


“Impact of organizational entrepreneurship characteristics on entrepreneurial orientation: Moderating role of firm size and education”

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IMPACT OF ORGANIZATIONAL ENTREPRENEURSHIP CHARACTERISTICS ON ENTREPRENEURIAL ORIENTATION: MODERATING ROLE OF FIRM SIZE AND EDUCATION

Abstract

Organizational entrepreneurial characteristics (OEC) have received less attention compared with the individual entrepreneurial ones. In addition, few studies examined this issue in the context of small and medium enterprises (SMEs) in developing countries. The purpose of this study is to examine the impact of OEC on the entrepreneurial orientation (EO) of an organizational member. OEC are operationalized to include top management support (TMS), organizational culture (OC), and transformational leadership (TL). Two moderators are proposed in this study: the CEO's education and company's size. The data were collected via purposive sampling using a questionnaire; a survey included 206 SMEs in Iraq. The data were analyzed using AMOS. The findings indicate that the impact of EOC ($B = 0.14$) on OE is positive. Its dimensions TL ($B = 0.14$) and TMS (0.50) also impacted positively the OE. CEO's education and company size moderated positively the effect of OEC on OE. Decision makers are advised to pay more attention to leadership style and adopt open culture as well as free expression and tolerance among SMEs in Iraq.

Keywords

entrepreneurship, top management support, organizational culture, transformational leadership, SMEs, CEO's education

JEL Classification

O33, A29

INTRODUCTION

Currently, organizations around the world are striving to survive during the outbreak of COVID-19. The need for an entrepreneurial mindset has increased because the intensive competition and the current situation require companies to be innovative and first-movers (Akpan et al., 2020; Lee & Trimi, 2021). Organizational entrepreneurship differs from managerial as the first rely on the organizational innovativeness and ability to make a decision during the uncertain time (Martin-Rojas et al., 2019; Moghaddam et al., 2015; Reza et al., 2012). On the other hand, organizational entrepreneurship is defined as structures that promote the emergence and development of ideas from all members of the firm. It is supportive of the idea and promotes the participation of an organizational member in decision-making to respond quickly to market changes (Burger-Helmchen, 2013).

Studies that are related to entrepreneurship, in general, focused on individual entrepreneurship while the organizational aspect of entrepreneurship has not received much attention (Hejazi et al., 2013; Radipere, 2014). In addition, the existing literature focused on western

and developed countries while this topic receives less attention in developing countries (Azma et al., 2019; Marashian & Naderi, 2017; Rashedi, 2019). Studies also linked both types of entrepreneurship to variables such as organizational performance and innovativeness while the link between organizational and individual entrepreneurship has not been examined in the literature. Further, small and medium enterprises are less investigated in the context of developing countries (Akpan et al., 2020). These SMEs contribute to the economic growth and employment in most countries. However, in Iraq, the contribution is limited compared with other countries in the region (Slim et al., 2021). Therefore, this study aims to examine the effect of the organizational entrepreneurship characteristics on entrepreneurial orientation of SMEs in Iraq. Since SMEs is the concern of this study, the size of SMEs and their managerial staff i.e., CEO of SMEs are critical and will be examined to understand their impact as moderating variables.

According to the resource-based view, organizations can deploy their capabilities and resources to develop new capabilities and improve their performance (Al-Dalaien et al., 2020; Al-Oqaily et al., 2015; Barney, 1991, 2001). Organizational entrepreneurship characteristic includes the leadership style, organizational culture, and top management support for entrepreneurship (Abd et al., 2019; Akpan et al., 2020; Hosseini, 2018; Martin-Rojas et al., 2019; Rashedi, 2019). Among the leadership style, transformational leadership is more preferable for promoting the development of the organizational member (Lai et al., 2020; Shafi et al., 2020). A supportive culture is important to foster the organization and its member. Further, the top management support for entrepreneurship activities encourages the staff to innovate and be creative (Handfield et al., 2009; Hartley et al., 2013; Hejazi et al., 2013; Moghaddam et al., 2015). Thus, the study will attempt to understand the interrelationship between the variables that are proposed in this study. In the next section, the literature review and the hypotheses development are discussed.

