

Running Head: INNOVATION, SL AND CFC: A CROSS-CULTURAL
PERSPECTIVE

Linnaeus University

Department of Psychology

Psychology

Master Thesis 4PS012, 30 credits

Spring 2015

**Innovation, sustainable leadership and consideration of future consequences: A
cross-cultural perspective.**

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Innovation, Sustainable Leadership and Consideration of Future Consequences: A cross-cultural perspective.

Abstract

The present study aimed to examine the relationship between national culture and organizational innovation, sustainable leadership (SL), and leaders' consideration of future consequences (CFC), based on Hofstede's cultural dimensions. An online survey was developed and sent out to employees of private organizations located in Greece and Sweden. Analysis of the data collected from 133 participants indicated that: (a) national culture is marginally significantly associated to perceived workplace innovation; (b) national culture is not significantly related to SL based on employees' perceptions; and (c) national culture is not significantly related to perceived leaders' CFC. Contrary to previous research that examined the culture-innovation relationship on a national level, the results of this study suggest that national culture is not strongly related to organizational level innovation, although it is significantly related to two of its examined dimensions: creativity and lack of organizational impediments. Moreover, the results indicated that SL and leaders' CFC are not significantly related to national culture, although four of the dimensions of SL varied significantly between the two examined countries. Practical implications, limitations of the study and future suggestions are discussed.

Keywords: national culture, power distance, uncertainty avoidance, individualism/collectivism, innovation, creativity, sustainability, sustainable leadership, consideration of future consequences, long-term perspective

Innovation, sustainable leadership and consideration of future consequences: A cross-cultural perspective.

As Bauman postulated, “the liquid modern society is a society in which the conditions under which its members act change faster than it takes the ways of acting to consolidate into habits and routines” (Bauman, 2005, p.1). The same can be said about today’s rapidly-changing business climate, which forces organizational leaders to transform their companies to cope with globalization, growing international competition, as well as rapid technological and social change. In these global conditions of operation, it is becoming increasingly significant for organizations to develop new methods of coping with the current economic uncertainty and gaining an edge over their competitors. As a result, organizational leaders in all types of industries are faced with a new challenging reality which calls for constant, consistent and effective innovation, not only in services and products, but also in operations and strategy, in order to achieve higher rates of profitable sustainable growth (Jonash, 2005).

Resulting from this shift in business climate, modern organizations are gradually taking a turn toward a long-term sustainable development orientation, departing from the traditional ‘business as usual’ approach, which promoted a leadership perspective predominantly focused on creating short-term profit and value for shareholders, consumers and employees, while disregarding ecological and social interests (Tideman, Arts, & Zandee, 2013) . The turn toward sustainability encompasses a new perspective which considers business, economy, society and the environment as interconnected, and assumes a long-term approach to operations affecting all the aforementioned aspects. In fact, it has been argued that “the only business of business is sustainable business” (Tideman et al., 2013, p. 19), which can be supported by the growing number of leading companies incorporating sustainability practices and principles into their operations. Theoretical and empirical literature indicates that the turn towards sustainability constitutes not just a transient trend in business theory, but a major ongoing transformation in business practice, stimulated by the global financial crisis, as well as the increasing environmental resource crisis (Kantabutra & Avery, 2011; Tideman et al., 2013).

The present study builds on insights from previous research investigating the relationship between cultural dimensions and innovation, aiming to examine the hypothesis that national culture is significantly related to an organization's overall aptitude and proneness to espouse innovations. Furthermore, considering that innovation constitutes a driving force for the successful adoption of a sustainable leadership style and the long-term perspective it entails, it is also expected that national culture will be significantly associated to those two concepts as an extension.

The majority of previous research investigating the relationship between national culture and innovation were based predominantly on the inputs of innovation such as research and development (R&D) expenditures and number of patents per country (Tellis, Prabhu & Chandy, 2009), overlooking the outputs of innovation. Additionally, recent research (Efrat, 2014) indicates that the impact of national culture on organizational processes and outcomes is changing over time, due to the changing demands in modern globalized work environments. The present study aims to address the gaps in existing research by examining the potential association between national culture and the contextual factors of workplace innovation in modern organizations.

Moreover, while sustainable leadership has become a new business mega-trend, the research literature is still limited concerning its successful adoption by modern businesses at the organizational level. A potential explanation for that scarcity could be the apparent lack of a measurement tool investigating the leaders' sustainable behaviors inside an organization. In fact, most research into sustainability has measured the concept utilizing metrics of an organization's operations and performance such as economic, environmental and social indicators (Szekely & Knirsch, 2005). Moreover, while researchers such as Avery and Bergsteiner (2011a) or Kantabutra and Avery (2011) have focused on investigating sustainable leadership practices in organizations based on their Honeybee approach, they have not provided an exact quantitative instrument for examining those practices. Thus, the present study aims to lead the way into a quantitative investigation of leaders' sustainable behavior at an organizational level, by utilizing a scale of sustainable leadership newly developed by McCann and Holt (2010a), based on the ten pillars of sustainable leadership.

Furthermore, in modern times of globalization where organizations are required to expand their business operations in various locations, it is deemed significant to investigate whether the national culture of the different locations can

affect considerably the successful adoption of a sustainable leadership style. Thus, the present study aims to add to the existing literature by examining the potential relationship between national culture and sustainable leadership practices at an organizational level and based on employees' perceptions.

Lastly, considering that a long-term perspective constitutes one of the cornerstones of sustainable leadership, the present study aims to introduce into the sustainable leadership framework the concept of consideration of future consequences, as developed by Strathman, Gleicher, Boninger and Edwards (1994). Specifically, by adjusting Strathman et al.'s (1994) CFC scale to assess leaders, the study intends to add to the literature by being the first to examine the potential relationship between national culture and leaders' consideration of future consequences at an organizational level and as perceived by employees. Additionally, this study aims to contribute to the literature by being the first to empirically investigate the hypothesized correlation between leaders' consideration of future consequences, their sustainable behavior, and the overall innovation capability of their organization.

Literature review

National culture and innovation. There is a vast research literature associating cultural characteristics to national rates of innovation and invention, entrepreneurship and the ability to discern or espouse innovations, based predominantly on Hofstede's cultural dimensions (Ambos & Schlegelmilch, 2008; Herbig & Dunphy, 1998; Jones & Davis, 2000; Shane, 1995; Shane, 1993; Sun, 2009; Thomas & Mueller, 2000). Hofstede defines culture as "the collective programming of the mind which distinguishes the members of one group from another" (Bockstedt, Druhl & Mishra, 2014), as well as "the interactive aggregate of common characteristics that influences a group's response to its environment" (Jones & Davis, 2000, p. 25). Creativity can be defined as the production of novel and useful ideas in any domain and it can be considered as the first phase of the innovation process described as 'innovation initiation', while innovation constitutes the second phase of the successful implementation of creative ideas concerning new products and services, new markets, and new production and supply methods within an organization (Amabile, Conti, Coon, Lazenby & Herron, 1996; Kaasa & Vadi, 2010; Rauch et al., 2013).

