

OPTIMISM AND ENTREPRENEURIAL INTENTIONS AMONG STUDENTS: THE MEDIATING ROLE OF EMOTIONAL INTELLIGENCE

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ABSTRACT

***Purpose:** The purpose of the study is to explore the role of optimism and emotional intelligence in entrepreneurship intentions among students.*

***Procedure:** This paper proposes and empirically tests a theoretical model positing relationships between dispositional optimism, emotional intelligence, and entrepreneurial intention. Model formulation is based on a random survey of students (N=227).*

***Principal Findings:** Results indicate that students' optimism and emotional intelligence are associated with increased levels of entrepreneurial intention. Additionally, the present study argues that emotional intelligence mediates the positive relationship between optimism and entrepreneurial intention. Theoretical and practical implications of this model are discussed.*

Keywords: Entrepreneurial Intentions, Dispositional optimism, Emotional Intelligence, Students.

INTRODUCTION

In today's dynamic and competitive environment, understanding how to cultivate entrepreneurship is a major concern of many organizations, workplaces, and educational settings (Doran et al., 2016; Haltiwanger, 2012; Keep, 2000; Naude, 2010; Fritsch & Schroeter, 2009). Entrepreneurship is necessary to adapt to changing technologies and demands, and to give oneself or one's company a lead over others (Acs, 2006). Not surprisingly therefore, scientists and professionals seek to identify conditions that influence entrepreneurship. One critical factor that influences entrepreneurship is the type of goals that drive innovative behavior, particularly entrepreneurial intentions (Schlaegel & Koenig, 2014). Entrepreneurial intention refers to the intention of an individual to start a new business (Krueger, 2009). Entrepreneurial intentions lie at the heart of entrepreneurship, since they activate the process of discovering, creating, and exploiting opportunities (Gartner et al., 1994).

Recent empirical evidence confirms that entrepreneurial intentions seem to be good predictors of future start-up behavior (Kautonen et al., 2013; Shirokova et al., 2016; Van Gelderen et al., 2015). As such, entrepreneurial intention is one of the best measures of

entrepreneurial potential, because it directly precedes the decision to start a business (Krueger & Carsrud, 1993; Ajzen, 1991; Fishbein & Ajzen, 1975). Due to their crucial role as a preliminary stage in the entrepreneurial process, the literature on predictors of entrepreneurial intentions continues to grow rapidly (Liñán & Fayolle, 2015; Schlaegel & Koenig, 2014).

Studies examining entrepreneurial intentions in the educational-entrepreneurial context have also been carried out, focusing on different variables likely to be related to this important variable (Crane, 2014; Nabi et al., 2018; Souitaris et al., 2007; Zampetakis et al., 2009). The current study adds to this stream of literature by exploring the association between dispositional optimism, emotional intelligence and entrepreneurial intentions among university students.

The entrepreneurial event model (Shapero & Sokol, 1982) and the theory of planned behavior (Ajzen, 1991; Krueger & Carsrud, 1993; Krueger & Brazeal, 1994) have directed most empirical research explaining the formation and cultivation of entrepreneurial intentions. Such cognitive frameworks perceive entrepreneurial intentions as a specific kind of planned behavior, and therefore focus on the entrepreneur's assumptions and beliefs regarding new venture formation. Despite their considerable contribution to the understanding of the mental processes that enable entrepreneurship, these perspectives pay relatively little attention to the role of the entrepreneur's personality and emotional skills in the initiation of new ventures (Baum et al., 2014; Brandstätter, 2011; Miller, 2015; Mortan et al., 2014). Indeed, recent studies have demonstrated a positive association between emotional intelligence and entrepreneurial intentions (Tiwari et al., 2017), as well as between "*positive*" personality traits, such as proactive personality and self-efficacy, and entrepreneurial intentions (Travis & Freeman, 2017). Yet, surprisingly, the role of dispositional optimism in the formation and cultivation of entrepreneurial intentions has received little consideration. Optimism may be especially important for entrepreneurs who need to recognize opportunities and pursue their goals, despite obstacles (Storey, 2011; Trevelyan, 2008).

The current study has three aims: firstly, to explore the relationship between dispositional optimism and entrepreneurial intentions; secondly, to extend previous studies suggesting that emotional intelligence contributes to the formation of entrepreneurial intentions; and thirdly, to investigate the combined roles of optimism and emotional intelligence on entrepreneurial intentions directly, focusing on the mediating role of emotional intelligence in the relationship between optimism and entrepreneurial intentions. In the following paragraphs, the theoretical and empirical literature on optimism, emotional intelligence, and entrepreneurial intentions will be briefly described.

LITERATURE REVIEW

Optimism and Entrepreneurial Intentions

Dispositional optimism is a generalized tendency to expect positive outcomes even in the face of obstacles (Scheier & Carver, 1985). Adopting a positive perspective regarding the future may result in enhanced entrepreneurial intentions for several reasons. First, optimism enhances adaptive attention biases, since optimists engage with positive stimuli, ignore contradictions, and disregard threatening information more frequently than pessimists (Isaacowitz, 2006; Kelberer et al., 2018). As a result, optimists are prone to recognize and pursue opportunities. This may be especially relevant for entrepreneurs who need to specialize in opportunity recognition (Baron, 2006; Ramos-Rodríguez et al., 2010). As summarized by Krueger and Day (2010), "*Some of the most promising recent models of entrepreneurship focus on cognitive processes, showing the*

importance of an opportunity-friendly cognitive infrastructure” (p. 324).