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

In this section, the theoretical framework, as well as the effect of OEC on EO, are discussed. The section also presents the conceptual framework and the hypotheses of this study.

1.1. Theoretical framework

Entrepreneurship is a new concept and it is multi-dimensional and multi-oriented. Among the first to develop the concept of entrepreneurship are Miller and Friesen (1982) who identified main traits of entrepreneurial orientation. These include the willingness to be innovative, take a risk, and try new products or services, and be proactive rather than competitors. Lumpkin and Dess (1996) were also among the pioneers of entrepreneurship orientation and added a fourth dimension which is autonomy. Autonomy is defined as an independent action of an individual or a team in ensuring ideas and concepts are being carried out until completion (Lumpkin & Dess, 1996).

The resource-based view is the underpinning theory of this study. According to the theory, an organization can deploy its resources and capabilities to create a competitive advantage by being different from other organizations (Armstrong & Shimizu, 2007; Barney, 2001). Entrepreneurial organizations differ from other organizations by being able to innovate and create new products and services. This can be done by utilizing the resources and capabilities of the organization to develop the organizational members, which ultimately lead to more productive and better performance of the individual, and the organization (Alaaraj et al., 2018). The study also utilizes the transformational leadership theory that points out that leaders strive to develop the capabilities and skills of the followers to achieve dual goals: the goal of the individuals and the organization (Bass, 1995; Bass & Avolio, 2000). Theory, such as the agency theory, suggested that the performance of companies depends on the size of the company as well as the characteristics of the management. In this study, the CEO's education and the company size are deployed as moderating variables (Bala & Gugong, 2019; Dakhllalh et al., 2019; Lewis et al., 2014; Longo et al., 2005).

1.2. Organizational entrepreneurship characteristic and entrepreneurship orientation

An entrepreneurial organization differs from other organizations. It is innovative and it supports the organizational members and develops their capabilities and skills. Entrepreneurial organizations are innovative, creative, and visionary (Handfield et al., 2009; Hjorth, 2005, 2012). They have long-term planning and follow multiple flexible approaches (Courpasson et al., 2016; Teimouri et al., 2017; Ziviar et al., 2017). These characteristics of the organizations provide motivation and support to organization members to be innovative, risk-takers, and proactive (Abd et al., 2019; Azma et al., 2019; Lumpkin & Dess, 1996).

Entrepreneurial orientation is a multidimensional construct. Innovativeness, risk-taking, and proactiveness, as well as autonomy, are traits of the entrepreneurial orientation of employees (Lumpkin & Dess, 1996; Miller & Friesen, 1982). This study deploys the entrepreneurial orientation as a dependent variable. The entrepreneurial organizational characteristics are determined in this study to be the leadership style, organizational culture, and top management support.

1.3. Conceptual framework

This study proposes that the effect of organizational entrepreneurial characteristics will lead to the better entrepreneurial orientation of organizational members. This effect is dependent on the educational level of the CEO of the company as well as the size of the company. These variables (education and size) are considered as moderating

variables. Figure 1 shows the conceptual framework of this study.

1.4. Entrepreneurial organizational characteristics and entrepreneurial orientation

EOC are characteristics that some organizations enjoyed and differentiated themselves from other organizations and make this organization a faster responder to market changes. These characteristics are important for organizations and help in developing their capabilities and skills. Aeimtitiwat and Lee (2006) examined the effect of EOC on organizational innovativeness and found that there is a positive association.

