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The relationship between the emotional intelligence of entrepreneurs and the new venture creation: The role of age, gender and motive

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ABSTRACT

The study investigates the effect of emotional intelligence (EI) of entrepreneurs on new venture creation (NVC). A self-administered questionnaire is used to test the study hypothesis on a sample of 378 Egyptian entrepreneurs. The analysis shows that there is a significant relationship between emotional intelligence and new venture creation. There are three constructs of EI (interpersonal skills, internal motivation and self-awareness), which support the creation of new ventures.

The results of the empirical study are validated using demographic characteristics (age and gender) and the motivation of entrepreneurship (necessity-driven or opportunity-driven). The findings show that age has a moderating effect on the relationship between EI and NVC, whereas gender does not play a role in this relationship. There are differences in the relationship between emotional intelligence and new venture creation based on the motivation to engage in entrepreneurship. Although the relationship is significant in the cases of both necessity-driven and opportunity-driven entrepreneurs, the dimensions/constructs of EI that support the new venture creation are different in each case.

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1. Introduction

Entrepreneurship has gained the attention of academia in the last decades because of its important role in creating jobs and fostering economic development. This is the reason for its current vital importance to developing countries, which are trying to develop entrepreneurship to achieve growth and prosperity. SMEs provide opportunities for a reasonable standard of living for a large segment of these populations. Therefore, it is important to identify ways to foster and develop SMEs in developing countries. This means, to train and develop the people who initiate and manage these SMEs, i.e. the entrepreneurs. Thus, attention should be given to enhance entrepreneurship in these countries. However, there is no one agreed upon model of the entrepreneurial individual, as the research on what creates and develops entrepreneurs, has produced inconsistent results (Alon & James, 2005; Cross & Travaglion, 2003; Liñán, Fernández-Serrano, & Romero, 2013).

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To understand the process that leads to new venture creation, it is important to identify what makes individuals take the decision to engage in this process of creating a new venture and to dedicate the required time and resources (Cross & Travaglione, 2003). Thus, there is more recently a return in the direction of entrepreneurial analysis to the human being with his/her traits and abilities. This is significant now, as it is becoming more and more vital to encourage and enhance entrepreneurship and new venture creation.

One of the traits/abilities proposed as having an impact on entrepreneurial success is emotional intelligence (EI) (Cross & Travaglione, 2003; Ghosh & Rajarm, 2016; Rhee & White, 2007). Studies started first to investigate the relationship between emotional intelligence (EI) and Entrepreneurial Attitudes (EA), then with Entrepreneurial Behaviour (EB) (Baron, 2007; Cross & Travaglione, 2003; Mortan, Ripoll, Carvalho, & Bernal, 2014), now it is related to the NVC (Cross & Travaglione, 2003). Furthermore, the literature is highlighting the motive for engaging in entrepreneurship and differentiating between entrepreneurs in times of necessity (when the entrepreneur starts a business due to the lack of adequate income) and in times of opportunity (when the entrepreneur starts a business to capture a business opportunity in the market) (Liñán et al., 2013).

The literature proposes, that there is a lack of a concise model of the entrepreneurial individual (Cross & Travaglione, 2003) and there is scarcity in research distinguishing entrepreneurs in times of necessity and in times of opportunity (Liñán et al., 2013). In addition, developing countries need SME development, which is mostly initiated by entrepreneurs. Thus, there is not enough in country-specific research focusing on the entrepreneurs as individuals, their behaviour and activities' outcome in developing countries.

This study will investigate the relationship between EI and NVC of entrepreneurs and will focus on one developing country, Egypt. Egypt has 75% of its labour force employed in SMEs (El-Said, Al-Said, & Zaki, 2014). Despite their unquestionable importance to the country and its development, still they are facing many problems, especially on the micro level. One of these problems is preparing and developing effective entrepreneurs.

This study is an attempt to shed more light on the field of entrepreneurship development. It will examine emotional intelligence and how it affects achieving success as an entrepreneur, which is measured through new venture creation. It will also analyze the effect of age and gender on this relationship, while differentiating between times of necessity and times of opportunity of the Egyptian entrepreneurs.

