

**Emotional Competencies and Entrepreneurial Intention: An Extension of the Theory of
Planned Behavior**

Por

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Dedication

To God for his blessings that have allowed me to finish this doctoral research. To my mother Martha for her unconditional support, to my aunts for their confidence in me. To my wife for her understanding and my children Mateo and Samantha who are the inspiration of my life.

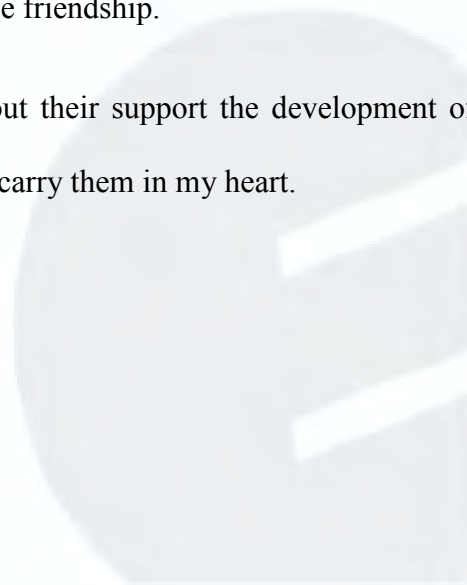
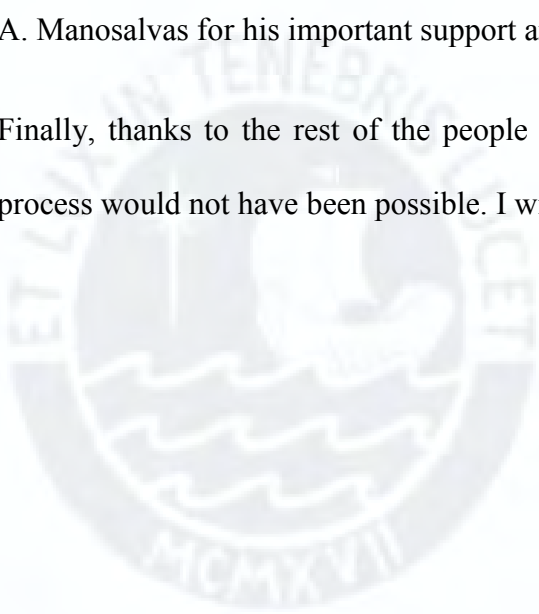


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Finally, thanks to the rest of the people that without their support the development of this process would not have been possible. I will always carry them in my heart.



Abstract

This study analyzed the relationship between emotional competencies and entrepreneurial intention in final-year undergraduate students of public higher education institutions in Ecuador, supported by an extended model of Ajzen's Theory of planned behavior (1991). The results were derived from a questionnaire applied to students in the last semester of degrees involving academic business training. To analyze the results, structural equation modeling (SEM) was used. The findings show that emotional competencies are significant factors in the configuration of entrepreneurial intentions and have a direct and positive relationship with their cognitive precursors: entrepreneurial attitude and self-efficacy. It is suggested that students with a higher degree of emotional competencies cope better with the cognitive bias that can make it difficult to recognize business opportunities. The main contribution of this study was to generalize the results that have been obtained in the use of emotional competencies to promote the intentionality of entrepreneurship in the contexts of emerging economies.

Keywords: Emotional Competencies, Entrepreneurial Intentions, Self-efficacy, Business Attitude and Subjective Norms.

Resumen Ejecutivo

Este estudio analizó el poder explicativo de las competencias emocionales y su relación con la intención emprendedora de los estudiantes de pregrado de último año de las instituciones de educación superior públicas de Ecuador, respaldados por un modelo extendido de la teoría del comportamiento planificado de Ajzen (1991). Los resultados se derivaron de un cuestionario dirigido a estudiantes del último semestre de las carreras con formación académica empresarial los cuales fueron sometidos a análisis de ecuaciones estructurales (MES). Los hallazgos mostraron que las competencias emocionales son factores significativos en la configuración de las intenciones emprendedoras y su relación directa y positiva con los antecedentes cognitivos de la actitud empresarial y a la autoeficacia. Se sugiere que los estudiantes con mayor grado de competencias emocionales enfrentan de mejor manera el sesgo cognitivo que puede dificultar el reconocimiento de oportunidades empresariales. La principal contribución de este estudio fue dar mayor generalidad a los resultados que se han obtenido en el uso de las competencias emocionales para fomentar la intencionalidad de emprendimiento en contextos de economías emergentes.

Palabras clave: Competencias Emocionales, Intenciones emprendedoras, Autoeficacia, Actitud Empresarial y Normas Subjetivas.