One of the characteristics of EOC is that the employee is led and not manage. The leadership in the organization sets a vision and shares the vision with employees. It empowers them to achieve their goals and the organizational goals. It also tolerates risk (Mitra, 2019). In an entrepreneurial organization, the management adopts supportive and open culture where the management supports the communication, teamwork, and social interaction among the organizational member. Social networking is encouraged in entrepreneurial organizations (Talke et al., 2011). Ambitious thinking and freedom of expression are encouraged values in the organization. Employees are given an opportunity to express their ideas and turn them into reality (Beugelsdijk & Noorderhaven, 2005). The support of the management is important in this process as it helps in spreading the culture and improves the confidence of the organizational members (Menzel et al., 2007). The study proposes that the EOC and its dimensions will

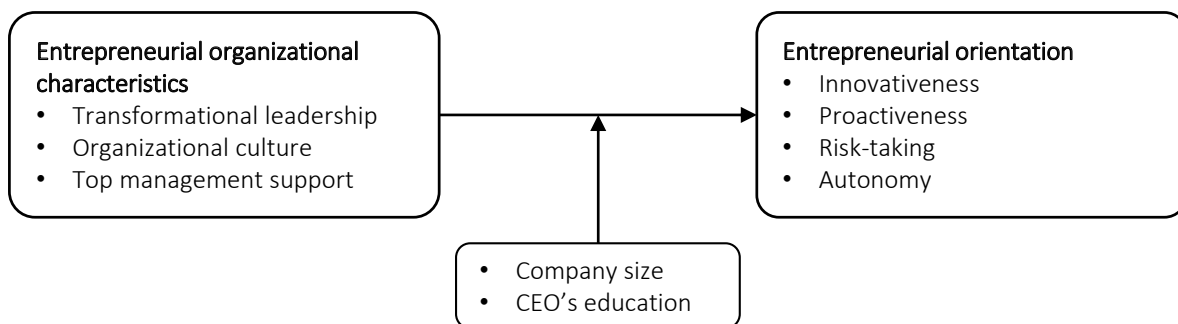


Figure 1. Conceptual framework

have a positive effect on EO. Thus, this study proposes the following hypotheses:

- H1: EOC has a positive impact on EO of employees.*
- H2: Transformational leadership has a positive impact on EO of employees.*
- H3: Organizational culture has a positive impact on EO of employees.*
- H4: Top management support has a positive impact on EO of employees.*

According to the agency theory, the size of the company and the education of the management are important for transforming the organization and achieving its goals. Few studies in the literature examined the moderating role of company size and the education of CEO. In the study of Chen and Chen (2011), Kannadhasan, (2009), and Pangaribuan (2019), company size was examined as a moderator and mixed findings were derived. Thus, this study proposes:

- H5: Company size moderates the effect of EOC on EO.*

In addition, the CEO education was examined in limited studies and mostly in large-scale companies (Hsu et al., 2013; Nadkarni & Herrmann, 2010; Patzelt, 2010; Sitthipongpanich & Polsiri, 2015):

- H6: CEO's education moderates the effect of EOC on EO.*

2. METHODOLOGY

This paper is a quantitative study that aims to examine the impact of EOC on EO. The study deploys the SMEs in Iraq as the population of this study. According to the Chamber of Commerce, in Iraq, there are 700,000 SMEs. However, this study focuses on companies that have a number of employees equal or larger than 25 employees. This is because these SMEs will have the capabilities and the required structure. More than 3,000 were considered as the population of this study. The study deploys purposive sampling because it includes only the SMEs that meets certain criteria in term of company size and number of employees. This sampling was used in several studies due to the need to collect specific information from the respondents (Al-Dalaïen et al., 2019; Alaarj et al., 2016)

Data were collected using a questionnaire. The questionnaire was adopted from previous studies. Measurement of top management support was adopted from Gangwar et al. (2015), measurement of organizational culture was adopted from Alaarj et al. (2016), measurement of transformational leadership was adopted from Tajasom and Ariffin (2011). Entrepreneurial orientation was adopted from Radipere (2014). The questionnaire was translated into Arabic because it is the official language in Iraq. It has been validated by two experts. A pilot study was conducted on 30 employees in SMEs in Iraq. A total of 734 questionnaires were distributed. After follow-up, a total of 219 respondents participated in this study making the response rate 29.8%. The missing values were checked as well as the outliers. This has resulted in removing 13 responses. Skewness and Kurtosis

