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The effect of national culture on entrepreneurs' networks: a comparison of the MENA region and Denmark

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Abstract: This study examines the effect of cultural variables on entrepreneurs' networks in the Middle East and North Africa (MENA) region countries and Denmark. Using data collected by the GEM surveys and clustered for the purpose of this research, analysis is undertaken on the effect of cultural variables on entrepreneurs' private networks in addition to their work, professional, market and international networks. The major cultural contrast in the empirical analysis is between Denmark and the MENA countries. Traditionalism dominates in the MENA region while secular-rationalism pervades Denmark: trust is widespread in Denmark, but more limited to family members in MENA; and collectivism prevails in MENA while Denmark is more individualistic. Analyses show that both traditional culture and collectivism promote networking in the private sphere, which explains the intensity of private networking in MENA and the lower level of private networking in Denmark. Trust in society, generally promotes networking, and specifically networking in the public spheres of the work-place, the professions, the market and the international environment. This explains the greater prevalence and intensity of networks and networking in the public domain in Denmark compared to that in the MENA region.

Keywords: culture; entrepreneurs' networks; Middle East and North Africa; MENA countries; Denmark.

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Hazbo Skoko holds a Doctorate in IT/ICT Management, Master in Information Economics, and another Master in International Business Management. His research interests include issues of IT/ICT management, international business, information economics and quantum physics, and complex systems and systemic approach applications. He has written a number of articles in international journals, three single authored books and two co-authored books. He works full time at Charles Sturt University and is also a Visiting and Guest Professor at several prime universities around the world. In 2011, he was awarded with the 'Best Professor in Economics' by the World Education Congress for teaching, integrity and leadership.

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1 Introduction

One of the important areas affecting entrepreneurial outcomes is networking. Entrepreneurs' networks constitute the environment within which they are working. This environment is their source of advice, financing, operation, opportunities and other resources. The importance of networks has been researched within a single country, cross-nationally, and for the world as a whole, while noting differences among countries (Dodd and Patra, 2002). As with other aspects of entrepreneurship, entrepreneurs' networks are expected to be greatly affected by the national factors of each country.

This study attempts to examine the effect of certain national conditions (e.g., variables that measure trust or cultural values) on the entrepreneurs' network environment in the Middle East and North Africa (MENA) region, and then to compare these with Denmark. The countries are Algeria, Arab Emirates, Egypt, Iran, Jordan, Lebanon, Morocco, Pakistan, Palestine, Saudi Arabia, Syria, Tunisia, Turkey, Yemen and Denmark. The variables used in our analysis were obtained from the GEM Adult Population Survey. For the purpose of our research, selected national values were added to the GEM data (trust) for the 15 countries, together with cultural values such as 'traditionalism versus secular-rationalism' and 'survival versus self-expressionism' and four of Hofstede's cultural dimensions.

The research focuses on common cross-national dynamics examining the effect of national culture on the entrepreneurs' networks in the MENA region, and then compares it with Denmark. The analysis focuses on the individual level, but within a national context. The data in our empirical work are analysed using the SPSS software.

2 Literature review

2.1 National culture

National cultures differentiate one society from another. Culture is defined as “a set of shared values, beliefs and expected behaviors” (Hofstede in Hayton et al., 2002); it is viewed as the “underlying system of values peculiar to a specific group or society” [Pinillos and Reyes, (2011), p.25]. There are various models and frameworks used in the literature to describe and analyse culture, each using different dimensions and focusing on specific variables (Hofstede, 1991, 1996; House et al., 2004; Inglehart and Welzel, 2005).

Hofstede's framework is one of these frameworks, which considers the variables of collectivism vs. individualism, high vs. low power distance, uncertainty avoidance, short-term v. long-term orientation, masculinity vs. femininity (Hofstede, 1980). Inglehart and Welzel (2005) based on the work of the previous scholars, developed a value map which visualises the strong correlation of values of different cultures where two dimensions are used: secular rational vs. traditional values and self expression vs. survival values, where trust is a main component of self expression. These frameworks – and others – were widely validated and also extensively criticised, but still they are recognised, appreciated and used in the literature as the ‘national culture models’.