The statistical analysis shows that age has a moderating effect on the relationship between EI and NVC, whereas gender does not play a role in this relationship. There are also differences in the relationship between emotional intelligence and new venture creation in the case of opportunity-driven and in the case of necessity-driven entrepreneurs. The findings add to the body of knowledge on entrepreneurship. They also have practical implications to policy makers and entrepreneurs, as they propose recommendations for entrepreneurship education and capacity development programmes.

The next section of the study examines the literature and shows the research gap. It will conclude with the conceptual model and the research questions and hypothesis. Then the methodology and research design will be explained, followed by the data analysis and the discussion of the outcomes. The last part will be devoted to the conclusion, limitations and recommendations.

2. Literature review

The focus of the research on entrepreneurship kept changing over the years. First, in the 1970s and 1980s research focused on the entrepreneur as a human being and analyzed his/her characteristics (Cross & Travaglione, 2003). In the 1990s research moved to explore the cognitive abilities of the entrepreneur (Allen, 2012) and identified self-efficacy as a core of the entrepreneurial abilities (Mortan et al., 2014). Eventually the research spectrum expanded to include the entrepreneurial intentions and behaviour and most recently, it incorporated the output and main aim of the entrepreneurial process, which is new venture creation (Allen, 2012; Hack, von Bieberstein, & Kraczy, 2014).

2.1. Emotional intelligence

Emotional intelligence has its roots in social intelligence; it is about having both interpersonal (ability to interact with others) and intrapersonal (cognitive skill to understand one's self) intelligence (Naseer, Chishti, Rahman, & Jumani, 2011). This means it focuses on the ability and skills to know one's own emotions and manage them, as well as the ability to detect emotional cues in others and react accordingly.

The literature identifies two main streams for studying emotional intelligence: one is based on the ability model, developed by Mayer and Salovey (Mayer & Salovey, 1997). The second is based on the mixed models, which was initiated by Bar-On and then elaborated by Daniel Goleman (Aslan & Erkuş, 2008; Caruso, Mayer, & Salovey, 2002; Goleman, 2001). The latter is mostly used in the literature (Cross & Travaglione, 2003) and perceives EI as a mixture of both cognitive ability and personality. It defines EI as "the ability to recognize and regulate emotions in ourselves and others" (Goleman, 2001).

EI consists of five main dimensions: self-awareness, self-management, self-motivation, social awareness, and relationship management (Goleman, 2001). Self-awareness involves knowing one's internal states, having self-confidence and having a realistic assessment of one's abilities. Self-management involves managing one's own emotions and regulating one's impulses. Self-motivation is concerned with reaching goals and driving one's self to achieve. Social awareness (empathy) is about understanding the emotions of others and reacting correctly to them. Relationship management refers to communicating with

others in a way as to reach desirable responses. Emotional intelligence is therefore associated with successful leadership and effective performance (Kim, Yoo, Lee, & Kim, 2012), as all the characteristics/skills included in emotional intelligence have proven to be linked positively to leading and performing.

Demographic variables have been examined within emotional intelligence. The effects of age and gender on the emotional intelligence development have been widely studied; findings concluded that EI is higher in older people and more relevant to females (Goleman, 2001), though there is no agreement about this in the empirical studies (Law, Wong, Huang, & Li, 2008; Stys & Brown, 2004).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Mayer & Salovey, 1997), and the 'Emotional Competence Inventory' (ECI), developed by Goleman (1998) are mostly used to measure EI. However, they are long and detailed and measure a long list of competencies (Stys & Brown, 2004). Wong and Law developed a simplified self-report EI scale known as Wong and Law EI scale, WLEIS (Kim et al., 2012). It is based on the ECI and aims at revealing the person's knowledge about their own and others' emotional abilities rather than their actual capacities (Wong, Wong, & Law, 2007). The names of the five constructs were changed to: self-awareness (AR) internal motivation (MR), interpersonal skills (IR), mood regulation (RR) and empathetic response (ER). The reliability and validity of this measure was found acceptable for research purpose (Wong et al., 2007). WLEIS is a mixed model that views EI as a combination of personality traits, abilities and skills (Kim et al., 2012).

2.2. New venture creation

New venture creation is the outcome of entrepreneurship; it leads to economic growth, new industry formation and job creation (Allen, 2012; Mortan et al., 2014; Xu, 2014). Furthermore, the entrepreneurial success can be measured by the new venture creation, as this is the aim of any entrepreneur (Cross & Travaglione, 2003).