The relationship between culture and innovation has undergone growing scientific scrutiny since the beginning of the 20th century due to the sweeping developments in the field of technology and the increasing globalization of the business environment which has drastically altered the demands of modern organizations. Earlier research underlined the impact of culture on a society's innovative capacity, inventiveness, tolerance of new ideas and inquisitiveness (Herbig & Dunphy, 1998; Shane, 1993), while scientific research in the past two decades has examined the aforementioned relationship not only in societal but in corporate contexts as well.

Specifically, several researchers suggested that certain types of culture may be more innovation-friendly and thus more suitable for foreign R&D activities of multinational organizations (Ambos & Schlegelmilch, 2008; Jones & Davis, 2000), while others indicated that national culture dimensions, and specifically Hofstede's dimensions of power distance, uncertainty avoidance and individualism, can impact the countries' national innovative capability and performance as well as the innovation adoption rates of organizations across countries (Halkos & Tzeremes, 2013; Puia & Ofori-Dankwa 2013; Sun, 2009; Waarts & Van Everdingen, 2005). Uncertainty avoidance has also been associated with the preference and acceptance of innovation championing roles in organizations (Shane, 1995), while cultural individualism has been positively linked to national innovation rates, although research indicates that certain types of cultural collectivism may also foster national innovation (Kaasa & Vadi, 2010; Taylor & Wilson, 2012).

Consequently, it appears evident that existing cultural conditions in a society determine whether and how an innovative effort will be adopted and whether it will succeed (Herbig & Dunphy, 1998). As Porter and Stern (2001) emphasized, innovation constitutes the defining challenge for global competitiveness, since modern organizations need to be innovative in order to adapt to the changing circumstances and environments. Moreover, Baumol (2004) and Carrasco (2014) argued that future economic growth relies greatly on encouraging innovation, especially in modern knowledge-based economies. Similarly, Rauch et al. (2013) indicated that innovation can predict growth in cross-country analyses and that the innovation-growth relationship is mediated by national culture and the cultural orientations of business owners. Therefore, in order to sustain their competitive advantage, modern organizations need to be able to innovate and create new products,

processes and manufacturing methods, stimulating learning processes, shifting the technology frontier and advancing ‘as fast as their rivals catch up’ (Lin, 2009; Porter & Stern, 2001; Rauch et al., 2013).

Previous research has established that perceptions of work environments can affect the individuals’ creative performance, and aspects such as a sense of autonomy or control on the job were found to enhance employees’ creative behavior, while aspects such as lack of resources and rigid procedures tend to restrict creativity (Amabile et al., 1996; Shalley et al., 2000). Therefore, it appears significant to examine the contextual factors that determine creative and innovative capabilities of employees in modern organizations, since enhancing the creative performance of employees is “critical for remaining competitive in a rapidly changing environment and for improving the overall innovativeness of a firm” (Shalley et al., 2000, pp. 219-220). Especially during the current economic crisis, improving innovation conditions, processes, and environments has been deemed vital for accelerating financial recovery and placing countries on a track of sustainable growth (Carrasco, 2014).

Innovation and sustainable leadership. Innovation is considered to be one of the key performance drivers in the development of corporate sustainability and therefore essential to the adoption of a sustainable leadership style (Avery & Bergsteiner, 2011a). Sustainable development is defined as the “development which meets the needs of current generations without compromising the ability of future generations to meet their own needs” (Lane et al., 2014, p. 255). Hence, sustainable leadership can be defined as “a management approach aiming to deliver better and more sustainable returns, reducing unwanted employee turnover and accelerating innovation” (Avery & Bergsteiner, 2011a, p. 5). Alternatively, McCann and Holt (2010b, p. 209) posited that “sustainable leadership aims to create current and future profits for an organization while improving the lives of all those concerned”. As Szekely and Knirsch (2005) underlined, the most essential factor for a successful adoption of sustainability in an organization is the presence of a leader who actively champions the approach. Furthermore, as McCann and Holt (2010b, p. 2007) emphasized, in order to develop a sustainable leadership style, organizational leaders need to become innovation agents, as well as to develop certain competences focusing on the long-term survival of the firm.

The growing amount of relevant literature over the last decade indicates that sustainability has turned into a business mega-trend, altering fundamentally the

demands placed on leadership, thus fostering the need for a new type of leadership, namely sustainable leadership (Tideman et al., 2013). Research and observations from over 50 firms around the globe indicated that sustainable leadership requires assuming a long-term perspective in decision-making, fostering innovation aimed at raising customer value, developing a skilled, loyal and greatly engaged workforce, as well as providing quality products, services and solutions (Avery & Bergsteiner, 2011a). Overall, as the triple bottom line (TBL) perspective asserts, the objective of sustainable leadership is to maintain a balance between people, profits, and the planet over the lifespan of the organization (McCann & Holt, 2010b), thus ascertaining that the business generates the social capital needed to endure any type of recession (Avery & Bergsteiner, 2011a).

Corporate sustainability constitutes a much subscribed-to idea by a growing number of modern organizations, including several leading companies such as Unilever, Google and IKEA which are engaged in sustainable development initiatives and are listed on the Dow Jones Sustainability Index, and it is considered as an evolution from efficiency to innovation (Lane et al., 2014; Tideman et al., 2013). Organizations operating sustainably can not only attain a positive balance between economic growth, social, and ecological aims, but they can also improve business conditions, gain stakeholder support, improve customer service, protect the organization's reputation, reduce expenses, and become more profitable in the long term (Avery & Bergsteiner, 2011a; McCann & Holt, 2010a; McCann & Holt, 2010b; Szekely & Knirsch, 2005; Tideman et al., 2013). Additionally, by using sustainability as a driving force for new technologies, business processes and innovations aiming to improve the business's operation, organizations can obtain a competitive advantage and ensure the continuous improvement of their performance (McCann & Holt, 2010a).

Sustainable leadership and consideration of future consequences.

Sustainable development requires the adoption of a long-term perspective to business strategy and performance, which constitutes a challenge for most business leaders operating on short-to medium-term timeframes (Szekely & Knirsch, 2005). The concept of time perspective "refers to the process whereby the continual flow of personal and social experiences is assigned to temporal categories or time frames, which help to give coherence, meaning, and order to those experiences" (Anagnostopoulos & Griva, 2012, p.42). Research has indicated that organizations

espousing a long-term perspective in their strategies, combined with flexibility, innovativeness and a sustainable leadership approach, can gradually increase their profits and performance even during the current global economic crisis and recession (Avery & Bergsteiner, 2011b). Moreover, organizations assuming a long-term perspective can devise plans and strategies investing on future growth and competitiveness, such as R&D and innovation, employee development and business restructuring, regardless of short-term events (Kantabutra & Avery, 2011).

