

Influence of managers' time orientation on strategic practices in the UAE

The moderating role of environmental uncertainty

Ali Abu-Rahma and Bushra Jaleel

*College of Business Administration, Abu Dhabi University, Al Ain,
United Arab Emirates*

Time
orientation and
strategic
practices

219

Received 21 January 2015
Revised 12 May 2016
Accepted 24 June 2016

Abstract

Purpose – The purpose of this paper is to explore the relationship between time orientation and strategic practices in the context of an Arab country. Toward this end, the paper studies a conditional process model that assesses the role of visioning ability and perceived uncertainty in explaining how future-oriented managers may be better at strategic management.

Design/methodology/approach – The study adopts a quantitative research design with closed-ended questionnaires as the main mode of data collection, and applies bootstrapping technique to test the significance and validity of the conditional process model.

Findings – The results confirm that time orientation influences strategic practices in an organization through its impact on a manager's visioning ability, when uncertainty in the environment is perceived as low-moderate. The study also notes that local managers in the United Arab Emirates (UAE) tend to be relatively future oriented and demonstrate a greater preference toward strategic work in comparison to operational tasks.

Research limitations/implications – The scope of this study has been limited to UAE nationals, and generalization of these results should be done with caution. Future research is recommended on a wider geographical area, such that cross-national results can be used to better understand the concept of time orientation in Arab countries.

Originality/value – Findings of this paper contribute to the literature by studying the concept of time orientation in a unique cultural domain. Moreover, by providing a theoretically relevant model for understanding the relationship between time orientation and strategic practices, the study highlights the significance of environmental uncertainty, and the importance of developing the visioning abilities of those involved in strategic roles in an organization.

Keywords United Arab Emirates, Strategic practices, Environmental uncertainty, Conditional process analysis, Time orientation, Visioning ability

Paper type Research paper

1. Introduction

The uncertainty and ambiguity associated with today's dynamic environment has led many researchers to debate the relevance of strategic planning (Heskett, 2013). The debate is even more relevant to a country like the United Arab Emirates (UAE), that has witnessed unprecedented growth over the last two decades (Kazmi *et al.*, 2014), and has emerged as a key player in the global landscape (Fadol *et al.*, 2015). Arguably, while some managers find it essential to relate their past and current circumstances to build long-term plans and believe in the importance of strategic management for organizational success (Phongpetra and Johri, 2011), others are more comfortable with perfecting routine tasks and consider planning for the distant future dispensable. Not denying the significance of operational tasks in maintaining a firm's profitability, it is well established that senior management that excessively focuses on operational activities is not well equipped to deal with rapid changes (Frankel, 2008) that are characteristic of today's environment.



Research in this area has identified and discussed several psychological factors that influence strategic thinking and focus in managers (Pisapia *et al.*, 2005; Dragoni *et al.*, 2011). One such factor that dominates literature is time orientation. Defined as an individual's perception of time (Thoms, 2004), time orientation is deemed a characteristic personality trait that is widely linked to individual preferences as well as workplace behavior (Gupta, *et al.*, 2012). The construct has been used to explain several organizational considerations ranging from a firm's choice of manufacturing strategy (Voss and Blackmon, 1998) to its response to climate change (Slawinski and Bansal, 2012). Similarly, Qian *et al.* (2015) discuss the role of future time orientation in facilitating the achievement of long-term goals in an organization.

Findings of these studies suggest that it is reasonable to expect future-oriented managers to be better at visualizing the prospective state of their organizations, which in turn makes them more inclined toward developing strategic plans. However, these studies do not explicitly theorize or attempt to explain the mechanism underlying the relationship between time orientation and strategic practices. Moreover, while research in the field of management psychology has shed light on several aspects of managerial decision making (Ashkanasy *et al.*, 2004), why some managers favor strategic work activities over operational tasks is unclear. Furthermore, since time orientation is a culture-specific concept (Bearden *et al.*, 2006), and regional factors are known to influence managerial perspective (Koles and Kondath, 2014), it is important to study these constructs in societal settings that have not yet been explored in the literature.

Given the need for context-specific studies (Jansson and Söderman, 2015), this paper aims to develop and assess a model that can shed light on how time orientation of managers in the UAE influences their disposition toward performing strategic work. This is primarily significant because, although the influence of individual time horizons on managerial behavior is intuitively plausible and theoretically suggested in the literature, it has not been empirically examined. Moreover, by studying managerial practices in the UAE, this paper also addresses the need to explore and sufficiently differentiate the strategy and management practices employed in emerging economies from those used in developed countries (Contractor, 2013; Baack and Boggs, 2008).

In the next section, a detailed review of literature is presented, which will be used to develop a theoretical framework and specific hypotheses that address the research objectives. Next, the methodology used to carry out this research is described, followed by a documentation of data analysis and inference of results. The paper concludes with a discussion of major findings and recommendations for further research in this area.

2. Literature review

The inclination toward a particular period of time is a function of both personal and societal factors (Bergadaà, 1990) that eventually shape how an individual ranks past-, present-, and future-oriented activities (Thoms and Blasko, 2004). Largely regarded as an unconscious process of assigning one's life experiences to specific time frames (Zimbardo and Boyd, 1999), time orientation may be used to classify people as past, present, or future oriented based on their unintentional tendency to over or under emphasize one of the three temporal frames when making decisions. A vast majority of research in this area is devoted to the impact of national culture on time orientation (Wang, 2012). For instance, cross-cultural researchers have demonstrated that national cultures influence an individual's construct of time, its importance and usage to them, and ultimately shape their worldview accordingly (Ahlstrom and Bruton, 2009).

The dimension of time also presents itself in Hall's (1976) cultural framework which categorizes cultures across a dichotomous scale, where monochronic cultures, typically Western (North American and European) societies, place significant value on time and

regard it as something that needs to be accounted for, while polychronic cultures, such as Asian and Arab societies, have a more relaxed view of time and favor social interactions over timely accomplishment of tasks. Another view on the cultural differences in time orientation is the one presented by Graham (1981) where the perception of time is categorized into three groups: linear, circular, and procedural. According to this classification, the linear view is the one that is most typical in Western societies, which perceive time on a discrete scale of past, present, and the future. Asian and Arab cultures, on the other hand, perceive time as a circular concept where future occurrences are expected to be similar to those in the past. Lastly, African societies are considered mostly procedural; where emphasis is laid on completion of tasks, while the time taken to complete an activity is unimportant.

The association between culture and time orientation has also been famously documented in one of Hofstede's dimensions of national culture. Although not without criticism (Fang, 2003), this dimension describes cultures using a time horizon of long-term vs short-term orientation (Minkov and Hofstede, 2010), where nations that score high on long-term orientation tend to embrace values that are slanted toward the future, while nations that score low hold values that are oriented toward the present. Expanding on Hofstede's research, studies have noted that future-oriented societies tend to have a long-term focus and a willingness to sacrifice short-term benefits (House *et al.*, 2004); a finding that has significant implications in the realm of management practice, as described in the next section.

