

The Impact of Entrepreneurs' Emotional Intelligence on Creativity: The Moderating Role of Personal Traits

**Ala'eddin Ahmed¹, Nour Aldahabreh², Nawras M. Nusairat^{3*}, Mohammad Abuhashesh⁴,
Leila Rawashdeh⁵, Jassim Ahmad Al-Gasawneh⁶**

¹E-Marketing and Social Media Department, Princess Sumaya University for Technology (PSUT), Amman, Jordan,
a.ahmed@psut.edu.jo

²E-Marketing and Social Media Department, Princess Sumaya University for Technology (PSUT), Amman, Jordan,
nour.dahabreh.2014@gmail.com

³Department of Marketing, Applied Science Private University (ASU), Jordan, n_nserat@asu.jo

⁴E-Marketing and Social Media Department, Princess Sumaya University for Technology (PSUT), Amman, Jordan,
m.abuhashesh@psut.edu.jo

⁵Business Administration Department, Princess Sumaya University for Technology (PSUT), Amman, Jordan,
l.rawashdeh@psut.edu.jo

⁶Department of Marketing, Applied Science Private University (ASU), Jordan J_algasawneh@asu.edu.jo

Abstract

The main objective of this research is to investigate the impact of emotional intelligence of entrepreneurs on creativity, and the moderating role of their personal traits. Also, the aim was to identify the connection between independent and dependent variables. The research independent variables consist of emotional intelligence factors (self-awareness, self-regulation, self-motivation, social awareness, and social skills) and the dependent variables are represented by creativity. A quantitative method was used to accumulate the initial data from a research survey that was given to entrepreneurs in Jordan. The result shows a positive impact of emotional intelligence on creativity. The conclusion of this paper provides essential suggestions for policy-makers, entrepreneurs, and those wishing to support and promote entrepreneurship in Jordan.

Keywords

Emotional Intelligence, Creativity, Entrepreneurship, Personal Traits, Jordan.

Introduction

Recent years have seen the emergence of entrepreneurship as a critical topic. It is of equal importance to both academics and politicians, since it has been conclusively linked to both economic and personal growth. McGuire (2003) stated that entrepreneurship is the transformation of innovation into unused product, services, or a trade to require advantage for a market opportunity. Moreover, entrepreneurship plays a crucial role in creating jobs, which is a prominent factor in the development of economies (Prabhu et al, 2012). Jordan's economy has been affected in many different ways since the Arab Spring, and thus entrepreneurship, closely related to the economy, the environs, and the social makeup of the country, has also been affected. Further, unemployment and low salaries have been increasingly problematic, and there is a pressing need for this to change in order to avoid further social unrest.

Entrepreneurship means the ability to lead. Shedding light on entrepreneurial factors, emotional intelligence (EI) is an essential link between an individual and their likelihood to engage in entrepreneurship and creativity. The concept of EI was first popularized by Daniel Goleman (1995), with the term referring to a person's proficiency regarding self-awareness, self-management, social awareness, and relationship management (Brotheridge, 2002). EI empowers individuals to manage and understand their own and others' emotions in social interconnection. Possessing these abilities is the basis for good

leadership, creativity and, importantly, they can be learned (McKee et al., 2008). These competencies can be helpful to generate healthy working environments that assist people in excelling in their chosen fields of work. EI is crucial to creativity because of employees' capacity to think clearly, make the right choices and focus on tasks is linked to employees' emotions. Humans' brains are complexly designed. Moreover, EI forms an essential connection between neurophysiology, i.e., how the brain functions, psychology (identity, motives, and characteristics), and values (deeply held convictions about how to act based on people's beliefs) (Goleman et al., 2013). As humans, people often sense the emotions of others. Limbic reverberation could be a term utilized to depict how feelings are effective and infectious drivers of human's considerations, sentiments and behaviors. Recent investigations have revealed evidence indicating that structures exist in a people's brains called "mirror neurons" which help humans to sense emotions and experiences from others (McKee et al., 2008). This means that individuals are wired to empathize with one another. The research problem revolves around studying the factors behind EI which influence entrepreneurs' creativity in Jordan; also it tries to answer these questions:

1. What are the most significant EI factors impacting the entrepreneur's creativity in Jordan?
2. What are the most significant EI factors impacting the entrepreneur's creativity in Jordan, moderating role of personal traits?

Literature Review

Entrepreneurship

There has been a growing recognition of the role of EI in entrepreneurship in recent years. Many scholars (Gartner, 1988; Luthje & Franke, 2003; Iakovleva et al., 2011) have investigated entrepreneurship as an essential factor in successfully leading businesses and have defined it as an incentive force in developing the economic system of a country through the creation of job vacancies in the labor market. Researchers agree about the critical role entrepreneurship plays in creating an innovative society, providing opportunities for personal development and fulfillment, and importantly, providing opportunities for social empowerment (Mehtap, 2014). Entrepreneurship is also related to the overall economic situation of the country, having an ability to stimulate and improve the economy. To power entrepreneurship, various factors are necessary, since initiating a business can be a risky endeavor. Potential entrepreneurs require the knowledge and skills to seek and exploit a gap in the market. For this they need education and training, as well as guidance and advice from mentors. To help them get their projects off the ground, financial or government incentives must be offered (Mehtap, 2014). Most importantly, however, entrepreneurs need to be creative, to develop and to utilize an original idea for which there is a market demand (Awwad & Ali, 2012).

In the last ten years, it is clear that policy planners and makers have concentrated on supporting ambitious projects in both developing and developed areas. Simultaneously, there has been an increase in academic studies focusing on the personal traits of businesspeople, as well as the goals and aims of a business and its environment. With the current trend in support for entrepreneurs, there is an additional requirement for business education and training courses (European Commission, 2010). With the current state of the economy in the Arab World, many in politics and business emphasize that now is the time for an entrepreneurship revolution, to provide stimulus for the economy, and employment for the populace.

Emotional Intelligence

Poor EI connects negatively with work and work-related pressure (Tsaousis & Nikolau, 2005). Consequently, numerous researchers contend that EI forms a critical element of productive leadership (Sadri, 2012; Al-Adamat, Al-Gasawneh & Al-Adamat, 2020) as "it speaks to a critical ability for compelling authority and group execution in associations" (Prati et al., 2003; Castro et al., 2012).

