his model in terms of a theory of performance since, as he suggested, his model has direct applicability to the domain of work and organisational effectiveness, particularly in predicting excellence in jobs of all kinds, from sales to leadership (Goleman, 1998b).

Finally, Bar-On (1997) has placed EI in the context of personality theory. He defined EI as an umbrella concept of non-cognitive capabilities, competencies, and skills, which helps an individual to become more efficient in coping with environmental demands and pressures. He proposed a model of non-cognitive intelligences that includes five broad areas of skills or competencies from the personality domain, and within each, more specific skills that appear to contribute to success. These include intra-personal skills, inter-personal skills, adaptability, stress management, and general mood (optimism, happiness).

In recent years, there has been an increasing interest in the theoretical development of the concept of EI in an attempt to identify whether or not this newly introduced concept accounts for variance not already accounted for by intelligence and/or personality (Fox and Spector, 2000; Van der Zee *et al.*, 2002) in various areas of human transactions, such as life success (Bar-On, 2001; Goleman, 1995), life satisfaction and well-being (Dulewicz *et al.*, 2003; Palmer *et al.*, 2002), physical and mental health (Ciarrochi *et al.*, 2002; Salovey *et al.*, 2000; Taylor, 2001), interpersonal relationships (Fitness, 2001; Flury and Ickes, 2001), etc.

According to Dulewicz and Higgs (2000) existing literature on EI has been largely drawn for psychological research and educational based research while the limited organisational applications of EI tend to be based on derivative arguments and anecdotal case descriptions. However, during the last decade research within the organisational context has started to become a focus point and today has concentrated on how EI can predict work related behaviours,

such as leadership potential, career development, team effectiveness, occupational stress, job performance, etc.

Research suggests that people with high levels of EI experience more career success (Dulewicz and Higgs, 1998; Weisinger, 1998), feel less job insecurity (Jordan *et al.*, 2002) lead more effectively (Cooper and Sawaf, 1997; Palmer *et al.*, 2000; Prati *et al.*, 2003; Higgs and Rowland, 2002) are more effective in team leadership and team performance (Rice, 1999), are more adaptable to stressful events (Nikolaou and Tsaousis, 2002; Slaski and Cartwright, 2002), and with better coping strategies (Bar-On *et al.*, 2000) than those with low EI. This growth of interest in EI is also associated with increasing organisational contextual volatility and change since the latter is frequently associated with emotional conflict (Downing, 1997). Within a change management context, there is evidence suggesting that focusing on EI can contribute to competitive advantage (Cooper, 1997; Goleman, 1998b).

According to Walsh (1995), although we still know very little about the emotional bases of organisational change, we are able to recognise the important role of emotions and the way employees use or handle them on how they experience any modification of an organisation's environment. Huy (1999) argues that emotional dynamics (i.e. emotional states that are expressed or evoked by certain organisational behaviours) are the key factors, which determine whether a change program will succeed or fail. He notes that "The degree of an organisation's ability to execute effectively these various emotional dynamics determines its level of emotional capability and, therefore, its likelihood of realising radical change ... By and large, these emotional dynamics also mirror the behaviors of an 'emotional intelligent' individual" (Huy, 1999, p. 332).

From the above presented arguments it becomes obvious that the individual-difference construct of EI has the potential to contribute to a better understanding of the affective implications of a change policy that takes place within an organisation. More specifically, it is hypothesized that employees with low control of emotions are expected to react negatively towards the proposed changes, since they are not well equipped to deal effectively with the demands and the affective consequences of such a stressful and emotionally expensive procedure. In contrast, employees with the ability to use their emotions appropriately, since they are optimistic and often take initiatives, usually decide to reframe their perceptions of a newly introduced change program and view it as an exciting challenge. Therefore we hypothesise that:

- H2. Attitudes toward organisational change will demonstrate positive relationship with use of emotions for problem solving, control of emotions as well as with overall EI score.

The purpose of the present study is to explore a different way at looking and working with change in organisations by focusing not only on dispositional characteristics which previous research has demonstrated that have an effect on attitudes toward change (Judge *et al.*, 1999; Wanberg and Banas, 2000) but also on the individual's ability to manage his/her own emotions at work. As a result, this paper investigates how various attributes of personality and EI can facilitate organisational change at an individual level by exploring the relationship between these individual difference constructs and attitudes toward organisational change. Therefore, we suggest that:

H3. EI will explain additional variance of attitudes toward change above and beyond the effect of personality.