2.1 Time orientation and managerial behavior

Kaynak *et al.* (2013) eloquently describe the influence of time orientation on managerial behavior by asserting that individuals oriented in the past form their decisions by relying on their previous experiences, while those oriented in the future tend to plan ahead for future needs. This interchange between time orientation and management practice is evident in the literature in many areas. Zimbardo *et al.* (1997), for example, note that attitude toward risk is influenced by time orientation, whereby future-oriented individuals are more prone to taking risks when compared to those oriented in the past, a finding also noted by Thoms and Blasko (2004). Similarly, several studies have reported that managerial time orientation correlates with strategic choice (Poterba and Summers, 1992), planning horizons (Wang, 2012), and emphasis on growth and sustainability (Kaynak *et al.*, 2013).

Although, a review of literature has not revealed any theoretical models that explain how time orientation influences strategic practices in an organization, studies have related managerial time orientation to leadership style (Nwankwo, 2008), attitude toward organizational control systems (Hofstede *et al.*, 2010), and the manner in which managers respond to existing and potential competitors (Wang, 2012). What these studies have in common is the implication that managers with a future time perspective are better at strategic management practices by virtue of their foresight and ability to envision the future clearly (O'Connell *et al.*, 2011). As a construct, visioning ability requires individuals to be future oriented (Avlonitis and Papastathopoulou, 2000) and also acts as the basis for strategic planning process (Ruhanen, 2007). Thoms and Greenberger (1993) proposed such an association in a theoretical framework that linked time orientation with leadership and suggested that individuals with a temporal alignment biased toward the future tend to be better at visioning, which in turn makes them better suited for strategic activities, such as long-term planning and dealing with major change.

Despite the significance of visioning ability in enabling strategic work (Mintzberg, 2000), several studies have noted that the association between these constructs is contingent on both organizational factors and environmental dynamics (Ireland and Hitt, 1999). In this context, Chawla *et al.* (2012) have identified environmental uncertainty as one of the key

constraints faced by organizations today. Theoretically, research in change management purports either prediction or control to deal with uncertainty (Vecchiato, 2012). While the prediction approach allows firms to forecast eminent changes in the environment and adapt strategies to respond to the change, control emphasizes entrepreneurial qualities of envisioning future possibilities and strategically directing the organization to sustain in a dynamic setting (Awasthy and Gupta, 2012). Wiltbank *et al.* (2006) note that when an organization has a greater emphasis on predicting and controlling changes in an uncertain environment, visioning ability is of increased importance. Essentially, for a vision to be of use in a fast-changing environment, it is essential that the organization translates the vision into specific objectives to fit the needs of the changing environment (Mintzberg *et al.*, 2009).

While researchers have suggested that long-term time horizons and a future time orientation is likely to facilitate managers to deal with the perceived uncertainty in their environments (Wang, 2012), a framework theorizing the same has not yet been established. Additionally, while these studies have been instrumental in relating time orientation with strategic management practices, the culturally sensitive nature of time orientation implies that these findings do not intuitively extend beyond their societal context. This is of special concern when extending cross-cultural research findings to Middle Eastern countries, as Arab culture is known to be diametrically different from its Western counterparts (Ali, 2009; Alon and Brett, 2007). Although academic literature in the Middle East is not as extensive as it is in other parts of the world, some significant research efforts have been made to assess the management practices in this region, as documented next.

2.2 The Middle Eastern context and the UAE

The Middle East has gathered sufficient research interest over the last decade, some of which explores the salient features of Arab managerial culture (Lalonde, 2013; Huang *et al.*, 2013; Azzam and Rettab, 2015). For instance, Sabri (2012) has examined the influence of work value orientation on leadership styles in an Arab country and signified the importance of cultural factors in understanding organizational behavior. Similarly, Al-Shammari and Hussein (2007) have linked strategic management and planning to improved organizational performance in Jordan.

As part of the GLOBE study, House *et al.* (2004) also examined some Middle Eastern countries to study the influence of culture on organizational practices, specifically leadership. In terms of contextual factors, the authors recorded average scores on nine cultural dimensions; namely, group and family collectivism, power distance, future orientation, gender egalitarianism, uncertainty avoidances, institutional collectivism, humane orientation, performance orientation, and assertiveness. The Middle Eastern countries that became part of the study scored high on group and family collectivism and power distance, low on future orientation, and were ranked mid ranged on the other five dimensions.

While the UAE did not form part of the GLOBE study and, like most Arab countries, also does not have an official score on Hofstede's national culture dimension of long-term orientation, Arab countries, in general, are classified as having a short-term time orientation, with an emphasis on the past (Hurn, 2007). Lalonde (2013), for instance, notes that entrepreneurs in Arab countries employ a reactive approach to dealing with change and demonstrate minimal proactivity in managing their business affairs. Abdul-Gadar (1997) attributes such tendencies of Arab managers to their fatalistic orientation and strong religious beliefs, which the author has cited as one of the main reasons Arab managers are resistant to long range planning.

Although the literature predominantly reports Arab managers to be more traditional than their Western counterparts (Hurn, 2007), there is a lack of consensus when it comes to studies that focus on the UAE. For instance, Elbanna (2010) notes that managers across different business sectors in the UAE demonstrate a positive attitude toward strategic planning. Similarly, Irvine (2008) notes the transformation of the UAE into a more open and diversified

economy, where firms are effectively managing challenges of operating in a globalized environment (Barhem, 2008). At the same time, studies have noted that firms in the UAE lack change management capabilities (Bin Taher *et al.*, 2015; Yaseen and Okour, 2012), exhibit a short-term time orientation (Fadol and Sandhu, 2013), and appear to have a non-strategic focus (Yaseen, 2013).

In the same context, research has documented the dynamic nature of the environment in which firms in the UAE operate (Fadol *et al.*, 2015), as well as the emphasis managers place on strategic planning to achieve organizational performance (Elbanna and Alhwarai, 2012). Yet, Bealer and Bhanugopan (2014) note that managers in the UAE lack key characteristics of effective leadership and do not actively engage in developing a shared vision for the future. Contradictory accounts of the managerial practices in this region signify the need for a more thorough and less subjective assessment of these constructs. Toward this end, the next section uses insights from the published body of work to derive a conceptually accurate, and logically sound, basis for developing this study's theoretical framework.

3. Theoretical framework

The goal of this study is to examine time orientation of managers in the UAE, and to explore the mechanism by which it influences their preference for strategic work activities. As suggested by Kaynak *et al.* (2013), this study proposes that time orientation is positively associated with strategic practice in an organization, whereby future-oriented managers would exhibit increased preference toward strategic activities. Similarly, based on the literature (Avlonitis and Papastathopoulou, 2000) a positive association between time orientation and visioning, as well as strategic practice and environmental uncertainty (Mintzberg *et al.*, 2009) is hypothesized. The first set of hypotheses are modeled as follows:

H1a. Time orientation is positively associated with strategic practice.

H1b. Time orientation is positively associated with visioning ability.

H1c. Strategic practice is positively associated with perceived environmental uncertainty.

Deriving from the work of Thoms (2004), time orientation is defined here as an individual's preference toward a particular space in time; past, present, or future. The construct of strategic practices, on the other hand, assesses the perceived importance of strategic management in terms of the extent to which decision makers favor strategic tasks over operational activities. As dictated in theory, Figure 1 classifies the influence of time orientation on strategic practice into direct and indirect effects, and establishes visioning ability as the mediating variable. Visioning ability, in this study, refers to an individual's ability to formulate an image of the organization in the future.