2.2 National culture and entrepreneurship

Institutional theory suggests that national culture motivates certain behaviours and attitudes through the values and beliefs that are unique to a society (Hayton et al., 2002). Therefore, entrepreneurial intentions and behaviours can be seen as an outcome of national culture. There is wide agreement in the literature that there are differences in entrepreneurial behaviour between national cultures. Furthermore, cultural values indicate the degree to which a society appreciates, encourages and cultivates certain attitudes and behaviours (Hayton et al., 2002; Fitzsimmons and Douglas, 2005). Additionally, each culture will probably produce entrepreneurial forms that are unique to its own history and values (Russell, 1997).

“Most studies have hypothesised that entrepreneurship is facilitated by/in cultures that are high in individualism (i.e., low in collectivism), low in uncertainty avoidance, low in power distance and low in masculinity” [Hayton et al., (2002), p.34; Fitzsimmons and Douglas, (2005), p.5]. Trust is also one of the variables that proved to have a significant effect on entrepreneurship, as well; low power distance cultures are characterised by high level of trust which have less need for monitoring and would go more willingly to engage in entrepreneurial activities (Hayton et al., 2002). Also Chrisman et al. (2002) analysed the effect of national culture on entrepreneurial perceptions and performance and concluded that familial influences on business formation are more important than any other factor, mainly because they rely on the element of trust. Thus, there is wide

recognition of the fact that entrepreneurial behaviours are influenced by cultural values (Hayton et al., 2002; Thomas and Mueller, 2000; Russell, 1997).

However, the national culture approach has been widely critiqued. The problem with most studies is that they focus on Western countries and sometimes countries in the Far East. Very few studies have examined Middle Eastern or South Mediterranean countries, therefore the results cannot be generalised and more research is expected in other countries with different cultural backgrounds. Most of the countries examined have very similar national and cultural backgrounds (Dodd and Patra, 2002). Nevertheless, the persistent patterns of wealth and poverty in the world has in recent years led to a renewed interest in identifying variations in entrepreneurial performance caused by culture. In addition, the literature seems to indicate that the cultural and national conditions constitute a 'moderating factor' between contextual factors and entrepreneurial outcomes (Hayton et al., 2002; Fitzsimmons and Douglas, 2005). This is because they are not alone in affecting entrepreneurial outcomes; other structural factors play a significant role.

2.3 Social networks

Networking theory suggests that successful business owners possess a positive pattern of social networking behaviour. These networking behaviours aid the owners in their acquisition of scarce resources needed to grow a business. Johannisson (2000) focuses on different ties in terms of content that describe the relationships within networks. There are three types of ties: informational, exchange, and influence. Informational ties provide business information, exchange ties provide access to resources, and influence ties legitimise the business owner's activities and create barriers to entry (Johannisson, 2000). The assets created through social relations can be leveraged to gain a competitive advantage.

The main purpose of these networks is to gain knowledge, information, advice and resources that accelerate the engagement in entrepreneurial activities (Toledano et al., 2010; Khakbaz and Aghazadeh, 2012; Hoang and Antoncic, 2003). Networks can also provide access to finance, access to skills, social legitimacy and reputation and credibility (Klyver et al., 2008). The most important function of these networks is the identification of a business opportunity (Khakbaz and Aghazadeh, 2012). These connections are work related, frequently informal and mostly include family networks (Greve and Salaff, 2003).

An important element in these networks is trust, which has been proven to be a key element in their success and effectiveness (Toledano et al., 2010; Hoang and Antoncic, 2003). Related to this is the strength of the network. Family networks are stronger in some societies than in others and play a major role in identifying and developing business opportunities (Chrisman et al., 2002). Another element identified in the literature is the 'alertness' of the entrepreneur, which is the key for the identification, development and assessment of an opportunity (Khakbaz and Aghazadeh, 2012). Thus, there are many variations of networks; some revolving around people, but others involving firms and organisations.

In general, the network perspective as applied to entrepreneurship proposes that ventures develop and crystallise out of personal networks, which continue to play a significant role in the growth and development of the entrepreneurial venture (Toledano et al., 2010). This is why family networks are of high importance. Research using GEM

data from 2001 has also shown that having an entrepreneur in the family adds to the probability of initiating entrepreneurial activities (Klyver et al., 2008).

2.4 Culture and social networks

As noted earlier, research has been undertaken on the interaction of culture with entrepreneurship and there has also been substantial research on social networks and entrepreneurship. However, the relationship between culture and social networks together within entrepreneurial activity has not been extensively researched.