Table 1. Normality and multicollinearity tests

Variable	Missing value	Normality		Multicollinearity	
		Skewness	Kurtosis	VIF	Tolerance
Transformational leadership	0	-0.901	0.201	1.912	0.341
Organizational culture	0	0.341	0.331	1.221	0.441
Top management support	0	-0.442	0.541	1.331	0.461
Innovativeness	0	-0.331	0.831	1.414	0.411
Proactiveness	0	-0.449	0.551	1.234	0.512
Risk-taking	0	-0.031	0.431	1.331	0.491
Autonomy	0	-0.712	0.333	1.833	0.344

were checked to ensure that the data is normally distributed. The data is free from multicollinearity because the variation inflation factor (VIF) is less than five and the tolerance is greater than 0.20 (Hair et al., 2017). Table 1 shows the analysis of normality and multicollinearity.

3. RESULTS

This section examines the data analysis and findings of this study. The profile of the respondents is presented as well as the data analysis using AMOS (Analysis of a Moment Structures). The measurement model (MM) and structural model (SM) were assessed.

3.1. Profile of the respondents

206 respondents participated in this study. The majority of the respondents are males (89%) while females account to 11%. The respondents have experience of more than 5 years (72%) and they are holders of bachelor's degree (49%). The characteristics of the SMEs showed that 81% have more than 25-50 employees while 19 have more than 51 employees. Table 2 shows the profile of the respondents.

Table 2. Profile of the respondents

Variable	Label	Frequency	Percentage
Gender	Male	183	89
	Female	23	11
Experience	Less than 5 years	58	28.1
	5-10 years	69	33.4
	11-15 years	54	26.2
	16-20 years	16	7.8
	Above 20 years	9	4.5
Number of employees	25-50 employees	167	81
	More than 51 employees	39	19

Table 3. Results of the measurement model

	CA	CR	AVE	TL	OC	TMS	INN	PRO	RT	AU
TL	0.95	0.96	0.83	0.91	–	–	–	–	–	–
OC	0.90	0.92	0.71	0.40	0.84	–	–	–	–	–
TMS	0.94	0.96	0.90	0.46	0.31	0.95	–	–	–	–
INN	0.91	0.94	0.79	0.42	0.42	0.29	0.89	–	–	–
PRO	0.94	0.96	0.82	0.58	0.37	0.61	0.38	0.90	–	–
RT	0.94	0.95	0.81	0.51	0.26	0.24	0.37	0.31	0.90	–
AU	0.84	0.88	0.64	0.48	0.32	0.50	0.45	0.69	0.35	0.80

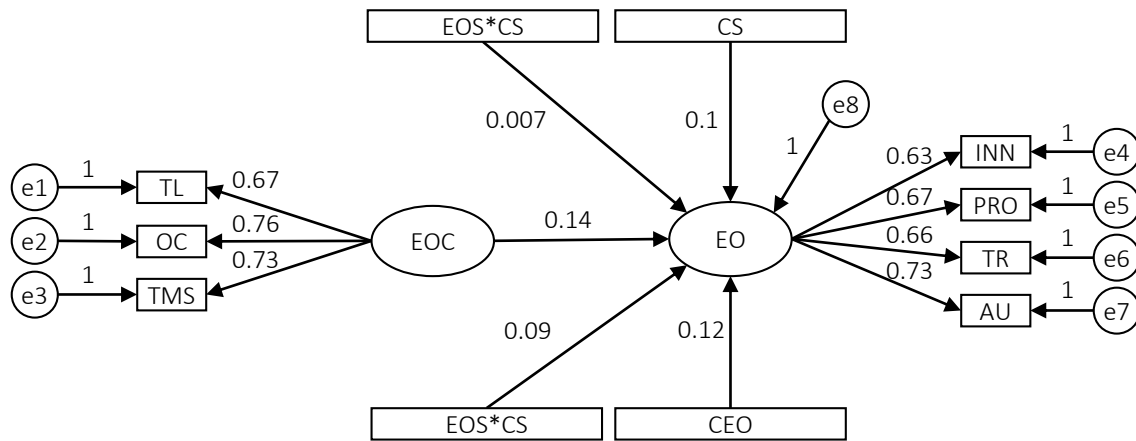
Note: TL: transformational leadership, OC: organizational culture, TMS: top management support, INN: innovativeness, PRO: proactiveness, RT: risk-taking, AU: autonomy, CA: Cronbach's alpha, CR: composite reliability, AVE: average variance extracted.