Research examining individual differences in time perspective has indicated that future time perspective predicts individual engagement in various types of environmentally sustainable behaviors such as use of public transportation, since the decision to act sustainably entails a focus on future outcomes rather than on immediate benefits (Arnocky, Milfont & Nicol, 2014). Additionally, previous research has indicated that future thinking has a large adaptive value, since it can improve behavioral flexibility and encourage creative thinking (Chiu, 2012). Specifically, research by Chiu (2012) indicated that increasing the temporal distance of future thinking can promote performance in creative thinking, since future thinking assists abstract thinking, which facilitates creative thinking. Similarly, Förster, Friedman & Liberman (2004) indicated that distant time perspective boosts insight and abstract creative performance. In particular, thinking about the distant future seems to bring forth a processing shift toward abstract mental representation, which is transferred to consequent tasks, thus facilitating performance on creativity tasks which require abstract thought. Moreover, a consideration of future consequences has been positively associated to organizational citizenship behaviors, such as helping behaviors, organizational loyalty and compliance, individual initiatives, and self-development (Joireman, Daniels, George-Falvy & Kamdar, 2006). Lastly, as research by Agerström and Björklund (2009) indicated, morally questionable behaviors raise a greater moral concern when those actions are perceived as more temporally distant. Furthermore, their findings indicated that the participants' affective reactions to morally questionable behaviors, such as anger, increased with higher temporal distance. Thus, it could be assumed that individuals exhibiting an overall longer-term perspective would be more prone to ethical behavior, which constitutes one of the foundations of sustainable leadership.

Theoretical frameworks and hypotheses formulation

National culture and innovation

Hofstede's cultural dimensions. Hofstede has indicated that societies with low uncertainty avoidance are more prone to risk taking which encourages innovation and entrepreneurship, and societies with low power distance typically display a greater tendency for innovation (Jones & Davis, 2000). Power distance refers to the degree to which individuals in a society and its organizations accept an unequal distribution of power, and it encompasses several characteristics that could influence innovation, such as the presence and level of social or organizational hierarchy, top down control, centralized power, formal rules and procedures, formal vertical communication flows, and resistance to change (Jones & Davis, 2000; Sun, 2009).

Uncertainty avoidance refers to the desire to avoid risks related to uncertainty by focusing on rules, laws, procedures, technology, as well as other constructs which diminish ambiguity. Hofstede indicated that organizations in countries with high uncertainty avoidance tend to demonstrate resistance to innovations, as well as greatly formalized management and the hindering of innovation by rules (Sun, 2009), while low uncertainty avoidant countries demonstrate more tolerance for ambiguity and change, which is expected to relate positively to innovative success (Jones & Davis, 2000).

Lastly, the dimension of individualism/collectivism according to Hofstede refers to “the relationship between the individual and the collectivity which prevails in a society” (Jones & Davis, 2000, p. 27), and it can influence innovative potential through the value it places on concepts such as autonomy freedom, and independence. Specifically, individualistic cultures exhibit high levels of personal and professional autonomy, freedom, independence, and an outward orientation, encouraging individual initiative and contact with senior managers, thus supporting innovative success. On the contrary, collectivistic cultures, which inhibit personal autonomy, freedom and independence in decision making, as well as individual initiatives for the benefit of the group, are considered to hinder innovative efforts (Jones & Davis, 2000; Sun, 2009).

KEYS assessment of innovation and creativity. While the traditional psychological approach to creativity examines individual characteristics, Amabile et al. (1996) posited that the social environment can affect the level and frequency of creative behavior and innovation in employees. The researchers developed a conceptual framework focusing on the psychological context of creativity, namely the individuals' work environment perceptions which can influence creative and

innovative work in organizations, as well as an instrument assessing the relevant work environment dimensions, i.e. the KEYS instrument assessing the climate for creativity. The underlying framework was developed based on Amabile's componential model of creativity and innovation in organizations, which proposes three broad organizational factors influencing innovation, namely organizational motivation to innovate, resources, and management practices. Moreover, Amabile et al. (1996) incorporated in their conceptual framework aspects from Woodman, Sawyer & Griffin's theoretical perspective on creativity in organizations, namely the dimensions of group characteristics, and organizational characteristics as two categories of work environment inputs.

From Amabile et al.'s (1996) conceptual categories of work environment factors influencing creativity and innovation, the present study examined solely the factors deemed to be more relevant for the purposes of the research. In particular, the factors of organizational and managerial encouragement, freedom, creativity and lack of organizational impediments were investigated, while factors such as workload pressure and sufficient resources were deemed excessive and unlikely to be related to national culture dimensions and thus they were excluded.

Based on the theoretical and empirical literature presented, I hypothesize that,

Hypothesis 1. National culture will be significantly related to organizational levels of innovation.

Specifically, based on Hofstede's model and previous research, I anticipate that individuals from a country with high power distance, high uncertainty avoidance and low individualism/high collectivism (Greece) will score lower on the assessment of perceived innovation than individuals from a country with low power distance, low uncertainty avoidance, and high individualism/low collectivism (Sweden). Additionally, based on Amabile et al.'s (1996) conceptual framework, it can be anticipated that national culture will be related more strongly to certain factors of innovation such as freedom and lack of organizational impediments and less strongly to others.

National culture and sustainable leadership.

The ten pillars of sustainable leadership. As the research into sustainability has indicated, the concept of sustainable leadership encompasses various meanings and ideas which are constantly evolving and being redefined (McCann & Holt, 2010b). Concerning sustainable leadership, a number of theoretical frameworks and

models have been proposed over the last decade, the majority of which are based on the same fundamental values that a leader should demonstrate, such as a long-term orientation, broad systems thinking, innovativeness and vision communication (Avery & Bergsteiner, 2011a; Kantabutra & Avery, 2011; McCann & Holt, 2010a; Tideman et al., 2013).

Slankis's ten pillars of sustainable leadership, as presented by McCann and Holt (2010a) and incorporated into their Sustainable Leadership scale, constituted the theoretical foundation of the present study. According to Slankis, sustainable leadership is grounded on a positive change orientation, broad systems thinking, social and environmental consciousness, business savvy and credibility, adaptability, patience and commitment to the long term, the skill to translate thought into action, persuasiveness, energy and passion in vision communication and innovation encouragement, as well as mentoring for constant development of the people in the organization (McCann & Holt, 2010a). It is suggested that an amplified focus on these principles in organizations could bridge the gap between corporate performance and social values (McCann & Holt, 2010b).

Based on the arguments previously presented and the utilized theoretical framework, I hypothesize that,

Hypothesis 2. It is expected that national culture will be significantly related to levels of sustainable leadership in a similar direction with innovation.

That expectation stemmed from the fact that innovation constitutes a key element for successful sustainable leadership and thus national cultures that hinder innovation are also expected to hinder the innovative sustainable approach to leadership. Moreover, based on Slankis' theoretical framework, it is expected that certain dimensions of sustainable leadership such as a positive change orientation, will be more strongly associated to national culture than others.

National culture and leaders' consideration of future consequences.