Klyver et al. (2008) identify two extreme and typical positions on networking. One extreme position argues that social networking plays a generic and universal role regardless of the culture and the industry in which entrepreneurs operate. There may be differences in how social networking is practiced, but the role of research, according to this position, is to explore the common and generic elements across contexts (Greve and Salaff, 2003). In contrast, Dodd and Patra (2002) argue that social networking is context determined. That is, networking differs dramatically depending on the culture and the industry within which entrepreneurs operate.

A recent study highlighted the value of trust in entrepreneurial networking (Toledano et al., 2010). The study investigated family businesses in Spain and concluded that trust is a basic condition for networking that leads to effective entrepreneurial activities and endeavours (Toledano et al., 2010). Studies focused on the size of the networks, but the nature and composition of the networks were not examined across countries; instead, the research was country-based. Furthermore, in their study, Greve and Salaff were able to prove that entrepreneurs go through three different phases and that there is a relationship between the cultural setting and the entrepreneurial phase. However, their study is based on four countries which, according to Hofstede, have similar cultural characteristics; Sweden, the USA, Norway and Italy (although Italy has a significantly higher level of masculinity).

The most recent literature can be found in the research of Foley and Klyver (2012) which attempts to fill the gap in the literature by investigating 'case studies on three diverse cultural groups' and how culture influences entrepreneurial networks. Their starting point was Dodd and Patra's (2002) argument that the reason why differences in networks have not, so far, been found in previous research is due to cultural commonality among the countries that have been studied. They found that the networking of entrepreneurs is not uniform nor universal. There is a difference between the networking of entrepreneurs in minority and dominant cultures

Furthermore, the study concluded that social networking is a way of creating and maintaining identity; as is entrepreneurial networking. Culture defines norms and rules as to what is accepted and what is not accepted. Culture can limit the people with whom a person can interact if they want to withhold their identity and continue being accepted within their culture. If people interact in contrast to the norms and rules institutionalised within their culture they will be – or at least feel that they are being – expelled from their culture. In that sense, culture – through identity and through the need to be socially accepted – moderates how entrepreneurial networking can and is carried out [Foley and Klyver, (2012), p.16].

Although the research conducted has led to various conclusions, it has at least raised the essential issue of culture and social networks. However, as concluded by Klyver et al.

(2008) future research needs more cultural diversity in order to improve our knowledge of the effect of culture on entrepreneurial networking.

3 Conceptual model development and formulation of research propositions

Earlier it was noted that Dodd and Patra (2002) argue that the reason why differences in networks have not, so far, been found in previous research is due to cultural commonality among the countries that have been studied. To avoid this trap this study investigates differences in entrepreneurial networking activities among entrepreneurs in the MENA countries and Denmark.

For our analysis we focus on the variables of *trust* (Toledano et al., 2010; Hayton et al., 2002; Chrisman et al., 2002), *collectivism* (Hayton et al., 2002; Fitzsimmons and Douglas, 2005; Eroglu and Picak, 2011; Kreiser et al., 2010) and *traditionalism* (Inglehart and Welzel, 2005; Thomas and Mueller, 2000; Russell, 1997; House et al., 2004).

Using the GEM Adult Population Surveys for 2009 to 2011 for the countries of the MENA Region and Denmark, representative samples of entrepreneurs were identified in the same manner across all the countries and respondents were asked the same question regarding their social networks. In the GEM surveys, a sample of 35,430 entrepreneurs in 42 countries reported on relationships with up to 20 advisors. Cluster analysis of their relationships discerned five components: a private network of advice relationships with spouse, parents, other family and friends; a work-place network of boss, co-workers, starters and mentors; a professional network of accountants, lawyers, banks, investors, counsellors and researchers; a market network of competitors, collaborators, suppliers and customers; and an international network of advice relationships with persons abroad and persons who have come from abroad. The effect of entrepreneurial networks on entrepreneurial motivation, i.e., necessity or opportunity, was then examined.

This study adds to the research conducted by Foley and Klyver (2012) who compared highly diverse cultures and their sub-cultures, where entrepreneurial networking differs between entrepreneurs embedded within dominating cultures and entrepreneurs embedded within minority cultures. In this study, we compare a block of (collectivist culture) countries with a fairly similar dominant culture with Denmark's (individualistic) culture.

The study also compares the countries of the MENA region, characterised by low levels of trust with Denmark where trust is high. The third variable under investigation will be traditionalism, which is high in the MENA countries and low in Denmark, which is more modern or secular-rational.