New venture creation (NVC) refers to the steps that lead to the birth of a new business (Baron, 2007). These steps include opportunities recognition, developing a business concept, and assembling resources to create an organization (Baron, 2007). Cornelissen and Clarke (2010) elaborated the previous definition and proposed that NVC is a process that requires a considerable amount of creativity, proactivity, problem solving abilities and the creation of value.

But one should not assume that NVC is identical to entrepreneurial behaviour (EB). EB is defined as "the process by which individuals—either on their own or inside organizations—pursue opportunities without regard to the resources they currently control", which suggests that entrepreneurial behaviour leads to new venture creation (Perry, Chandler, & Markova, 2012). However, not all entrepreneurial behaviour leads to NVC (Bird, Schjoedt, & Baum, 2012) and not all new venture creations are a result of EB (Hack et al., 2014).

The definition of NVC implies that the entrepreneur plays a central role in this process (Baron, 2007; Gartner, Carter, & Reynolds, 1996). Therefore, researchers went back to examining the psychological and sociological traits of the entrepreneur. This supports the traditional definitions of entrepreneurship which view it as a manifestation of a certain mind-set that drives the identification and exploitation of opportunities (Perry et al., 2012; Senges, 2007; Stevenson & Jarillo, 1990) to create a new venture. Still, "the role of emotional capital in the venture formulation is understudied and can be further investigated" (Mishra & Zachary, 2015, p. 265).

2.3. Emotional intelligence and entrepreneurship

Entrepreneurship research is interested in examining the personal characteristics differentiating entrepreneurs from other groups (Josien, 2008). Trait and cognitive theories were previously used to understand the entrepreneur as an individual already, but have failed to present a solid model and left many questions unanswered (Cross & Travaglione, 2003). Therefore, attempts were made later to examine the mind-set of entrepreneurs more thoroughly. There are competencies that are identified as being necessary for entrepreneurial development (Barazandeh, Parvizian, & Khorsravi, 2015). These include skills, which were proven effective in business performance of the entrepreneur (Barazandeh et al., 2015).

The emotional intelligence of entrepreneurs – which can be viewed as a set of skills and traits – was investigated to understand the different aspects of the entrepreneurial mindset (Mortan et al., 2014; Pradhan & Nath, 2012; Yitshaki, 2012; Zampetakis, Kafetsios, Bouranta, Dewett, & Moustakis, 2009). One of the aspects closely examined is the relation between EI and entrepreneurial intentions, which was proven to be positive and significant (McLaughlin, 2010) (Zakarevicius & Zuperka, 2010). As entrepreneurial intention leads to entrepreneurial behaviour, thus EI affects entrepreneurial behaviour, as well (Pribadi, 2005). Furthermore, previous research encouraged incorporating emotional intelligence competencies into entrepreneurship education, as a necessity to help students deal effectively with the uncertainty and ambiguity of the entrepreneurial process (Rhee & White, 2007). In addition, the relationship between EI and new venture creation (NVC) has only been examined fleetingly in the literature (Kesting & Guenzel-Jensen, 2015), although NVC is a proof of the entrepreneurial success.

2.4. The motive of entrepreneurs

There is a new important distinction in entrepreneurship based on the motivation behind the engagement in this activity. Middleton (2010) argues that the behaviour of individuals might be influenced by different factors, including motivation. The entrepreneurship literature distinguishes between a wide range of entrepreneurial motivations (Robichaud, LeBrasseur, & Nagarajan, 2010), ranging from economic (additional source of income) and non-economic (desire for independence or work-

family balance) factors to necessity and opportunity based motivations. The latter distinguishes between those who initiate entrepreneurial activities voluntarily and are pulled into entrepreneurship; and those who are pushed into such activities to address their unsatisfied needs due to lack of economic provision (Liñán et al., 2013). Scholars advocate that NVC happens regardless the motives of individuals (Uhlaner & Thurik, 2007), however they do not identify whether there are differences that take place due to the motivational variance. Emotional intelligence of entrepreneurs has not been examined in the different cases of necessity and opportunity of entrepreneurs.