The three theories that stand out as creating the most interest in terms of investigations and research, will be briefly reviewed, particularly the hypotheses of (Salovey & Mayer, 1990; Goleman, 1998; Bar-On, 2006). The first noteworthy speculations to arise were those of Bar-On (1997) who instituted the expression "emotional quotient" (EQ), as a comparison to Intelligence Quotient (IQ). Bar-On founded his model on five primary collective and passionate capacities including intrapersonal abilities, interpersonal abilities, flexibility, managing stress, and the emotional state, which together impact an individual's skills to adapt viably to ecological requirements. His model in this manner encircled EI with regards to identity hypothesis and is foremost seen as a common model of mental prosperity and adjustment (Goleman, 2001).

Received 15 May 2021; Accepted 20 May 2021.

Salovey and Mayer (1990) further formed EI within an intelligence model. The inspiration to develop a hypothesis of EI originated as an acknowledgment that standard customary knowledge neglected to gauge particular contrasts within the capacity to see, process and viably oversee feelings. In like manner, they developed a model that has a psychological basis, sketching out the unequivocal mental states for perceiving with marshaling feelings (Goleman, 2001; Nusairat et al., 2017). Goleman (1998) showed an EI-based hypothesis of execution that is competency-based, containing a discrete arrangement of actions that integrate both cognitive (and mental) abilities and practical (or emotional) abilities. For the purpose of this research the following main hypothesis was developed for EI:

H1: There is a significant positive relationship between entrepreneurs' emotional intelligence and creativity in Jordan.

H1 includes five sub-hypotheses:

H1-1: There is a significant positive relationship between the self-awareness of entrepreneurs and creativity in Jordan.

H1-2: There is a significant positive relationship between the self-regulation of entrepreneurs and creativity in Jordan.

H1-3: There is a significant positive relationship between the self-motivation of entrepreneurs and creativity in Jordan.

H1-4: There is a significant positive relationship between the social awareness of entrepreneurs and creativity in Jordan.

H1-5: There is a significant positive relationship between entrepreneurs' social skills and creativity in Jordan.

Empirical studies of EI

There is a growing accumulation of data that documents the significance of EI abilities for best performance at work. McClelland (1998) discusses information that was gathered from almost thirty different institutions. It was demonstrated that those workers with the highest performance records possessed a vast range of EI expertise connecting to social awareness, social skills, and self-motivation, while those with poorer performance lacked EI abilities in these areas. Previous studies indicate that commanding EI abilities is associated with higher levels of satisfaction at work, a greater capacity to compromise when faced with both change and stress, and more significant commitment to the organization. EI holds genuinely steady overall execution areas, including work's data gathering and scholastic execution (Carmeli, 2003; Vakola et al., 2004). These discoveries correlate with those of Watkin (2000), whose exploration depicts EI as an essential factor for unrivaled execution at each dimension from section level employment to top official positions. Bar-On and Parker (2000) also confirm EI capabilities as the basis for predictable achievement in different jobs, and Goleman (1998) also notes that 67 percent of the capacities which are fundamental to perform well at work are EI abilities. There are blended discoveries, for instance concerning the connection between age and EI. However, several investigations propose that age does not significantly affect EI (Cakan, 2005).

Amabile (1983) stated that the creative process is related to motivation, being an element of the same assessment process. Motivation can be defined as 'the behavior concerning a task, and the approach of one's motivations.' Gioia and Poole (1984) contend that individuals will pursue innovatively as they are highly motivated, and since they can find new ways of acting, and can understand and make sense of the situations they encounter. Amabile (2001) noted that creating highly creative habits, creativity involvement, and creativity expertise must be complemented by motivation.

Numerous studies have asserted that creative behavior is enhanced when employees are more motivated. Thus, individuals who lack self-motivation tend to be less confident, and thus have lower levels of creativity (Yang & Chen, 2012). This information provides this study with a solution for enhancing creativity and knowledge creation, since employees must be invested in the outcome they are working towards, enabling them to develop creative solutions to problems, and allowing them to achieve the desired results.

Creativity

Gurteen (1998) noted that creativity is about divergent thinking and developing ideas. Researchers have investigated the factors which can contribute to creativity, since humans are considered as creative beings, and there is a motive to provide methods for developing creativity (Zhu, 2011). It can be challenging to predict the occurrence of creative ideas. However, three key elements which are closely linked with human inventiveness have been recognized by Teresa Amabile (Amabile

Received 15 May 2021; Accepted 20 May 2021.

1998; Harvard Business School, 2003; Ahmad et al., 2020). These incorporate (1) expertise, (2) creative-thinking skills, and (3) motivation, as shown in Figure (1). These components have been considered in this research.

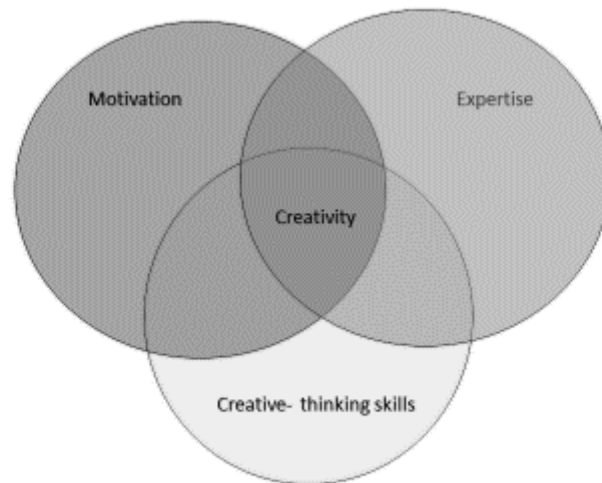


Figure 1. The components that were considered in the study.

Expertise is characterized as specialized, procedural, and mental knowledge (Harvard Business School, 2003) and plays an essential part in creativity.

Creative-thinking skills is characterized as the methods by which individuals deal with, and develop, creative solutions to problems. Specific mental thinking abilities are needed for creativity and have been identified (Koestler, 1975; Poincare, 1982; Ishikawa & Terano, 1996; Boden, 2004).

Motivation is identified as the passion, interest, or incentives which effect people, enabling them to be dedicated to developing and exploring highly creative solutions to address problems (Cardon et al., 2009).

Relationship between EI and Creativity

Researchers have commonly looked into the connection between EI and work-related outcomes, such as motivation, creativity and, institution engagement. Emotional expression has been examined by scholars of management, as being one component of the overall work experience, with the finding that feelings are importantly related to work fulfillment, work behavior and work cleverness (Staw et al., 1994; Dulewicz et al., 2005). For this reason, it is critical to developing a greater understanding of how strong EI enables individuals to control their emotions, and enable them to deal with others. Higher levels of EI provide an individual with a significant advantage, as it allows them to perform better in the decision-making process since it will lead them to a better understanding of how others feel and behave. Additional research indicates that people with the highest levels of EI tend to be more efficient and exhibit more group production (Rice, 1999).