Personal variables

Earlier findings have linked a number of personal variables with attitudes toward organisational change. Iverson (1996) in a study exploring organisational change and commitment in a public hospital found that employees with low tenure and high education are more positive toward organisational change. Cordery *et al.* (1993) also identified a positive relationship between years in education and acceptance of organisational change. The findings regarding gender are quite inconsistent. Iverson (1996) did not find any relationship between gender and attitudes toward change, although Cordery *et al.* (1991) reported that men were more resistant to change when they perceived they were gaining skills that were traditionally female (e.g. typing). Therefore, we propose the following hypotheses:

H4. Tenure will be negatively associated with attitudes toward organisational change.

H5. Attitudes toward organisational change will demonstrate significant association between different levels of educational background (i.e. employees with higher education will demonstrate more positive attitudes toward organisational change).

H6. There will be no significant difference between males and females regarding attitudes toward organisational change.

Method

Participants/procedure

A total of 137 professionals from various public and private organisations based in Athens, Greece participated in this study. These organisations had undergone major organisational changes such as restructuring, culture change interventions and mergers. Overall, 350 questionnaires were administered by the researchers (a response rate of 39 per cent). Due to the sensitivity of the subject, researchers decided to be present during the completion and collection

of the questionnaires. Participants were asked to complete a self-report questionnaire pack, which incorporated the study measures. They were informed that all data would be treated as confidential, and that they had the right to withdraw from the study at any time and any stage. Table I presents the descriptive characteristics of the sample.

Measures

The attitudes to change questionnaire (ACQ (Tsaousis et al., 2003)). Attitudes toward organisational change were measured by a scale, which was developed for the purposes of the present study. The development of the initial item pool was based on the existing literature regarding attitudes to change. According to Dunham *et al.* (1989) attitude toward change in general consists of a person's cognitions about change, affective reactions to change, and behavioural tendency toward change. More specifically, Elizur and Guttman (1976) classified individuals' or groups' response to the introduction of organisational change into three types: cognitive responses (i.e. the opinions one has about advantages and disadvantages, usefulness, necessity, and knowledge required to handle the change); affective responses (i.e. the feelings of being linked to, satisfied with, or anxious about the change); and instrumental responses (i.e. the actions already taken or which will be taken in the future for or against the change).

Based on this theoretical model, 66 items were generated, which formed the initial item pool from which items for the final version of the scale were developed. A pilot study was run collecting data from 124 employees from private and public organisations. Following standard item analytic techniques (through the indices of item difficulty and item discrimination) we reduced the number of the items in 30 (15 positive and 15 negative to control for acquiescence effect).

	Per cent	<i>n</i>	M	SD
<i>Gender</i>				
Males	42.3	58		
Females	57.7	79		
<i>Age</i>			35.42	10.36
<i>Family status</i>				
Single	51.9	69		
Married	42.1	56		
Divorced	6	8		
<i>Educational background/attainment</i>				
High school	11.9	16		
Further education	12.6	17		
University graduates	47.4	64		
Postgraduate degree	28.1	38		
<i>Tenure (months)</i>			31.49	60.97

Table I.
Demographic
characteristics of the
sample (*n* = 137)

Subsequently, in order to examine the factor structure of the scale, we administered the new scale in a new sample of employees ($n = 330$) from various organisations. A principal axis factoring with Varimax rotation revealed the emergence of a clear two-factor solution with all positive items loading on the one factor and all negative items on the other. The total variance explained by these two factors was 50.5 per cent. This result suggests that attitudes toward organisational change – as measured by the ACQ – is a uni-dimensional construct with a two opposite poles (one positive and one negative). One item was eliminated from the final version of the scale, since it could not load on either of the two scales clearly.

The final version of the scale consists of 29 items (14 positive and 15 negative), has an overall alpha reliability of 0.89, 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). In order to explore the robustness of the final version of the new scale an additional study was carried out, with the participation of 292 employees from various public and private organisations. The results of the factor analysis replicated the factor structure of the measure, explaining 40 per cent of the variance.