2.5. The Egyptian context of entrepreneurship

SMEs constitute around 80% of job provision in Egypt (The Small and Medium Enterprises Policy Development Project, 2003) (El-Said et al., 2014). More than 75% of the SMEs are concentrated in Delta and Greater Cairo, are either macro or small, are engaged mainly in manufacturing or in trade and are mostly owned and run by one person, namely the entrepreneur (El-Said et al., 2014). Therefore, it is crucial to investigate the entrepreneur in Egypt in depth and try to identify the factors leading to his/her success in small business initiation and development. This can help policy makers and decision takers in supporting and enhancing entrepreneurship in the country.

Based on the above review, it can be concluded that there is a lack of sufficient research confirming the relationship between emotional intelligence and new venture creation (Yitshaki, 2012, p. 360). Furthermore, the literature does not provide evidence for differences in the new venture creation process based on age, gender and motivation, and it does not investigate these relationships in times of opportunity and times of necessity.

2.6. Conceptual model

Fig. 1

2.7. Research questions and hypothesis

The study attempts to answer the following research questions to fill the gaps in the literature:

1. Is there a significant relationship between emotional intelligence and new venture creation?
2. Do demographic characteristics, specifically age and gender, influence the relationship between emotional intelligence and new venture creation?
3. To what extent does the motive of entrepreneurship play a role in the relationship between emotional intelligence and new venture creation?

The study will test the following hypothesis based on the data collected in Egypt (as illustrated in Fig. 1):

H1: There is a significant relationship between emotional intelligence and new venture creation in the case of Egyptian entrepreneurs.

H2: Gender and age have a moderating effect on the relationship between emotional intelligence and new venture creation in the case of Egyptian entrepreneurs.

H3: The effect of emotional intelligence on new venture creation is different in based on the motive of the Egyptian entrepreneurs.

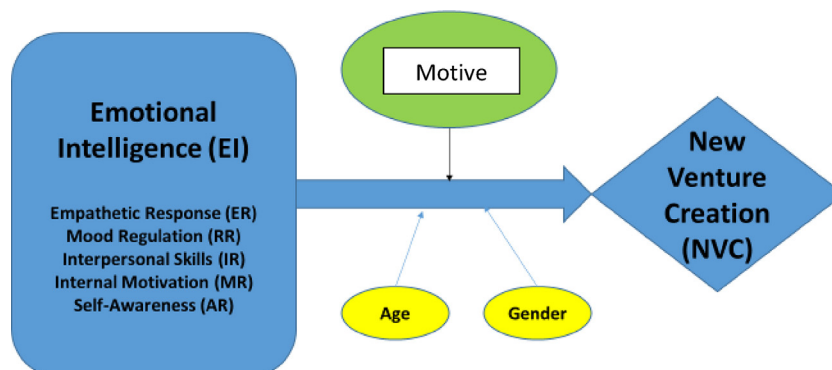


Fig. 1 – The Impact of emotional intelligence of entrepreneurs on new venture creation.

3. Methodology and research design

3.1. Sample characteristics

The Global Entrepreneurship Monitor (GEM) report for Egypt 2012 (Hattab, 2013) identifies that entrepreneurs comprise 7.8% of adults in Egypt, which concludes that 4.1 million people in Egypt are entrepreneurs. The sample size, at a confidence level of 95%, margin of error 5%, will be between 370 and 378 (Christensen, Johnson, & Turner, 2015; Research Advisor, 2007); hence, the targeted sample size is 378. The number of surveys distributed was more than 750 to be able to disregard the invalid surveys.

Ten governorates are targeted: Cairo, Beni Sweif, Qena, Behira, Alexandria, Fayoum, Gharbeya, Souhag, Helwan, and Giza. This is balanced geographic distribution, as it includes two governorates in greater Cairo, four in upper Egypt and four in lower Egypt. These governorates also have more than 50% of SMEs in Egypt (El-Said et al., 2014).

3.2. Data collection procedure

The first group of participants was selected through convenience sampling, then the snowball technique was used and participants were asked to forward the questionnaire to other entrepreneurs. The rationale behind the use of non-probability and snowball sampling techniques is to ensure reaching out to a diverse pool of SME owners who are scattered across the country. The response rate was 65%, which is higher than the acceptable response rate in social research, estimated at 50% (Nutly, 2008).