Secondly, cultivation of entrepreneurial intentions demands creativity and innovative behavior (Biraglia & Kadile, 2017; Engel et al., 2006). Studies in the last decade demonstrate that optimism serves as a facilitator of creative thinking and innovative behavior (Icekson et al., 2014; Li & Wu, 2011; Michael et al., 2011; Rego et al., 2012, 2012a, Sameer, 2018), and, therefore, positive future expectations may also be related to entrepreneurial intentions. Finally, setting up a new venture usually requires a strong belief in its future success, as well as persistence in overcoming obstacles along the way (Storey, 2011). Optimism according Scheier & Carver (1985) is strongly related to motivation; since optimists expect good things to happen in the future, they actively strive to achieve their goals. Indeed, dispositional optimism has been found to stimulate persistence in goal pursuit (Brown & Marshall, 2001) and to enhance psychological and physical adjustment to stressful events (Segal et al., 2005). Optimistic individuals also believe they can overcome obstacles, and perceive demanding situations as challenging rather than threatening (Chang, 1998; Smith et al., 1993). Recent studies found a relationship between entrepreneurs' optimism and their persistence (Adomako et al., 2016).

Several studies and reviews have also examined optimism in the educational-entrepreneurial context, in view of the importance of this variable for entrepreneurship (Crane, 2014; Nabi et al., 2017). For example, a recent study (Lee et al., 2018) found that optimism is associated with self-confidence among students.

Generally, positive attitudes toward entrepreneurship as a preferred vocational choice and positive self-evaluation of abilities were found to be positively and systematically related to entrepreneurial intentions. For example, Giacomini et al. (2015) found that the greater students evaluated the probability of positive entrepreneurship outcomes (e.g., personal wealth, high social status, and more free time) the greater their entrepreneurial intentions, thus indicating a positive relationship between personal entrepreneurial optimism and entrepreneurial intentions. Moreover, on average, entrepreneurs have a greater tendency to be over-optimistic than non-entrepreneurs (Hmieleski & Baron, 2009; Ucbasaran et al., 2010). Yet, to the best of our knowledge, only the study by Bernoster et al. (2018) documented a positive relationship between general dispositional optimism and entrepreneurial intentions among students.

In summary, despite the theoretically suggested positive relationship between dispositional optimism and entrepreneurial tendencies, very little attention has been paid to systematic empirical investigation of the relationships between the two, or to the possible mediating mechanisms between them (Simon et al., 2000).

Emotional Intelligence and Entrepreneurial Intentions

The term emotional intelligence refers to the mental processes involved in the recognition, use, understanding, and management of one's own and others' emotional states to solve problems and regulate behavior (Mayer & Salovey, 1997), encompassing the following four emotional intelligence dimensions (Davies et al., 1998). The first dimension refers to appraisal and expression of emotion in oneself. This dimension represents the individual's ability to understand his or her emotions and to express emotions naturally. The second dimension refers to appraisal and recognition of emotion in others, that is, the individual's ability to perceive and understand the emotions of people around him or her. The third dimension refers to the regulation of emotion in oneself, meaning the ability of the individual to regulate his or her emotions, especially in overcoming negative emotions such as anger or sadness. Finally, emotional intelligence also includes the use of emotion to facilitate performance, that is, the

ability of a person to utilize his or her emotions by actively directing them toward desired goals (Law et al., 2004).

Entrepreneurs work in environments characterized by intense interpersonal relationships and high stress. Therefore, as suggested by several researchers, an entrepreneur may need to use an array of emotional capabilities in order to succeed (Baron, 2008; Cross & Travaglione, 2003). Indeed, a growing number of studies suggest that emotional intelligence is directly or indirectly positively related to entrepreneurial behaviors and new venture success (FakhrEldin, 2017; Ingram et al., 2017; Yitshaki, 2012; Zhou & Bojica, 2017). For example, Zampetakis et al. (2009) found that employees with high emotional intelligence are more aware of the factors that contribute to their experience of positive and negative emotions, and therefore exhibit higher tolerance to stress and environmental stressors. Such capabilities were positively correlated with adjusting entrepreneurial behavior (Abiola-Ale & Abiola, 2017). In the same vein, Ahmetoglu et al. (2011) showed that emotional intelligence correlates significantly and positively with most entrepreneurial outcomes, such as income-generating entrepreneurial behavior, corporate entrepreneurship, social entrepreneurship, entrepreneurial activity at school/college, and entrepreneurship through innovation. Furthermore, emotionally intelligent individuals are more likely to engage in innovative entrepreneurial activities, and tend to have higher affectivity, informing creative dispositions and facilitating innovation, which are the cornerstones of entrepreneurship (Zampetakis et al., 2009). Ahmetoglu et al. (2011) conclude that emotional intelligence is an important contributor to entrepreneurship.

