Job Satisfaction and Creativity at Work among Greek Employees: 
The Role of Time Perspective and Financial Crisis

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Abstract
The objective of this research is the examination of the role of time perspective and financial crisis on levels of job satisfaction and creativity at work for Greek employees. This is the first study testing the relationship between time perspective and levels of job satisfaction and creativity at work during a financial crisis. One hundred and ten people completed a survey translated in Greek which was uploaded on the researcher’s personal social media page. In the study, it was found that a) future time perspective and financial crisis were significant predictors of levels of job satisfaction and creativity, and b) Present Hedonistic time perspective significantly predicted levels of job creativity. These findings indicate that time perspective and the crisis are important constructs when investigating work-related outcomes. Theoretical and practical implications as well as limitations of the research are discussed.

Keywords: time perspective, job satisfaction, creativity at work, financial crisis, Greek employees

“If we can find a way of becoming positive in the present, then our brains work even more successfully as we're able to work harder, faster and more intelligently”.
— Shawn Achor

Job satisfaction and organizational creativity are considered as two of the most important factors for organizational sustainability and effectiveness. Job satisfaction has attracted a considerable amount of scholars’ attention due to its association with employees’ mental and physical health (Faragher, Cass & Cooper, 2005) as well as job performance and productivity (Babin & Boles, 1996). Similarly, it has been suggested that creativity or innovativeness in general, can be the only way for firms to succeed and be competitive in a globalized labour market (Cummings & Oldham, 1997; Shalley, Gilson & Blum, 2000).

Similarly, time perspective is gaining more and more attention as a result of empirical evidence which indicates that the way people view their past, present and future influences several domains of their lives (Zimbardo & Boyd, 1999). Given that feelings of optimism/pessimism are embedded in the construct of time orientation, financial crisis was considered as a pessimistic present factor for this study. Most of
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the research on this issue has primarily focused on the impact of feelings of job insecurity and unemployment on people's psychological wellbeing (Adkins, Werbel & Farh, 2001; Goldsmith, Veum & Darity, 1996). To my knowledge, there is not any study investigating the effect of perceived influence by the crisis and time perspective on levels of job satisfaction and creativity at work. Hence, this paper is aiming on addressing this gap.

Theoretical Background

Job satisfaction. Over the last years, more and more studies in the field of organizational psychology indicate that a happy worker is more productive (Achor, 2011). Job satisfaction has been the most investigated topic in Organizational Psychology due to researchers’ and theorists’ belief that it can influence various domains of the organizational life (Eslami & Grakhani, 2012; Hirschfeld, 2000; Spector, 1997). As Pinder (2008) argued, job satisfaction can “spill over” into the other aspects of people’s lives. It has been found, for instance, that employees’ levels of work satisfaction highly correlate with life satisfaction (Judge & Hulin, 1993; Judge & Watanabe, 1993), well-being (Judge & Hulin, 1993), organizational commitment (Eslami & Grakhani, 2012; Fletcher & Williams, 1996), as well as job performance (Babin & Boles, 1996) and less turnover intentions (Chen, 2006; Lambert, Hogan & Barton, 2001).

Job satisfaction refers to “the extent people like or dislike their work (Spector, 1997). Brief (1998) indicated that the concept of job satisfaction entails people’s attitudes towards their job, mainly gauged in affective terms. This is why the researcher promotes more Locke’s (1976) definition of job satisfaction as “a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences”. The last description of the concept captures the emotional reaction to a job as a consequence of the comparison between the actual and the expected outcomes (Brief, 1998; Hirschfeld, 2000). As Buitendach and Witte (2005) argued, job satisfaction comes from individuals’ evaluations of their job depending on their unique needs and expectations. Hence, people experience job satisfaction when they feel that their abilities and requirements are fulfilled by their work and that they are offered opportunities and rewards (Buitendach & Witte, 2005). In addition, as the authors claim, since all definitions of the concept include employees’
According to Weiss and his colleagues (as cited in Eslami & Gharakhani, 2012), satisfaction can be intrinsic, extrinsic and total. Intrinsic job satisfaction refers to the pleasant feelings of one’s work resulting from facets associated with the job itself, such as autonomy and variety of job tasks (Buitendach and Witte, 2005). This means that an employee is intrinsically satisfied as a result of the work itself (Eslami & Gharakhani, 2012). Extrinsic job satisfaction, on the other hand, depends on pleasure derived from factors like pay, working conditions and co-workers which are not associated with the job tasks or the work per se (Buitendach and Witte, 2005). This means that extrinsically satisfied is someone who feels happy because of the practical/monetary rewards he/she receives from his/her job (Eslami & Gharakhani, 2012).

Creativity at work. It has been argued that innovation in all firms depends on its employees’ creativity (Amabile, Conti, Coon & Herron, 1996; Cummings & Oldham, 1997). Empirical research on this topic has consistently indicated its value on the vitality and sustainability of organizations (Cummings & Oldham, 1997; Dul & Ceylan, 2011; Shalley et al, 2000). Apart from creativity’s significance on organizations’ viability and development, it has been pointed out that many professions depend on the actual exercise of creativity, such as engineering and marketing (Probst, Stewart, Gruys & Tierney, 2007). Creativity is commonly defined as the development of new and useful ideas, products or services, while innovation refers to “the successful implementation of creative ideas in an organization” (Amabile et al, 1996; Cummings & Oldham, 1997; West, 2002). More simply stated, the proposal or generation of a novel idea reflects an employees’ or a team’s creativity, whereas the introduction of a new organizational outcome to the market encompasses the company’s innovation (Cummings & Oldham, 1997). According to Woodman and his colleagues (1993), organizational creativity should be seen as one of the components of the broader sphere of innovation.

As Cummings and Oldham (1997) argued, the significance of employees’ creative contributions can become evident by the “creative inputs” they provide the
company with. These “inputs” will form the available options for the firm to choose from, develop and ultimately implement, and thus, innovate (Cummings & Oldham, 1997). Given the importance of creativity on organizational life, a considerable amount of research has investigated the relationship between creativity and personality, theorizing that people can be “creative talents” or not (Cummings & Oldham, 1997; Woodman et al, 1993). Other studies have also focused on testing ways in order to enhance employees’ creativity at work for instance through “creativity friendly” working environments which can facilitate and augment the staff’s levels of creativity or via support and encouragement by supervisors (Cummings & Oldham, 1997; Shalley et al, 2000).