Supplemented by the work of Thoms and Greenberger (1998) and Hwang *et al.* (2005), it is proposed that future time orientation leads to improved visioning ability, which in turn leads to an inclination toward strategic management activities (O'Connell *et al.*, 2011). This is hypothesized as:

H2a. Time orientation influences visioning ability.

H2b. Visioning ability influences strategic practice.

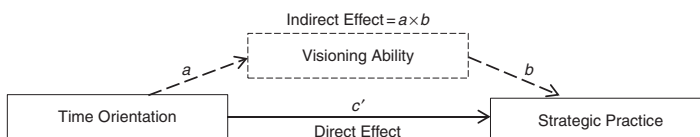


Figure 1.
Simple mediation
model

H2c. Time orientation influences strategic practice.

H2d. Visioning ability mediates the relationship between time orientation and strategic practice.

Since previous studies suggest that the management practice of engaging in strategic work is contingent on the level of uncertainty perceived in the environment (Ireland and Hitt, 1999), a moderating variable is introduced into the framework to represent this relationship. The moderating variable, perceived uncertainty, measures the degree of unpredictability managers associate with their business environment. The resulting conditional process model (Preacher and Hayes, 2008), illustrated in Figure 2, integrates the mediation and moderation effects derived from the literature.

In line with the model, the following hypothesis is developed:

H3. Perceived uncertainty moderates the relationship between visioning ability and strategic practice, whereby higher levels of perceived uncertainty would weaken the association between visioning ability and preference for strategic work.

The next section documents the research methodology employed to carry out this research with details on the research instrument used and the respondents who participated in this study.

4. Methodology

Since the research required an assessment of managerial attitude and perception, a survey research methodology was employed for collecting primary data. A closed-ended questionnaire was developed and is included in the Appendix. The first section of the instrument inquired basic demographic information of the survey participants, such as age, gender, and job title. Next, the questionnaire made use of the ten-item future time perspective scale developed by Thoms (2004), which measures time orientation on a scale of 1-5. Average rating on this scale when close to 5 depicts personality traits consistent with having a future time orientation, while average scores close to 1 signify an orientation toward the past. Similarly, to assess visioning ability of the participants, the next section of the questionnaire included a 12-item visioning ability scale (Thoms and Blasko, 1999) that quantifies an individual's ability to create an organizational vision. Perceived uncertainty was also assessed in a similar manner by adapting the turbulence scales developed and validated by Jaworski and Kohli (1993). Lastly, managers' inclination toward strategic work was assessed using a semantic differential scale composed of dimensions of operational and strategic management practices documented by Middlewood and Lumby (1998).

The research targeted UAE nationals holding managerial-level positions at organizations in the country; a population that is hard to reach. Therefore, snowball sampling technique was utilized to invite respondents to participate in the study. The sample was initiated using e-mail invitations to an online survey that were sent to network contacts of the researchers. Upon accepting the invitation, the respondents received a link to the survey along with a request to invite more contacts from their respective networks to participate in the study. As the prime criterion for inclusion in the sample, each

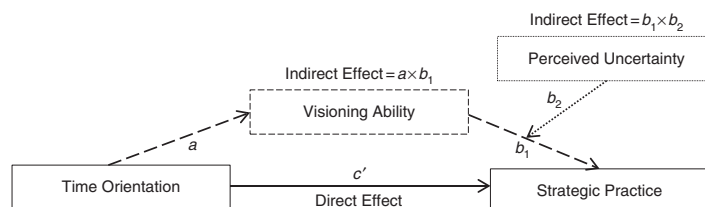


Figure 2.
Moderated mediation
model

respondent was required to self-identify as a UAE national with a full-time managerial-level position in a private or public sector organization. For all participants employed at private firms, respective corporate websites were specifically reviewed to ensure that each firm's leadership team was also primarily Arab. This was done to retain focus of this study on Arab managerial practices only, and to minimize the possibility of participants' responses being unduly influenced by a predominantly non-Arab work environment.

Subsequent to the data collection, the participant responses were sorted and edited for consistency and completion, and later coded using a statistical data package for analysis. The preliminary results of the data analysis are summarized in Table I. The sample included 67 participants comprising 53.7 percent male and 46.3 percent female respondents, with the majority in the age group of 40 years and above, and holding senior managerial positions. In total, 55.2 percent of the participants were employed in private corporations, while 44.8 percent held full-time positions in the public sector, with an average of 19.72 years of experience of working in the UAE.

Table I also provides some insight into the mean scores of the four main constructs studied in this paper. On a scale of 5, time orientation received an average score of 3.82, which signifies that the sampled participants did not exhibit an orientation toward the past; rather, they appeared to be more comfortable seeing themselves in the present and future time frame. Similarly, the participants' average visioning ability was recorded as 3.80, which is moderately fair on a scale of 5. It appears that local managers in the UAE consider their environment to be marginally unpredictable, with an average perceived uncertainty score of 3.65. Lastly, the average score on strategic practice was found to be 4.36, indicating that the sampled participants preferred strategic tasks more than operational activities at their workplace.

While, on average, the time orientation and strategic practice scores of male participants were slightly higher than that of females, a two-tailed *t*-test indicated that these differences were not statistically significant ($\alpha = 0.05$) across gender. The next section documents the findings of the survey and reports the results of the hypothesis tests.

	Male (%)	Female (%)	Total (<i>n</i> = 67)
<i>Age (years)</i>			
Below 30	10.45	4.48	14.93
31-40	22.39	10.45	32.84
Above 40	20.90	31.34	52.24
Total	53.73	46.27	100
<i>Organization</i>			
Private	32.84	22.39	55.22
Public	20.90	23.88	44.78
Total	53.73	46.27	100
<i>Managerial level</i>			
Lower	1.49	16.42	17.91
Middle	14.93	5.97	20.90
Senior	38.81	22.39	61.19
Total	55.22	44.78	100
	Male	Female	Average
UAE work experience (years)	24.21	15.23	19.72
Average time orientation	3.88	3.76	3.82
Average visioning ability	3.72	3.87	3.80
Average perceived uncertainty	3.69	3.61	3.65
Average strategic practice	4.40	4.31	4.36

Table I.
Descriptive statistics

5. Results and discussion

The data were first analyzed using descriptive statistics to summarize meaningful information, following which linear regression and conditional process analysis were used to test the theoretical framework.

5.1 Bivariate correlations

Pearson product moment correlation is one of the most common measures used to study hypothesized linear relationships between variables. As summarized in Table II, all four variables showed significant positive correlations. Time orientation was found to have a significant positive association with both visioning ability (0.449) and strategic practice (0.574). Similarly, a moderately strong positive relationship was noted between visioning ability and strategic practice (0.536). Perceived uncertainty is also found to have moderate to weak, positive, and statistically significant correlations with time orientation (0.506), strategic practice (0.428), and visioning ability (0.351).