3.3. The data collections instruments

The questionnaire is divided in two parts, 1. Basic demographics about the respondents and characteristics of their enterprises as well as the new venture creation (NVC); 2. Emotional intelligence construct measure– using Wong and Law's questionnaire (Wong & Law, 2002), which uses Likert scale. The reliability of the scale was evaluated using Cronbach alpha, which scored (0.89). While collecting the data, ethical considerations were adhered to; respondents were assured of the secrecy of the surveys and that they are used for academic purposes.

4. Findings and discussion

The statistical analysis is conducted using SPSS. The number of cases that were used was 378, after eliminating invalid responses. The regression analysis is used to see how the dependent variable is affected by the independent variables. The research's dependent variable is the new venture creation; it is categorical. Therefore, logistic regression was used to predict the contribution of each independent variable to the probability of the occurrence of the dependent variable. A series of logistic regressions should be used to cover all the possible relationships between the independent (EI with all its constructs; ER, RR, IR, MR and AR) and the dependent variable (NVC). In addition, age, gender as well as whether the motivations is opportunity- or necessity-driven were considered in each case.

The analysis shows that there is a significant relationship between EI as a construct and the NVC as an outcome of the entrepreneurial behaviour for both opportunity-driven and necessity-driven entrepreneurs combined. The relation between EI and NVC is significant at the 0.05 level, explaining 32.6% of the changes occurring in NVC, as a result of EI (the coefficient of determination R-square is 32.6). So, emotional intelligence can predict new venture creation. This confirms that entrepreneurs who succeed to create a new venture possess emotional intelligence.

When examining the relation between each construct of the five constructs of EI and NVC, the logistic regression analysis shows a significant relationship between three components of EI and NVC, Interpersonal skills (IR), internal motivation (MR) and self-awareness (AR). Table 1 shows the relation between EI and NVC overall and each of the constructs of EI and NVC.

The analysis also shows that IR, MR and AR are all significantly related to NVC at the 0.05 level. This means that individuals with interpersonal skills, internal motivation and self-awareness are the ones who have the higher potential of successfully engaging in new venture creation.

Table 1 – Logistic regression – EI and NVC.

Independent variable (s)	Dependent variables	Sig	Wald statistic	R-square
EI	NVC	0.0	144.9	32.6
ER	NVC	0.158	0.345	–
RR	NVC	0.27	1.217	–
IR	NVC	0.023	5.143	8.1%
MR	NVC	0.022	5.226	18.2%
AR	NVC	0.031	4.629	14.3%

Analysis of Covariance (ANCOVA) is used to investigate the impact of gender on the relation between EI and the NVC in Table 2. Since the $\text{sig} > \alpha = 0.05$, it can be concluded that there is no significant difference between male and female in the relation between EI and NVC in the case of Egyptian entrepreneurs. The analysis of Covariance (ANCOVA) is also used to investigate the effect of age on the relation between EI and NVC in Table 3.

Graph 1 illustrates that there is a significant difference in the relation between EI and NVC between age categories. It is evident that the effect of EI on NVC is more in the higher age categories. Thus, older individuals have a higher chance of succeeding in new venture creation when having higher EI levels.

When validating the results of the relationship between EI and NVC dividing the entrepreneurs in necessity-driven and opportunity-driven entrepreneurs, the results are different. When comparing the effect of age on the relationship between EI and NVC, it has a significant effect on the relation between EI and NVC in the case of the necessity-driven entrepreneurs only (0.040 compared to 0.065). This shows that age plays a role in the case of entrepreneurs that are pushed out of necessity to engage in entrepreneurship.

Going into details of the EI constructs, Table 4 shows the results of logistic regression between each of the EI constructs and NVC among necessity driven (NE). For the necessity driven entrepreneurs, again IR, MR and AR are significant, where MR and IR are explaining approximately the same percentage of changes resulting from internal motivation.

When it comes to opportunity-driven entrepreneurs, the results are different, as shown in Table 5. Interpersonal skills (IR) and self-awareness (AR) are significantly related to NVC in the case of opportunity driven entrepreneurs. The significance of AR is very high (0.00). Self-awareness in the case of opportunity-driven entrepreneurs explains 36.2% of the changes in new venture creation.