**Time perspective (TP).** The concept of time has been the center of attention for scientists as it is considered to be inextricably linked to the human experience (Boniwell, 2005; Holman & Silver, 1998). Apart from the physical dimension of time, there is also the psychological aspect of this phenomenon which can have several implications in human life (Zimbardo & Boyd, 1999). The power of time perspective on people’s behavior and psychological profile has been highlighted by many researchers (Boniwell and Zimbardo, 2004; Boniwell, Osin, Linley & Ivanchenko, 2010; Holman & Silver, 1998; Zimbardo et al, 1999). Philosopher Kant has also posited that the way people view time plays a vital role in their lives (Zimbardo & Boyd, 1999). According to Holman and Silver (1998), time perspective has been conceived as “the overall extent of cognitive involvement across past, present and future life domains”. In other words, time perspective refers to whether people concentrate on their past, present or future in order to make a decision or act (Boniwell, 2005). According to Zimbardo and Boyd (1999), human experience consists of these three temporal constructs which enable people to recode, recall and interpret information and ultimately formulate their actions, by reconstructing their past and constructing their future.

A single instrument for measuring multiple time orientations, the Zimbardo Time Perspective Inventory (ZTPI) was developed by Zimbardo and Boyd (1999) which has been proven to have significant psychometric properties (Boniwell, 2005; Zhang, Howell & Stolarski, 2013). After a factor analysis, the researchers extracted five dimensions of time perspective: Past Negative (PN), Past Positive (PP), Present Hedonistic (PH), Present Fatalistic (PF), and Future (F). Each of these factors reflects
a general orientation for the individuals who score high on them. Future-oriented people are considered to be more organized and concerned about achieving future goals. The ZTPI distinguished the past in two separate factors: Individuals who score high on the PN are described as holding pessimistic attitudes towards the past. Past Positive, on the other hand, also known as nostalgia (Routledge, Wildschut, Sedikides & Juhl, 2013) depicts a more positive often reminiscing view of the past. Specifically, nostalgia is a Greek term referring to “the sentimental longing for one’s past (Sedikides, Wildschut, Arndt & Routledge, 2008)”. The scale also suggests two different ways of concentrating on the Present TP: Present-Hedonistic oriented people are characterized as “living in the moment” and seeking excitement and pleasure today. The factor of Present-Fatalism, instead, is associated with beliefs of predestined future as well as feelings of helplessness and dissatisfaction with present life (Boniwell, 2005; Zimbardo & Boyd, 1999).

On the basis of findings from previous research on the psychological benefits of Present Hedonistic, Future and Past Positive, Zimbardo and Boyd (1999) go as far as to propose the Balancing Time Perspective (BTP) for optimal functioning. Balance is defined as the individual’s ability to move across time perspectives from one to the other depending on the needs of a specific situation, rather than making use of a single TP (Zimbardo & Boyd, 1999). According to Boniwell and Zimbardo (2004), a BTP will enable individuals to make decisions and act more effectively by making use of all three perspectives. The model refers to statistical high scores on all three time perspectives and low scores for the factors of PN and PF (Boniwell and Zimbardo, 2004). Studies based on the BTP suggest that the more impulsive, “living in the moment” and positive people feel towards their past, the happier they report (Drake, Duncan, Sutherland, Abernethy & Henry, 2008).

The context investigated (Financial crisis). In the present study, financial crisis is viewed as a Present Fatalistic factor, as it represents the negative side of present life for many Greeks. A Present Hedonistic attitude could be associated with a focus on the positive side of life without paying too much attention to “today’s ugly aspect of reality”. A future orientation could reflect individuals’ focus on a potential future Greece’s exit from the financial crisis, a fact which is expected to have a significant impact on levels of job satisfaction and creativity. Past Positive time perspective can illustrate “the good times” before the crisis when the country’s economy was
flourishing. A past-negative attitude can be related to an even worse financial situation of the past than this current one.

Since the onset of the economic crisis in Europe, employment rates have been fallen dramatically and keep falling gradually every year, companies are closing down and people are losing their jobs almost every day (Adkins et al, 2001). Greece is considered to have been affected more than any other country by the financial crisis which escalated between 2007 and 2011. Unemployment has increased from the point of 6.6% in 2008 to 16.6% in 2011 (Kentikelenis, Karanikolos, Papanicolas, Basu, McKee & Stuckler, 2011). Such dramatic changes accompanied with the collapse of the Greek economy, can have a destructive impact on most of the people’s standards of living as well as their life evaluations (Deaton, 2011). Most economists investigating the influence of the crisis have mostly focused on issues such as income, wealth and joblessness. Similarly, issues such the above can have several implications on individuals’ subjective well-being (SWB) as well. For instance, well-being literature suggests that income and unemployment are two of the most significant predictors of SWB (Deaton, 2011). In addition, findings from several studies have consistently concluded that people’s mental and physical health is at risk as a result of the financial crisis (Karaiskou, Malliarou & Sarafis, 2012; Kentikelenis et al, 2011).

Theory provides good grounds for relating the damaged financial environment of the crisis to a general negative emotional state. Indeed, Goldsmith and his colleagues’ (1996) paper on unemployment and helplessness highlighted the negative outcomes of unemployment and joblessness on people’s psychological well-being. Chronic unemployed individuals can experience “learned helplessness” which refers to feelings of perceived loss of control of one’s life. Such feelings of powerlessness foster the deterioration of optimism and motivation (Goldsmith et al, 1996). Financial crisis has been strongly associated with feelings of job insecurity and a general negative economic situation (Adkins et al, 2001). As the researchers argued, living in a country under a financial crisis, which is characterized by a climate of damaged labor market can result in feelings of job insecurity among employees. Greenhalgh and Rosenblatt (1984) defined job insecurity as “powerlessness to maintain desired continuity in a threatened job situation”. Such emotions can be highly connected to negative emotional states, such as low levels of job satisfaction as well as organizational commitment (Ashford et al, 1989, Adkins et al, 2001). Adkins and his
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colleagues (2001) noted that employees experiencing job insecurity will probably experience fewer positive emotions about their job. In addition, according to the researchers, these individuals are likely to feel that their organization will not be able to commit to its obligations towards them and ultimately distance themselves from their jobs.

Previous Research

As Anagnostopoulos and Griva (2011) observe, all five time perspectives have been found to be associated with several indicators of mental health. Such studies indicate that the three basic time perspectives (past, present and future) correlate highly to positive and negative psychological and behavioral results. The outcomes that have been mostly associated to time perspectives are mood, well-being, psychological distress and maladaptive behaviors such as aggressiveness and risk taking. Results from these researches indicate strong positive correlations between Present Hedonism, Past Positive and Future and positive aspects of psychological and mental health (Holman & Silver, 1998; Zimbardo & Boyd, 1999). On the other hand, Past Negative and Present Fatalism have been consistently found to be associated with negative domains of the human existence (Drake et al, 2008; Taber, 2012; Zimbardo & Boyd, 1999).