The emotional intelligence questionnaire (EIQ (Tsaousis, 2003)){1}. This self-report questionnaire comprises 91 self-referencing statements and requires individuals to rate the extent to which each statement is representative to them on a five-point scale (1 = not representative at all; 5 = very representative). The EIQ is the only Greek measure of EI, and is based on the theoretical model proposed by Mayer and his associates (Mayer *et al.*, 2000; Mayer and Salovey, 1997; Salovey and Mayer, 1990). It measures four independent dimensions scales: perception and appraisal of emotions, control of emotions, understanding and reasoning of emotions, and use of emotion for problem solving and provides also an overall EI score based on the sum of responses from all scales and sub-scales. EIQ demonstrates very good internal consistency (scores ranged form 0.81 (perception and appraisal of emotion) to 0.91 (regulation and management of emotion)). The Cronbach alpha for the total test was high and acceptable ($\alpha = 0.92$), and test-retest reliability indices (scores ranged from 0.79 (perception and appraisal of emotions) to 0.91 (use for problem solving)).

EIQ demonstrates also acceptable validity evidence, with all its scales correlating with corresponding scales from other EI tests, such as the Schutte self-report inventory (SSRI (Schutte *et al.*, 1998)) and the trait meta-mood scale (TMMS (Salovey *et al.*, 1995)) as well as with other theoretically related constructs, such as empathy, alexithymia, mood, social skills, well-being, personality, intelligence, etc. The vast majority of the reported results justify the ability of the instrument to measures what it claims it measures (Tsaousis, 2003).

The traits personality questionnaire 5 (TPQue5 (Tsaousis and Kerpelis, in press)). The TPQue5 is a measure of the big five model developed and validated specifically for use with Greek adults. It is a short version (101 items) of the TPQue (Tsaousis, 1999) comprising scales of neuroticism, extraversion, openness, agreeableness, and conscientiousness as well as a lie and a social desirability scale. The TPQue5 factor scales displayed excellent internal consistency (scores ranged from 0.74 (openness) to 0.87 (neuroticism) and good test-retest reliability indices (scores ranged from 0.74 (conscientiousness) to 0.84 (neuroticism). Convergent and discriminant validation of the TPQue5 was demonstrated through comparison with other personality measures, while the analysis of the factorial structure of the test justified its concordance with the long form.

Job satisfaction. This was measured through a single-item measure assessing employees' global job satisfaction levels on a seven-point scale (1 = highly dissatisfied; 7 = highly satisfied).

Withdrawal intentions. Participants were finally asked to indicate the likelihood of voluntary resignation within the next six months using a seven-point scale (1 = highly likely; 7 = highly unlikely).

Results

Descriptive statistics

Table II presents the descriptive statistics along with the alpha reliabilities for the personality scales, the EI scales, as well as the attitudes toward organisational change scale, and the two single-item scales; job satisfaction and turnover.

As can be seen from Table II, all scales were reliable in the present sample. More specifically, all TPQue5 scales exhibit very similar with the normative

Variables	M	SD	α
<i>Personality variables (TPQue5)</i>			
Extraversion	50.86	7.84	0.83
Neuroticism	43.23	9.40	0.86
Openness to experience	49.01	7.86	0.78
Agreeableness	52.98	7.05	0.81
Conscientiousness	51.91	8.25	0.83
<i>Emotional intelligence variables (EIQ)</i>			
Perception and appraisal	48.64	8.59	0.81
Control of emotions	89.46	18.59	0.93
Use of emotions	86.77	13.66	0.91
Understanding of emotions	95.13	12.20	0.89
Overall EI score	320.00	38.11	0.94
Attitudes to change	106.72	14.03	0.93
Job satisfaction	5.26	1.24	–
Turnover	2.73	2.09	–

Table II. Descriptive statistics, and alpha reliabilities of the study variables ($n = 137$)

sample alphas ($M_{\text{alpha}} = 0.82$). Similarly, all EI scales exhibited almost identical to the normative samples alpha reliabilities ($M_{\text{alphas}} = 0.88$). The attitudes toward organisational change scale also demonstrated high internal consistency ($\alpha = 0.93$) whereas the job satisfaction and turnover scales have no reliability indices since they are single item scales.

The relationship between personal variables and attitudes toward organisational change

In order to examine whether there is any significant difference between males and females regarding their attitudes toward organisational change, one-way analysis of covariance (ANCOVA) was conducted, after controlling for age and organisational tenure. A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the covariates and the dependent variable did not differ significantly as a function of the independent variable, $F(1, 120) = 0.09$, partial $\eta^2 = 0.001$. The results revealed that there were no gender differences regarding attitudes toward organisational change ($F(1, 133) = 2.24$, ns), providing evidence which confirm *H6*.