Despite the considerable progress made in understanding the relationship between emotional intelligence and entrepreneurship, few studies have explored the contribution of emotional intelligence to entrepreneurial intentions (Javed et al., 2016). Among the few studies directly investigating this question, Zampetakis et al. (2009) demonstrated that emotional intelligence was positively related to entrepreneurial intentions among students, as reflected in students' creativity, proactivity, and attitudes towards entrepreneurship. Mortan et al. (2014) showed that emotional intelligence led to higher entrepreneurial intentions through entrepreneurial self-efficacy.

One major limitation of the previous work conducted on the relationship between emotional intelligence and entrepreneurial intentions is the tendency to ignore the unique contribution of each of the four components of emotional intelligence in the promotion of the tendency to become an entrepreneur, despite their theoretical distinction (Mayer et al., 2016). The current study aims to extend previous findings by exploring the contribution of the four components of emotional intelligence to entrepreneurial intentions among students.

Optimism, Emotional Intelligence, and Entrepreneurial Intentions

According to expectancy value models, the tendency to foresee positive outcomes in the future has strong emotional recognition and regulation consequences (Seegerstrom et al., 2017). Specifically, optimism intensifies positive emotions such as enthusiasm and happiness (Hodges & Winstanley, 2012), and attenuates negative emotions such as sadness and fear (Lucas et al., 1996; Siddique et al., 2006). Thus, optimism may enhance the ability of a person to regulate his or her emotions, especially in overcoming negative emotions, which is one of the emotional intelligence capabilities.

Optimists also tend to use more adaptive coping mechanisms when facing stress, alternating between cognitive and emotional problem-solving according to the situation (Nes & Seegerstrom, 2006). Additionally, optimists have greater social resources (Brissette et al., 2002).

This may be partly because people prefer interacting with individuals who have a positive outlook (Helweg-Larsen et al., 2002). Moreover, as noted before, optimism predicts active and persistent goal pursuit, so that optimists tend to be more motivated to achieve their goals and more successful in doing so even when facing adversity (Carver et al., 2010). Taken together, optimism may be positively associated with better use of emotions to facilitate performance, a skill characteristic of highly emotionally intelligent individuals. Indeed, previous correlational studies verified a positive relationship between optimism and emotional intelligence in general (Augusto-Landa et al., 2011; Extremera et al., 2007; Kumcagiz et al., 2011). Jenaabadi (2014) demonstrated that increasing optimism enhanced emotional intelligence skills. Yet, the possible mediating role of emotional intelligence between personality traits and psychological attitudes has been overlooked with regard to entrepreneurial intentions (Ansari & Talan, 2017). The current study extends previous work by investigating the mediation mechanism of emotional intelligence including its four components between dispositional optimism and entrepreneurial intentions.

Theoretical Background and Hypotheses

The entrepreneurial event model (Shapiro & Sokol, 1982), and the theory of planned behavior (Krueger & Carsrud, 1993) stress the importance of specific positive attitudes, assumptions, and perceptions in determining the probability that an individual will be willing to start a new enterprise. Thus, entrepreneurs who hold a positive outlook regarding the future may be more prone to establish a new venture in a high risk and competitive environment.

One source of such positive cognitive schemas may be broad personality differences between individuals (Baum et al., 2014; Brandstätter, 2011; Miller, 2015). Broad personality traits are stable, biologically determined, distal variables. Indeed, among the leading factors consistently related to entrepreneurial intentions is the entrepreneur's personality. According to personality theories, when predicting entrepreneurial intentions, it is important to explore the mechanisms connecting proximal and distal factors. Distal factors are remote non-cognitive dispositions that affect entrepreneurial behavior indirectly. Previous results suggest that personality traits contribute substantially to the way entrepreneurs think, what they aim for, what they do, and what they actually achieve (Rauch & Frese, 2007; Zhao et al., 2010; Zhao & Seibert, 2006). In particular, an entrepreneur typically has an orientation toward seeing opportunities, as well a strong belief in his or her ability to attain desired goals (Krueger & Day, 2010). As suggested by Liñán and Fayolle (2015), "*assessing the role and the importance of mental prototypes, cognitive scripts, mental schemas and maps may shed light on the formation of entrepreneurial intentions and the process leading from intention to behavior*". Previous studies established moderate yet significant relationships between entrepreneurial intentions and traits such as self-efficacy (Bullough et al., 2014; Piperopoulos & Dimov, 2015), achievement motivation (Stewart & Roth, 2007), proactive personality (Travis & Freeman, 2017), and risk propensity (Stewart & Roth, 2001; Zhao et al., 2010). Dispositional optimism, however, has been rarely investigated in relation to entrepreneurial intentions.

Several researchers have suggested that optimism may play a significant role in entrepreneurship (Storey, 2011; Trevelyan, 2008). In face of uncertainty and increased probability of failure, optimistic entrepreneurs, unlike pessimistic ones, believe more strongly in the feasibility of their ventures, and may therefore be better able to establish a successful new venture (Ucbasarn et al., 2010). Some even argue that optimism is a requirement for entrepreneurship (Dushnitsky, 2010). Yet the relationship between dispositional optimism and

entrepreneurial intentions has received little attention. In view of the above, this study's first hypothesis regarding the relationship between optimism and the entrepreneurial intention variable is:

H1: Optimism will be positively related to entrepreneurial intentions.