3.1 Hypotheses

The following hypotheses are raised about the effect of each cultural dimension:

- H1 Trust in society promotes networking and specifically networking with friends and acquaintances in the work place, professions, market and the international environment.

- H2 Traditionalism in society promotes networking in the private environment, but reduces networking in other environments.
- H3 Collectivism promotes networking in general and also networking in other environments.

The hypotheses will be tested as follows; as culture is being measured across a small number of countries, (very small for statistical tests), adopting a 0.05 level of significance would not be useful. Instead, we adopt a 0.10 level of significance. We also consider a probability-value slightly above 0.10 to be marginally significant.

4 Empirical analysis

4.1 Culture in various countries

As the World Values Survey did not measure trust for some of our countries, we use our own estimate of trust for these countries (Table 1) in this study. Similarly we have also calculated our own estimate of traditionalism (Table 2).

Table 1 shows that trust is most limited in Turkey, while trust is widespread in Denmark. Indeed, there is a big difference between Denmark and the region of MENA.

Traditionalism is most dominant in Egypt and Lebanon. At the opposite extreme is Denmark, where secular-rationalism pervades society.

Furthermore, for our study we used the Collectivism versus Individualism variable, which was measured by Hofstede (1991). However, for most countries in our sample this variable was not measured so we imputed it, based on our own knowledge of our region.

Table 1 Trust in each country

Denmark	2.8
Yemen	1.9
Saudi Arabia	1.9
United Arab Emirates	0.9
Pakistan	0.5
Jordan	0.4
Palestine	0.2
Syria	0.1
Algeria	-0.1
Tunisia	-0.3
Egypt	-0.4
Lebanon	-0.5
Morocco	-0.7
Iran	-0.9
Turkey	-1.3

Note: Standardised scores

Table 2 Traditionalism in each country

Egypt	0.6
Lebanon	0.6
Jordan	0.5
Palestine	0.5
Algeria	0.4
Morocco	0.3
Tunisia	0.3
Pakistan	0.2
Yemen	0.1
Saudi Arabia	0.1
United Arab Emirates	0.1
Iran	0.1
Syria	-0.5
Turkey	-0.5
Denmark	-4.1

Note: Standardised score

Table 3 Collectivism in each country (standardised scores)

Pakistan	2.0
Algeria	0.0
Egypt	0.0
Jordan	0.0
Lebanon	0.0
Morocco	0.0
Palestine	0.0
Saudi Arabia	0.0
Syria	0.0
Tunisia	0.0
Turkey	0.0
United Arab Emirates	0.0
Yemen	0.0
Iran	-0.2
Denmark	-3.2

As indicated in the above table collectivism seems most extensive in Pakistan, while as expected, the lowest score is for Denmark.

From the three tables above, it can be summarised that trust and traditionalism are inversely related, Tables 1 and 2 show that high trust tends to go along with low Traditionalism, (correlation -0.6). Likewise, trust and collectivism are inversely related, although to a lesser degree (correlation -0.3). However, traditionalism and collectivism

are positively related, (correlation 0.7). These three dimensions of culture are used as independent variables in our analyses below.

The entrepreneurs' networks vary in size. A few entrepreneurs reported not to be networking with any of 20 advisors (which is the number identified in the GEM survey conducted worldwide). However, most entrepreneurs are networking with 1 to 4 advisors, some with 5 to 10 advisors, and very few with more than 10 advisors. Additionally, entrepreneurs are networking extensively in their private environment of family and friends. Moreover, the entrepreneurs often network in the work place with their superiors, co-workers, starters and business-mentors. The entrepreneurs network much less in the professional environment, the market environment, and the international environment.

The size of the whole network and size of the network within each of the various environments constitute the dependent variables of interest in the following analysis.

4.2 Effects of culture on the size of the entrepreneur's whole network

First, we analyse how size of the whole network is affected by the trust, traditionalism and collectivism. We test our three hypotheses that size of the network is positively affected by trust, negatively affected by traditionalism, and positively affected by collectivism.

How several conditions affect the size of the whole network can be ascertained in a model that is linear and multivariate. In addition, it is hierarchical; considering entrepreneurs as nested within countries. The model is also a mix of fixed parameters (for coefficients of cultural variables and individual level control variables) and so-called random parameters (for coefficients of our sample of countries, a more or less random sample; these numerous coefficients are omitted from the tables).