A study by Silva and Coelho (2019) focused on the effect of EI on creativity, the intervening part of laborer demeanor and the directing impacts of individual best achievement. The objective of this work was to recognize the impact of EI on creativity, considering the mediating roles of job resourcefulness, self-motivation and organizational commitment moderated by individual best achievement. The results of their work indicated that EI had a positive effect on creativity and other behavioral variables, and individual success appeared to moderate most of the presented relationships. The sample used in their study, however, made a generalization of the results difficult. Importantly, their study identified several work-

Received 15 May 2021; Accepted 20 May 2021.

related outcomes of EI, indicating new potential subjects for training programs, mainly related to soft skills. The research was innovative as it analyzed the intervening of driving factors, like work resourcefulness, on emotional intelligence's connection with creativity, directed by individual best achievement.

Today, creativity as a concept is viewed as an essential and valuable resource (Lowry-O'Neill, 2011), which reflects varying characteristics concerning the domain appearances. Thus, academics investigating the connection between emotional intelligence, leadership, and creativity declare that leaders sense EI as one of the prime elements of leadership to generate employees' creativity (George, 2000; Shalley et al., 2004; Antonakis et al., 2009). It can, therefore, be discussed that individuals with high levels of creativity are an important asset to any organization or endeavor, as creativity has been proven to aid performance.

Research into the effect of EI on creativity uncovered evidence that emotional methodologies can have on stress at work, job fulfillment and benefit execution (Diefendorff et al., 2005; Beal et al., 2006; Johnson & Spector, 2007; Groth et al., 2009). The results show that EI have a positive impact on employee creativity (Ashforth & Humphrey, 1993; Grandey, 2003).

Personal Traits

Identity is a concept that has attracted attention from numerous researchers. As indicated by Burger (2006), identity is an interpersonal process and consistent behavior of conduct inalienable to the individual himself. Finkelstein et al. (2005) characterize identity as integrated qualities that control and determine cognitive, emotional, and behavioral patterns. These qualities demonstrate psychological characteristics, and reveal the "real" personality, uncovering a person's identity.

Identity characteristics and discernment are two noteworthy methodologies that endeavor to distinguish entrepreneurs from non-entrepreneurs (Shaver & Scott, 1992; Stewart et al., 1999). Previous research has neglected to decisively recognize parallel connections between personality traits and entrepreneurial behavior gaining ground in building a hypothesis of enterprising cognizance that centers on how individuals make appraisals, decisions, and choices that include opportunity assessment, adventure creation, and development (Mueller et al., 2010). A few analysts recommend that the possession of certain personality traits may anticipate some portion of the entrepreneurial cognitive process (Krueger & Carsrud, 1993; Simon & Houghton, 2002).

Personality traits and cognition are two factors used to distinguish those who possess entrepreneurial tendencies from those who do not. Entrepreneurs, acting in the role of asset facilitators and start-up operators, often incorporate and use their social networks to support their new business venture. These social networks are one of their most valuable resources, vital in assisting the new business venture to be successful (Larson & Starr, 1993).

In this research, hypothesis Ha2 was added to consider personal traits as follows:

H2: A significant positive relationship between entrepreneurs' emotional intelligence and creativity in Jordan, with a moderating role played by personal traits.

EI, Creativity, and Entrepreneurship

In Ahmetoglu et al. (2011), they examined whether EI predicts entrepreneurship which is connected to entrepreneurial satisfaction and favorable result. They determined that EI predicts only a few entrepreneurial results beyond other factors inspected with small impact sizes. The study agreed that these three factors had a direct positive relationship on industrial SMEs' entrepreneurial orientation. Besides, managers' EI had a positive direct impact on institutional condition, which led to a positive knock-on impact on employees' creativity.

The Emotional Quotient (EQ) has also been identified as an important predictor of favorable workplace results. Entrepreneurs are individuals who can operate beyond the usual restrictions of a traditional work environment. Using qualitative methods, several Australian entrepreneurs were interviewed concerning their EI ability. EQ was inspected via in-depth organized interviews. It was anticipated that the entrepreneurs would significantly display particular proportions, hence an EQ-level beyond the standard. Not only did the study abdicate such a result, but it also appeared that the

entrepreneurs display high levels of all the sub-scales in each demonstrate. The outstanding exaction of each entrepreneur in EI ability, as well as all the sub-scale levels, unequivocally supports the concept that EQ may be the lost calculate that has rendered entrepreneurship studies tricky.

Research Methodology

Given that there are no secure reference databases, it is difficult to state an exact population size for this study, but the study findings estimate it to consist of approximately 1,040 entrepreneurs working in a range of businesses in cities throughout Jordan. A questionnaire was distributed to a research sample of 280 respondents. The study sample was retrieved is 180 questionnaires, and 123 (or 64%) of those were valid. A convenience experiment strategy was used to choose the participants in this paper. The research sample comprised of Jordanian and non-Jordanian males and females who are engaged in Total Entrepreneurial Activity, all of whom fall into the age range of 18-58 years. The sample encompasses 79 males (64.2%) and 44 females (35.8%). Regarding nationality, the study involves 106 Jordanians (86.2%) and 17 non-Jordanians (13.8%). Also, in view of the important level of ($\alpha > 0.05$), it is clear that the distribution of all factors was ordinary. Where the ordinary conveyance proportions for each variable is more than (0.05) which is the affirmed level in the measurable treatment of the current study.

Results

Adequacy of the Data to Test the Study Hypotheses

Before examining the test hypotheses, this study conducted a few preliminary tests to guarantee the adequacy of the collected data for the suspicions relapse examination. This research ensured that the data follows the normal distribution measurement of the skewness coefficient, as the data follows a normal distribution if the value of skewness coefficient is less than (± 1).

Depending on the statistical result there is no Multicollinearity connection between the independent variables, agreeing that the values of Variance Inflation Factor of the elements are (5.195, 7.569, 5.645, 4.423, and 4.395), respectively, less than (10). It can be shown that the values of Tolerance are (0.132 – 0.228), which is more than (0.05). This is an indication that there is no Multicollinearity connection with the independent variables. To ensure that the data follows a normal distribution, the researcher measured the Skewness coefficient where the values were less than (± 1).

Hypothesis Testing

The researcher divided the tests into two different hypotheses: the first is testing Simple Regression, and Multiple Regression Analysis. The second is testing through Hierarchical Multiple Regression Analysis.