To investigate whether educational attainment affects attitudes toward organisational change, another one-way analysis of covariance (ANCOVA) was performed. The independent variable was the educational attainment, consisted of four levels: Basic education, further education degree, university degree, and postgraduate degree. The dependent variable was the score on attitudes towards organisational change scale and the covariates were age and organisational tenure. The results showed that there was a significant effect of educational attainment on attitudes toward organisational change ($F(3, 120) = 5.19$, $p = 0.002$). The strength of relationship between educational attainment and the dependent variable was medium, as assessed by a partial η^2 , with the educational attainment factor accounting for 12 per cent of the variance of the dependent variable, holding constant age and organisational tenure.

Follow-up tests were conducted to evaluate pairwise differences among the adjusted means. The Holm's sequential Bonferroni procedure was used to control for type I error across the six pairwise comparisons. The results revealed that university graduates express less positive attitudes from both further education graduates and postgraduate degree holders. No significant differences among the remaining groups were found. This leads us to reject *H5* since an unequivocal relationship between attainment and attitudes toward organisational change does not exist. As far as tenure is concerned, the inter-correlation matrix (Table III) demonstrates that attitudes toward organisational change are not related to tenure, and as a consequence, we reject *H4*.

Table III.
Inter-correlation matrix
of the study variables
($n = 137$)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Extraversion													
2. Neuroticism	-0.212*												
3. Openness to experience	0.151	0.002											
4. Agreeableness	0.194*	-0.100	-0.029										
5. Conscientiousness	0.281**	-0.356**	0.028	0.309**									
6. Perception and appraisal	0.399**	-0.076	0.237**	0.323**	0.387**								
7. Control of emotions	0.215*	-0.788**	0.051	0.160	0.433**	0.191*							
8. Use of emotions	0.593**	-0.669**	0.064	0.293**	0.493**	0.258**	0.601**						
9. Understanding of emotions	0.412**	-0.051	0.312**	0.415**	0.393**	0.489**	0.057	0.427**					
10. Overall EI score	0.539**	-0.658**	0.201*	0.389**	0.601**	0.568**	0.765**	0.846**	0.611**				
11. Change attitudes	0.369**	-0.268**	0.228**	0.341**	0.374**	0.292**	0.318**	0.530**	0.376**	0.531**			
12. Job satisfaction	0.027	-0.123	-0.144	0.260**	0.117	0.129	0.129	0.121	0.170	0.189*	0.093		
13. Turnover	0.021	0.089	-0.130	-0.143	-0.079	-0.130	-0.194*	-0.128	-0.195*	-0.231**	-0.034	-0.523**	
14. Tenure	-0.044	0.031	-0.059	.189*	-0.023	0.131	0.034	0.042	0.122	0.097	-0.006	0.211*	-0.181*

Notes: * $p < 0.05$, ** $p < 0.01$

Predicting attitudes toward organisational change from personality and EI characteristics

To investigate how personality traits as well as EI factors are related to attitudes toward change we initially examined the inter-correlation matrix presented in Table III.

The results presented in Table III show that attitudes toward organisational change are positively related to extraversion, agreeableness, conscientiousness and openness to experience ($r = 0.23$ to 0.37) and negatively to neuroticism ($r = -0.27$). All correlation coefficients were statistically significant at $p < 0.01$. As far as EI is concerned, attitudes toward organisational change are positively related to all four dimensions of EI ($r = 0.29$ to 0.53 , $p < 0.01$) as well as to overall EI score ($r = 0.53$, $p < 0.01$). No significant correlations were found between attitudes to change and job satisfaction and turnover.

In order to investigate which personality and EI dimensions predict attitudes toward organisational change, a series of hierarchical multiple regression analyses were carried out. Attainment, was used as a control variable, since it was the only personal variable demonstrating a statistically significant relationship with attitudes to change.

The first hierarchical regression analysis examined the role of the FFM of personality on attitudes toward change. The regression equation with the personality variables, controlling for attainment, was statistically significant (R^2 change = 0.30 , $F(6, 128) = 9.54$, $p = 0.000$). An examination of the beta coefficients demonstrated the statistically significant relationships between four of the five personality dimensions (excluding Neuroticism) and attitudes toward change (extraversion, $\beta = 0.20$, $p = 0.01$; openness, $\beta = 0.19$, $p = 0.01$; agreeableness, $\beta = 0.24$, $p = 0.00$; conscientiousness, $\beta = 0.18$, $p = 0.03$). These results suggest that extravert, open to experiences, agreeable and conscientious employees are more positive to organisational changes. Examining these results, one could argue that *H1* is partially confirmed, since neuroticism was not entered in the equation as hypothesised. On the contrary, extraversion, although it was hypothesised to predict attitudes to change, was not entered into the equation.