Consideration of future consequences. The concept of consideration of future consequences was introduced by Strathman et al. (1994) as a relatively stable individual difference, and it was defined as "the extent to which individuals consider the potential distant outcomes of their current behaviors and the extent to which they are influenced by those possible outcomes" (p. 743). To extend Strathman et al.'s conceptual framework, the present study investigates leaders' differences in

consideration of future consequences, hypothesizing that these will be related to cultural characteristics.

Based on the previously presented arguments, it is anticipated that,

Hypothesis 3. National culture is expected to be significantly related to levels of leaders' consideration of future consequences in a similar direction with innovation and sustainable leadership.

As with sustainable leadership, that expectation is built on the premises that national culture is significantly related to organizational innovation, as well as that future orientation is associated to innovation and creativity. Hence, it is assumed that national cultures that hinder innovation will also hinder the innovative turn from the traditional 'business as usual' short-term to a long-term sustainable perspective in organizations. Additionally, considering the detrimental effects of the financial crisis to the Greek economy, it can be expected that Greek organizational leaders will demonstrate a more short-term perspective in achieving organizational outcomes than Swedish leaders, since their business's survival may depend on the production of immediate revenues.

Method

Sample

The selection of countries. The study compares two samples of employees from Greece and Sweden working in various job positions of private organizations located in the two countries. The selection of these two countries was based on several criteria. Firstly, Greece and Sweden are situated on opposite ends of the cultural dimensions of power distance, uncertainty avoidance and individualism based on Hofstede's index scores. In particular, Greece has a score of 60 on power distance, a score of 35 on individualism, and a score of 100 on uncertainty avoidance. On the other hand, according to Hofstede, Sweden scores 31 on power distance, 71 on individualism, and only 29 on uncertainty avoidance. Secondly, based on the Innovative Culture Index proposed by Sun (2009), Greece ranks in the top 73%, meaning that it falls in the group of countries with less innovative national cultures, while Sweden ranks in the top 9%, indicating a very innovative culture. The innovation rankings were based on numbers of US patents per million population, rates of higher education and surveys of technological innovation in companies. Thirdly, the two countries were selected on the basis of their current financial state due to the economic crisis which has led to the increase of the income gap between

Greece and Sweden. It is assumed that innovation bears different meanings in countries with weak or strong economies, since Kelley, Singer and Herrington (2011) indicated that national economic development is positively associated with innovativeness in organizations.

In the original design, the study aimed to compare four samples of employees from Denmark, Greece, Sweden, and the U.K. in order to ensure a greater diversity of cultures which would allow for a comparison between countries based on a ranking of Hofstede's index scores in the three cultural dimensions. However, mainly due to sampling setbacks, the study was limited to the comparison between two countries, which renders impossible the comparison between each separate cultural dimension based on rank order, while it also hinders any testing of universality.

The selection of participants. In order to ensure that the two samples are comparable, the participants were selected based on the criterion that they were employed in a private organization located in Greece or Sweden. Secondly, the participants had to be employed in industries existing in both countries, such as mechanical and civil engineering, hotel, retail and shipping business.

In Greece, a total of 72 employees participated in the survey, while the Swedish sample consisted of 61 employees, adding up to a total of 133 participants from both countries. Most participants were employees (73% of Greek sample and 69% of Swedish sample), while the sample also consisted of middle managers (15% of Greek sample and 21% of Swedish sample) and a few senior managers or company owners (11% of Greek sample and 10% of Swedish sample). From the total sample, 72 (54.1%) participants were employed for 0 to 5 years in their current organization, 33(24.8%) were employed for 6 to10 years, and 28(21.1%) were employed for 11 years or more. The total sample consisted of 49 (36.8%) females and 84(63.2%) males (mean age= 34.59, SD= 9.9). Lastly, 38 (28.6%) participants were high school graduates, 50 (37.6%) had a bachelor's degree, 32 (24%) had a master' degree or a doctorate, and 13 (9.8%) had other education.

Measures

Culture. Following a more holistic fit, I determined the cultural profile for both countries based on Hofstede's index scores for national cultures. As Hofstede emphasized, separating cultural dimensions for analytic purposes may be misleading, thus suggesting the use of "cultural patterns" as a more holistic approach to

examining culture-bounded theories (Ambos & Schlegelmilch, 2008). Data for the two countries were collected from the Hofstede Center website (2015).

Innovation. Workplace innovation was measured using a 47-item questionnaire derived from the KEYS scale to innovation and creativity (Amabile et al., 1996), which encompassed five workplace dimensions that influence innovation. Specifically, 15 items measured the dimension of organizational encouragement, 11 items examined managerial encouragement, 4 items assessed workplace freedom, 6 items examined creativity, and 11 items assessed the lack of organizational impediments. Other dimensions of the KEYS scale such as productivity and work group support were deemed superfluous and were omitted from the study in order to keep the instrument as brief and easily comprehensible as possible. All items were scored on a five-point Likert scale where 1= *never*, 2= *rarely*, 3= *sometimes*, 4= *often*, and 5= *always*, according to the respondents' perception of how often the statements were true in their organization.

Examples of items from the organizational encouragement subscale are 'People in this organization can express unusual ideas without the fear of being called stupid' and 'People are recognized for creative work in this organization'. Examples of items from the managerial encouragement subscale are 'My boss is open to new ideas' and 'My boss values individual contributions to projects'. The freedom subscale included items such as 'I have the freedom to decide how to carry out my projects', and the creativity subscale encompassed items such as 'My area of this organization is innovative' and 'I believe that I am currently very creative in my work'. Lastly, examples of items from the organizational impediments subscale, which were later reversed, are 'People are critical of new ideas in this organization' and 'Destructive criticism is a problem in this organization'.

According to Amabile et al. (1993) the KEYS internal scale reliabilities vary from minimally acceptable (.66) to extremely strong (.91) with a median Cronbach alpha of .84. In the current study, the Cronbach alpha coefficient was .94 for the entire scale used, while the reliabilities of the various dimensions ranged from $\alpha = .64$ for the dimension of freedom to $\alpha = .91$ for organizational encouragement. The dimension of lack of organizational impediments had a Cronbach alpha of .79, while creativity had an alpha of .85, and managerial encouragement had an alpha coefficient of .89.

Sustainable leadership. A 15-item scale developed by McCann and Holt (2010a) was used to measure the respondents' perception of the sustainability

behavior of their leaders. The scale was developed based on the theoretical pillars of sustainable leadership, and each item reflects a different aspect of the examined concept. All items were scored on a five-point Likert scale ranging from *never* to *always*, based on 'how often true' they were. Examples of items are 'My leader acts in a sustainable socially responsible manner' and 'My boss attempts to use unique innovative methods to resolve sustainability issues'.

According to McCann and Holt, the scale has a good reliability with a Cronbach alpha of .97. In the present study, the Cronbach alpha coefficient was .92.