H1: There exists a significant positive relationship between entrepreneurs' emotional intelligence (self-awareness, self-regulation, self-motivation, social awareness, and social skills) and creativity in Jordan.

A simple linear regression test is conducted to investigate Ha1 hypothesis. Results of the test are shown in Table (1). From the Table, (R) value represents simple correlation and is (83%), which indicates that the relationship between two variables is generally considered a very good impact size. The (R²) value indicates how much of the total variation in the creativity can be explained by entrepreneurs' emotional intelligence. In this case, (68.9%) can be explained; while the remaining proportion (31.1%) can be explained by other variables that are not included in the regression model.

The ANOVA Table provides an F-test to determine whether the model is a good fit for the data. According to this p-value, it is. Since $F(1, 121 \text{ degree of freedom}) = 267.482$, $p \leq 0.05$, which indicates that, overall, the regression model is statistically significant (a good fit for the relationship between entrepreneurs' EI and creativity).

The Coefficients Table provides the necessary information to predict creativity from various entrepreneurs' EI, as well as to determine whether entrepreneurs' EI makes a statistically significant contribution to the model. Besides, Beta values for entrepreneurs' EI reached (0.830) which indicates a prediction of (83%) of the creativity comes from the EI of entrepreneurs. In other words, the results can be interpreted as (For every unit increase in the EI of entrepreneurs, there is a (83%) unit increase in the predicted creativity).

Based on these results, it is accepted that the alternative hypothesis and null hypothesis should be rejected.

Received 15 May 2021; Accepted 20 May 2021.

Table (1): Simple linear regression analysis to ensure the impact of EI of entrepreneurs on the creativity:

Dependent Variable	Model Summary		ANOVA			Coefficient		
	R	R ²	F	df	Sig.	β	t	Sig.
Creativity	0.830	0.689	267.482	1	0.000	0.830	16.355	0.000

The H1 hypothesis included five sub hypotheses:

H1-1: There is a significant positive relationship between the self-awareness of entrepreneurs and creativity in Jordan.

H1-2: There is a significant positive relationship between the self-regulation of entrepreneurs and creativity in Jordan.

H1-3: There is a significant positive relationship between the self-motivation of entrepreneurs and creativity in Jordan.

H1-4: There is a significant positive relationship between the social awareness of entrepreneurs and creativity in Jordan.

H1-5: There is a significant positive relationship between the social skills of entrepreneurs and creativity in Jordan.

To test this hypothesis, the study uses the multiple regression analysis to ensure the impact of EI of entrepreneurs' dimensions (self-awareness, self-regulation, self-motivation, social-awareness, and socialskills) on their creativity. This is shown in Table (2).

Table (2): Multiple regression analysis shows the impact of EI of entrepreneur dimensions on creativity:

Dependent Variable	(R)	(R ²)	F	DF	Sig*	B		T	Sig*
Creativity	0.877	0.769	77.776	5	0.000	Self-Awareness	0.530	5.232	0.000
				Self-Regulation		0.067	0.547	0.585	
				Self-Motivation		0.214	2.029	0.035	
				Social-Awareness		0.181	1.933	0.045	
				122		Social-Skills	0.302	3.242	0.002

* The impact is significant at level ($\alpha \leq 0.05$).

Table (2) illustrates the impact of EI of entrepreneur dimensions (self-awareness, self-regulation, self-motivation, socialawareness, and socialskills) on creativity. The regression model achieves a high degree of fit, as reflected by (R) and (R²) values (0.877) and (0.769), which asserts that (76.9%) of the explained variation in creativity can be accounted for entrepreneurs' EI (self-awareness, self-motivation, socialawareness, and socialskills). On the other hand, the executive data set in Table (2) indicates the slope value of (0.530), (0.214), (0.181) and (0.320) for the regression line. This suggests that for a one-unit increase in entrepreneurs' EI (self-awareness, self-motivation, socialawareness, and socialskills) can significantly predict a (53%), (21.4%), (18.1%) and (32%) increase in creativity. Table (2) illustrates that the analysis of variance of the fitted regression equation is significant with F value of (77.776). This is an indication that the model is a good one. Since the p-value is ($\alpha \leq 0.05$), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The outcomes also showthat EI of entrepreneurs (self-awareness, self-motivation, socialawareness, and socialskills) actually impact on creativity with a coefficient of (0.530) for self-awareness, (0.214) for self-motivation, (0.181) for socialawareness, and (0.320) for socialskills. Thus, EI of entrepreneurs (self-awareness, self-motivation, socialawareness,

Received 15 May 2021; Accepted 20 May 2021.

and social skills) actually impact on creativity. The results lead the study to accept the alternative hypothesis and reject the null hypothesis.

H2: There is a significant positive relationship between entrepreneurs' emotional intelligence and creativity in Jordan moderated by of personal traits.

To test this hypothesis, the research uses the Hierarchical Multiple Regression analysis to ensure the moderate impact of personal traits on the relationship between the EI of entrepreneurs and creativity in Jordan, as shown in Table (3).

Table (3): Hierarchical Multiple Regression analysis to ensure the moderate impact of personal traits on the relationship between entrepreneurs' EI and creativity in Jordan:

Dependent Variable	Independent Variables	Model 1			Model 2		
		β	T	Sig*	β	T	Sig*
Creativity	Emotional intelligence of entrepreneurs	0.830	18.005	0.000			
	Emotional intelligence of entrepreneurs X Personal traits				0.634	2.898	0.004
	R	0.830			0.864		
	R ²	0.728			0.746		
	ΔR^2	0.728			0.018		
	ΔF	324.176			8.396		
	ΔF Sig.	0.000			0.004		

* The effect is significant at level ($\alpha \leq 0.05$)

Table (3) illustrates the moderate impact of personal traits on the connection between the EI of entrepreneurs and creativity in Jordan. The first model based on the results gives the value of the correlation coefficient ($R = 0.830$). This demonstrates that there is a positive correlation between the EI of entrepreneurs and creativity. The outcomes also illustrate the statistically significant impact of the EI of entrepreneurs on creativity, with F value of (324.176) since the p-value is less than (0.05). As the value of the coefficient of determination is ($R^2 = 0.728$), this indicates that the EI of entrepreneurs explains (72.8%) of the variance in creativity.

In the second model, the entry of the moderate variable (personal traits) to regression model, increased value of the correlation coefficient to become ($R = 0.864$). In addition, the value of the coefficient of determination (R^2) increased to (0.018). This percentage is statistically significant, where the value of ($\Delta F = 8.396$) and the significance level is (Sig. $\Delta F = 0.004$) which is less than (0.05). As the slope value ($\beta = 0.634$) at personal traits, the (t Calculate) value was (2.898), and the p-value is less than (0.05) this confirms that there is a statistically significant impact of personal traits (moderate variable) on the relationship between the EI of entrepreneurs and creativity, where the percentage of interpretation of variation in creativity has improved, the percentage increased from (72.8%) to (74.6%). Based on this result, the second alternative hypothesis is accepted and the null hypothesis is rejected.