The same analysis was conducted, using this time the four dimensions of the EI as predictors to attitudes toward organisational change (R^2 change = 0.31 , $F(5, 129) = 12.39$, $p = 0.000$). The only dimension predicting attitudes toward organisational change at a statistically significant level ($\beta = 0.40$, $p = 0.00$) was the use of emotions for problem solving. Significant contribution made also the overall EI score ($\beta = 0.53$, $p = 0.00$). These results partly confirm *H2*, since control of emotions did not predict employees' attitudes toward organisational change, as was hypothesised.

The final set of analysis referred to the investigation of *H3*, i.e. whether EI will explain additional variance of attitudes toward change above and beyond the effect of personality. A hierarchical multiple regression analysis was

carried out controlling initially for attainment and then for the five personality dimensions, in order to examine whether the EI dimensions contributed significantly on attitudes toward change. The results of this analysis are presented in Table IV.

The results of Table IV demonstrate that the EI scales and most notably the use of emotions for problem solving predict additional variance beyond the effect of personality. The result is similar when we use the overall EI score instead of the EI sub-scales. Two of the personality dimensions (i.e. openness to experience and agreeableness) positively predict attitudes toward organisational change, revealing a significant influence of individual characteristics on employees' attitudes toward organisational change. It is worth noting that the effect of the use of emotions scale is quite stronger than the effect of openness and agreeableness on attitudes towards change. The results of this analysis lead us to accept *H3* that EI can predict additional variance above and beyond the effect of personality on employees' attitudes toward organisational change.

Discussion

The current study explores the links between personality traits, as expressed by the FFM, EI and attitudes toward organisational change. The findings confirmed relationships among these variables proving the need for an individual level approach to managing change. They also provide evidence establishing the positive relationship between individual characteristics and attitudes to change, which contribute to the success of change. Although, the research design and the nature of the study do not allow generalisation and detection of causal effects, the implications of these results for research and practice are quite significant.

Predictors	<i>B</i>	SE <i>B</i>	β
<i>Step 1</i>			
Attainment	10.15	10.22	0.07
<i>Step 2</i>			
Extraversion	-0.03	0.18	-0.01
Neuroticism	0.29	0.20	0.18
Openness	0.30	0.15	0.16
Agreeableness	0.42	0.17	0.20
Conscientiousness	0.12	0.16	0.07
<i>Step 3</i>			
Perception and appraisal	0.04	0.15	0.02
Control of emotions	0.06	0.10	0.08
Use of emotions	0.52	0.14	0.49
Understanding and reasoning	0.01	0.12	0.01

Table IV. Hierarchical regression analysis, for variables predicting attitudes toward organisational change (*n* = 137)

Notes: $R^2 = 0.01$ for step 1 (n/s); $\Delta R^2 = 0.30$ for step 2 ($p < 0.000$); $\Delta R^2 = 0.08$ for step 3 ($p < 0.01$). Values for *B* and β are from the final equation

Evidence from the literature in change management reported no relationship between gender and organisational change (Iverson, 1996; Cordery *et al.*, 1993), although Decker *et al.* (2001) found that males viewed the effects of organisational change (in that case, staff and budget reduction) more negatively than females. Findings of the present study also reported no gender differences regarding attitudes toward change.

Although previous findings reported a negative relationship between tenure and attitudes to change (Iverson, 1996), the results of this study reported no relationship. One possible explanation for this discrepancy in results might be due to the cross-sectional research design adopted in this study. More specifically, since tenure might be influenced by company-specific organisational characteristics, such as employee development, rewards, management style, etc., the lack of relationship found in this study may be attributed to the different types and kinds of organisations participated in this study.

As far as the role of attainment on attitudes toward organisational change, previous research supports the positive impact of education on acceptance of organisational change. Cordery *et al.* (1993) suggested that employees with higher education have increased opportunities for skill utilisation and, therefore, are able to cope with the new requirements or challenges that change will bring. This finding was also confirmed by Iverson (1996), indicating that organisations must invest in training in order to have a flexible and adaptable workforce able to display greater involvement in organisational change. The results of the present study indicated that attainment is positively related to attitudes towards organisational change.

As regards the impact of individual characteristics (i.e. personality and EI) on attitudes toward organisational change, Judge *et al.* (1999) pointed out that, in the past decade personality characteristics have been linked to a number of significant organisational variables, such as leadership, stress or work performance, leaving aside other important work attitudes or behaviours such as coping with organisational change. The current research contributes towards this direction since it supported a significant relationship between personality traits, EI and attitudes to change. These findings provoke several implications both for research and practice within the organisational context of change.