Consideration of future consequences. A six-item scale adjusted from Strathman et al. (1994) was used to measure respondents' perceptions of their leaders' consideration of future consequences. Strathman et al.'s CFC scale consists of twelve items assessing individual consideration of future consequences. However, for the purposes of the present study, six items were selected and rephrased to examine the leaders' potential future orientation as perceived from the respondents. Examples of items are 'My boss considers how things might be in the future, and tries to influence those things with his/her day to day behavior' and 'My boss acts to satisfy immediate concerns, figuring the future will take care of itself'. All items were scored on a five-point Likert scale ranging from *never* to *always*, based on 'how often true' they were according to the respondents.

According to Strathman et al. (1994) the CFC scale has good internal consistency, with a Cronbach alpha ranging from .80 to .86. In the current study, after deletion of one item that did not correlate well with the total, the Cronbach alpha coefficient was .65.

Control variables. A series of demographic variables were also included in order to control for the participants' individual characteristics. Considering that the present study is investigating individual employees' perceptions of workplace innovation and their leaders' sustainability behavior and future orientation, it appears necessary to examine whether individual characteristics significantly influence such perceptions. The first control variable was gender, since research has indicated that women are underrepresented in innovation-related fields, women innovators are less visible in organizations, occupying less senior positions, as well as that institutional environment matters for innovative activity by women (Carrasco, 2014; Salazar & Holbrook, 2003). The second control variable was job position, which was classified for analytic purposes into three categories, i.e. senior managers or owners, middle

managers, and employees. Each job position reflects different functional areas of the organization and research has indicated that function categories may influence employee involvement in innovative activities (Dorenbosch, Engen & Verhagen, 2005). Moreover, considering that the respondents were required to rate their immediate leaders, it is expected that the scores will vary depending on whether those leaders are middle managers, senior managers, or whether the participants themselves are the company leaders. A third control variable was education level, classified in four categories, i.e. high school graduate, bachelor degree, master or doctorate degree, and other. Past research has indicated that education is associated with a positive attitude toward innovation (Shane, 1995; Hambrick & Mason, 1984), though Baumol (2004) suggested that while education is particularly valuable for innovation, it may also hinder creative thinking.

Procedure

An online survey was developed based on preexisting empirically validated scales, adjusted for the purposes of the present study. The first part of the survey aimed to gather information concerning the participants' demographics and additional control variables, while the second part consisted of 47 questions regarding the respondents' perceived workplace innovation. The second part of the survey consisted of 15 items examining sustainable leadership, as well as 6 items adjusted from the 12-item consideration of future consequences scale, in order to examine the leaders' perceived future orientation.

The online survey was written in English and sent out by email to various private organizations located in Greece and Sweden. Participation in the survey was voluntary and completely anonymous, and the respondents had the opportunity to contact me regarding any potential inquiries during or after its completion. At the introduction of the survey, the respondents were informed about the broader aim of the study, which was to investigate workplace innovation and sustainability. No explicit research assumptions were revealed to them, in order to avoid biases in the responses. Additionally, the participants were provided with definitions of the main concepts in the survey, in order to ensure a common understanding. All responses were collected in the period between February and April 2015.

Results

The assumptions were met with regard to all the analyses that were conducted. The intercorrelations between the three dependent variables were investigated using Pearson product-moment coefficient. The results can be seen in Table 1.

Table 1. *Intercorrelations of Innovation, Sustainable leadership (SL), and Consideration of future consequences (CFC)*

Variable	M	SD	1	2	3
1.Innovation	3.3318	0.5514	1		
2.SL	3.3192	0.6508	0.693**	1	
3.CFC	3.2045	0.6317	0.483**	0.590**	1

**= $p < .01$.

The relationship between perceived innovation and sustainable leadership was investigated using Pearson product-moment correlation coefficient. The results demonstrated a strong, positive correlation between the two variables, with high levels of perceived innovation associated with high levels of perceived sustainable leadership. Similarly, the relationship between innovation and consideration of future consequences was examined and the results indicated a medium, positive correlation between the two variables, with high levels of perceived innovation associated with high levels of leaders' consideration of future consequences. Lastly, the relationship between sustainable leadership and consideration of future consequences was investigated, and the analysis indicated a strong, positive correlation between the two variables, with high levels of perceived sustainable leadership associated with high levels of leaders' consideration of future consequences.

In order to investigate the study Hypotheses, preliminary checks were conducted to examine whether the three proposed control variables, namely gender, job position and education level, correlated significantly to the three dependent variables. Specifically, the correlation results indicated that only job position was significantly related to innovation ($p < .05$), while none of the three control variables were significantly related to sustainable leadership or consideration of future consequences. For that reason, it was deemed necessary to control for job position when examining the relationship between culture and innovation. In particular, Hypothesis 1 suggests that there will be a significant relationship between national culture and perceived levels of innovation. A one-way between-groups ANCOVA

was conducted to test for the hypothesis, using the participants' job position as the covariate in the analysis. The results can be seen in Table 2.

Table 2. ANCOVA results for Innovation by Country and Job position

Source	SS	df	MS	F	p
Job position	2.01	1.00	2.01	7.01	.009
Country	0.80	1.00	0.80	2.80	.097
Error	37.25	130.00	0.29		

Notes. $R^2 = .072$, Adjusted $R^2 = .057$. Homogeneity of regression tested and not significant: $F = .023$, $p > .05$.

After controlling for job position, there was a marginally significant difference in scores for Greek and Swedish employees; $p < .01$, partial eta squared = .02. There was a medium relationship between job position and innovation scores, as indicated by a partial eta squared value of .05. Thus, Hypothesis 1 was partially supported in the expected direction, indicating that Swedish employees reported marginally higher levels of innovation than Greek employees.

A series of independent-samples t-tests were conducted to examine the rest of the primary hypotheses. The results can be seen in Table 3.

Table 3. Country differences for Innovation, Sustainable leadership (SL) and Consideration of future consequences (CFC)

	Country	N	M	SD	t	df	p
SL	Greece	72	3.34	0.68	0.34	130	.731
	Sweden	60	3.30	0.62			
CFC	Greece	72	3.17	0.57	-0.75	130	.453
	Sweden	60	3.25	0.70			

Note. M= Mean. SD= Standard deviation.

To test Hypothesis 2 an independent-samples t-test was conducted to compare sustainable leadership scores for Greek and Swedish employees. The results indicated no significant difference in scores for Greek and Swedish employees; $p > .05$. Thus, Hypothesis 2 was not supported, indicating that national culture does not relate significantly to perceived levels of sustainable leadership.

Finally, to test Hypothesis 3 an independent-samples t-test was conducted to compare consideration of future consequences scores for Greek and Swedish

employees. There was no significant difference in scores for Greek and Swedish employees; $p > .05$. Consequently, Hypotheses 3 was not supported, indicating that national culture is not significantly related to leaders' perceived future orientation.

For exploratory purposes, individual-samples t-tests were conducted to compare the scores on the five innovation dimensions for Greek and Swedish employees. The results can be seen in Table 4.