A large body of research has indicated strong relationships between future time perspective and optimism (Mann, Kato, Fidgor, and Zimbardo, as cited in Zimbardo & Boyd, 1999; Zimbardo & Ryan, 1999, as cited in Zimbardo & Boyd, 1999), well-being (Holman & Silver, 1998), emotional coping, active problem-solving and coping (Anagnostopoulos & Griva, 2011; Holman & Zimbardo, 1999, as cited in Zimbardo & Boyd, 1999), as well as motivation and decision-making (Ferrari, Nota & Soresi, 2010; Taber, 2012). There is also evidence of a somewhat protective function of future orientation when it comes to risky behaviors, such as substance use and HIV risky activities (Hutton et al, 1999, as cited in Zimbardo & Boyd, 1999; Rothspan & Read, 1996; Robins & Bryan, 2004; Keough, Zimbardo & Boyd, 1999; Apostolidis, 2006). On the other hand, it has been suggested that an excessive concern about the future and future goals can be harmful for individuals’ healthy functioning (Boniwell & Zimbardo, 2004). This notion is based on the researchers’ belief that being too future-oriented can hinder spontaneity and prevent them from seeking present
enjoyment. Indeed, an excessive future orientation may reflect high levels of anxiety, for instance some people are constantly worrying about the future.

A very interesting and rather pioneering study conducted by Förster, Liberman and Friedman (2004) attempted to link future time perspective and creative thought via abstract thinking. Their expectations according to which distal future perspective would enhance creative generation of abstract solutions were based on construal level theory (CLT) developed by Liberman and Trope (1998). Following reasoning from previous studies indicating that creativity can be improved by abstract thinking, the authors conducted several experiments to test the effect of temporal distance on creativity. In their experiments, Förster and his colleagues’ (2004) manipulated distant as opposed to near future orientation and tested their effect on participants’ performance on various types of problem-solving tasks. Evidently, findings led to support of the researchers’ initial hypotheses, as it was found that temporal distance (distant future orientation) increased abstract thinking which in turn led to increased creativity, thus fostering the creative generation of abstract ideas.

Similarly, there is evidence for positive relationships between Present Hedonistic and Past Positive perspectives and subjective happiness (Drake et al, 2008). Empirical research on Present Hedonistic TP has indicated significant associations between PH orientation and life satisfaction (Drake et al, 2008) and positive affect (Zimbardo & Boyd, 1999). However, as Boniwell and his colleagues (2010) argued, although PH time perspective reflects life satisfaction in the present, their association is open to question as PH scale also captures the postponement of pleasure. Past Positive orientation or nostalgia has been found to be significantly associated to happiness (Zimbardo & Boyd, 1999), as well as increased feelings of meaning and purpose in life (Routledge et al, 2012; Steger et al, 2006). Further, results from experiments conducted by Wildschut and his colleagues (2006) in order to examine nostalgia’s role on psychological health have predominantly indicated that recalling nostalgic events facilitated participants’ positive mood and affect. Indeed, a considerable body of evidence favors nostalgia’s amplifying role on psychological

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1 CLT theory posits that temporal distance modifies people’s mental representations of upcoming events, and thus influencing their reactions to them. The researchers stated that distant future occasions are more likely to be depicted by more abstract (high-level construal) features compared to near future ones which are represented in more concrete (low-level construal) information (see Liberman and Trope, 1998).
resources, an effect which in turn promotes wellbeing (Routledge et al, 2012; Sedikides et al, 2008). In addition, according to Wildshut and his colleagues’ (2006) research, nostalgia can be triggered by psychological threat, such as negative mood and meaninglessness (Routledge et al, 2013).

Interestingly, empirical evidence supports the benefits of the Balanced Time Perspective, as a plethora of studies have consistently concluded that high scores in Future, Past Positive and Present Hedonism indicated higher levels of life satisfaction and well-being (Boniwell & Zimbardo, 2004; Gao, 2011; Zhang et al, 2013; Zimbardo & Boyd, 1999).

As far as Past Negative and Present Fatalistic time perspectives are concerned, prior research has demonstrated that they are significantly linked to risky behavior such as drinking, substance use and HIV risky behavior (Apostolidis, 2006; Hutton et al, 1999, as cited in Zimbardo & Boyd, 1999; Keough et al, 1999; Robins & Bryan, 2004; Rothspan & Read, 1996). It has been also found that high scores on PN and PF correlate significantly with high levels of anxiety and depression (Zimbardo & Boyd, 1999), lower scores in life satisfaction (Drake et al, 2008; Gao, 2011; Zhang & Howell, 2011), active or emotional coping (Zimbardo & Boyd, 1999) and decreased subjective well-being (Boniwell & Zimbardo, 2004; Zhang et al, 2013). According to Zimbardo and Boyd (1999), PF appears to be the most damaging factor when it comes to its impact on subjective happiness while other studies suggest that PN perspective has been a persistent indicator of reduced satisfaction and well-being (Boniwell et al, 2010).

Regarding the issue of present orientation in general, results of research have been inconsistent. On one hand, in the same line as future’s drawback, an overemphasis on the present has been indicated as compromising healthy functioning, as it is considered to be associated with the sought of temporary pleasure and unawareness of potential risks (Keough et al, 1999; Rothspan & Read, 1996). On the other hand, mindfulness, a meditation practice used to focus people’s attention on “here and now”, on what is happening right now, has been related to many beneficial outcomes such as stress handling, well-being and an orientation to life characterized by love and kindness (Brown & Ryan, 2003; Saltzberg, 2011). According to mindfulness theorists, present orientation refers to “an internal state of awareness”
which can help individuals pay attention on, and thus appreciate every little detail of their present experience (Saltzberg, 2011).

Although there has not been any research investigating the impact of the financial crisis per se on levels of job satisfaction and creativity, empirical evidence support the negative influence of the outcomes of such a damaged economic environment on these facets (Adkins et al, 2001; Ashford, Lee & Bobko, 1989; Probst et al, 2007). Particularly, it has been suggested that there is a strong negative relationship between levels of job insecurity and job satisfaction, organizational commitment and turnover intentions (Adkins et al, 2001; Ashford et al, 1989). Moreover, research has indicated that innovation and creativity can be decreased due to downsizing and cost-cutting policies employed by organizations in order to survive (Cascio, 1993; Pech, 2001; Probst et al, 2007). It is also argued that employees’ stress associated with job insecurity can have a negative impact on creative performance as a result of their distraction while engaging in innovative behaviors (Sanders & Baron, 1975).