It can be inferred from these results that future-oriented managers tend to have stronger visioning abilities and an inclination toward performing strategic tasks. Similarly, it appears that managers with future time orientations, and stronger visioning ability, perceive a greater degree of uncertainty in their environment. These significant correlations form the basis for testing the theoretical framework proposed in this study using linear regression, as discussed next.

5.2 Linear regression and mediation analysis

The second hypothesis of this study proposed that managerial time orientation influences visioning ability as well as involvement in strategic practices. This was tested using linear regression, as illustrated in Tables III and IV. Results indicate that 20.1 percent of variation in visioning ability is explained by time orientation, which is significant with a regression coefficient of 0.561 ($p < 0.05$). Table III also explores this relationship further by studying

Table II.
Bivariate correlations

	Time orientation	Visioning ability	Perceived uncertainty	Strategic practice
Time orientation	1			
Visioning ability	0.449**	1		
Perceived uncertainty	0.506**	0.351**	1	
Strategic practice	0.574**	0.536**	0.428**	1

Note: **Significant at 0.01 level (two-tailed)

Table III.
Influence of time orientation on visioning ability controlled for gender and age

Model		Coefficients	<i>t</i>	Sig.	<i>R</i> ²	<i>R</i> ² change	Sig. <i>F</i> change
1	(Constant)	1.642	3.063	0.003			
	Time orientation	0.561	4.048	0.000	0.201		
2 ^a	(Constant)	1.243	2.072	0.042			
	Time orientation	0.581	4.205	0.000	0.226	0.025	0.157
	Gender – male	0.219	1.431	0.157			
3 ^b	(Constant)	1.669	3.015	0.004			
	Time orientation	0.554	3.860	0.000			
	Age – below 30 years	–0.046	–0.202	0.841	0.202	0.001	0.961
	Age – 31–40 years	0.023	0.132	0.895			

Notes: ^aModel controlling for gender (binary coded with reference category: female); ^bmodel controlling for age (dummy coded with reference category: above 40 years)

the influence of time orientation when age and gender are controlled for. The insignificant change in R^2 implies that the influence of time orientation on visioning ability in the current sample is not affected by gender, and experiences insufficient differentiation in terms of age.

Results in Table IV summarize the regression model examining the relationship between time orientation and strategic practices. A regression coefficient of 0.653 ($p < 0.05$) indicates a significant influence of time orientation on strategic practices, where 32.9 percent of variation in strategic practices can be explained by a manager's time orientation.

The regression model suggests that time orientation positively influences strategic practice. To test whether visioning ability mediates this relationship, mediation analysis was performed using the bootstrapping technique. Bootstrapping is a non-parametric method devised by Preacher and Hayes (2008) and was chosen for its statistical accuracy and appropriateness when dealing with smaller samples (Fritz and Mackinnon, 2007). As presented in Table V, the bootstrap technique classifies the relationships in the mediation model as direct and indirect effects, and the coefficients of these effects are used to quantify the underlying relationships. More specifically, the results indicate that participants who considered themselves as future oriented had higher visioning ability ($a = 0.5613$) than those who classified themselves as oriented in the past, and participants with higher visioning ability showed greater preference for performing strategic activities ($b = 0.3172$). This is also illustrated in Figure 3.

Typically, some form of mediation is established when the indirect effect of the model is found to be significant. Since, the 95 percent confidence interval for the indirect effect

	R	R^2	Ad. R^2		
	0.574	0.329	0.319		
ANOVA	SS.	df	MS	F	Sig.
Regression	8.726	1	8.726	31.888	0.000
Residual	17.788	65	0.274		
Total	26.514	66			
Model coefficients	Unstd. β	SE	Std. β	t	Sig.
(Constant)	1.859	0.447		4.158	0.000
Time orientation	0.653	0.116	0.574	5.647	0.000

Note: Independent variable: time orientation; dependent variable: strategic practice

Table IV.
Influence of time
orientation on
strategic practice

	Coefficients	SE	t	Sig (two)	Path
<i>Direct and total effects</i>					
$b(YX)$	0.6533	0.1157	5.6470	0.000	c
$b(MX)$	0.5613	0.1387	4.0481	0.0001	a
$b(YM.X)$	0.3172	0.0965	3.2886	0.0016	b
$b(YX.M)$	0.4752	0.1207	3.9386	0.0002	c'
<i>Model summary for DV model</i>					
R^2	Ad. R^2	F	df1	df2	p
0.4261	0.4028	23.7590	2.00	64.00	0.0000
<i>Bootstrap results for indirect effect (bootstrap resamples = 5,000)</i>					
	Data	Mean	SE	LL 95 CI	UL 95 CI
Effect	0.1781	0.1806	0.0732	0.0522	0.3380

Notes: Independent variable: time orientation; mediating variable: visioning ability; dependent variable: strategic practice direct and total effects

Table V.
Mediation analysis

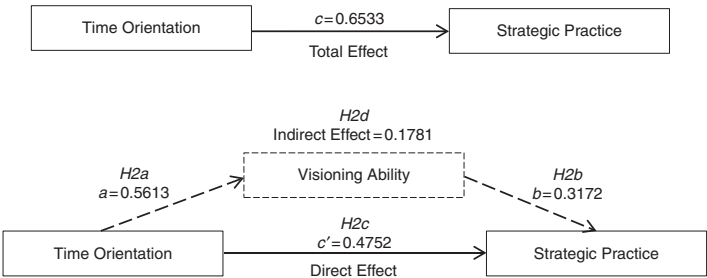
($a \times b = 0.1781$) based on 5,000 bootstrap samples did not contain zero, the effect is statistically significant, and implies that the influence of time orientation on strategic practices is not independent of its effect on visioning ability. Additionally, with visioning ability as a mediator, the explanatory power of the overall model has increased from 31.9 to 40.28 percent.

Since the results suggest that time orientation indirectly affects strategic practices by influencing an individual's visioning ability, the output from the bootstrap technique can now be used to establish the type of mediation involved. Given that both the indirect effect ($a \times b$) and total effect (c) are significant and their product ($a \times b \times c$) is positive, the mediation can be classified as complementary. Deriving from the work of Zhao *et al.* (2010), complementary mediation suggests an effective partial mediation model where the identified mediator is consistent with the hypothesized theoretical framework, with room for additional mediators that may complete the model.