First, the relationship between extraversion, openness, agreeableness, conscientiousness and attitudes to change confirmed that stable individual characteristics, as described by the five-factor model of personality, are linked to organisational change. If we look these correlations in more detail we will be able to form the profile of the “positive to organisational change” employee, who is an extrovert, open to new experiences, agreeable and conscientious employee. Focusing on these dispositions, when managers or team leaders are selected in order to act as change agents, they may contribute significantly to

the overall success of organisational change efforts. These personality characteristics can be used not only to select change agents but also to select employees for the positions or assignments that inherently entail change. Selecting for change agents, using the five-factor model of personality, would be a very interesting issue to investigate based on the results of the current study.

Second, attitudes toward organisational change also related to the EI dimension of use of emotions for problem solving above and beyond the effect of personality. This dimension describes optimistic, energetic, hopeful people who trust their abilities and prepare well-organised plans using and assessing their own emotions appropriately (Tsaousis, 2003). Organisational change causes redistribution of resources and power and as a result, it challenges employees' assumptions about the nature of the organisation (Bartunek, 1984; Regar *et al.*, 1994) or about their own capability of coping with the new situation (Coch and French, 1948). Challenging stability could trigger strong defence mechanisms, such as anxiety and defensiveness (Schein, 1992) or cynicism and stress (Armenakis *et al.*, 1993), which can result in low job satisfaction, intentions to quit (Schweiger and DeNisi, 1991; Rush *et al.*, 1994) or putting obstacles to the change implementation process (Armenakis and Bedeian, 1999). Being able to use emotions in order to develop positive attitudes towards change and increase ability to cope with change (Huy, 1999) is a critical success factor in the change process (Higgs and Rowland, 2002). This finding has significant practical implications since use of emotions contribute to the development of positive attitudes toward change beyond the effect of personality dispositions.

Although personality dispositions such as those described by the FFM are quite stable and there is evidence, which reveals a genetic basis of these traits (Costa and McCrae, 1992; Goldberg, 1990), there is a strong consensus in the literature that EI is a developable trait or competency (Steiner, 1997; Cooper, 1997; Dulewicz and Higgs, 2000). Taking into consideration the fact that organisations may have limited flexibility in selecting managers responsible for change or change agents, these findings underline the importance of developing individuals in order to cope with change successfully. Organisations need to consider the fact that they do not need people who are willing to accept any kind of changes without questioning and challenging its logic and outcomes. They need employees who are not narrow-minded so they can accept to consider organisational change and know how to use their emotions in order to handle conflicts, solve problems and adapt quickly, skills which are necessary in a change context. Human resource management needs to invest in selection, training and development and performance management both for change agents but also for employees involved of affected by change as a way of implementing and institutionalising organisational change. For example, employee training and development may include specific

competencies such as listening skills, negotiating skills, conflict management skills, motivating others or stress management. Also, performance appraisal should include competencies coming from EI such as adaptability, inter-personal sensitivity, self-development or flexibility in order to institutionalise a constant mindset of embracing organizational changes.

It is worth noting that the study is subject to a series of limitations. The first limitation of the study is that no measures of previous change experience were included, in order to compare participants' attitudes toward change with actual change familiarity. Further, a limitation of the research design is that since the data were collected through the use of a single survey at a single point in time, the results may be influenced by common method bias. The different pattern and direction of results observed across the variables of the study suggest though that common method bias is an unlikely explanation for the results. Nevertheless, even if it exists, there is no reason to expect that the differences in correlations among EI, personality and attitudes toward organisational change are due to the effect of common method variance, since its presence would not be expected to exert differential bias on the observed relationships. Additionally, the cross-sectional nature of the study, as opposed to a longitudinal or experimental methodology, do not allow affirmative causal explanations.

In future studies it would be interesting to obtain observer ratings of EI skills and attitudes toward change, such as supervisors and colleagues. Previous research has shown that personality can be a stronger predictor when rated by observers than when obtained through self-reports (Mount *et al.*, 1994). Research examining EI from a multi-rater perspective may lend further insight into the relationship between individual differences and attitudes toward organisational change. Future studies would also profit from use of additional measures to cross-validate findings of the relationships among EI and organisational change.

Note

1. The Greek copyrighted title of the test is ΤΕΣΥΝ. The English translation of TESUN is emotional intelligence questionnaire (EIQ).

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