**Hypotheses**

From the information provided so far a number of hypotheses can be generated regarding the relationship between the dependent variables, job satisfaction and creativity at work, and the independent variables, time perspective and the crisis.

When it comes to the relationship between time perspective and job satisfaction, previous research has indicated that individuals high on present hedonism, future and past positive report high levels of subjective well-being and life satisfaction (Zimbardo & Boyd, 1999; Holman & Silver, 1998). On the other hand, respondents high on past negative and present fatalism report lower levels in such domains (Drake et al, 2008; Gao, 2011; Zhang et al, 2013). Keeping in mind Boniwell & Zimbardo’s (2004) BTP for optimal functioning, I suggest that people who are PH, F and PP oriented will be able to cope more efficiently with the financial crisis and concentrate on the positive aspects of their present lives and work, compared to those who are “stuck” in the current economic situation (PF) and in the bad memories of the past (PN). Hence, we can expect to find strong positive relationships between these three time perspectives and job satisfaction, and negative associations between PN and PF orientation and job satisfaction. Particularly, it is expected that:
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*Hypothesis 1a:* Scores on present hedonistic factor will be positively associated to levels of job satisfaction (overall, intrinsic and extrinsic).

*Hypothesis 1b:* Scores on future will be positively associated to levels of job satisfaction (overall, intrinsic and extrinsic).

*Hypothesis 1c:* Scores on past positive/nostalgia will be positively associated to levels of job satisfaction (overall, intrinsic and extrinsic).

*Hypothesis 1d:* Scores on past negative will be negatively associated to levels of job satisfaction (overall, intrinsic and extrinsic).

*Hypothesis 1e:* Scores on present fatalism will be negatively associated to levels of job satisfaction (overall, intrinsic and extrinsic).

The inclusion of all three components of job satisfaction - overall, intrinsic and extrinsic - is based on job satisfaction’s classification into these main factors.

Drawing on Förster and his colleagues’ (2004) research on the effects of temporal construal on creative thinking, as well as the findings from other studies that indicate strong correlations between FTP and motivation and setting goals (Ferrari et al, 2010; Taber, 2013), I propose that being more future-oriented can be beneficial for creativity at work. Particularly,

*Hypothesis 2:* Future time perspective is expected to be positively associated to creativity at work.

Based on the findings from research that has been conducted on the results of the financial crisis and its impact on individuals’ well-being and health (Deaton, 2011; Karaiskou et al, 2012; Kentikelenis et al, 2011), I expect that there will be a negative relationship between perception of the crisis and job satisfaction. Consistent with such results are studies associating feelings of job insecurity with people’s emotional states and their attitudes toward work (Adkins et al, 2001; Ashford et al, 1989). In addition, building on findings indicating that stress which is associated with job insecurity and downsizing measures can harm creative behavior (Pech, 2001; Probst et al, 2007), I suggest that there will be a significant negative relationship between the crisis and levels of creativity at work. Particularly, the following hypotheses are suggested:

*Hypothesis 3a:* Scores on perceived influence by the crisis are expected to be negatively associated to levels of job satisfaction (overall, intrinsic and extrinsic).
Hypothesis 3b: Scores on perceived influence by the crisis are expected to be negatively associated to levels of job creativity.

Method

Participants. The sample (see table 1) consisted of 110 employees from various organizational positions in public as well as private organizations. 40% (44) of the respondents were male and 60% (66) were female. Their age ranged from 18 to 64 years and the mean age was M=30.58 years (SD=8.12). The majority of the participants (40%) stated that they were in a relationship, 33.6 % of all the respondents were single, 21.8% were married and only a percentage of 4.5% were divorced. With respect to the educational level, 48.2% of the participants were highly educated (university studies), 36.4% have graduated from senior high-school or Technical school and 15.5% of the respondents possessed the highest degree of education, Phd or MSc studies. Most of the respondents 81.8% were employees, while the remaining 18.2% of the sample consisted of individuals in managerial positions. As far as the type of the company is concerned, most of the individuals, 78.2%, were employed in the private sector while 21.8% were working in a public company.

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<td>Descriptive Statistics for the sample’s demographics (N=110)</td>
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Note. M=Mean. SD=Standard Deviation.

Materials. All scales that were used in the study were translated into Greek, back-translated with the help of a colleague and distributed to five Greek colleagues for a pilot study to ensure that they were easy to follow, before the final distribution to the sample.

Job satisfaction. For the measurement of job satisfaction, respondents were asked to complete the short version of the Minnesota Satisfaction Questionnaire developed by
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Weiss, Dawis, England and Lofquist (1967, as cited in Arvey et al, 1989). Even though there is a well validated questionnaire for the measurement of job satisfaction in Greek, the use of MSQ was preferred as the differentiation between extrinsic and intrinsic levels satisfaction was clearer. A plethora of studies investigating the topic of job satisfaction has been using this questionnaire. The short version of the MSQ consists of 20 questions concerning various job related aspects, using a 5-point scale (1 very dissatisfied, 5 very satisfied). According to the manual of the questionnaire, the factor analysis has indicated that it includes a scale for the intrinsic job satisfaction and a scale for the extrinsic one (Arvey et al, 1989). 12 items have been found to depict the intrinsic job satisfaction levels while the extrinsic scale has been found to consist of 6 of the items. The overall job satisfaction levels can be computed by the sum of all the 20 items (Arvey et al, 1989). The internal consistency was computed separately for all three components of the variable. Particularly, Cronbach’s alpha for overall job satisfaction was .89, while a values for intrinsic one were .83 and for extrinsic .77.

Time Perspective. Time perspective was measured via the short version of the ZTPI (Zimbardo & Boyd, 1999) developed by Zhang, Howell and Bowerman (2013). Test-retest reliability analysis conducted by Zhang and her colleagues (2013) produced similar Cronbach’s coefficients for both the short and the full ZTPI and an adequate Cronbach’s alpha .73 for the short version. The scale consists of 15 items measuring the five perspectives of time: Past Positive, Past Negative, Present Fatalism, Present Hedonism and Future (3 items for each). Respondents were asked to rate the degree according to which, each of the 15 statements is characteristic for them, on a 5-point scale ranging from 1not at all to 5very much. Cronbach’s alpha was computed for each of the 5 time perspectives and although some of them appeared to be somewhat low, they were deemed acceptable for the purposes of this study. Particularly, alpha values for the different time perspectives were as follow: past positive (.63), past negative (.81), present fatalism (.52), present hedonism (.57) and future (.64).