Table 4 Entrepreneurs' size of whole network affected by trust, traditionalism and collectivism

	<i>Coefficient</i>	<i>Standardised coefficient</i>	<i>Probability-value</i>
Trust	0.76	0.21	0.04 one-tailed
Traditionalism	-0.02	-0.005	0.49 one-tailed
Collectivism	0.26	0.07	0.36 one-tailed
Gender	0.16	Etc.	0.05
Age	-0.19		0.09
Education	0.24		<0.0005
Self-efficacy	0.26		0.004
Opportunity-perception	0.53		<0.0005
Risk-willingness	-0.18		0.02
Phase: Intending	-0.01		0.94
Phase: operating	-0.83		<0.0005
Intercept	-2.48		0.11

Table 4 shows, as hypothesised, that the effect of Trust is significant and positive, i.e., networks are extensive where trust is high. The standardised coefficient is actually

substantial, so the effect of trust is considerable. However, we can see that there are no significant effects of traditionalism or collectivism on size of the whole network around an entrepreneur. These findings align with Toledano et al. (2010) and Dodd and Patra (2002) as discussed above.

4.3 *Effects of culture on the size of the network in each environment*

We hypothesised that private networking, especially with friends, is promoted by trust, and also by traditionalism and by collectivism. A hierarchical linear mixed model, presented in the following tables, illustrates how these affect private networking. Tables 5 and 6 report only on the effects of the three variables of interest (they do not show the coefficients for the individual-level control variables and the coefficients for the countries).

Table 5 Entrepreneurs' private network size affected by trust, traditionalism and collectivism

	<i>Standardised coefficient</i>	<i>Probability-value</i>
Trust	0.20	0.004 one-tailed
Traditionalism	0.11	0.15 one-tailed
Collectivism	0.14	0.10 one-tailed
Etc. as in Table 5		

Table 5 shows that private networking is positively affected by trust, by collectivism, and by traditionalism, as hypothesised (the significance is only marginal). However, the effect of trust seems stronger than the effects of collectivism and traditionalism. The private network is predictably strongest in societies that are trusting, collectivistic and traditional, and weakest in societies that are based on legislative and business practices rather than Trust, with strong individualistic and secular-rationalistic cultural dimensions.

Work place networking was hypothesised as being positively affected by trust, negatively affected by traditionalism, and positively affected by collectivism.

The effects upon work-place networking are estimated in a hierarchical linear mixed model presented in Table 6.

Table 6 Entrepreneurs' work-place network size affected by trust, traditionalism and collectivism

	<i>Standardised coefficient</i>	<i>Probability-value</i>
Trust	0.14	0.11 one-tailed
Traditionalism	-0.06	0.36 one-tailed
Collectivism	0.09	0.30 one-tailed
Etc. as in Table 5		

Table 6 shows that trust positively affects work place networking. Traditionalism and collectivism do not have significant effects.

Professional networking was hypothesised as being positively affected by trust, negatively affected by traditionalism, and positively affected by collectivism. The effects are estimated in Table 7.

Table 7 Entrepreneurs' professional network size affected by trust, traditionalism and collectivism

	<i>Standardised coefficient</i>	<i>Probability-value</i>
Trust	0.10	0.12 one-tailed
Traditionalism	-0.03	0.41 one-tailed
Collectivism	-0.04	0.76 two-tailed
Etc. as in Table 5		

Table 7 shows that trust seems to have a positive effect on professional networking, as hypothesised (although the significance is only marginal). The data lend no support for the other two hypotheses.

Market networking was hypothesised as being positively affected by trust, negatively affected by traditionalism, and positively affected by collectivism. The effects are presented in the Table 8.

Table 8 Entrepreneurs' market network size affected by trust, traditionalism and collectivism

	<i>Standardised coefficient</i>	<i>Probability-value</i>
Trust	0.14	0.09 one-tailed
Traditionalism	-0.07	0.34 one-tailed
Collectivism	-0.002	0.99 two-tailed
Etc. as in Table 5		

Table 8 shows that trust has a positive effect on market networking, as hypothesised. The data lend no support for the other two hypotheses.

International networking was hypothesised as being positively affected by trust, negatively affected by traditionalism, and positively affected by collectivism. The effects are presented in the Table 9.