Discussion and Recommendations

Findings Discussion

This study is modeled on one general hypothesis and seven sub-hypotheses as follows:

Main hypothesis: *there is a significant positive relationship between the emotional intelligence of entrepreneurs and creativity, taking into consideration the moderating role of personal traits in Jordan.*

The outcomes are as expected, as many studies have noted a connection between EI and entrepreneurs. It has been demonstrated that possessing a high level of EI enables and empowers individuals to establish their own businesses, rather than working for others' goals. Individuals with well-developed EI are driven to seek and obtain financial freedom, whereas those with low levels of EI tend to be unable to create and foster their own ideas. Thus, it is evident that EI is a highly important factor in life, whether in business, relationships, education, or any other sphere. This study contributes to the existing knowledge of Jordanian entrepreneurs' levels of EI, since, to foster and encourage successful entrepreneurship in Jordan, it is necessary to know and understand more about Jordanian entrepreneurs' levels of EI, which can make it possible to promote the required traits through training and education.

Sub-hypotheses:

1. There is a significant positive relationship between the self-awareness of entrepreneurs and creativity in Jordan.

Self-awareness has been explicitly identified as a key element of EI (Goleman, 2001). As seen in the results of this research, self-awareness obtained the highest rank in the EI dimensions. The self-awareness dimension and 'my feelings' occupy the highest rank because it is a critical skill for entrepreneurs, strongly present (It must be high, but here it is low). The study result concluded from the questionnaire that the highest rank was related to the question of "I recognize how my feelings affect my performance" where it took a rank of 1, which makes it a prominent factor in enhancing an entrepreneur's success.

On the other hand, the question "I present myself with self-assurance; I have 'presence'" was classified with a rank of 6. This indicates that entrepreneurs possess the self-confidence to appear in front of a crowd and speak about themselves and their work, which reflects on our research findings. Entrepreneurs who are significantly self-aware can perceive and understand others accurately, enabling them to align their teams' strengths to the business. They are easily able to recognize strengths and weaknesses. Since self-awareness is arguably a key factor, indeed, the most critical factor in EI, this result was expected; if it were not highest-ranked, it would indicate significant issues for Jordanian entrepreneurs.

Self-awareness is critical for success. The environment and society in which humans live in provide with certain beliefs, understandings, rules, and perceptions. The self-aware individual must be able to recognize these pre-conceptions and be able to put them aside, to observe and ask in-depth questions, avoiding easy or simplistic answers. The journey of self-awareness can bring many benefits, but it requires significant courage and personal strength. For entrepreneurs to be successful, they must bring this inner strength to bear and be able to achieve self-awareness to observe both themselves and their interactions with their environment.

2. There is a positive significant relationship between the self-regulation of entrepreneurs and creativity in Jordan.

The self-regulation dimension revolves around the aspect of self-control, where one becomes responsible for his or her behavior in front of colleagues and others. In analyzing the results, it became apparent that the question "I meet commitments and keep promises (time)" ranked highest, while the question "I think clearly and stay focused under pressure" took the lowest rank. In contrast with the reality, the study analysis found that the results match the entrepreneur's behavior. This result is somewhat unexpected; since self-regulation is about controlling the self, it is expected that this attribute would be strong and prominent among entrepreneurs. The ability to manage one's behavior, feelings and thoughts to pursue and achieve long-term goals is assumed to be critical to entrepreneurial success. Further research is needed to enable a deeper understanding of why Jordanian entrepreneurs tend to be lacking in area of self-regulation. It is recommended that steps be taken to help them improve their ability to achieve greater self-control and regulate their emotions.

3. There is a positive significant relationship between the self-motivation of entrepreneurs and creativity in Jordan.

How we lift our spirits when working, and how we push others to do their best professionally and diplomatically is generalized under the term "self-motivation." According to the results, the statement "I pursue information to reduce uncertainty and find ways to do better" ranked superior to the statement "I use the group's core values in making decisions and clarifying choices." This proves the connection between our findings and the behavior of entrepreneurs in motivating themselves and others in a business environment. However, there is also a negative aspect of not following rules that were created and agreed upon by the group, in addition to making independent decisions and disregarding the group's opinion. Self-motivation is an essential trait for entrepreneurs; it is an attribute that can enable individuals to achieve their goals and objectives despite challenges. Indeed, it can be described as being the seed for achieving success. Thus, the results obtained by this study are as expected.

4. There is a significant positive relationship between the social awareness of entrepreneurs and creativity in Jordan.

The dimension of social awareness focuses on the mental state of a business community. In other words, under evaluation is how far a group is open to moving in a specific direction in business. The highest ranked statement was "I acknowledge and reward people's strengths, accomplishments, and development," whereas the statement "I can usually detect crucial social networks" received the lowest rank. Based on the finding, it was clear that entrepreneurs appreciate people's efforts. According to Karl Marx, human creatures enter into particular effective, or financial, relations and these relations lead to a frame of social awareness. The results obtained by the study fit expectations, as, to be successful, entrepreneurs require the ability to create connections with those around them. Doing so enables them to inspire respect and motivate their teams to achieve business objectives.

5. There is a significant positive relationship between the social skills of entrepreneurs and creativity in Jordan.

Finding and maintaining diplomatic methods of communicating and dealing with other people, including persuading them to accept your point of view, falls under the dimension of social skills. The study findings revealed that the statement "I step forward to lead as needed, regardless of position" ranks higher than the statement "I am skilled at the art of persuasion". Although this shows the existence of a spirit of leadership among entrepreneurs, on the other hand they lack the art of persuasion, which is somewhat unexpected, as entrepreneurs would be expected to possess powerful persuasive abilities to be able to convince others of the merit of their thoughts. As per the study analysis, it can be seen that the self-awareness dimension ranks higher than the other five aspects, followed by social skills, self-motivation, self-regulation, and finally, social awareness lies at the lowest rank. This conclusion complements the findings of other researchers in the field. It is important to note that although this result indicates that entrepreneurs perceive themselves to lack significant persuasive abilities, it does not necessarily mean that in actuality they do not possess them. This may be an opportunity for further research.