A prominent and promising mediating variable in predicting entrepreneurial intentions is emotional intelligence. Much research suggests that emotional intelligence leads to higher job satisfaction and performance, better social relations, and enhanced mental and physical well-being (Mayer et al., 2008; O'Boyle et al., 2011). Moreover, in the last decade, a few studies have suggested that emotional intelligence may promote entrepreneurial intentions (Davis & Peake, 2014; Tiwari et al., 2017; Zampetakis et al., 2009). However, none of the studies mentioned investigated the role of each of the distinct components of Emotional Intelligence on entrepreneurial intentions. Thus, the need to extend previous findings about the relationship between emotional intelligence including its components and entrepreneurial intentions is clearly indicated. In view of the above, the study's second hypothesis regarding the relationship between emotional intelligence (and its different components) and the entrepreneurial intention variable is:

H2: Emotional intelligence, as well as each of its components will be positively related to entrepreneurial intentions.

Finally, the relationship between both optimism and emotional intelligence and entrepreneurial intentions has not been explored (Augusto-Landa et al., 2011; Extremera et al., 2007; Kumcagiz et al., 2011).

In view of the positive relationship previously found between optimism and emotional intelligence (as described in the previous section) and in view of the relationships found between emotional intelligence and entrepreneurial intentions, the third hypothesis suggests that the emotional intelligence variable is a mediating variable between the variables of optimism and entrepreneurial intentions:

H3: Emotional intelligence as well as its four components will mediate the relationship between optimism and entrepreneurial intentions.

METHOD

Sample and Procedure

Our sample included 244 business management students in Israel (67% women, 33% men). The sample included 64% undergraduates and 36% MBA students. Ages ranged from 19 to 63, with an average of 30.9 (SD=8.4). 52% of the sample was single, 46% married, and 2% had other personal statuses. The average number of children was 1.1 (SD=0.6). Questionnaires were administered in class, with prior permission from the lecturer. Students were briefed on the purpose of the study by a member of the research team, and then asked to voluntarily fill in the survey. The study was conducted with the approval of the Human Subjects Research Committee.

Measures

We draw on existing scales wherever possible. The process of translating the scales into

Hebrew included the following four steps: (a) forward-translation into Hebrew by three independent English-Hebrew bilingual individuals; (b) primary evaluation of the comprehensibility of the translated questionnaire; (c) back-translation into English by two native English speakers blinded to the original and the intended use of the questionnaire; and (d) discussion and agreement on a final version.

Entrepreneurial intentions were measured using the Entrepreneurial Intention Questionnaire (Liñán & Chen, 2009). The scale contains 6-Likert-scale items with response options ranging from 1 (total disagreement) to 7 (total agreement). Sample items are *“I am ready to do anything to be an entrepreneur”* and *“My professional goal is to become an entrepreneur”*. Cronbach’s alpha for the current study was 0.97.

Dispositional Optimism was assessed using one of the most common measurement tools of optimism called the Life Orientation Test–LOT-Revised (Scheier et al., 1994). The LOT-Revised has been translated to many languages, and psychometrically tested in multiple studies (Hinz et al., 2017; Schou-Bredal et al., 2017). The test consists of ten items, three assessing optimism, three assessing pessimism and four filler items. LOT-R is used as a unidimensional scale, in which the total sum score is calculated by adding the optimism score and the inverted pessimism score (Carver et al., 2010). Participants respond on a scale ranging from 0 (strongly disagree) to 4 (strongly agree), with higher scores indicating greater optimism. An example of an optimism item is *“In uncertain times, I usually expect the best”*, a pessimism item *“If something can go wrong for me, it will”* (reverse scored), and a filler item *“It is easy for me to relax”*. Reported Cronbach’s alpha range between 0.66 (Hinz et al., 2017) and 0.75 (Schou-Bredal et al., 2017). Cronbach’s alpha for the current study was 0.74.

Emotional intelligence was measured using the Wong and Law Emotional Intelligence Scale (Wleis, Law, Wong, & Song, 2004) based on the four-dimensional definition of emotional intelligence introduced by Davies et al. (1998). WLEIS consists of the following 4 subscales: Self-Emotions Appraisal, Regulation of Emotion, Use of Emotion, Others-Emotions Appraisal, and uses a 7-point Likert-type scale (1-totally disagree to 7-totally agree). Sample items for the various scales include: *“I really understand what I feel”* (Self-Emotions Appraisal); *“I would always encourage myself to try my best”* (Use of Emotion to facilitate performance); *“I can always calm down quickly when I am very angry”* (Regulation of Emotion); and *“I have good understanding of the emotions of people around me”* (Others’-Emotions Appraisal). To validate these constructs in our sample, items were subjected to Exploratory Factor Analysis, with promax rotation and eigenvalue of 1. This procedure yielded four factors when items were loaded to each of the four factors (loadings range between 0.56 and 0.93). Factors explained 72% of the total variance. In addition, confirmatory factor analysis was conducted, yielding a good fit with the data ($\chi^2=25.63$, $df=98$, $p<0.05$, $CFI=0.91$, $NNFI=0.86$, $GFI=0.92$, $RMSEA=0.08$, $SRMR=0.06$).