5.3 Conditional process analysis

The last hypothesis of this study was expressed by means of a conditional process model that introduced perceived uncertainty as a variable moderating the relationship between visioning ability and strategic practices. Results of the conditional process analysis are presented in Tables VI and VII, as well as in Figure 4. The model summary indicates that, overall, the

Figure 3.
Direct and total effects
in mediation model



<i>Outcome: visioning ability</i>							
Model summary	<i>R</i>	<i>R</i> ²	MSE	<i>F</i>	df1	df2	<i>p</i>
	0.4487	0.2013	0.3931	16.39	1.00	65.00	0.0001
Model	Coeff.	SE	<i>t</i>	<i>p</i>	LLCI	ULCI	
Constant (<i>i</i> ₁)	1.6415	0.5359	3.0631	0.0032	0.5713	2.7118	
Time orientation (<i>a</i>)	0.5613	0.1387	4.0481	0.0001	0.2844	0.8382	
<i>Outcome: strategic practice</i>							
Model summary	<i>R</i>	<i>R</i> ²	MSE	<i>F</i>	df1	df2	<i>p</i>
	0.7006	0.4909	0.2177	14.944	4.00	62.00	0.0000
Model	Coeff.	SE	<i>t</i>	<i>p</i>	LLCI	ULCI	
Constant (<i>i</i> ₂)	-1.840	1.3380	-1.375	0.1741	-4.51	0.84	
Visioning ability (<i>b</i> ₁)	1.266	0.3939	3.214	0.0021	0.48	2.05	
Time orientation (<i>c'</i>)	0.3424	0.1298	2.637	0.0106	0.08	0.60	
Perceived uncertainty (<i>b</i> ₂)	0.9559	0.3528	2.709	0.0087	0.25	1.66	
Interaction (<i>b</i> ₃)	-0.2413	0.0955	-2.527	0.0141	-0.43	-0.05	

Table VI.
Conditional process
analysis

Notes: Interaction: Visioning ability × Perceived uncertainty. Independent variable: time orientation; mediating variable: visioning ability; moderating variable: perceived uncertainty; dependent variable: strategic practice

Table VII.
Moderated
mediation – direct
and indirect effects

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
0.3424	0.1298	2.6372	0.0106	0.0829	0.6019

Conditional indirect effects of X on Y at values of the moderator^a

Mediator	Uncertainty	Effect	Boot SE	Boot LLCI	Boot ULCI
Visioning ability	2.6188	0.3558	0.1158	0.1513	0.6104
Visioning ability	3.6567	0.2152	0.0761	0.0905	0.3903
Visioning ability	4.6947	0.0746	0.0863	-0.0842	0.2561

Index of moderated mediation^b

Mediator	Index	Boot SE	Boot LLCI	Boot ULCI
Visioning ability	-0.1354	0.0656	-0.2733	-0.0182

Notes: ^aValues for quantitative moderators are the mean and plus/minus one SD from mean. ^bNo. of bootstrap samples for bias corrected bootstrap confidence intervals: 5,000 level of confidence for all confidence intervals in output: 95.00

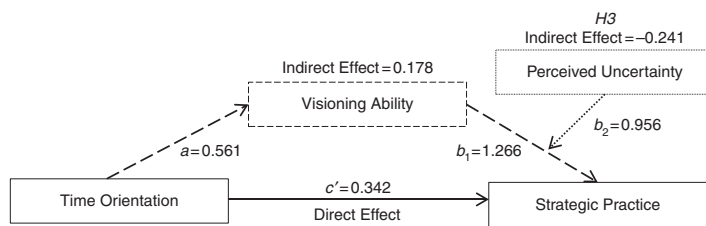


Figure 4.
Moderated mediation
model

model is significant ($p < 0.05$), and a good fit for the data set. Additionally, the three variables, time orientation, visioning ability, and perceived uncertainty, explain approximately half (49.09 percent) of the variation in the dependent variable, strategic practice.

Results of the moderated mediation also confirm the positive correlation between time orientation and visioning ability. As was stated earlier, the more future oriented managers are, the greater is their visioning ability ($a = 0.5613$). In this model, the conditional direct effect of time orientation on strategic work also signifies a positive association ($c' = 0.3424$). As this effect is not moderated, its significance can be determined simply by looking at its p -value (0.0106) generated from the regression model. Additionally, the statistically significant interaction between the moderator and the mediating variable ($b_3 = -0.2413$, $p = 0.0141$) indicates that the effect of visioning ability on strategic practices is contingent on the level of uncertainty perceived in the environment. The moderator, perceived uncertainty, in this case, creates a buffering effect by means of which the influence of visioning ability on strategic practice grows weaker as perceived uncertainty increases.

The interaction between visioning ability and perceived uncertainty can be further explored by studying the conditional effect of visioning ability on strategic work at various levels of perceived uncertainty. This is done by using the data set to first classify perceived uncertainty into three levels: low (2.62), average (3.66), and high (4.69), and then reviewing the influence of visioning ability on strategic practice at each of these levels.

As can be seen from Table VII, the values of the conditional effects are positive at all three levels. This implies that regardless of the level of perceived uncertainty in the environment, managers with higher visioning ability have a higher preference for strategic work. However, this positive association is larger when environmental uncertainty is perceived as low, and the association recedes as perceived uncertainty rises. The influence of visioning ability on strategic work eventually becomes statistically insignificant, when

the managers perceive the level of uncertainty in the environment as high. Therefore, it can be inferred from the conditional process analysis that future time orientation and better visioning ability is conducive to preference toward strategic work in environments where the level of uncertainty is perceived as low-moderate. The effect of visioning ability on strategic work is less prominent in instances where future-oriented managers perceive the environment as highly uncertain.

Combined, these results indicate that managers with future time orientation seem to develop higher visioning ability which results in them carrying out more strategic work. However, this effect lasts only if the environmental uncertainty is perceived as sufficiently low. As the level of perceived uncertainty increases, the relationship between visioning ability and strategic work weakens in magnitude, before becoming statistically insignificant at higher levels of uncertainty. In other words, when the environment is perceived as highly uncertain, the visioning ability of managers, resulting from future time orientation, does not appear to significantly influence strategic work.

6. Conclusion

The aim of this study was to explore the concept of time orientation in an Arab context, and examine its impact on the preference for strategic practices in the region. The results indicate that time orientation significantly influences strategic practice, and that this relationship is partially mediated by an individual's visioning ability. More specifically, participants who considered themselves as future oriented had a stronger visioning ability, and showed greater preference for performing strategic activities than those oriented in the past. Conversely, participants who reported themselves as past oriented were found to be weaker at visioning a future image for their companies and more inclined toward performing routine operational tasks at their organizations. Moreover, the bootstrap technique revealed the nature of the mediation as complementary; signifying the effectiveness of the mediation established in this study, and implying that the explanatory power of the model can be further enhanced by including additional, theoretically relevant, mediators.

While indirect effect of time orientation on strategic work through visioning ability is positive, the study also notes that the effect is stronger when the level of uncertainty in the environment is perceived as low. Thus, relatively future-oriented managers seem to be better at envisioning the future state of their organizations, which in turn translates into their inclination to perform strategic work, but more so in cases where the level of uncertainty is perceived as low-moderate. The results of this study suggest that when managers perceive the degree of uncertainty in the environment as high, they envision an unstable future, which reduces their tendency to plan ahead and diminishes their preference for carrying out strategic activities.

6.1 Research implications

Despite the widely acknowledged need for research in the field of globalization and emerging market development, academic literature in this area is fairly disproportionate, with Middle Eastern economies receiving little to no attention. Given that the UAE is evolving as a potentially strong player in international trade and commerce (Balakrishnan, 2013), this study not only provides insight into an understudied emerging economy, but also lays the groundwork for contextual discussion on strategic management practices in general, and dealing with dynamic environments in particular. The results also have several implications for academics, industry professionals, and decision makers responsible for the strategic management and growth of their firms.