Social skills require practice. The power of observation and the ability to listen and be open-minded enable individuals to acquire strong communication skills. Entrepreneurs must be able to model change and accept others; it is crucial that they create strong connections, surrounding themselves with individuals who are willing to help and support them. Creation of a secure network is critical in making a business. While this is true in Jordan, it is an observation that can be applied worldwide.

6. There is a significant positive relationship between the emotional intelligence of entrepreneurs and creativity in Jordan.

The study sought to measure the levels of creativeness among entrepreneurs through different questions that address the formation of new concepts and the shaping of those concepts to accommodate business evolution. The aim is to try to foster the required skills to fulfill the establishment of a creative environment and come up with new ideas.

As seen from the research and analysis, the findings were that the participating entrepreneurs did possess the maturity to come up with innovative ideas and translate them into action. On the other hand, the lack of ability to motivate themselves and others was observed.

7. There is a significant positive relationship between the emotional intelligence of entrepreneurs and creativity in Jordan, with a moderating role played by personal traits.

Received 15 May 2021; Accepted 20 May 2021.

The results of this study indicated that good charisma obtained the highest rank. This is a quality that is crucial to entrepreneurs. They require the ability to attract and inspire others to listen and follow them in order to establish and run their own business. The second highest factor was risk-taking, which we would argue is a stable trait that should be possessed by entrepreneurs. An unexpected result is that empathetic traits ranked the lowest. This may be due to the background of the entrepreneurs surveyed, as the majority came from engineering or other scientific backgrounds. This means that they may follow a more logical approach than one that relies on empathy with others, based on the Myers-Briggs personality spectrum. This result could, therefore, differ if entrepreneurs from different backgrounds were included in the study. This is an avenue for further research, as discussed below. The second lowest ranked item was flexibility. This is unexpected as this should be an essential trait for entrepreneurs, since creating a business requires one to be flexible and adaptable to any external or internal circumstances.

Conclusions

This research has examined the relationship between EI, creativity, and the personal traits of participating entrepreneurs in Jordan. While many studies examining the impact between EI and creativity have been carried out, this is the first study of its kind to be conducted in Jordan.

EI is of vital importance, as it enquires into the deeper reasons for our choices. Taking any action requires an emotional and mental balance to ensure the correct decision is made at the right time. Possession of a higher level of EI clearly helps people to learn, consider, and develop in people personal and business lives. Introspection and self-analysis require courage yet examining people selves is highly beneficial and allows a person to understand others feelings and reactions when interacting with both the internal and external world.

As humans, our emotions can control who people behave; scholars have observed that the human mind is composed of two entities, the conscious mind, and the subconscious mind. The latter commands people more, as it is affected by their emotions, while the conscious mind understands logic. People react and are moved by their feelings more so than by logic. Thus, balancing both of these requires people to have the awareness to understand their feelings in both our business and personal lives.

Study Limitations

As with any study, various challenges and limitations were encountered while conducting the research. The primary limitations were posed by the mechanics of the research, such as the distribution and collection of the surveys. Some entrepreneurs declined to complete the survey, while others accepted the survey, but omitted to return it. The major challenge was encountered in obtaining access to entrepreneurs, as there is no single venue, either virtual or physical, in which Jordanian entrepreneurs gather, although there are many start-up incubators. This provides an additional limitation on the subjects canvassed: only those entrepreneurs who are already in touch with incubators or other support mechanisms were included in the study, due to the time limitations involved. This may have implications regarding the personalities of the entrepreneurs; those who are more open to seeking help may have different personality attributes to those who do not. It also means that entrepreneurs who are not in touch with incubators were not included in the study. It is questionable as to whether this would have any significant impact on the outcomes, however.

Since responses were received only from entrepreneurs willing to take part, it could be argued that those who did not respond are naturally less accommodating or open to self-analysis or introspection. It is possible that this may have an impact on the results, as those who are more accommodating may be more willing to listen to others, more open to suggestion, more self-aware, for instance. To establish whether this is the case, further research will be required.

When examining the gender distribution of the survey respondents, it is notable that more males than females responded to the survey. It is not clear whether this is due to the natural gender imbalance of entrepreneurs in Jordan - currently there are many more male entrepreneurs than female entrepreneurs - or whether this is a factor related to more male entrepreneurs being involved with incubators than females. This is again an avenue deserving of further research. However, given the gender imbalance in the survey respondents, it may be that the results of this survey are more applicable to male than to female entrepreneurs. The author recommends that further research be carried out to focus on gender for EI and creativity.

The majority of the survey respondents reported that their educational background was in the scientific or business spheres, as opposed to arts or humanities. It is possible that this may have an impact on the study results, as personality traits and EI

Received 15 May 2021; Accepted 20 May 2021.

may differ between individuals predisposed to science and business as opposed to those whose leanings are towards the arts and humanities. Again, this would benefit from further study.

In summary, it is felt that overall, the limitations and challenges encountered do not materially affect the results of this study, the first of its kind in Jordan, although they do point to many opportunities for future research, and implications which could be considered by policymakers.

Policy Implications and Recommendations

Many interesting avenues for further research are opened up due to the findings of this study. Likewise, there are many important implications for policymakers. This section will examine the opportunities for further research, before discussing the recommendations for policymakers.

Policy Implications

As the first of its kind in Jordan, this study has raised many important issues which would benefit from consideration by policymakers. Entrepreneurship can bring significant advantages to the economy, and the results of this study indicate various means by which policymakers could support entrepreneurs and promote entrepreneurship in Jordan.

Given the difficulties in reaching a broad cross-section of entrepreneurs, it is apparent that there is no centralized hub for entrepreneurs in Jordan. It is recommended that the provision of such a hub, whether government-backed or privately funded, would enable entrepreneurs to network and exchange critical information and advice.

Feedback from the entrepreneurs themselves indicated that they have interest in self-analysis; they requested copies of the survey as they felt it helped them to analyze their skills and abilities. Others asked for more information about EI, as they saw it to be a vital topic. These queries indicate that entrepreneurs have an interest in knowing more about themselves, their skills, traits, and EI. Thus, incubators should consider providing training on these topics for entrepreneurs, to enable them to improve their skills and abilities, allowing them to be more successful. It is important to remember that entrepreneurial activity provides a much-needed boost to the country's economy.

The results of the research indicated that entrepreneurs appear to have deficits in necessary leadership skills across several areas, including self-motivation, self-awareness, and social skills. Furthermore, the results reveal that entrepreneurs consider themselves to have serious difficulties with self-regulation. Since leadership skills are crucial to entrepreneurs, the study result strongly recommends that policy makers and incubators consider offering training in leadership skills. Seminars and workshops focusing on these skills would benefit entrepreneurs, assisting them to succeed in their endeavors.