Table 9 Entrepreneurs' international network size affected by trust, traditionalism and collectivism

	<i>Standardised coefficient</i>	<i>Probability-value</i>
Trust	0.09	0.19 one-tailed
Traditionalism	0.02	0.90 two-tailed
Collectivism	0.004	0.49 one-tailed
Etc. as in Table 5		

Table 9 shows that trust seems to have a positive effect on international networking, as hypothesised (although the significance is only marginal). The data lend no support for the other two hypotheses.

5 Concluding remarks

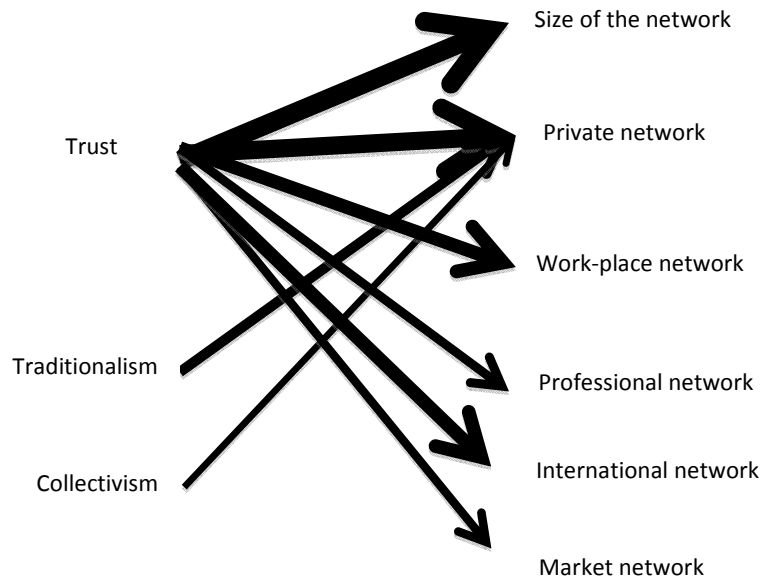
The question motivating our analyses was, how is entrepreneurs' networking affected by their national culture? Our review of the literature led us to focus on three dimensions of culture: trust, traditionalism and collectivism. We hypothesised that:

- Trust in society promotes overall networking and specifically networking with friends and acquaintances in the work place, professions, market and the international environment.
- Traditionalism in society promotes networking in the private environment, but reduces networking in each of the other environments.
- Collectivism promotes overall networking and also networking in each environment.

With respect to the first three hypotheses, several were supported by our tests, but most effects were insignificant (which was to be expected, given that our sample of countries is very small). No significant effect was found that opposed the hypothesised effect.

The results of testing are summarised in Figure 1. The significant and marginally significant effects are shown as arrows. The magnitude of an effect, as estimated by the standardised coefficient, is indicated by the thickness of the arrow.

Figure 1 Effect of cultural factors on entrepreneurs' networks



The major cultural contrast in our empirical material is between Denmark and the region of the MENA. Trust prevails in Denmark whereas distrust is pervasive in the MENA. Traditionalism dominates in the MENA whereas life in Denmark is regulated much more by secular-rationalism. Collectivism prevails in the MENA, whereas individualism dominates in Denmark. These cultural differences create differences in networking in the two places. The differences between the two places are substantial:

- Networks, on the whole, are larger in Denmark than in MENA. This is explained by the cultural condition of trust, which is greater in Denmark than in MENA. Trust is shown as the major effect on the size of the networks in Figure 1.
- The fact that private networks are larger in MENA than in Denmark can be explained by the greater traditionalism and greater collectivism in MENA than in

Denmark. (However, the role of trust in private environment networking is less clear).

- The work-place networks are larger in Denmark than in MENA, which can be explained by the greater trust in Denmark than in MENA.
- The professional networks are larger in Denmark than in MENA, which can be explained by the greater trust in Denmark than in MENA.
- The market networks are larger in Denmark than in MENA, which can be explained by the greater trust in Denmark than in MENA.
- The international networks are larger in Denmark than in MENA, which can be explained by the greater trust in Denmark than in MENA.

In these ways entrepreneurs' networks are strongly shaped by their culture.

5.1 Recommendations for future research

There is a need to further investigate the cultural factors and their effect on the entrepreneurial process. The interaction of culture and other factors should also be given attention and more in-depth analysis. It would also be beneficial to compare different years, with a special focus on the 'Arab Spring' countries. These countries will illustrate further the importance or maybe the unimportance of the value of trust.

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