For instance, the study emphasizes the role of future time orientation and visioning ability in enhancing strategic management practices. Managers who are interested in strategic roles should, therefore, work on expanding their time horizons to be more future oriented and train

to be better visionaries. Similarly, the moderating role of perceived uncertainty signifies that in highly turbulent environments, strategic managers are unable to effectively utilize their future time orientation and strong visioning ability. With little proficiency to counter environmental uncertainties, organizations in the UAE will find themselves incapable of dealing with turbulent environments that typically follow rapid growth in emerging economies (Enderwick, 2009). In such cases, top management commitment and organizational cultures conducive to change are required to ensure that firms are ready for the complexities associated with changes in their local and international markets.

The results of this study are also useful for human resource development professionals, who are responsible for recruiting, training, and appraising managerial personnel. Evidently, managers that intuitively favor the past or the present have weaker visioning abilities, making them a better fit for handling operational decisions. Strategic work, on the other hand, is preferred by, and better suited for, managers oriented in the future. To ensure that the organization's management is capable of successfully performing its roles, it is necessary that adequate measures are taken to assess the strengths and weaknesses of those designated with operational and strategic functions. In principal, managers typically required to perform strategic functions in the organization should possess, or be trained for, a future-oriented time perspective, strong visioning abilities, and competencies for dealing with environmental uncertainty and change.

These results are also useful for multinational firms that look forward to interacting with host firms in emerging economies. A useful finding for cross-border firms, especially those working on international strategies that target Arab countries, is the preliminary evidence for the future-time orientation of local managers in the UAE. Contrary to what is suggested in academic literature, the results of this study suggest that local managers in the region prefer strategic activities over operational tasks and favor the development of long-term plans. In light of these findings, international firms that conduct business in the UAE should not misconceive the fatalistic orientation commonly associated with Arab managers into assuming that local firms in this region do not believe in, or refrain from, strategic planning. Similarly, domestic firms that regularly outsource, or plan to expand, their operations abroad should be proactive in dealing with cultural differences that may result from the way time is perceived, and organizations are run, in other parts of the world.

Theoretically, results of this study are also relevant for academics and researchers that focus on cross-cultural differences and international strategy. Moreover, the empirical evidence confirming the significance of a conditional process model is as relevant to theory as it is to practice. Since, the mechanism underlying the relationship between time orientation and strategic management in published literature is virtually nonexistent, the conceptual model developed and tested in this paper is one of the firsts to relate the temporal alignment of managers to their preference for strategic work. The model also signifies the importance of perceived environmental uncertainty in moderating this relationship and confirms the challenge of practicing strategic management in an increasingly turbulent environment. Moreover, the partially mediating role of visioning ability in this study opens new venues for research that call for more extensive cross-sectional studies aimed at better explaining the relationship between time orientation and strategic practice.

6.2 Limitations and areas for future research

This study is not without its limitations and future research is recommended to further expand on the findings of this paper. First, survey research methods, despite their relevance for studying attitudes and perceptions, are not sufficient to justify causation, and therefore, the statistically significant relationships identified in this paper should not be inferred as causal associations. Second, although the bootstrapping technique was used particularly to counter biases resulting from a small sample size, the questionnaires were administered to a

very limited, albeit representative, group of participants in the UAE and generalization of results should be done with caution. The small sample size also necessitated that the conceptual model be kept parsimonious. Where theoretically relevant, studies in the future can build on the existing findings to develop a more comprehensive model. Future research is also recommended on a wider geographical area, possibly across multiple countries in the Middle East, such that cross-national results can be used to better understand the concept of time orientation in Arab countries.

Given that visioning ability is positively associated with strategic practices in an organization, studies in the future may aim to test the improvement in strategic practices that result from providing training programs in visioning. A study on determining the efforts Middle Eastern firms should take to gain a better control over environmental uncertainty is also a topic worth exploring. Lastly, the model tested in this study revealed complementary mediation, implying that the proposed model has room for additional mediators that may have the potential to better explain the underlying relationship between time orientation and strategic practices. Future research that aims to identify these variables can help develop a model with far reaching theoretical and practical implications in this field.

References

- Abdul-Gadar, H. (1997), "Information systems strategies in multi-national companies in Arab Gulf countries", *International Journal of Information Management*, Vol. 17 No. 1, pp. 3-12.
- Ahlstrom, D. and Bruton, G.D. (2009), *International Management: Strategy and Culture in the Emerging World*, Cengage Learning, Mason, OH.
- Ali, A. (2009), *Business and Management Environment in Saudi Arabia: Challenges and Opportunities for Multinational Corporations*, Routledge, New York, NY.
- Alon, I. and Brett, J.M. (2007), "Perceptions of time and their impact on negotiations in the Arabic-speaking Islamic world", *Negotiation Journal*, Vol. 23 No. 1, pp. 55-73.
- Al-Shammari, H.A. and Hussein, R.T. (2007), "Strategic planning-firm performance linkage: empirical investigation from an emergent market perspective", *Advances in Competitiveness Research*, Vol. 15 Nos 1/2, pp. 15-26.
- Ashkanasy, N., Gupta, V. and Mayfield, M.S. (2004), "Future orientation", in House, R. *et al.* (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage, Thousand Oaks, CA, pp. 282-342.
- Avlonitis, G.J. and Papastathopoulou, P.G. (2000), "Marketing communications and product performance: innovative vs non-innovative new retail financial products", *International Journal of Bank Marketing*, Vol. 18 No. 1, pp. 27-41.
- Awasthy, R. and Gupta, R.K. (2012), "Dimensions of the learning organization in an Indian context", *International Journal of Emerging Markets*, Vol. 7 No. 3, pp. 222-244.
- Azzam, A. and Rettab, B. (2015), "Estimation and application of a complete demand system for the United Arab Emirates", *International Journal of Emerging Markets*, Vol. 10 No. 3, pp. 329-349.
- Baack, D.W. and Boggs, D.J. (2008), "The difficulties in using a cost leadership strategy in emerging markets", *International Journal of Emerging Markets*, Vol. 3 No. 2, pp. 125-139.
- Balakrishnan, M.S. (2013), "Methods to increase research output: some tips looking at the MENA region", *International Journal of Emerging Markets*, Vol. 8 No. 3, pp. 215-239.
- Barhem, B. (2008), "Are global managers able to deal with work stress", *Journal of Accounting, Business and Management*, Vol. 15 No. 1, pp. 53-70.
- Bealer, D. and Bhanugopan, R. (2014), "Transactional and transformational leadership behaviour of expatriate and national managers in the UAE: a cross-cultural comparative analysis", *International Journal of Human Resource Management*, Vol. 25 No. 2, pp. 293-316.