There was a significant difference in lack of organizational impediments scores for Greek and Swedish employees. The magnitude of the differences in the means (mean difference = $-.41$, 95% CI: $-.60$ to $-.22$) was rather large (eta squared = $.120$ or 12%), meaning that 12% of the variance of lack of organizational impediments is explained by country. The observed difference was in the expected direction, indicating that Greek employees scored lower on perceived lack of organizational impediments than Swedish employees.

There was also a significant difference in creativity scores for Greek and Swedish employees. The magnitude of the differences in means (mean difference = $-.32$, 95% CI: $-.57$ to $-.06$) was almost medium (eta squared = $.045$ or 4.5%), meaning that 4.5% of the variance of creativity is explained by country. The difference was in the expected direction, indicating that Greek employees scored lower on perceived creativity compared to Swedish employees.

Table 4. *Country differences for Managerial encouragement (ME), Organizational encouragement (OE), Lack of organizational impediments (LOI), Creativity (C), and Freedom (F)*

Country		N	M	SD	t	df	p
ME	Greece	72	3.53	0.71	-0.20	131	.841
	Sweden	61	3.55	0.66			
OE	Greece	72	3.31	0.72	-0.07	131	.947
	Sweden	61	3.31	0.67			
LOI	Greece	72	2.96	0.50	-4.28	131	.000
	Sweden	61	3.37	0.62			
C	Greece	72	3.26	0.73	-2.52	131	.013
	Sweden	61	3.58	0.74			
F	Greece	72	3.18	0.68	-1.84	109.044	.068
	Sweden	61	3.44	0.92			

Note. M=Mean. SD=Standard deviation.

For further exploratory purposes, individual-samples t-tests were conducted to compare scores on the sustainable leadership items for Greek and Swedish employees. The most significant results are demonstrated in Table 5.

Table 5. *Country differences for Sustainable ethically behavior (SEB), Wealth through sustainability (WTS), Purpose before Profit (PBP), and Communication of sustainability decisions (CSD)*

Country		N	M	SD	t	df	p
SEB	Greece	72	3.54	0.93	-1.98	130	.050
	Sweden	60	3.85	0.84			
WTS	Greece	72	3.07	0.91	-2.57	131	.011
	Sweden	61	3.48	0.91			
PBP	Greece	72	2.97	1.13	2.03	131	.044
	Sweden	61	2.61	0.92			
CSD	Greece	72	3.39	0.99	2.02	131	.046
	Sweden	61	3.03	1.05			

Note. *M*=Mean. *SD*=Standard deviation.

There was a significant difference in ‘sustainable ethically behavior’ scores for Greek and Swedish employees. The magnitude of the differences in the means (mean difference= -.30, 95% CI: -.61 to .00) was rather small (eta squared= .029), meaning that 2.9% of the variance of this dimension of sustainable leadership can be explained by country. The results were in the expected direction, indicating that Greek employees rated their leaders with significantly lower scores in the dimension of sustainable ethically behavior than Swedish employees.

There was also a significant difference in ‘wealth creation through sustainability’ scores for Greek and Swedish employees. The magnitude of the differences in the mean (mean difference= -.40, 95% CI: -.71 to -.09) was almost medium (eta squared=.047), meaning that 4.7% of the variance in this sustainable leadership dimension can be explained by country. The results were in the expected direction, indicating that Greek employees rated their leaders with significantly lower scores in the dimension of wealth creation through sustainability than Swedish employees.

The t-test yielded also a significant difference in ‘purpose before profit’ scores for Greek and Swedish employees. The magnitude of the differences in the means (mean difference=.36, 95% CI: .009 to .72) was small (eta squared=.030), meaning

that 3% of the variance in this dimension of sustainable leadership is explained by country. The results however were not in the expected direction, indicating that Swedish employees rated their leaders with significantly lower scores in the dimension of putting purpose before profit than Greek employees.

Lastly, there was a significant difference in 'communication of sustainability decisions' scores for Greek and Swedish employees. The magnitude of the differences in the means (mean difference=.35, 95% CI: .006 to .70) was small ($\eta^2=.029$), meaning that 2.9% of the variance in this dimension of sustainable leadership is explained by country. The results were not in the expected direction, indicating that Swedish employees rated their leaders with significantly lower scores in the dimension of communicating sustainability decisions to all those involved than Greek employees.

Discussion

This study provides an empirical investigation of the relationship between national culture and workplace innovation, sustainable leadership, and leaders' consideration of future consequences. The results indicated that national culture is significantly related to certain aspects of innovation in modern organizations, yet marginally related to the overall firm innovation as perceived by employees. The marginally significant relationship between national culture and overall innovation persisted even when controlling for job position. Thus, it appears that in today's globalized work environments, national culture may not impact organizational processes and outcomes as much as in past decades. These findings are also supported by past research indicating that, while low power distance, low uncertainty avoidance, and high individualism may hinder an organization's capability to initiate radical innovations, they can also facilitate the adoption and exploitation of more incremental innovations (Ambos & Schlegelmilch, 2008). Moreover, research has indicated that high uncertainty avoidance can positively influence technological innovation performance in industries where there is a strong need for clear instructions, rules and controls (Lin, 2009), as well as that high collectivism may foster a communication context which promotes acceptance of technological innovation (Dwyer, Mesak & Hsu, 2005). Similarly, studies by Efrat (2014), Kaasa and Vadi (2010), and Taylor and Wilson (2012) have demonstrated that certain types of cultural collectivism may foster national innovation.

Moreover, the results indicated that specific dimensions of workplace innovation, namely the lack of organizational impediments and the employees' perceived creativity, are significantly associated to national culture in the anticipated direction. Specifically, it appears that in organizations located in a country with high power distance, high uncertainty avoidance, and low individualism/high collectivism, employees perceived more organizational obstacles to their innovation capabilities, as well as less opportunities for creativity, than in a country with opposite scores on the cultural dimensions. That could be attributed to the presence of strong organizational hierarchy, top down control, centralized power, formal rules and procedures, and resistance to change, which are prominent in cultures with high power distance and high uncertainty avoidance. Initial predictions also expected the factor of freedom to be significantly related to national culture and especially to the dimension of individualism/collectivism, yet the results indicated a marginally significant difference in employees mean scores between Greece and Sweden. That could be attributed to the rather low but acceptable Cronbach's alpha of the scale, even after deletion of one problematic item.

Secondly, the results indicated that national culture may be significantly associated to certain aspects of sustainable leadership, yet it is not significantly related to the overall levels of perceived sustainable leadership. Thus, it appears that sustainable development could be achieved by organizations regardless of the national culture of their location. Similarly, research by Avery (Avery & Bergsteiner's, 2011a), and Kantabutra and Avery (2011a), examining the success potential of sustainable leadership practices in various countries, indicated that organizations led sustainably can thrive in diverse industries and locations ranging from the developed world of Europe, United States, and Australia to emerging economies in Thailand and South Africa. However, it should be noted that the measured levels of sustainable leadership in the present study were rather moderate for both Greek ($M=3.34$) and Swedish ($M=3.30$) employees.