Financial crisis. In order to measure the extent to which the financial crisis had affected different aspects of the participants’ lives, a total of five self-developed items were used: One item for the psychological, one for the emotional, one for the financial and two items for the measurement of the social impact of the crisis on the
respondents’ way of life (see appendix). Response categories ranged from 1 (not at all) to 5 (very much). The scale showed good internal consistency (Cronbach’s alpha = .84).

*Job creativity.* Self-perceived creativity at work was gauged using two items that were constructed for the purpose of this study referring accordingly to the subjective and objective facets of self-reported job creativity. (“How creative at work would you say you are?” and “How creative at work would you say your colleagues consider you to be?”) A 5-point scale (1 not at all, 5 very much) was also used in this measure. Internal consistency for this scale was also high (Cronbach’s alpha = .76).

**Procedure.** Data were collected via a survey program which was uploaded on the author’s personal page in a social media platform. The survey consisted of 2 parts: part A’ included the participants’ demographic characteristics (gender, age, marital status, level of education, organizational position and type of company they were working for) and part B’ involved the main questionnaire. Respondents were informed about the general topic and purpose of the research in the beginning of the survey. In addition, they were ensured about the confidential, anonymous and voluntary nature of their participation. Particularly, the instructions given to participants were:

> “This questionnaire investigates the issue of job satisfaction and creativity in Greece. This research is being held under the development of Styliani’s Banakou thesis for the Master Program of Work and Organizational Psychology, at Linnaeus University. Participation in the research is voluntary, anonymous and confidential. The data obtained will be used solely for the purposes of the thesis. It is highly important for you to answer all questions. Remember: there are no right or wrong answers, just different opinions. Thank you for your participation!”

**Results**

Hypotheses were examined by conducting bivariate correlations and multiple regression analyses. First, bivariate correlations among all studied variables (Overall job satisfaction, intrinsic job satisfaction and extrinsic job satisfaction, job creativity, Past Positive, Past Negative, Present Fatalistic, Present Hedonistic and Future and the crisis) were calculated using Pearson Product-moment correlation coefficient (Table 2). Preliminary analyses were performed in order to ensure that assumptions were met.
The first thing to observe in the table is that intrinsic and extrinsic job satisfaction correlate highly \((r=.63)\) with each other. Hence, only scores on total job satisfaction are going to be used in the analyses. Next, focusing on overall job satisfaction’s correlations, we can see that it is positively associated with Future TP \((r=.28)\), as well as creativity \((r = .42)\). In addition, table 1 indicates negative relationships between job satisfaction and the independent variables of Present-Fatalistic TP \((r=-.20)\) and the crisis \((r=-.30)\). Generally, the results for job satisfaction correlations are as follow: high levels of overall job satisfaction were significantly related to higher scores in F and creativity on one hand, and on the other, to lower scores in PF and the crisis.

As far as job creativity is concerned, table 1 demonstrates a negative relationship between job creativity and the crisis \((r=-.23)\). Creativity was also significantly associated to Past Positive \((r = .25)\), Present–Hedonism \((r = .36)\) and Future \((r =.34)\). Summarizing the results for job creativity’s correlations, high levels of creativity were associated with lower scores on perceived influence by the crisis and higher scores on PP, PH and F.

Interestingly, as seen in the table, high scores on perceived influence by the crisis were associated with high scores on Present-Fatalism \((r = .38)\).

In order to assess the unique contribution of each time perspective and the crisis to levels of job satisfaction and creativity, two Multiple Regression analyses were performed based on the results of the correlation table (Table 2). The MRAs were used in order to develop models for predicting levels of job satisfaction and creativity from participants’ scores on time perspectives and the crisis. Preliminary analyses were conducted to ensure no violation of the assumptions.

The first MRA included overall job satisfaction as the dependent variable and PF, PH, F, and crisis as the predictors (Table 3). The factors of PP and PN were not included in the model, as their correlations with levels of job satisfaction were very low and not statistically significant (Table 2). Hence, it was deemed that these two time perspectives’ inclusion in the analysis would not change their predictive power significantly on levels of the dependent variable, thus rejecting hypotheses 1c and 1d. Observing the results, we can see that 20% of the variance in levels of job satisfaction is explained by the model (which includes PF, PH, F and the crisis), \(R\) square = .197, \(p < .001\). Next thing to look for is which of the independent variables included in the model contributed most to the prediction of the dependent variable. We can see in
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table 2 that future (F) makes the strongest contribution for explaining high levels of job satisfaction, with a beta value = .27, p <.001. This significant positive association between future time perspective and levels of job satisfaction provided support for hypothesis 1b. Slightly lower predictive power had the factor of the crisis which was negatively associated with levels of job satisfaction. As table 3 indicates, the factor of the crisis contributed significantly to the model with a beta coefficient of -.26, p < .001. Thus, in line with hypothesis 3a, high scores on participants’ perceived influence by the crisis were significantly related to lower levels of job satisfaction. According to the results of the regression analysis, present hedonistic and present fatalistic did not contribute significantly to the prediction of levels of job satisfaction. Therefore hypotheses 1a and 1e did not receive support. Concluding, results from the first MRA indicate that future time perspective and the crisis were the strongest predictors of job satisfaction levels.

Next MRA was used to evaluate the predicting power of time perspectives and the crisis on creativity at work. Past Positive, Past Negative, Present Fatalistic, Present Hedonistic, Future and the crisis were included in this model as the predictors. Looking at table 4, we can see that this model explains 30% of the total variance in levels of job creativity, R square = .30, p < .001. Regarding the significance of each of the independent variables on job creativity, it is shown that future (F) makes the strongest contribution to the explanation of the dependent variable, with beta = .29, p < .001, by predicting higher levels of creativity at work, thus supporting hypothesis 2. Next large contribution is that of Present-hedonistic (PH), with a beta coefficient of .26, p <.001. Last, crisis is making a rather moderate but unique contribution to the prediction of job creativity, with beta = -.18, p < .001, thus providing support for hypothesis 3b. Although dependent variable’s positive association with F time perspective was expected (hypothesis 2), the relationships between creativity and PH were not hypothesized. The main results of analysis of the second MRA showed that future and present hedonistic time perspectives as well as the crisis were the strongest predictors of levels of job creativity.
Table 3
Results of the MRA using PF, PH, F and crisis as predictors of job satisfaction
(N=110)

<table>
<thead>
<tr>
<th></th>
<th>R2</th>
<th>Beta</th>
<th>F</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Cons.)</td>
<td>.197</td>
<td>-</td>
<td>6.435</td>
<td>-</td>
<td>.000</td>
</tr>
<tr>
<td>PF</td>
<td>-</td>
<td>-.121</td>
<td>-</td>
<td>-1.262</td>
<td>.210</td>
</tr>
<tr>
<td>PH</td>
<td>-</td>
<td>.100</td>
<td>-</td>
<td>1.078</td>
<td>.284</td>
</tr>
</tbody>
</table>
### Exploratory/Follow up Analyses

Some extra analyses were conducted for exploratory purposes. Three independent-samples t-tests were conducted in order to compare job satisfaction and creativity levels for males and females, managers and employees and public and private organizations. There was only one significant difference (Table 5) in scores of creativity for managers and employees (p <.001), with managers reporting slightly higher levels of creativity than employees. Only the results from this t-test are presented in the paper, as the other two produced non-significant differences.