-
- Bearden, W.O., Money, R.B. and Nevins, J.L. (2006), "A measure of long-term orientation: development and validation", *Journal of the Academy of Marketing Science*, Vol. 34 No. 3, pp. 456-467.
- Bergadaà, M.M. (1990), "The role of time in the action of the consumer", *Journal of Consumer Research*, Vol. 17 No. 3, pp. 289-302.
- Bin Taher, N.A., Vlad, K. and Silva, L. (2015), "A framework for leading change in the UAE public sector", *International Journal of Organizational Analysis*, Vol. 23 No. 3, pp. 348-363.
- Chawla, C., Mangaliso, M., Knipes, B. and Gauthier, J. (2012), "Antecedents and implications of uncertainty in management", *Journal of Management History*, Vol. 18 No. 2, pp. 200-218.
- Contractor, F.J. (2013), "Punching above their weight", *International Journal of Emerging Markets*, Vol. 8 No. 4, pp. 304-328.
- Dragoni, L., Oh, I., Vanakatywyk, P. and Tesluk, P.E. (2011), "Developing executive leaders: the relative contribution of cognitive ability, personality, and the accumulation of work experience in predicting strategic thinking competency", *Personnel Psychology*, Vol. 64 No. 4, pp. 829-864.
- Elbanna, S. (2010), "Strategic planning in the United Arab Emirates", *International Journal of Commerce and Management*, Vol. 20 No. 1, pp. 26-40.
- Elbanna, S. and Alhwarai, M. (2012), "The influence of environmental uncertainty and hostility on organization performance", Al Ain, UAEU-FBE-Working Paper Series ISSN 2079-7141.
- Enderwick, P. (2009), "Responding to global crisis: the contribution of emerging markets to strategic adaptation", *International Journal of Emerging Markets*, Vol. 4 No. 4, pp. 358-374.
- Fadol, Y.Y. and Sandhu, M.A. (2013), "The role of trust on the performance of strategic alliances in a cross-cultural context: a study of the UAE", *Benchmarking: An International Journal*, Vol. 20 No. 1, pp. 106-128.
- Fadol, Y., Barhem, B. and Elbanna, S. (2015), "The mediating role of the extensiveness of strategic planning on the relationship between slack resources and organizational performance", *Management Decision*, Vol. 53 No. 5, pp. 1023-1044.
- Fang, T. (2003), "A critique of Hofstede's fifth national culture dimension", *International Journal of Cross Cultural Management*, Vol. 3 No. 3, pp. 347-368.
- Frankel, E.G. (2008), *Quality Decision Management – The Heart of Effective Futures-Oriented Management. A Primer for Effective Decision-Based Management*, Springer, Cambridge, MA.
- Fritz, M.S. and Mackinnon, D.P. (2007), "Required sample size to detect the mediated effect", *Psychological Science*, Vol. 18 No. 3, pp. 233-239.
- Graham, R.J. (1981), "The role of perception of time in consumer research", *Journal of Consumer Research*, Vol. 7 No. 4, pp. 335-342.
- Gupta, R., Hershey, D.A. and Gaur, J. (2012), "Time perspective and procrastination in the workplace: an empirical investigation", *Current Psychology*, Vol. 31 No. 2, pp. 195-211.
- Hall, E.T. (1976), *Beyond Culture*, Doubleday and Company, Inc, Garden City, NY.
- Heskett, J. (2013), "How relevant is long-range strategic planning?", available at: <http://hbswk.hbs.edu/item/7341.html> (accessed August 9, 2014).
- Hofstede, G., Hofstede, G.J. and Minkov, M. (2010), *Cultures and Organizations: Software of the Mind*, Revised 3rd ed., McGraw-Hill, London.
- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W. and Gupta, V. (2004), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage, Thousand Oaks, CA.
- Huang, V.Z., Nandialath, A., Alsayaghi, A.K. and Karadeniz, E.E. (2013), "Socio-demographic factors and network configuration among MENA entrepreneurs", *International Journal of Emerging Markets*, Vol. 8 No. 3, pp. 258-281.

- Hurn, B.J. (2007), "The influence of culture on international business negotiations", *Industrial and Commercial Training*, Vol. 39 No. 7, pp. 354-360.
- Hwang, A., Khatri, N. and Srinivas, E.S. (2005), "Organizational charisma and vision across three countries", *Management Decision*, Vol. 43 Nos 7/8, pp. 960-974.
- Ireland, R.D. and Hitt, M.A. (1999), "Achieving and maintaining strategic competitiveness in the 21st century: the role of strategic leadership", *The Academy of Management Executive*, Vol. 13 No. 1, pp. 43-57.
- Irvine, H. (2008), "The global institutionalization of financial reporting: the case of the UAE", *Accounting Forum*, Vol. 32 No. 2, pp. 125-142.
- Jansson, H. and Söderman, S. (2015), "International strategic management hybrids in China", *International Journal of Emerging Markets*, Vol. 10 No. 2, pp. 209-223.
- Jaworski, B.J. and Kohli, A.K. (1993), "Market orientation: antecedents and consequences", *Journal of Marketing*, Vol. 57 No. 3, pp. 53-70.
- Kaynak, E., Kara, A. and Chow, C.S.F. (2013), "Time orientation and attitudes towards advertising in a high-context culture: an empirical study of Macau", *Journal of Asia Pacific Business*, Vol. 14 No. 2, pp. 88-106.
- Kazmi, S.A.Z., Naaranoja, M. and Worlin, A. (2014), "Little knowledge is a huge treasure – exploring UAE as a keen entrepreneur", *International Conference on Business Strategy and Organizational Behaviour (BizStrategy). Proceedings, Global Science and Technology Forum: 1-5, July 21-22, Singapore*.
- Koles, B. and Kondath, B. (2014), "Strategy development processes in Central and Eastern Europe: a cross-regional perspective", *International Journal of Emerging Markets*, Vol. 9 No. 3, pp. 386-399.
- Lalonde, J. (2013), "Cultural determinants of Arab entrepreneurship: an ethnographic perspective", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 7 No. 3, pp. 213-232.
- Middlewood, D. and Lumby, J. (1998), *Strategic Management in Schools and Colleges*, Sage Publications, London.
- Minkov, M. and Hofstede, G. (2010), "Hofstede's fifth dimension: new evidence from the world values survey", *Journal of Cross Cultural Psychology*, Vol. 43 No. 1, pp. 3-14.
- Mintzberg, H. (2000), "View from the top: Henry Mintzberg on strategy and management", *Academy of Management Executive*, Vol. 14 No. 3, pp. 31-42.
- Mintzberg, H., Ahlstrand, B. and Lampel, J. (2009), *Strategy Safari*, Prentice Hall, London.
- Nwankwo, R. (2008), "The relationship between time orientations and leadership styles of parochial school administrators", unpublished doctoral dissertation, Texas Southern University, Houston, Texas.
- O'Connell, D., Hickerson, K. and Pillutla, A. (2011), "Organizational visioning: an integrative approach", *Group and Organization Management*, Vol. 36 No. 1, pp. 103-125.
- Phongpetra, V. and Johri, L.M. (2011), "Impact of business strategies of automobile manufacturers in Thailand", *International Journal of Emerging Markets*, Vol. 6 No. 1, pp. 17-37.
- Pisapia, J., Reyes-Guerra, D. and Coukos-Semmel, E. (2005), "Developing the leader's strategic mindset: establishing the measures", *Leadership Review*, Vol. 5 No. 1, pp. 41-68.
- Poterba, J.M. and Summers, L.H. (1992), "Time horizons of American firms: new evidence from a survey of CEOs", working paper, Harvard Business School, Cambridge, MA.
- Preacher, K.J. and Hayes, A.F. (2008), "Contemporary approaches to assessing mediation in communication research", in Hayes, A.F., Slater, M.D. and Snyder, L.B. (Eds), *The Sage Sourcebook of Advanced Data Analysis Methods for Communication Research*, Sage Publications, Thousand Oaks, CA, pp. 13-54.
- Qian, J., Lin, X., Han, Z.R., Tian, B., Chen, G.Z. and Wang, H. (2015), "The impact of future time orientation on employees' feedback-seeking behavior from supervisors and co-workers: the