Cronbach’s alphas for the current study were 0.78 for the Self-Emotions Appraisal subscale, 0.76 for the Others’ Emotion Appraisal subscale, 0.79 for the Use of Emotion to facilitate performance subscale, and 0.87 for the Regulation of Emotion subscale. Cronbach’s coefficient alpha for the total scale was 0.87.

Demographic variables included gender, age, and marital status.

Data Analysis

Data was entered and analyzed using SPSS version 25. Firstly, descriptive statistics were produced using means and standard deviations for all variables. Differences between groups

(e.g., males vs. females) were estimated using independent t-tests. Correlations between variables were assessed using Pearson correlations. To examine the indirect effect of optimism on entrepreneurial intentions through emotional intelligence, structural equation modeling was performed, using the bootstrapping method. The key principle underlining the bootstrapping procedure is that it enables the researcher to simulate repeated subsamples from an original database, allowing the assessment of the stability of parameter estimates and reporting their values with a greater degree of accuracy. Bootstrapping assesses the indirect effect in each resampled data set and establishes a confidence interval for a specific indirect effect (Byrne, 2010; Preacher & Hayes, 2008). In this study, the following indices will evaluate the fit of the model fit: chi-squared, which is acceptable when the value is not significant; the goodness of fit index (GFI), the comparative fit index (CFI), and the non-normed fit index (NNFI), (adequate values-above 0.90, excellent fit-above 0.95); and the root mean square error of approximation (RMSEA) (adequate values-less than 0.08, excellent fit - less than 0.06). The standardized root mean square residual (SRMR) was also used to assess model fit with values ranging from less than from 0.08 (adequate value) to 0.05 or less (considered reasonable) (Arbuckle, 2013; Byrne & Byrne, 2010). Level of significance (p-value) will be 5%.

RESULTS

Preliminary Analyses

Since all data was obtained over the same period, using the same instruments and respondents, common method variance bias (CMB) might affect measurement. To assess this bias, common latent factor was performed to capture variance explained by a single common factor (Lindell, & Whitney, 2001). This analysis showed that only 31% of total variance was attributable to a common latent factor, suggesting that common method variance bias does not affect our data.

Total variance for a single factor of less than 50% suggests that CMB does not affect the data, hence the results. Note that Harman's approach is to test for CMB, but not to control for CMB.

To begin with, our main dependent variables, entrepreneurial intentions, were examined for correlations with gender, age, number of children, marital status and education. Results showed that entrepreneurial intentions were stronger among males ($M=4.25$, $SD=1.42$), as compared with females ($M=3.67$, $SD=1.43$, $t(226)=2.92$, $p=0.004$). However, no difference was found between married participants ($M=3.77$, $SD=1.42$) and unmarried participants ($M=4.01$, $SD=1.46$, $t(226)=1.22$, $p=0.221$). No correlation was found between entrepreneurial intentions and age ($r=0.07$, $p=0.91$). Finally, no difference was found between undergraduate students ($M=3.80$, $SD=1.36$) and MBA students ($M=3.81$, $SD=1.50$, $t(213)=0.06$, $p=0.953$).

Table 1 presents descriptive statistics and Pearson correlations between study measures. Table 1 shows that entrepreneurial intentions were positively correlated with optimism ($r=0.137$, $p<0.05$). Entrepreneurial intentions were also positively correlated with each of the emotional intelligence sub-scales, Self -Emotions Appraisal ($r=0.150$, $p<0.05$), Others' Emotion Appraisal ($r=0.115$, $p<0.05$), Use of Emotion to facilitate performance ($r=0.340$, $p<0.01$), and Regulation of Emotion ($r=0.236$, $p<0.05$). In addition, optimism was positively correlated with the four sub-scales of emotional intelligence, and specifically with Self-emotions appraisal ($r=0.372$, $p<0.01$), Others' Emotion Appraisal ($r=0.142$, $p<0.05$), Use of emotion to facilitate performance ($r=0.515$, $p<0.01$), and Regulation of Emotion ($r=0.383$, $p<0.01$).

Table 1
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX OF STUDY VARIABLES (N=240)

	M	SD	1	2	3	4	5
1. Entrepreneurial intentions	3.79	1.55					
2. Emotional Intelligence-Self-Emotions Appraisal	4.03	0.66	0.150*				
3. Emotional Intelligence-Others-Emotions Appraisal	3.84	0.65	0.115*	0.373**			
4. Emotional Intelligence-Use of Emotion to facilitate performance	4.09	0.64	0.340**	0.518**	0.206**		
5. Emotional Intelligence-Regulation of Emotion	3.55	0.84	0.236**	0.387**	0.341**	0.448**	
6. Optimism	2.77	0.67	0.137*	0.372**	0.142*	0.515**	0.383**

*p<0.05, **p<0.01

In order to examine whether the independent variables significantly predicted entrepreneurial intentions, hierarchical regressions were conducted (Table 2). The first step controlled for gender, age, education level, and marital status. In the second step, optimism was entered, while in the third step, emotional intelligence components were entered. As can be seen from the first model in Table 2, gender has a significant effect on entrepreneurial intentions, that is, women report lower entrepreneurial intentions than men ($\beta=0.149$, $p<0.05$). The results of the second model showed that the relationship between optimism and entrepreneurial intentions was positive and significant, after adjusting for demographics ($\beta=0.182$, $p<0.05$), suggesting preliminary support for H1.