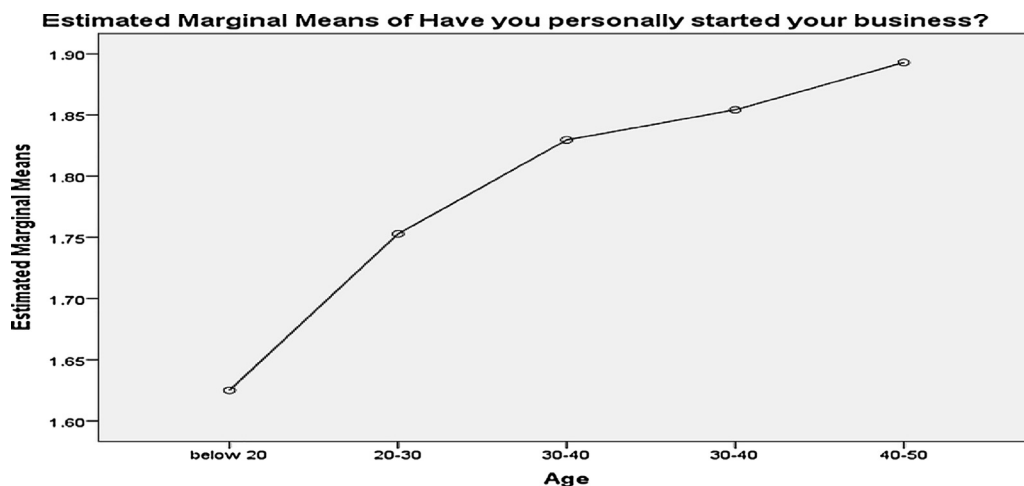
Based on the analysis, the following can be concluded:

Table 2 – Tests between-subjects effects ANCOVA.

Source		df	F	Sig.	Partial eta squared
Intercept	Hypothesis	1			
EI	Hypothesis	295	0.815	0.838	0.841
	Error	45.481			
Gender	Hypothesis	1	0.174	0.678	0.004
	Error	47.534			

Table 3 – Tests between-subjects effects ANCOVA.

Source		df	F	Sig.	Partial eta squared
Intercept	Hypothesis	1	1072.245	0.000	0.997
	Error	3.625			
EI	Hypothesis	297	0.997	0.519	0.758
	Error	94.756			
Age	Hypothesis	4	2.585	0.042	0.094
	Error	99.098			



Graph 1 – The difference in relation between EI and NVC due to age categories.

Table 4 – Logistic regression – EI and NVC in case of necessity.

Independent variable (s)	Dependent variables	Sig	Wald statistic	R-square
EI	NVC-NE	0.031	80.62	49.3%
ER	NVC-NE	0.066	0.065	–
RR	NVC-NE	0.328	0.956	–
IR	NVC-NE	0.0	121.31	57.2%
MR	NVC-NE	0.0	120.6	57.8%
AR	NVC-NE	0.0	108.59	51.2%

Table 5 – Logistic regression – EI and NVC in case of opportunity.

Independent variable (s)	Dependent variables	Sig	Wald statistic	R-square
EI	NVC-OP	0.043	6.62	9.3%
ER	NVC-OP	0.384	0.758	–
RR	NVC-OP	0.661	0.193	–
IR	NVC-OP	0.015	5.913	8.3%
MR	NVC-OP	0.063	3.452	–
AR	NVC-OP	0.0	31.42	36.2%

1. There is a significant relationship between the EI and the NVC in the Egyptian context.
2. Age has a moderating effect on the relationship between EI and NVC. It is more significant in the case of necessity-driven entrepreneurs than in the case of opportunity-driven entrepreneurs. Gender does not play a significant role in the relationship between EI and NVC.
3. Based on the motive of the entrepreneur (opportunity- or necessity-driven), there are specific dimensions/constructs that have a significant impact on the relationship between EI and NVC. In the case of entrepreneurs driven by necessity, the internal motivation (MR) is most significant, followed by interpersonal skills (IR), then by self-awareness (AR). In the case of entrepreneurs driven by opportunity, it is self-awareness (AR), followed by interpersonal skills (IR).

For the hypothesis, the study confirms the following:

H1. There is a significant relationship between EI and NVC in the case of Egyptian entrepreneurs.