3.2. Measurement model

Using AMOS, the confirmatory factor analysis (CFA) is conducted as well as the measurement model is used. Pooled CFA was used to assess the measurement model. The factor loading (FL) for all the items was assessed. Some items were removed due to low factor loading. This has resulted in better reliabilities and validities. Cronbach's alpha is acceptable because all the values are larger than 0.70. In addition, the composite reliability is also accepted. Convergent validity is achieved because the average variance extracted (AVE) is greater than 0.50. In addition, the discriminant validity is achieved because the square root of AVE is greater than the cross-loading. Table 3 shows the result of assessing the measurement model. The indices were achieved except for the GFI (good of fitness index). However, Hair et al. (2010) indicated that if at least three indices were achieved, researchers are permitted to continue in the analysis.

3.3. Structural model

The structural model is assessed using the R-square and the path coefficient. The SM showed that the value of R-square is 0.491, which indicates that 49.1% of the variation in EO can be explained



Note: TL: transformational leadership, OC: organizational culture, TMS: top management support, INN: innovativeness, PRO: proactiveness, RT: risk-taking, AU: autonomy, CA: Cronbach's alpha, CR: composite reliability, AVE: average variance extracted.

Figure 2. Structural model

by the EOC and its dimensions. After testing the moderators, the R-square increased to 0.612. The structural model, which includes the moderators, is given in Figure 2. The mean score value is used in testing the model. This is in line with Awang (2014). All the indices were achieved. The chi-square value is less than 5 as well as the IFI, CFI, and NFI are greater than 0.90. The value of GFI is equal to 0.87 which is less than 0.90. However, this value is accepted because more than three indices were achieved.

3.4. Hypotheses testing

The result of hypotheses testing is given in Table 4. It shows hypothesis (H), path coefficient (B), standard deviation (Std.), T-value (T), p-value (P), and remark. Table 4 shows the results of testing the hypotheses.

For H1, the effect of EOC on EO is positive and significant with a coefficient of 0.14 and a p-value

is less than 0.05. Thus, the increase in the level of EOC will increase the EO of organizational members. For H2, the impact of TL is positive and significant. The increase in the TL level in SMEs in Iraq will lead to a positive EO of an organizational member. H3 is rejected because the impact is not significant. For H4, it is supported because the TMS has a significant impact on the EO of employees.

The moderating effect of company size (CS) was examined using the interaction effect. The CS was multiplied by the EOC and the results showed that the effect is positive at 0.07 and p-value less than 0.05. Thus, the increase in the level of CS as a moderator will lead to a positive effect of EOC on EO. Thus, H5 is supported. For H6, the moderating effect of CEO education is tested. The interaction effect is significant at 0.09 and a p-value is less than 0.05. Thus, H6 is supported. When the CEO education is high, the effect of EOC on EO will increase.

Table 4. Result of hypotheses testing

H	Path Coefficient	B	Std	T	P	R ²	Significance
H1	EOC → EO	0.14	0.05	2.71	0.01	0.491	Yes
H2	TL → EO	0.14	0.05	2.75	0.01		Yes
H3	OC → EO	0.03	0.05	0.66	0.74		Yes
H4	TMS → EO	0.50	0.05	10.36	0.00		Yes
H5	EOC*CS → EO	0.07	0.02	3.04	0.00	.612	Yes
H6	EOC*CEO → EO	0.09	0.02	3.52	0.00		Yes

Note: EOC: entrepreneurial organizational characteristics, EO: entrepreneurial orientation, TL: transformational leadership, OC: organizational culture, TMS: top management support, CS: company size, CEO: CEO's education.