The outcome of providing training and workshops for entrepreneurs to provide them with the skills they lack will be a net benefit for the economy, and for Jordan, as entrepreneurs with strong capabilities across all researched areas will have higher chances of being successful.

The profile of entrepreneurs reached by this study indicates that there appear to be more entrepreneurs from science/business backgrounds, and there appear to be more male entrepreneurs than female. It is recommended that policymakers may wish to consider providing additional support to encourage women and those from a humanities/arts background to become entrepreneurs.

Recommendations for Further Research

The study findings recommend that future research can be done to study the connection between gender and entrepreneurship in Jordan. As a higher number of males than females responded to the survey, it is necessary to identify whether this accurately reflects the gender balance of entrepreneurs in Jordan. If that is the case, research should be carried out into why more males than females become entrepreneurs. Additionally, there are many further relationships which should be investigated, including the relationships between gender, entrepreneurial success, creativity, EI, and personal traits.

To further understand entrepreneurs and success in Jordan, it would be beneficial to understand the relationship between educational background (sciences/business versus arts/humanities) and the decision to become an entrepreneur, as well as the relationship between educational background and gender. It would also be helpful to establish whether the relationship

between personality traits and EI differs between individuals who have a science/business background as opposed to those more predisposed to arts and humanities.

Acknowledgement

We would like to express our deep and sincere gratitude to Princess Sumaya University for Technology (PSUT) for their support and for providing the research team for all the necessary facilities.

References

- [1] Ahmad, A., Madi, Y., Abuhashesh, M., M Nusairat, N., & Masa'deh, R. E. (2020). The Knowledge, Attitude, and Practice of the Adoption of Green Fashion Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 107.
- [2] Ahmetoglu, G., Leutner, F., & Chamorro-Premuzic, T. (2011). EQ-nomics: understanding the relationship between individual differences in trait emotional intelligence and entrepreneurship. *Personality and Individual Differences*, 51(8), 1028-1033.
- [3] Al-Adamat, A., Al-Gasawneh, J., & Al-Adamat, O. (2020). The impact of moral intelligence on green purchase intention. *Management Science Letters*, 10(9), 2063-2070.
- [4] Amabile, T.M. (1983). The social psychology of creativity: a componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357.
- [5] Amabile, T.M. (1998). *How to Kill Creativity* (Vol. 87). Boston, MA: Harvard Business School Publishing.
- [6] Amabile, T.M. (2001). Beyond talent: John Irving and the passionate craft of creativity. *American Psychologist*, 56(4), 333.
- [7] Antonakis, J., Ashkanasy, N.M., & Dasborough, M.T. (2009). Does leadership need emotional intelligence?. *The Leadership Quarterly*, 20(2), 247-261.
- [8] Ashforth, B.E., & Humphrey, R.H. (1993). Emotional labor in service roles: the influence of identity. *Academy of Management Review*, 18(1), 88-115.
- [9] Awwad, M., & Ali, H. (2012). Emotional intelligence and entrepreneurial orientation: the moderating role of organizational climate and employees' creativity. *Journal of Research in Marketing and Entrepreneurship*, 14(1), 115-136.
- [10] Bar-On, R. (1997). *The Emotional Intelligence Inventory (EQ-I): Technical Manual*. Multi-Health Systems. Inc, Canada.
- [11] Bar-On, R. (2006). The bar-on model of emotional-social intelligence (ESI). *Psicothema*, 18, 13-25.
- [12] Bar-On, R., & Parker, J.D. (2000). *The Handbook of Emotional Intelligence: The Theory and Practice of Development, Evaluation, Education, and Application-at Home, School, and in the Workplace*. 1st edition, Jossey-Bass.
- [13] Beal, D.J., Trougakos, J.P., Weiss, H.M., & Green, S.G. (2006). Episodic processes in emotional labor: perceptions of affective delivery and regulation strategies. *Journal of Applied Psychology*, 91(5), 1053.
- [14] Boden, M.A. (2004). *The Creative Mind: Myths and Mechanisms*. Routledge.
- [15] Brotheridge, C.M. (2002). The emotionally intelligent workplace: how to select for, measure, and improve emotional intelligence in individuals, groups, and organizations. *Personnel Psychology*, 55(2), 527.
- [16] Burger, J.M. (2006). *Kişilik* (çev. İD Erguvan Sarıoğlu). İstanbul: Kaknüs Yayınları.
- [17] Cakan, M. (2005). Adaptation of an emotional intelligence scale for Turkish educators. *International Education Journal*, 6(3), 367-372.
- [18] Cardon, M.S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3), 511-532.
- [19] Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: an examination among senior managers. *Journal of Managerial Psychology*, 18(8), 788-813.
- [20] Castro, F., Gomes, J., & de Sousa, F. (2012). Do intelligent leaders make a difference? the effect of a leader's emotional intelligence on followers' creativity. *Creativity and Innovation Management*, 21(2), 171-182.