After entering emotional intelligence components, results showed a positive correlation only between Use of Emotion to facilitate performance and entrepreneurial intentions ($\beta=0.330$, $p<0.01$), giving partial support for H2. However, in Model 3, in the presence of emotional intelligence components, optimism lost its significant association with entrepreneurial intentions ($\beta=0.063$, $p=0.49$), rejecting H1 and implying mediation between these variables.

Table 2
ENTREPRENEURSHIP INTENTIONS REGRESSED ON GENDER, OPTIMISM AND EMOTIONAL INTELLIGENCE (N=227)

Predictors	Model 1	Model 2	Model 3
Gender (Male)	0.149*	0.196*	0.190*
Age	0.078	0.057	-0.016
MBA students	0.017	0.029	0.005
Marital status (Married)	-0.033	-0.05	-0.024
Optimism		0.182*	0.063
Self-Emotions Appraisal			0.037
Others-Emotions Appraisal			0.018
Use of Emotion to facilitate performance			0.330**
Regulation of Emotion			0.116
R^2	3.20%	6.20%	18.30%
F	1.37	2.17*	3.98**

Note: Standardized coefficients are shown. *p<0.05, **p<0.01

To examine the study model, structural equation modeling was conducted using the bootstrapping method (Figure 1). The model exhibited good fit with the data ($\chi^2=20.92$, $df=1$, $p<0.05$, $CFI=0.94$, $NNFI=0.94$, $GLI=0.98$, $RMSEA=0.03$, $SRMR=0.05$). Results showed that optimism was directly associated with Self-emotions Appraisal ($B=0.37$, $SE=0.06$, $CI=[0.26,0.47]$, $p=0.01$), Others-emotions Appraisal ($B=0.14$, $SE=0.06$, $CI=[0.04,0.26]$, $p=0.04$), Use of Emotion to facilitate performance ($B=0.52$, $SE=0.05$, $CI=[0.43,0.60]$, $p=0.01$), and Regulation of Emotion ($B=0.38$, $SE=0.06$, $CI=[0.27,0.48]$, $p=0.01$). However, the results of the mediation analysis between optimism and entrepreneurial intentions showed that only Use of Emotion to facilitate performance was positively correlated with entrepreneurial intentions ($B=0.71$, $SE=0.16$, $CI=[0.17,4.22]$, $p<0.001$). Thus, an indirect effect was found between optimism and entrepreneurial intentions via Use of Emotion to facilitate performance component ($B=0.32$, $SE=0.09$, $CI=[0.08,0.56]$, $p=0.02$), while higher optimism is associated with higher Use of Emotion to facilitate performance, which in turn, leads to higher entrepreneurial intentions. Results indicate a full mediation model, while in the presence of the Emotional intelligence' factor of the Use of Emotion to facilitate performance, a direct correlation between optimism and entrepreneurial intentions is non-significant ($B=-0.07$, $SE=0.14$, $CI=[-0.32, 0.20]$, $p<0.001$). Thus, results do not support H1, yet provides support for H2 and H3.

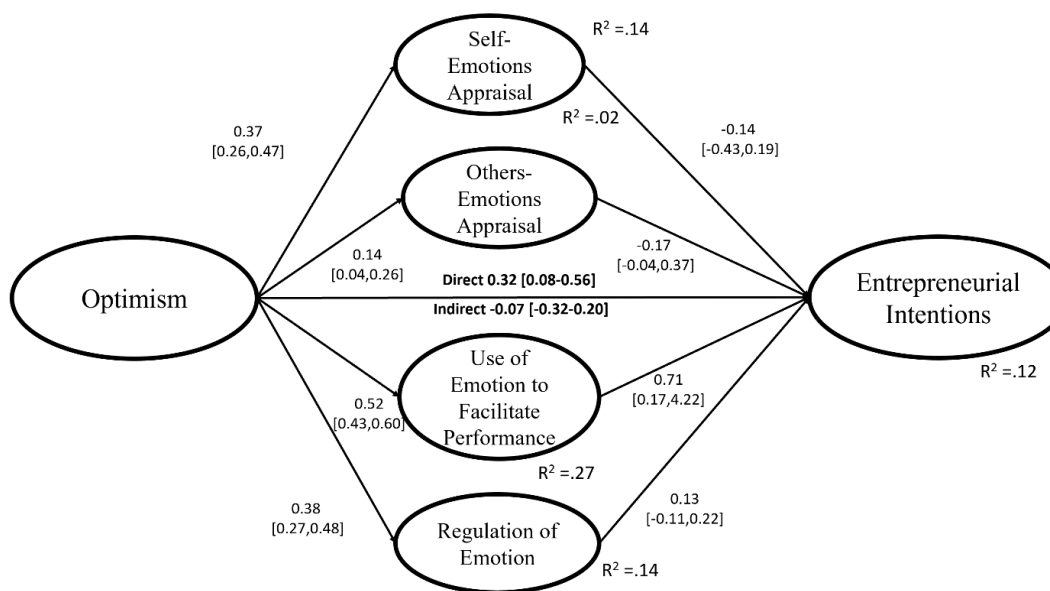


FIGURE 1
THE THEORETICAL MEDIATION MODEL FOR THE DIRECT AND THE INDIRECT EFFECT OF OPTIMISM VIA EMOTIONAL INTELLIGENCE COMPONENTS ON ENTREPRENEURIAL INTENTIONS