4. DISCUSSION AND IMPLICATIONS

This study was conducted to examine the impact of EOC on EO. The findings showed that the EOC and its dimensions such as TL and TMS are critical for the EO. Companies in Iraq that wish to improve the EO of their organizational members have to implement TL where the CEO of the company encourages and motivates the employees to achieve their goals and the organizational goals. The findings showed that OC has an insignificant effect on the EO. This could be due to the notion that in the context of Iraq, the OC is not being deployed sufficiently. This OC has not been deployed effectively by the SMEs in Iraq and more attention is needed by the CEO to utilize the benefits of OC.

The findings in terms of the effect of EOC on EO are in line with the resource-based view, which indicates that the capabilities and resources of organizations are important to create a competitive advantage by investing in their employees who are the human capital of the organizations (Alaaraj et al., 2018; Barney, 1991).

Managers of the SMEs in Iraq have to sharpen the skills of their employees and support their ideas as well as encourage them to be open and speak their

minds in an encouraging environment. The size of the company is important and this is in line with the agency theory that pointed out that the larger the companies, the more able they to innovate and increase their capabilities and support their organizational members (Chen & Chen, 2011; Kannadhasan, 2009; Pangaribuan, 2019). The education level of the CEO is important as it enables the CEO to understand the new techniques and work in an open mind that can lead to more support for the member in the SMEs, which can lead to more entrepreneurial thinking and capabilities of the employees. These findings are in line with the findings of researchers who indicated that the education of the CEO is a moderating variable and can enhance the EO of companies (Hsu et al., 2013; Nadkarni & Herrmann, 2010; Patzelt, 2010; Sitthipongpanich & Polsiri, 2015).

The study contributed to the literature by examining the EOC and its impact on EO in the context of SMEs in developing countries. The study also managed to combine the RBV with the agency theory to explain the variation of EO. Previous studies have focused on the effect of EO on the organizational outcome. However, what constitutes and supports the development of EO has not been adequately discussed in the literature and this study has made a contribution in this regard.

CONCLUSION

The purpose of this study is to examine the effect of EOC on the EO of SMEs in Iraq. The study also examined the moderating role of CEO's education and company size. The study found that the EOC are important for creating and supporting the EO of organizational members. The study also confirmed that CEO's education and company size are moderating variables. The findings of this study were derived from respondents working in SMEs in Iraq. The findings are limited to their perception, experience, and background. Future studies are suggested to examine the bidirectional relationship between EO and EOC. The causality between the two variables deserves further study. In addition, future studies are suggested to increase the sample size and to examine more moderators such as trust in the organization and organizational commitment. Further, future studies are suggested to include different populations. A focus on large-scale companies or public listed companies can further enhance the understanding of the impact of EOC on EO.

Based on the findings, decision-makers are advised to follow more lenient and relationship-based leadership such as transformational leadership. Management support is critical for improving the contribution of the employees and to unleash their potentials in enhancing the SMEs' contributions to the economy and the employment in the country. Future studies are suggested to look into the relationship from a qualitative approach. A focus group or an interview with CEOs and employees can further improve the understanding of the causality and the contribution of the EOC to create more entrepreneurial-oriented employees.

AUTHOR CONTRIBUTIONS

Conceptualization: Amel Farhan Swadi, Ahmad Abed al-hayy Al-dalaien.

Formal analysis: Amel Farhan Swadi.

Funding acquisition: Ahmad Abed al-hayy Al-dalaien.

Investigation: Amel Farhan Swadi.

Methodology: Amel Farhan Swadi, Ahmad Abed al-hayy Al-dalaien.

Resources: Amel Farhan Swadi.

Supervision: Ahmad Abed al-hayy Al-dalaien.

Validation: Amel Farhan Swadi.

Writing – original draft: Amel Farhan Swadi, Ahmad Abed al-hayy Al-dalaien.

Writing – review & editing: Amel Farhan Swadi, Ahmad Abed al-hayy Al-dalaien.

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