Two separate 3-way between-groups analyses of variance were performed to explore the impact of sex, position and company on levels of job satisfaction and creativity. Looking at table 6, we can see that there is a significant main effect for company, $F (1, 110) = 7.00$, with a moderate effect size (partial eta squared = .064). In addition, we observe that there is a statistically significant interaction effect for sex and company on levels of job satisfaction, with a moderate effect size (partial eta squared = .056). There was also a significant interaction effect between company and organizational position on job satisfaction levels with a moderate effect size (partial eta squared= .041). These interaction effects indicate that the influence of the type of the company on levels of job satisfaction depends on whether the participant is male or female and whether he/she is employee or manager. Particularly, results from the

### Table 4

<table>
<thead>
<tr>
<th></th>
<th>$R^2$</th>
<th>Beta</th>
<th>$F$</th>
<th>$t$</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cons.</td>
<td>.291</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>-.078</td>
<td>7,041</td>
<td>-.812</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>PH</td>
<td>.259</td>
<td></td>
<td>2,843</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>.288</td>
<td></td>
<td>3,259</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>PN</td>
<td>-.131</td>
<td></td>
<td>-1,432</td>
<td>.155</td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>.131</td>
<td></td>
<td>1,408</td>
<td>.162</td>
<td></td>
</tr>
<tr>
<td>Crisis</td>
<td>-.181</td>
<td></td>
<td>-1,978</td>
<td>.051</td>
<td></td>
</tr>
</tbody>
</table>

Note. $R^2$=R Squared. (Cons.) = PF, PH, F, PN, PP & Crisis.
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Anova analysis demonstrated that there was a significant difference between women and men who worked in public organizations, with males reporting higher levels of job satisfaction than females. There was also a significant difference between managers working in public firms and those working in private ones, with managers of private companies reporting higher levels of job satisfaction than those of public ones.

Table 5

<table>
<thead>
<tr>
<th>Position</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>manager</td>
<td>20</td>
<td>3.79</td>
<td>.45</td>
<td>3.40</td>
<td>108</td>
<td>.001</td>
</tr>
<tr>
<td>employee</td>
<td>90</td>
<td>3.31</td>
<td>.60</td>
<td>3.40</td>
<td>35.36</td>
<td>.000</td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>manager</td>
<td>20</td>
<td>4.13</td>
<td>.56</td>
<td>2.18</td>
<td>108</td>
<td>.031</td>
</tr>
<tr>
<td>employee</td>
<td>90</td>
<td>3.69</td>
<td>.85</td>
<td>4.13</td>
<td>41.39</td>
<td>.007</td>
</tr>
</tbody>
</table>

Note. SD=Standard Deviation. M=Mean.

Table 6

Results of univariate analysis of the effects of sex, position (Pos.) and company (Com.) on levels of job satisfaction

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>M</th>
<th>F</th>
<th>Sig.</th>
<th>η</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (A)</td>
<td>.848</td>
<td>1</td>
<td>.848</td>
<td>2.810</td>
<td>.097</td>
<td>.027</td>
</tr>
<tr>
<td>Pos. (B)</td>
<td>.276</td>
<td>1</td>
<td>.276</td>
<td>.915</td>
<td>.341</td>
<td>.009</td>
</tr>
<tr>
<td>Com. (C)</td>
<td>2.112</td>
<td>1</td>
<td>2.112</td>
<td>7.002</td>
<td>.009</td>
<td>.064</td>
</tr>
<tr>
<td>(A) *(B)</td>
<td>.001</td>
<td>1</td>
<td>.001</td>
<td>.003</td>
<td>.953</td>
<td>.000</td>
</tr>
<tr>
<td>(A) *(C)</td>
<td>1.826</td>
<td>1</td>
<td>1.826</td>
<td>6.055</td>
<td>.016</td>
<td>.056</td>
</tr>
<tr>
<td>(B) *(C)</td>
<td>1.327</td>
<td>1</td>
<td>1.327</td>
<td>4.401</td>
<td>.038</td>
<td>.041</td>
</tr>
<tr>
<td>(A)<em>B</em>(C)</td>
<td>0.000</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td>31.065</td>
<td>103</td>
<td>.302</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Total</th>
<th>110</th>
</tr>
</thead>
</table>

*Note. SS = Sums of Squares. df = degrees of freedom. M = Mean Square. F = F score. \( \eta \) = Partial eta squared.*

**Discussion**

The present study attempted to investigate the role of time perspective and the financial crisis on levels of job satisfaction and creativity among Greek employees. It was proposed that Past Positive, Present Hedonism and Future would be positively associated to levels of job satisfaction and creativity, while Past Negative and Present Fatalism would be negatively associated to levels of the dependent variables. Results indicate that these hypotheses were partly supported. With respect to the second hypothesis according to which a positive relationship between future orientation and levels of creativity at work was expected, findings did indeed match the criteria for its support. In line with hypotheses 3a and 3b, it was found that scores on perceived influence by the financial crisis were negatively associated to levels of both job satisfaction and creativity at work.

Correlational analysis showed that there was a significantly positive association between job satisfaction and creativity, demonstrating that people who felt more satisfied by their work reported higher scores on job creativity as well. This finding provides support for Shalley et al’s (2000) research which showed that employees whose working environment facilitates creativity are more satisfied in their job. Particularly interesting was the positive relationship found between the crisis and Present Fatalism. This result indicates that high scores on Present Fatalism were significantly associated with high levels of perceived influence by the crisis. Given that Present Fatalistic TP has been considered as representing the pessimistic aspect of the present, this finding could imply that the financial crisis possibly reflects the negative side of today’s Greek reality.