DISCUSSION

Following previous calls to deepen our understanding in the role that personality traits and emotional skills play as antecedents in predicting entrepreneurial intentions (Liñán & Fayolle, 2015; Zampetakis et al., 2009a; Zhao et al., 2010), the current study examined for the first time the role of dispositional optimism together with emotional intelligence as predictors of entrepreneurial intentions among students. Specifically, we speculated that emotional

intelligence would mediate the positive relationship between dispositional optimism and entrepreneurial intentions. Our findings partly supported the mediation hypothesis, and suggested that optimism may be positively associated with entrepreneurial intentions via a positive association with emotional intelligence, specifically with its Use of Emotion to facilitate performance factor.

The suggested mediating model extends previous literature, which focused mainly on the direct relationship between personality and entrepreneurial intentions (Bullough et al., 2014; Stewart & Roth, 2007; Travis & Freeman, 2017; Zhao et al., 2010). Specifically, the current study adds to the scant body of work demonstrating the significant mediating role of emotional intelligence between personality and attitude/behavior (Ansari & Talan, 2017). Generally, our findings answer previous calls to investigate the possible mediating processes that affect the relationship between personality traits and entrepreneurial behavior (Mischel & Shoda, 1998; Rauch & Frese, 2007).

The combination of the mediating model obtained in the present study with the theory of planned behavior (Ajzen, 1991; Kruger & Carsrud, 1993) indicates a complex process underlying the understanding of entrepreneurial behavior and highlight the significant variables involved in this process. Optimism was found to be correlated with entrepreneurial intentions via the mediating factor of emotional intelligence, and entrepreneurial intention is a predictive variable involved in entrepreneurial behavior, the final product of the process. It seems, therefore, that according to both these models, actually influencing entrepreneurship requires an understanding of the variables of optimism, emotional intelligence, entrepreneurial intentions, and the manner in which they relate to the entrepreneur's behavior in practice.

In addition, the current work extends previous findings by demonstrating that emotional intelligence serves as an accelerator of entrepreneurship by enhancing entrepreneurial intentions. By doing so, it adds to the growing literature that explores the ways in which emotional intelligence promotes future tendencies to establish a new venture among students and employees (Javed et al., 2016; Mortan et al., 2014; Zampetakis et al., 2009). The finding that emotional intelligence was positively associated with entrepreneurial intentions supports the general claim that, in order to succeed, an entrepreneur must express and utilize various emotional capabilities (Baron, 2008; Cross & Travaglione, 2003). In particular, the current study reinforces previous studies suggesting that emotional intelligence promotes entrepreneurial behaviors and new venture success (Ahmetoglu et al., 2011; FakhrEldin, 2017; Ingram et al., 2017; Yitshaki, 2012; Zampetakis et al., 2009a; Zhou & Bojica, 2017). Following Mayer et al. (2016) theoretical model of Emotional intelligence, the current study's results point for the first time to the unique and different contribution of each of the four components of emotional intelligence to the promotion of the tendency to become an entrepreneur. Moreover, previous studies demonstrated that optimism predicts active and persistent goal pursuit, so that optimists tend to be more motivated to achieve their goals and more successful in doing so even when facing adversity (Carver et al., 2010). Indeed, by demonstrating that only the Use of Emotion to facilitate performance component of emotional intelligence mediated the relationship between optimism and entrepreneurial intentions, the current study extends previous investigations of the motivational role of optimism in initiating behavior in the face of obstacles, especially entrepreneurial intentions. Therefore, among highly emotionally intelligent individuals, which better use their emotions to facilitate performance optimism may enhance entrepreneurial intentions.

Despite the positive correlation found between dispositional optimism and

entrepreneurial intentions, the hypothesis assuming that optimism will be significantly and directly related to entrepreneurial intentions was not supported in the current study. This finding is somewhat contrary to expectancy theory, as described by Scheier & Carver (1985) and to the findings of Giacomini et al. (2015) and Bernoster et al. (2017). However, it may match other findings regarding the entrepreneurial costs of optimism. The tendency to believe that *"things will always turn out for the best"* may lead entrepreneurs to be over-confident, underestimating the risks involved in launching and managing a new business, and eventually contributing to their failure. Indeed, studies investigating the relationship between optimism and entrepreneurial success yield inconsistent results (Cassar, 2010; Hmieleski & Baron, 2009). While some studies found a positive relationship between optimism and entrepreneurial success (Chen et al., 2013; Crane & Crane, 2007), others documented a negative relationship between the two (Elhem et al., 2015; Hmieleski & Baron, 2009). James & Gudmundsson (2011) suggest that *"realistic optimism may have positive consequences for the new venture creation process and ultimately improve the chance of new venture success, whereas excessive optimism may be linked to excessive risk taking and poor decision making and thus may have the opposite effect on the new venture outcome and negatively impact new venture success"*.