This hypothesis is accepted. Furthermore, it is proven that there are three of the five dimensions/constructs of EI which have a significant effect on NVC in the case of Egyptian entrepreneurs: interpersonal skills, internal motivation and self-awareness.

H2. Age and Gender of the Egyptian entrepreneurs have a moderating effect on the relationship between EI and NVC.

This hypothesis is partially accepted. Only age has an impact on the relation between EI and NVC; it is more apparent in the case of necessity-driven entrepreneurs. Gender does not have any impact on the relationship between emotional intelligence and new venture creation.

H3. The effect of EI on NVC is different based on the motive of the entrepreneurs.

This hypothesis is accepted. In the case of necessity-driven entrepreneurs, the significance is higher. When breaking down EI to its 5 components, IR, MR and AR are significant but MR is most effective. When it comes to opportunity-driven entrepreneurs only IR and AR are significant, where AR is most effective on new venture creation. This means that when the motive to be an entrepreneur is out of necessity, then internal motivation, self-awareness and interpersonal skills are most important in succeeding to be an entrepreneur and in creating new ventures. However, if the motivation is opportunity-driven, then self-awareness and interpersonal skills are the most significant factors that lead to the entrepreneurial success.

5. Conclusion and recommendations

This study adds to the body of literature of entrepreneurship and new venture creation. It confirms that the emotional intelligence of entrepreneurs has a strong effect on new venture creation. Thus, it explains why some individuals have a higher potential of

creating new ventures than others. Furthermore, the results show differences in the emotional intelligence dimensions of necessity-driven entrepreneurs and opportunity-driven entrepreneurs. In terms of necessity-driven entrepreneurs, they should have higher internal motivation to succeed and create a new venture. This is an expected outcome from an individual who is pushed into starting a new business as an essential mean of income generation. These kinds of entrepreneurs should also have high interpersonal skills, which include effectively communicating, building rapport, and relating well to all people, from all backgrounds and communication styles. It is one of the most important attributes of an entrepreneur, as without them entrepreneurs would only be able to relate to those who share their exact communication style, which would restrict their ability to convey their vision and goals (Bonnstetter, 2012).

When it comes to opportunity-driven entrepreneurs, researchers demonstrated that they are confident and professional (Solymosy, 1997), therefore, these entrepreneurs are high in self-awareness and interpersonal skills. They are growth-oriented and perceive problems as an opportunity for a new venture. They depend on, build and utilize their social networks effectively to acquire resources and have access to markets and information, which influences their performance in a positive way (Cantzler & Svante, 2007).

There are practical and academic implications of the outcome of this study. Egypt, like other developing countries, has a shortage in country-specific research focusing on entrepreneurs. This research will help the different players in the ecosystem (community development entities, policy makers, investors, etc.) to understand forces and determinants of the individual entrepreneur which are affecting new venture creation. This will enable them to develop and implement policies and capacity building programmes to enhance and support effective entrepreneurial outcomes (Ghosh & Rajarm, 2016). Among these programmes would be educational initiatives and curricula in schools and universities (McLaughlin, 2010).

Additionally, it will help entrepreneurs themselves better understand the personal requirements for more effective new venture creation. Entrepreneurs who are necessity-driven, require programmes that target enhancing internal motivation by mobilizing one's positive emotions towards achieving one's goal (Goleman, 2001). Opportunity-driven entrepreneurs will require workshops that enhance and develop the emotional intelligence construct of self-awareness by developing their ability to recognize their own emotions and their effects on them and on others. This increases their self-confidence, which in turn leads to better decision making and more successful venture creation (Ghosh & Rajarm, 2016). In addition, their interpersonal skills should be targeted by training them to acquire important skills like, influencing others, effective communication, conflict management and working effectively in teams and to manage change (Law et al., 2008).

Future research should investigate the applicability of the same proposed model to other countries. It is not clear if this only applies to Egyptian entrepreneurs. Studies should also compare their results with those of the Global Entrepreneurship Monitor report and identify differences and similarities. There are other forces affecting entrepreneurial behaviour within the Egyptian context like culture, education, and various variables in the ecosystem. This will require further investigation in Egypt and in other countries to complement this study and overcome some of its limitations.

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Conflict of interest

None.

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