- [21] Diefendorff, J.M., Croyle, M.H., & Gosserand, R.H. (2005). The dimensionality and antecedents of emotional labor strategies. *Journal of Vocational Behavior*, 66(2), 339-357.
- [22] Dulewicz, C., Young, M., & Dulewicz, V. (2005). The relevance of emotional intelligence for leadership performance. *Journal of General Management*, 30(3), 71-86.
- [23] European Commission (2010). *Entrepreneurship in the EU and beyond*. Available on: https://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_283_en.pdf
- [24] Finkelstein, M.A., Penner, L.A., & Brannick, M.T. (2005). Motive, role identity, and prosocial personality as predictors of volunteer activity. *Social Behavior and Personality: An International Journal*, 33(4), 403-418.
- [25] Gartner, W.B. (1988). Who is an entrepreneur? is the wrong question. *American Journal of Small Business*, 12(4), 11-32.
- [26] George, J.M. (2000). Emotions and leadership: the role of emotional intelligence. *Human Relations*, 53(8), 1027-1055.
- [27] Gioia, D.A., & Poole, P.P. (1984). Scripts in organizational behavior. *Academy of Management Review*, 9(3), 449-459.
- [28] Goleman, D. (1995). *Emotional Intelligence*. Bantam Books. New York.
- [29] Goleman, D. (1998). *Working with Emotional Intelligence*. Bantam.
- [30] Goleman, D. (2001). Leadership that Gets Results. *Harvard Business Review*, 78(2), 4-17.
- [31] Goleman, D., Boyatzis, R.E., & McKee, A. (2013). *Primal leadership: unleashing the power of emotional intelligence*. Harvard Business Press.
- [32] Grandey, A.A. (2003). When “the show must go on”: surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46(1), 86-96.
- [33] Groth, M., Hennig-Thurau, T., & Walsh, G. (2009). Customer reactions to emotional labor: the roles of employee acting strategies and customer detection accuracy. *Academy of Management Journal*, 52(5), 958-974.
- [34] Gurteen, D. (1998). Knowledge, creativity and innovation. *Journal of Knowledge Management*, 2(1), 5-13.
- [35] Harvard Business School Press, (2003). *Harvard Business Essentials: Managing Creativity and Innovation*.
- [36] Hawamleh, A. M. A., Alorfi, A. S. M., Al-Gasawneh, J. A., & Al-Rawashdeh, G. (2020). Cyber Security and Ethical Hacking: The Importance of Protecting User Data. *Solid State Technology*, 63(5), 7894-7899.
- [37] Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education + Training*, 53(3), 353-370.
- [38] Ishikawa, T., & Terano, T. (1996). Analogy by abstraction: case retrieval and adaptation for inventive design expert systems. *Expert Systems with Applications*, 10(3-4), 351-356.
- [39] Johnson, H.A.M., & Spector, P.E. (2007). Service with a smile: do emotional intelligence, gender, and autonomy moderate the emotional labor process?. *Journal of Occupational Health Psychology*, 12(4), 319.
- [40] Koestler, A. (1975). *The Act of Creation*. London: Picador.
- [41] Krueger, N.F., & Carsrud, A.L. (1993). Entrepreneurial intentions: applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315-330.
- [42] Larson, A., & Starr, J.A. (1993). A network model of organization formation. *Entrepreneurship Theory and Practice*, 17(2), 5-15.
- [43] Lowry-O'Neill, C. (2011). Creativity in the classroom: from an intuitive approach to a reflective approach. *Reflective Practice*, 12(4), 481-493.
- [44] Luthje, C., & Franke, N. (2003). The making of an entrepreneur: testing a model of entrepreneurial intention among engineering students at MIT. *R & D Management*, 33(2), 135-147.
- [45] McClelland, D.C. (1998). Identifying competencies with behavioral-event interviews. *Psychological Science*, 9(5), 331-339.
- [46] McGuire, S.J.J. (2003). *Entrepreneurial Organizational Culture: Construct Definition and Instrument Development and Validation*. Diss. George Washington University.
- [47] McKee, A., Boyatzis, R.E., Johnston, F., & Johnston, F. (2008). *Becoming a Resonant Leader: Develop your Emotional Intelligence, Renew your Relationships, Sustain your Effectiveness*. Harvard Business Press.

- [48] Mehtap, S. (2014). An EU-Arab partnership to foster entrepreneurship education in the Middle East: the ASPIRE program. *International Proceedings of Economics Development and Research*, 81, 124.
- [49] Mueller, A., Claes, L., Mitchell, J.E., Wonderlich, S.A., Crosby, R.D., & De Zwaan, M. (2010). Personality prototypes in individuals with compulsive buying based on the big five model. *Behaviour Research and Therapy*, 48(9), 930-935.
- [50] Nusairat, N. M., Akhorshaideh, A. H. O., Rashid, T., Sahadev, S., & Rembielak, G. (2017). Social cues-customer behavior relationship: the mediating role of emotions and cognition. *International Journal of Marketing Studies*, 9(1), 1-17.
- [51] Poincare, H. (1982). *The Foundations of Science: Science and Hypothesis, The Value of Science, Science and Method*, Univ. Press of America, Washington.
- [52] Prabhu, V.P., McGuire, S.J., Drost, E.A., & Kwong, K.K. (2012). Proactive personality and entrepreneurial intent: is entrepreneurial self-efficacy a mediator or moderator?. *International Journal of Entrepreneurial Behavior & Research*, 18(5), 559-586.
- [53] Prati, L., Douglas, C., Ferris, G.R., Ammeter, A.P., & Buckley, M.R. (2003). Emotional intelligence, leadership effectiveness, and team outcomes. *The International Journal of Organizational Analysis*, 11(1), 21-40.
- [54] Rice, C.L. (1999). *A Quantitative Study of Emotional Intelligence and its Impact on Team Performance* (Doctoral dissertation, Pepperdine University, Research Project (MSOD)).
- [55] Sadri, G. (2012). Emotional intelligence and leadership development. *Public Personnel Management*, 41(3), 535-548.
- [56] Salovey, P., & Mayer, J.D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.
- [57] Shalley, C.E., Zhou, J., & Oldham, G.R. (2004). The effects of personal and contextual characteristics on creativity: where should we go from here?. *Journal of Management*, 30(6), 933-958.
- [58] Shaver, K.G., & Scott, L.R. (1992). Person, process, choice: the psychology of new venture creation. *Entrepreneurship Theory and Practice*, 16(2), 23-46.
- [59] Silva, D., & Coelho, A. (2019). The impact of emotional intelligence on creativity, the mediating role of worker attitudes and the moderating effects of individual success. *Journal of Management & Organization*, 25(2), 284-302.
- [60] Simon, M., & Houghton, S.M. (2002). The relationship among biases, misperceptions, and the introduction of pioneering products: examining differences in venture decision contexts. *Entrepreneurship Theory and Practice*, 27(2), 105-124.
- [61] Staw, B.M., Sutton, R.I., & Pelled, L.H. (1994). Employee positive emotion and favorable outcomes at the workplace. *Organization Science*, 5(1), 51-71.
- [62] Stewart, Jr., W.H., Watson, W.E., Carland, J.C., & Carland, J.W. (1999). A proclivity for entrepreneurship: a comparison of entrepreneurs, small business owners, and corporate managers. *Journal of Business Venturing*, 14(2), 189-214.
- [63] Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and Health*, 21(2), 77-86.
- [64] Vakola, M., Tsaousis, I., & Nikolaou, I. (2004). The role of emotional intelligence and personality variables on attitudes toward organisational change. *Journal of Managerial Psychology*, 19(2), 88-110.
- [65] Watkin, C. (2000). Developing emotional intelligence. *International Journal of Selection and Assessment*, 8(2), 89-92.
- [66] Yang, Y.H., & Chen, H.H. (2012). Machine recognition of music emotion: a review. *ACM Transactions on Intelligent Systems and Technology (TIST)*, 3(3), 40.
- [67] Zhu, Z. (2011). *Towards a Knowledgeable Creative Problem-Solving Methodology: An Inspiration from Enhancing CBR Creativity*. LAP LAMBERT Academic Publishing.