Concerning the dimensions of sustainable leadership significantly correlated to culture, the differences in the first two factors were in the expected direction, indicating that Greek employees perceived their leaders as less prone to 'sustainable ethically behavior' and to 'wealth creation through sustainability' than Swedish employees. These results could be attributed to the countries' differences in the cultural dimensions of power distance and uncertainty avoidance. In particular,

Greece has a high level of power distance, which indicates a society based on unequal distribution of power, strict hierarchy, top down control, and centralized power, as well as high uncertainty avoidance, which leads to an emphasis on formal rules and procedures as well as greatly formalized management. The first sanctions inequality in the workplace, which could contribute to the employees' perception of their leaders' behaviors as only *sometimes* ethical, while the second compels organizational leaders to stick to traditional wealth creation methods in order to avoid unnecessary risks. Moreover, concerning leaders' ethical behavior, it appears that for the highly interdependent Greek society, it is very significant that individuals demonstrate an ethical behavior or "filotimo", in order to establish a social network of trustworthy and lasting relationships. In Greece, the word "philotimo" is the concept that describes an individual "who offers assistance and takes care of family and friends, contributing to the smooth functioning of the in-group" (Anagnostopoulos & Griva, 2012). Therefore, Greek employees may be overly strict in their estimates of their leaders' ethical behavior, contrary to Swedish employees.

Contrarily to initial expectations based on theoretical and empirical background, the results in the next two dimensions of sustainable leadership indicate that Swedish employees perceived their leaders as less prone to putting purpose before profit, as well as to communicating sustainability decisions to everyone involved, compared to Greek employees. These unanticipated results could be partly attributed to country differences in the dimension of individualism/collectivism, since past research has indicated that, contrary to high individualism, high collectivism in culture promotes communication, co-operation and a supportive climate between individuals (Dwyer et al., 2005; Efrat, 2014; Kaasa & Vadi, 2010; Taylor & Wilson, 2012). Similarly, most of the sustainable leadership principles suggested by theory (Avery & Bergsteiner, 2011a; McCann & Holt, 2010a) are based on a climate of cooperation, communication and team orientation, which corresponds more to a collectivistic culture. Thus, it appears that national culture may be related to some aspects of sustainable leadership in an opposite direction than originally anticipated.

Thirdly, the results indicated that national culture is not significantly related to leaders' consideration of future consequences as perceived by their employees. Thus, it appears that the adoption of a future orientation by organizational leaders, which is essential for achieving a sustainable development, can be accomplished in organizations regardless of national culture. Nevertheless, the measured scores of

leaders' consideration of future consequences in this study were rather moderate for both Greek ($M=3.17$) and Swedish ($M=3.25$) employees.

Additionally, concerning the control variables of gender, job position and education level, initial analyses indicated that only the variable of job position correlated significantly to innovation, while none of the control variables correlated significantly to sustainable leadership or consideration of future consequences. Furthermore, even after controlling for job position, the relationship between national culture and innovation remained marginally significant. However, these findings could be partly attributed to the rather small sample size and its configuration which comprised mostly of male employees.

Lastly, the results indicated that innovation, sustainable leadership and consideration of future consequences are positively correlated with one another, which could be expected based on their considerable theoretical overlap.

Practical Implications

The present study contributes to the literature in various ways. First, it examines the relationship between national culture and innovation at an organizational level and based on the employees' perceptions of their work environment. As was already discussed, most previous research looked at the culture-innovation relationship at a national level and based predominantly on the inputs of innovation such as R&D expenditures and patents (Tellis et al., 2009). Thus, the divergence of the study results from the majority of past theoretical and empirical literature could be partly attributed to differences in the conceptualization and measurement of innovation. Furthermore, by examining innovation at an organizational level, the study suggests that national culture is not as significantly related to innovation as past research indicated. That finding contradicts the majority of past research and theoretical expectations, and it posits that modern organizations can select the site locations for their R&D and other types of activities without being considerably restrained by the national culture of that location. Nevertheless, we must keep in mind that there are other factors that can restrain location selection, such as economic conditions and political regime.

Moreover, the results indicated that specific dimensions of workplace innovation, namely the lack of organizational impediments and the employees' perceived creativity, are significantly associated to national culture in the anticipated direction. Specifically, it appears that in organizations located in a country with high

power distance, high uncertainty avoidance, and low individualism/high collectivism, employees perceived more organizational obstacles to their innovation capabilities, as well as less opportunities for creativity, than in a country with opposite scores on the cultural dimensions. Based on the particular findings, it could be suggested that Greek organizations should focus their attention on dealing with these perceived deficiencies in order to increase their overall innovation capabilities and outcomes. However, the observed results could also be attributed to the detrimental effects of the financial crisis to the Greek economy and consequently to the more limited resources available in organizations located there. Future research could delve more into the subject, while it could also include additional dimensions of innovation from the KEYS scale, such as the factor of available resources. Nevertheless, we must remain preserved in our assumptions, considering that the overall innovation scores did not vary radically between the two countries.

Second, this study adds to the literature by being the first to investigate whether national culture is significantly associated to sustainable leadership and consideration of future consequences by company leaders. While the results indicate that the adoption of sustainable leadership and future orientation are equally attainable in countries with different cultural profiles, the overall participants' scores for these two variables were moderate for both Greece and Sweden with a mean of approximately 3 out of 5. Thus, based on the findings of this study, it can be suggested that organizational leaders need to put more effort into their attempts to incorporate a sustainable leadership approach and a long-term perspective into their business practices. Furthermore, the results of the present study indicate that organizations operating sustainably can successfully expand their business in locations with different cultural profiles, since perceived sustainable leadership and future perspective did not differ significantly between the two examined countries. However, similarly with innovation, organizations should still be wary of other factors which could influence location selection, such as political regime.

Concerning the various dimensions of sustainable leadership as they were reflected in the SL scale, the results indicate a significant difference between the two examined countries in four out of the fifteen measured factors. As Kantabutra and Avery (2011) indicated, some elements of sustainable leadership may be less fitting to different countries due to their cultural diversities, yet that should not hinder organizations from attempting to develop sustainability. As was previously discussed,

the differences in two of the four dimensions of sustainable leadership were in the expected direction, while the differences in the other two were in the opposite direction. These findings could prove useful for modern organizations attempting to adopt a sustainable leadership style, since they can inform organizational leaders about the potential problematic areas they need to focus in to ensure the successful implementation of sustainability in their company, depending on the national culture of the location site. However, we need to remain preserved in our inferences, considering that sustainable leadership as a total did not correlate significantly to national culture.