This study introduces an innovative approach that examines non-cognitive aspects of entrepreneurship intention, and its findings suggest that the entrepreneur's optimism should be judged through the prism of emotional intelligence, and not as an isolated variable. Since the findings show connections between optimism and emotional intelligence on the one hand, and entrepreneurial intentions on the other, future research should complete the picture by examining the relationship between these connections and entrepreneurial success.

The present study focused on a student population, with the intention of understanding in greater depth the way in which it might be possible to enhance entrepreneurial tendencies among students. Previous research noted the great importance of such investigation, with an emphasis on examining the emotional factors involved in the process (Crane, 2014; Nabi et al., 2017; Lee et al., 2018). This study suggests that the variables of optimism and emotional intelligence play a role in the formation of students' entrepreneurial intentions. The unique contribution of this study, as opposed to previous research into entrepreneurship education, is its insight into the more complex process that involves a special combination of optimism and emotional intelligence.

Finally, our results supported the growing number of studies that show a consistent gender difference in entrepreneurial intentions between men and women (Shirokova et al., 2016). In our sample, female participants reported fewer intentions of becoming entrepreneurs compared with their male counterparts. Based on the variables examined in this study, methods should be devised to address this tendency and increase entrepreneurial intentions among women.

LIMITATIONS AND FUTURE RESEARCH

A major strength of the current study lies in its focus on well-validated measures of personality and entrepreneurial intentions. However, the generalizability of its findings may be limited, due to its cross-sectional nature and its use of a survey methodology, rather than measurement of actual behavior. Future research should explore the actual behavior of entrepreneurs, preferably in longitudinal studies (Kautonen et al., 2015).

In addition, environmental and organizational context have been demonstrated to play a key role in determining entrepreneurial intention as well as performance. For example,

Hmieleski & Baron (2009) showed that environmental dynamism moderated the relationship between optimism and venture success, and therefore future studies should include such variables.

Similarly, entrepreneurial intention was found to be affected by factors such as entrepreneurial higher education (Bae et al., 2014; Basu, 2010; Souitaris et al., 2007), and family tradition (Zellweger, et al., 2011). Future studies that integrate such predictors will likely lead to a better understanding of the unique contribution of each factor in the creation of intentions. Finally, when predicting entrepreneurial intentions, it may be beneficial to explore the mechanisms connecting proximal and distal factors (Rauch & Frese, 2007). Broad personality traits such as dispositional optimism are considered distal variables, while entrepreneurial self-efficacy and perceived behavioral control are considered proximal variables, based on the theory of planned behavior (Krueger & Carsrud, 1993) and on the model of the entrepreneurial event (Shapero and Sokol, 1982). Promising directions for future study might consider whether perceptions of entrepreneurial self-efficacy and perceived behavioral control mediate the relationship between optimism and entrepreneurial intentions.

MANAGERIAL AND PRACTICAL IMPLICATIONS

One of the major implications of our study is that cultivation of both optimism and emotional capabilities among students is key as a path to enhance entrepreneurial intentions. In view of the important role of entrepreneurship in national economies, an understanding of the process leading to enhanced entrepreneurial intentions can and must be reflected in formal and informal educational settings. Strategies should be devised for developing skills that lead to an increase in entrepreneurial intentions among students (and young people), based on emotional intelligence and optimism.

Research has shown that entrepreneurship study programs can produce positive results that lead to a rise in entrepreneurial intentions among students (Crane, 2014), improvement in students' attitudes toward entrepreneurship (Souitaris et al., 2007), and greater inspiration among students (Nabi et al., 2018). This research and the present study highlight the importance of designing curricula that emphasize the development of general skills and capabilities (Crane, 2014), with a focus on engendering optimism and emotional intelligence.

Greater optimism can be engendered by directly training students to adopt more optimistic perspectives (Malouff & Schutte, 2017) or by designing environments in ways that enhance positive future expectations. For example, optimism can be stimulated by interventions on an individual level, using cognitive-behavioral techniques (Gillham & Reivich, 2004) or exercises like "*the best possible self*" (BPS), which involve envisioning oneself in an imaginary future where everything has turned out optimally (Meevissen et al., 2011; Peters et al., 2010).

Over and above the contribution of this research to the understanding of the process of education and skills acquisition among the younger generation, its findings have important implications on an intra-organizational level. Generating innovation in companies in a constantly changing market is critical for a company's survival and success (Tellis, 2012). As Tellis suggested, the key to innovation is human capital. Therefore, understanding the personality elements that drive innovativeness among company employees will doubtless contribute to the company's success. The current study confirms the considerable importance attributed to the variable of emotional intelligence with regard to entrepreneurial intentions.

CONCLUSION

The study suggests that HR recruitment for organizations that foster entrepreneurship should consider emotional intelligence combined with optimism, in order to bring aboard new employees who will make a more significant contribution to development and innovation processes. It is important too that organizations seeking to reinforce intra-organizational entrepreneurship should be cognizant of the need to nurture and encourage enhancement of emotional intelligence skills together with optimistic thinking, by means of workshops, training, and positive incentives. In addition, these traits can be used to build and improve work teams that promote entrepreneurial tendencies, in other words, to try to achieve a better match between people and teams in terms of these traits, in order to promote personal and team-based entrepreneurial intentions.

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