The main results of this study come from the two MRAs that were conducted in order to examine the hypotheses in depth. The first model predicting levels of job satisfaction from participants’ scores on PF, PH, F and the perceived influence by the crisis, significantly explained a considerable percentage (20%) of the variance in the dependent variable. Results indicated that crisis and Future TP were the most significant predictors for levels of job satisfaction. The findings regarding the negative relationship between the crisis and employees’ attitudes toward their work
can be considered as theoretically reasonable on the basis of previous research. Following Deaton’s (2012) conclusions on the effect of people’s financial situation on their levels of subjective well-being and emotional states, this study showed that the extent in which Greeks feel they have been affected by the crisis played a vital role on their levels of job satisfaction. This study’s results are also based on findings concerning the effects of feelings of job insecurity on levels of life and job satisfaction (Adkins et al., 2001; Ashford et al., 1989). Crisis can be viewed as an international phenomenon which affects all countries around the world and is linked to feelings of increased stress and job insecurity (Adkins et al., 2001; Ashford et al., 1989; Goldsmith et al., 1996).

Future TP was the most significant predictor for levels of job satisfaction. These observations are in line with previous research highlighting the various benefits of a future orientation (Mann, Kato, Fidgor & Zimbardo, as cited in Zimbardo & Boyd, 1999; Holman & Silver, 1998; Anagnostopoulos & Griva, 2011). Results showed that scores on F time perspective are of great significance for levels of job satisfaction, indicating that focusing or not on the future could predict to a significant extent, levels of job satisfaction among Greeks employees. Here, a new function of F time perspective is implied, as a potential buffer of the outcomes of the crisis in the sense that participants who focused more on the future (and potentially an exit from the crisis) had more positive attitudes towards their work irrespective of the general negative financial situation.

Surprisingly, Past Positive, Past Negative, Present Fatalistic and Present Hedonistic were not significantly associated with job satisfaction. It was expected that participants high on PP and low on PN would report higher levels of job satisfaction. Such expectations were based on previous research that has highlighted the significance of these two time orientations on people’s subjective well-being and happiness (Drake et al., 2008; Zimbardo & Boyd, 1999). This stemmed from findings indicating significant correlations between job satisfaction and life satisfaction (Judge & Hulin, 1993; Judge & Watanabe, 1993) as well as well-being (Judge & Hulin, 1993). Of particular interest is the fact that none of the two present time perspectives (PF and PH) was significantly related to levels of satisfaction. For instance, Boniwell (2005) has found that people from individualistic cultures tend to be more future-oriented than those living in collectivistic ones who are more focused on the present. Following his theorization, it would be expected that present orientation would have
had a bigger influence on Greeks’ levels of job satisfaction than future. According to Hofstede’s model of cultural dimensions, Greece is considered to be traditionally collectivistic culture (as cited in Joiner, 2001). Regarding Present-Fatalistic, it has been considered as one of the most destructive factors when it comes to emotional coping (Zimbardo & Boyd, 1999) and life satisfaction (Drake et al, 2008). Living in a country under a financial crisis, possibly results in increased feelings of anxiety and insecurity (Adkins et al, 2001; Goldsmith et al, 1996). Hence, it seems logical to expect that a PF orientation would have a significant negative impact on Greeks’ already increased negative mood so as to possibly preventing them from receiving pleasure from their work. Past Positive TP as nostalgia was also expected to relate highly with job satisfaction due to the strong meaning this factor holds for Greek society, referring to feelings of longing for the past (Anagnostopoulos & Griva, 2012; Sedikides et al, 2008). However, these non-significant results could be explained by this unique meaning of nostalgia as a specific characteristic in Greek culture or personality trait which represents something far more than just a time perspective in Greek language (Anagnostopoulos & Griva, 2012).

The second model attempted to predict levels of job creativity from respondents’ scores on Past Positive, Past Negative, Present Fatalistic, Present Hedonistic, Future and the perceived influence by the crisis. The model significantly explained a considerable percentage (30%) as well, of the variance in job creativity. The analysis indicated that Present Hedonistic and Future time perspectives were the strongest predictors of creativity at work. Even though there has not been any research on the potential of a positive relationship between future TP and creativity at work, this hypothesis was based on prior experimental research demonstrating distant future orientation’s amplifying role of creative thinking ( Förster et al, 2012) as well as motivation and decision-making (Ferrari et al, 2010; Taber, 2012). There is also logic behind Present Hedonism’s unexpected significant predictive power on job creativity. This finding could be explained by PH’s association with the more positive side of reality as well as positive affect (Zimbardo & Boyd, 1999). This was consistent with previous research concluding that positive mood increased the generation of creative ideas (Baas, De Dreu & Nijstad, 2008; Grawitch, Munz, Elliott & Mathis , 2003), as well as prior empirical support demonstrating PH’s significant positive correlation with novelty-seeking (Zimbardo & Boyd, 1999). Also, in line with results from other studies highlighting optimism/positivity’s significance on creative behavior
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(Kluemper, Little & DeGroot, 2009; Rego, Sousa, Marques & Cunha, 2012), the present findings indicate that Present Hedonism significantly predicted high levels of creativity at work, implying that a focus on the hedonistic side of Greeks’ present reality played a significant role on their levels of perceived job creativity. As Kluemper and his colleagues (2009) explained, optimistic individuals tend to be more motivated to work hard in order to achieve a future goal and deal with a problem actively.

With regard to the crisis, the second MRA indicated that the factor contributed in a negative way to the prediction of creativity at work (moderately significantly). This finding is in line with former studies stating that creative behavior was obstructed as a result of feelings of job insecurity and downsizing policies, both connected to the damaged labor market of the crisis (Pech, 2001; Probst et al, 2007). Thus, it is implied by the results that the extent Greeks felt they were affected by the crisis had a negative effect on their levels of creativity at work. Following the theorization connecting financial crisis and feelings of job insecurity with increased anxiety and decreased levels of life satisfaction (Adkins et al, 2001; Goldsmith et al, 1996), it is suggested by the results of this paper that mood could indirectly influence participants’ creativity levels. Such belief is also based on the strong association found in the correlational analysis, between levels of perceived influence by the crisis and scores on Present Fatalistic time perspective which reflects the negative/pessimistic side of the present (Zimbardo & Boyd, 1999).