Additionally, the present study attempts to initiate a turn towards a quantitative approach to measuring sustainable leadership in organizations. Research has indicated that assessing sustainable leadership in an organization can facilitate the firm's efforts to create a competitive advantage and to advance overall performance (McCann & Holt, 2010b). Hence, this report presents a validated and reliable instrument developed by McCann and Holt (2010a), which could be utilized by organizations in order to introduce the concept of sustainability to their employees and to measure the sustainable behavior of their leaders over time. The scale's good internal consistency was confirmed in the present study, since the analysis yielded a Cronbach's alpha of .92.

Thirdly, the present study contributes to the further development of the concept of consideration of future consequences, since it constitutes the first study that shifts the focus from the self to the leader. Specifically, by adjusting the phrasing of the items from "I" to "My leader/boss" in Strathman et al.'s (1994) CFC scale, we adapted an instrument to measure leaders' future orientation, which constitutes the principal feature of sustainable leadership. Organizations could benefit from utilizing the leaders' CFC scale to assess their managers' and top executives' long-term orientation in decision-making, planning, and overall behavior, especially over time. Moreover, the presented scale could be utilized for further future research into leaders' consideration of future consequences as an aspect of sustainable leadership, as well as on the potential relationship of the concept to various organizational processes and outcomes.

Lastly, the present study provides empirical confirmation of the significant correlation between organizational innovation, sustainable leadership and leaders' long-term perspective at the organizational level. That finding suggests that

organizations aiming to successfully adopt a sustainable leadership style should also place considerable efforts into increasing the company's innovation capabilities and assuming a long-term perspective starting with their top members.

Limitations and future suggestions

While the present study yielded some significant results, these need to be interpreted in light of certain limitations. Firstly, due to unanticipated hindrances in the sampling process, the initial study design needed to be readjusted to investigate two instead of four countries. That development rendered unfeasible the comparison of the three cultural dimensions based on a rank order, thus I was forced to compare between countries, deeming that all dimensions of national culture for each country group together into one idiosyncratic cluster. No separate scales were used to measure scores on the three cultural dimensions for brevity purposes, but also since, according to Hofstede and other researchers, culture is a phenomenon best measured at the group level and attempts to measure it at the individual level would only measure the effect of individual values on individual behavior (Shane, 1995). Thus we cannot assertively attribute any particular results to any specific cultural dimension. What we can do is make educated speculations based on theoretical and empirical literature, that any potential significant differences can be ascribed to any or all of the three aforementioned cultural dimensions. Therefore, it could be suggested that future research investigates the culture-workplace innovation relationship by explicitly measuring cultural dimensions, even though the present study indicates that the relationship is barely significant at the individual level.

Secondly, considering that we compared cultures at the country level assuming that Hofstede's index scores apply universally, the culture-specific inferences require further investigation in order to rule out potential influences of other factors not included in the present study. Specifically, aspects such as the countries' national income or wealth and within-country cultural diversity at the national level (Puia & Ofori-Dankwa, 2013), the economic or institutional environment, as well as the organizations' corporate culture (Morsing & Oswald, 2009; Tellis et al., 2009), the firm size, the type of industry (Rauch et al. 2013) and other factors may influence the examined relationships. Therefore, we cannot attribute the results of this study solely to national culture, and future research should take into consideration other potential influences and compare alternative explanations to the culture-innovation relationship.

Thirdly, it should be noted that the analysis is based on an acceptable but relatively small sample size, which may hamper the generalizability of the results to the broader population. Additionally, the sample is limited to employees from the two examined countries, making it difficult to generalize the results to other countries with different market environments. Thus, future research should include samples from a wider variety of cultural profiles in order to insure a greater universality in the results, as well as in the generalizability of the findings.

Lastly, considering that the present study investigated innovation, sustainable leadership and consideration of future consequences at the individual level, the results reflected the participants' perceptions of the concepts, which may diverge from the objective reality in the examined firms. In particular, the respondents' evaluations may have been affected by a variety of factors, which is why gender, job position and education level were investigated as control variables. Additionally, the length of the questionnaire, which included 68 questions, hindered the collection of data, since respondents considered the scale as rather time consuming. That could have affected the participants' scores in the questionnaire, and it could partly explain why the overall results were so moderate, since participants may have been rushing through the questions without giving too much thought to their responses.

Moreover, the fact that the survey was conducted in English, which was not the native language in either one of the two investigated countries, may have slightly altered the participants' understanding of the concepts. Similarly, the fact that certain concepts, and especially sustainable leadership, were particularly novel for the majority of the participants could be partly responsible for the low differences in mean scores between countries. A definition of sustainable leadership was provided for the participants at the introduction of the survey in order to minimize such effects. However, future research should establish that the participants have a common and comprehensive understanding of the concepts prior to the completion of the instrument.

Future research on organizational innovation could investigate the potential relationship between the current economic crisis and the different factors comprising workplace innovation based on Amabile et al.'s (1996) conceptual framework. Specifically, it could be expected that factors such as sufficient resources, workload pressure and lack of organizational impediments would be significantly associated to

current economic conditions, thus affecting the employees' perceptions of their work climate and its innovation capabilities.

Future research into sustainable leadership at an organizational level could investigate the potential impact of organizational culture to the successful implementation of sustainability, and especially to the leaders' practices and attempts to incorporate a more sustainable approach into the organization (Morsing & Oswald, 2009). Additionally, future research could investigate other aspects of sustainable leadership such as employee trust in management, staff engagement and commitment, knowledge sharing, employee involvement in decision making, team orientation, and employee self-management. The aforementioned elements constitute a few of the criteria proposed by Avery & Bergsteiner (2011a), differentiating sustainable leadership from traditional 'shareholder-first' approaches to leadership. Another aspect of sustainable leadership which could be further investigated by future research is leaders' ethical behavior, which varied significantly between Greek and Swedish employees, as well staff retaining and development, cooperative labor relations, corporate social responsibility, environmental concerns and concerns about employees' welfare.

Finally, future research could utilize the altered version of the CFC scale as an additional measure of sustainable leadership, considering the strong positive correlation discovered between the two concepts. Moreover, the adjusted CFC version could be utilized to examine the effects of leaders' time perspective on several organizational outcomes, such as leader and employee creativity (Förster et al., 2004), ethical conduct (Agerström & Björklund, 2009), and sustainable behaviors (Arnocky et al., 2014).

Conclusion

The present study has indicated that organizational level innovation is marginally associated to national culture, with the exception of the dimensions of creativity and lack of organizational impediments which varied significantly between the two examined countries. Similarly, the results indicated that sustainable leadership and leaders' consideration of future consequences at the organizational level are not significantly associated to national culture. Lastly, the study provided empirical support for the theoretical assumption that sustainable leadership, innovation and leaders' long-term perspective are significantly inter-correlated concepts at an organizational level. Several practical implications of the study results have been

discussed, along with a number of suggestions for future research. I believe that organizational level innovation should be further investigated, especially in relation to the current economic crisis and its effects on modern businesses. Additionally, I believe that the proposed concept of leaders' consideration of future consequences could contribute to the literature and guide future research on sustainable leadership in organizations.

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