- mediating role of psychological ownership", *Journal of Management & Organization*, Vol. 21 No. 3, pp. 336-349.
- Ruhanen, L. (2007), "Destination competitiveness: meeting sustainability objectives through strategic planning and visioning", in Matias, Á., Nijkamp, P. and Neto, P. (Eds), *Advances in Modern Tourism Research*, Springer: Physica-Verlag, Heidelberg, pp. 133-151.
- Sabri, H.A. (2012), "Re-examination of Hofstede's work value orientations on perceived leadership styles in Jordan", *International Journal of Commerce and Management*, Vol. 22 No. 3, pp. 202-218.
- Slawinski, N. and Bansal, P. (2012), "A matter of time: the temporal perspectives of organizational responses to climate change", *Organization Studies*, Vol. 33 No. 11, pp. 1537-1563.
- Thoms, P. and Greenberger, D.B. (1993), "A model of the relationship between leadership and time", paper presented at the Annual Meeting of the Academy of Management, Atlanta, GA.
- Thoms, P. (2004), *Driven by Time*, Praeger, Westport, CN.
- Thoms, P. and Blasko, D. (1999), "Preliminary validation of a visioning ability scale", *Psychological Reports*, Vol. 85 No. 1, pp. 105-113.
- Thoms, P. and Blasko, D. (2004), "Future time perspective as a temporal anchor: applications to organizations", *Journal of Business and Economics Research*, Vol. 2 No. 11, pp. 27-40.
- Thoms, P. and Greenberger, D.B. (1998), "A test for vision training and potential antecedents to leaders' visioning ability", *Human Resource Development Quarterly*, Vol. 9 No. 1, pp. 3-19.
- Vecchiato, R. (2012), "Strategic foresight and environmental uncertainty: a research agenda", *Foresight*, Vol. 14 No. 5, pp. 387-400.
- Voss, C. and Blackmon, K. (1998), "Differences in manufacturing strategy decisions between Japanese and Western manufacturing plants: the role of strategic time orientation", *Journal of Operations Management*, Vol. 16 Nos 2/3, pp. 147-158.
- Wang, Z. (2012), "The impact of cultural time orientation on managerial and financial accounting practices", unpublished doctoral dissertation, Bentley University, Waltham, Massachusetts.
- Wiltbank, R., Dew, N., Read, S. and Sarasvathy, S.D. (2006), "What to do next? The case for nonpredictive strategy", *Strategic Management Journal*, Vol. 27 No. 6, pp. 981-998.
- Yaseen, Z. and Okour, A. (2012), "Managing organizational change: decisions maker perceptions in the UAE manufacturing industry", *International Journal of Research Studies in Management*, Vol. 1 No. 1, pp. 97-108.
- Yaseen, Z.K. (2013), "Clarifying the strategic role of the HR managers in the UAE educational institutions", *Journal of Management and Sustainability*, Vol. 3 No. 2, pp. 110-118.
- Zhao, X., Lynch, J.G. and Chen, Q. (2010), "Reconsidering Baron and Kenny: myths and truths about mediation analysis", *Journal of Consumer Research*, Vol. 37 No. 2, pp. 197-206.
- Zimbardo, P.G. and Boyd, J.N. (1999), "Putting time in perspective: a valid, reliable individual differences metric", *Journal of Personality and Social Psychology*, Vol. 77 No. 6, pp. 1271-1288.
- Zimbardo, P.G., Keough, K.A. and Boyd, J.N. (1997), "Present time perspective as a predictor of risky driving", *Personality and Individual Differences*, Vol. 23 No. 6, pp. 1007-1023.

Further reading

- Wang, P. and Chan, P.S. (1995), "Top management perception of strategic information processing in a turbulent environment", *Leadership and Organization Development Journal*, Vol. 16 No. 7, pp. 33-43.

Appendix. Measurement scales included in the survey

Section A. Time orientation

- (1) I never feel as if time is standing still.
- (2) Living for the future is important in my life.

- (3) I always plan things ahead.
- (4) When I think of events that may happen in the future, I see a clear picture.
- (5) When I think of my future, a sense of peace and tranquility comes over me.
- (6) Time is moving quickly.
- (7) There aren't enough minutes in a day to list all that I hope to do in the future.
- (8) The pace of my life is fast.
- (9) I see the future as being full of countless possibilities.
- (10) I feel that I am facing my future with confidence.

Section B. Visioning ability

- (1) It is easy to imagine myself and how I will be leading my firm in the future.
- (2) It is easy to think positively about my leadership skills in the future.
- (3) It is easy to imagine my organization and what it will be like in the future.
- (4) It is easy to think positively about this organization in the future.
- (5) I can clearly imagine how large this organization will be.
- (6) I can clearly imagine the type of organization it will be.
- (7) I can clearly imagine the type of people who will be involved in this firm.
- (8) I can clearly imagine the physical environment of this firm in the future.
- (9) How this organization will look is clear in my mind.
- (10) I frequently imagine this organization in the future.
- (11) I can clearly imagine my role in this organization in the future.
- (12) It is clear to me whether this organization will be successful in the future.

Section C. Perceived uncertainty

- (1) In our kind of business, customers' product preferences change quite a bit over time.
- (2) Our customers tend to look for new product all the time.
- (3) We are witnessing demand for our products from customers who never bought them before.
- (4) New customers have product-related needs that are different from those of our existing customers.
- (5) We cater to many of the same customers that we used to in the past.
- (6) Competition on our industry is cutthroat.
- (7) There are many promotion wars in our industry.
- (8) Anything that one competitor can offer, other can match readily.
- (9) Price competition is a hallmark of our industry.
- (10) One hears of a new competitive move almost every day.
- (11) Our competitors are relatively weak.
- (12) The technology in our industry is changing rapidly.
- (13) Technological changes provide big opportunities in our industry.

Section D. Strategic practices

For the following pair of terms, select the point between them which best reflects the nature of managerial work you prefer to do.

Short term planning	☐	☐	☐	☐	☐	Long-term planning
Concerned with a particular department	☐	☐	☐	☐	☐	Concerned with the organization
Reactive thinking	☐	☐	☐	☐	☐	Reflective thinking
Concrete work	☐	☐	☐	☐	☐	Conceptual work
Ongoing, routines	☐	☐	☐	☐	☐	Creative, breaking new ground
More concerned with efficiency	☐	☐	☐	☐	☐	More concerned with effectiveness
Resolving existing problems	☐	☐	☐	☐	☐	Identifying opportunities
Focusing on internal context	☐	☐	☐	☐	☐	Examining the external environment
Demonstrating hands on approach	☐	☐	☐	☐	☐	Demonstrating a hands off approach
Applying micro perspective	☐	☐	☐	☐	☐	Applying macro perspective

Corresponding author

Ali Abu-Rahma can be contacted at: ali.aburahma@adu.ac.ae