Follow-up analyses indicated that the only significant difference was between managers and employees on levels of job creativity, with the managers scoring slightly higher than employees. Such a finding seems reasonable, as managers possibly need to demonstrate more creative behavior than employees as a result of their high position and the large amount of their responsibilities. 3-way Anova indicated that a considerable part of the variation in levels of job satisfaction has been accounted for by the type of the organization (public or private). In fact, the analysis showed that the effect of the company (whether the participant was working in the public or private sector) on levels of job satisfaction depended on respondents’ gender as well as their position (whether they were employees or managers). These exploratory findings were in conjunction with other studies demonstrating that employees’ levels of job satisfaction differs among those working in the public and those working in the private sector (Markovits, Davis & Van Dick, 2007).
Conclusions and implications

The results suggest that Greeks’ attitudes towards time orientation did relate to their levels of job satisfaction and creativity. According to the findings, future time perspective had a strong positive effect on these outcomes, by significantly predicting levels of job satisfaction and creativity. The rather surprising significant predictive power of Present Hedonistic on levels of job creativity provided support for theories emphasizing the significance of optimistic time orientation on various aspects of people’s lives. With regard to the role of the financial crisis, results indicate that the factor did matter in terms of Greeks’ levels of job satisfaction and creativity, as it was found to be a strong and rather persistent predictor of low levels of both the dependent variables. Hence, it is suggested that the extent employees felt they were affected by the crisis in various aspects of their life had a significant impact on their reported levels of these job related factors. Findings imply that the more Greek employees reported that their life in general has been changed due to the crisis, the less creative and satisfied by their work they felt.

Given that the financial crisis was significantly associated to present-fatalistic time perspective, Greece’s current economic situation could reflect the negative side of people’s present life. It could be claimed that future time perspective reflects the optimistic aspect of a potential exit from the crisis, and present hedonistic represents a focus on the more optimistic/positive side of present life. In that sense, it seems that the more optimistic/positive attitudes Greeks held towards their time orientation, the more creative and satisfied they felt by their work. Following this logic, results could imply that concentrating more on the optimistic aspect of reality, which is represented by future (or present hedonistic) orientation had a significant effect on participants’ creativity and job satisfaction levels. This study’s findings support Achor’s (2011) view on happiness at work, as results indicate that employees’ positivity, reflected in a general optimistic orientation was associated with higher levels of job satisfaction and creativity. As Achor (2011) argued, a positive attitude enhances the release of dopamine, a substance which not only increases levels of happiness but also stimulates the learning parts of the brain enabling people to respond to their environment in different ways.

It is my belief that this is the first research to examine levels of job satisfaction and creativity at work in relation to time perspective and the financial crisis. The
findings presented here add another dimension to the existing knowledge about job satisfaction and creativity at work. This paper further, provides scholars with additional empirical support for the potential effects of time perspective in various aspects of the human experience and directs people’s attention on the significance of time perspective on work-related factors. In addition, this research contributes to our knowledge regarding the significance of the financial crisis, along with all the variables connected to it, such as feelings of job insecurity, when measuring job related outcomes. Conducting the study in a country during times of economic turbulence was a chance for a timely research which can have some significant implications in an international level. Taking into account today’s globalization and the interdependence among nations, examining ways that could potentially minimize or buffer the effects of the crisis could be of great help all over the world. Last, some significant elements are added concerning the particular cultural context of Greece. As Papalexandris (1992) observed, despite the fact that Greece has been adequately represented in cross-cultural studies, the country has not been given the same attention when it comes to other types of research.

When it comes to the practical implications of the research, results indicate some significant characteristics of Greek culture and how people with similar demographic features react to the crisis. The present study demonstrated that future orientation predicted levels of job satisfaction and creativity more than present or past did. This is inconsistent with the results from the International Time Perspective Project which indicated that individuals coming from countries with financial problems tend to focus more on the present, as future seems unpredictable (Sircova, van de Vijver, Osin, Milfont, Fieulaine, Kislali-Erginbilgic & Davydova, 2014). These findings could also mirror employees’ attitudes and behavior in other countries with similar cultural values (for instance other collectivistic cultures) as Greece or are under a similar financial situation. Concluding, in light of these results, it is my suggestion that employees are encouraged to focus more on the future than their present reality or past lives in order to feel satisfied by their work. In addition, I propose that employees should consider implementing a future or present hedonistic attitude into their time orientation if they want to improve or sustain their creativity levels. Alternatively, it would also be beneficial if educational programs trained students to adopt specific time perspectives especially in times of adversity.
Limitations and future considerations

The research reported here has some limitations that must be acknowledged. First, caution is suggested with regard to the generalization of the results, as they can reflect solely the general attitudes of Greek society and mentality. In addition, the data reported refer mostly to highly educated employees, working mostly in private organizations. Given the high unemployment rates in Greece, the findings could be different if the sample consisted of people without a job. In addition, results from this study apply more to employees of private organizations, as the majority of the participants were working in this type of companies. Generalizability of the results may also be affected by the sample’s small size. Second, in line with Joinson’s (1999) reservations on the use of the Internet for collecting data, extra attention is needed when drawing conclusions. As Joinson’s experiment indicated, people’s behaviour can change depending on whether they are participating in a pen-to-paper study or an online one. This issue is based on the notion that real life differs significantly from the environment of the Internet (Joinson, 1999). In addition, it has to be mentioned that the length of the period dedicated for the research was limited due to time constraints. Significantly, the correlational nature of the research design impedes any inferences for causality implications or directional relationships. Last, readers are advised to be careful when analysing the differences found on exploratory analyses, as the sizes of the groups were not equal.

The results of the study suggest some directions for future research. In view of the surprisingly significant association between Present Hedonistic and job creativity, further research is proposed on this issue. Future research aiming on investigating the impact of this multidimensional aspect of time could include a cross-cultural design in order to compare different attitudes towards time orientation across nations, based on Boniwell’s (2005) theorization. In addition, based on future’s strong predicting power on Greeks’ attitudes and behaviour during these financially hard times, it is my suggestion that upcoming studies should focus on the potential of time perspective as coping mechanism in times of adversity. Alternatively, studies could consider investigating future orientation’s possible buffering effect on the outcomes of the crisis. Concluding, I think it would be interesting to conduct experiments to see whether training people to adopt different time perspectives lead to different levels of job satisfaction, creativity or other work-related outcomes.
References


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Zhang, J. W., Howell, R. T., & Stolarski, M. (2013). Comparing three methods to measure a balanced time perspective: The relationship between a balanced...


**Appendix**

*Scale measuring levels of perceived influence by the financial crisis*

Please, rate the extent you feel you were affected by the crisis in the following aspects of your life:

1. How much would you say the crisis has affected your general mood?
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1. Not at all    2 A little    3 Neutral    4 A lot    5 Very much
2. How much would you say the crisis has affected your emotional state?
   1 Not at all    2 A little    3 Neutral    4 A lot    5 Very much
3. How much would you say the crisis has affected your personal finance?
   1 Not at all    2 A little    3 Neutral    4 A lot    5 Very much
4. How much would you say the crisis has affected your social status?
   1 Not at all    2 A little    3 Neutral    4 A lot    5 Very much
5. How much would you say the crisis has affected your lifestyle?
   1 Not at all    2 A little    3 Neutral    4 A lot    5 Very much