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Introduction

This thesis is structured in two chapters. The first chapter presents the research paper accepted for publication, which is a requirement for completion of the degree of Doctor en Administración Estratégica de Empresas granted by the Pontificia Universidad Católica del Perú through its graduate school in business management, CENTRUM PUCP. The second chapter details the main conclusions and recommendations of the thesis. Therefore, chapter 1 of this thesis includes the research paper entitled, Emotional Competencies and Entrepreneurial Intention: An Extension of the Theory of Planned Behavior, Case of Ecuador, which was accepted for publication by *Cogent Business & Management* on April 23, 2021 (see Appendix A). This study analyzed the relationship between emotional competencies and entrepreneurial intention in final-year undergraduate students of public higher education institutions in Ecuador, supported by an extended model of Ajzen's theory of planned behavior (1991).

Cognitive characteristics are valuable elements that facilitate the study of entrepreneurial intention, but they are not always sufficient, since entrepreneurship implicitly contains an emotional component (Cardon et al., 2012). The influence of emotional processes on cognition has been observed in a wide range of business contexts, affecting people, processes and organizations (George & Brief, 1992; Weiss et al., 1999), including decision-making (Souitaris et al., 2007). Emotional processes can be related to judgment and behavior (Cohen, 2005) and are of great importance to help understand business opinions, decisions and actions when they occur under conditions of uncertainty (Baron, 2008). It has been shown that certain areas of the brain are adapted to cognitive and emotional mechanisms, that is, to the ability of an individual to make personal judgments, to take decisions and also to express their feelings (Bechara et al., 2007). Baron (2008) established the value of emotions as a variable of interest in the study of entrepreneurship, since this factor influences many aspects

of cognition and behavior. As the environments in which entrepreneurs operate are unpredictable, emotional problems can have significant effects on important aspects of business. It is difficult to separate rational and emotional perspectives, since emotions have an impact on cognitively processed information and subsequent behavioral inclinations (Welppe et al., 2012).

The framework suggested by Hayton and Cholakova (2012), obtained from Vroom's expectation theory of motivation (1964) and the theory of planned behavior of Ajzen (1991), gave a complete understanding of how the emotional process can be related to entrepreneurial intentions and helped recognize that these can also significantly lower uncertainty in considerations of accuracy, convenience and feasibility when starting a business (Dimov, 2007). The literature reviewed to examine the main factors related to entrepreneurial intention suggests that the personality traits of individuals determine their intentions in starting a business (Koh, 1996; Mayhew et al., 2016; Mueller, 2001). However, little consideration has been given to emotional factors in emerging economies, since awareness of this issue is largely confined to developed countries. In addition, research that examines the emotional factors in the creation of companies is somewhat limited (Fernández-Perez et al., 2017; Padilla et al., 2014). In any event, only partial knowledge can be obtained by studying the relationship of emotional competencies in entrepreneurial intentions as the population studied is limited to final-year undergraduate students attending public universities in Ecuador (Montes, 2018).

Individuals with a high level of entrepreneurial intention were able to regulate their own emotions (George, & Brief, 1992), showing emotional competencies that can foster an orientation toward the business environment (Padilla et al., 2014). The results confirm that emotional competencies are significant factors in the configuration of entrepreneurial intentions in university students of business degree programs. An important finding was that

entrepreneurial attitude does not have a significant influence on entrepreneurial intention and is the weakest predictor of entrepreneurial intentions among undergraduate students of public higher education institutions in Ecuador. This confirms the results reported in studies by Bagozzi (1992); Krueger and Brazeal (1994), but contrasts with findings in other countries (Engle et al., 2010; Kolvereid & Isaksen, 2006; Moriano et al., 2014; Yurtkoru et al., 2014; Zhang et al., 2014). It was also interesting to contrast emotion versus cognition in the case of Ecuador, and this study highlights a new vision of the duality of the decision-making process in the business environment.

Chapter 2 includes six conclusions and three recommendations. It also includes the theoretical and practical implications of this research. This study provided an interesting framework to understand the entrepreneurial intentions of students and the effectiveness of careers with business academic training in public higher education institutions, focusing on cognitive and emotional factors and their relationships, taking into account that it would be important to obtain an emotional-rational balance in the decision-making process in the business area.

Chapter 1: Research Article

Cogent Business & Management is a multidisciplinary Open Access Journal that strives for inclusivity and global reach. The broad scope of the Journal creates a perfect environment to foster connections between researchers across all areas of Business & Management research, from Operations Research to Corporate Governance and Accounting to Marketing. E-ISSN 2331-1975, Scopus, quartile 3, ID:1943242, DOI: 10.1080/23311975.2021.1943242

Emotional Competencies and Entrepreneurial Intention: An Extension of the Theory of Planned Behavior Case of Ecuador

Abstract

This study analyzes the relationship between emotional competencies and entrepreneurial intention of students from public higher education institutions in Ecuador, supported by an extended model of Ajzen's Theory of planned behavior. The results are derived from a questionnaire applied to students of last semester of careers with academic business training. To analyze the results, structural equation modeling (SEM) was used. The findings show that emotional competencies are significant factors in the configuration of entrepreneurial intentions and have a direct and positive relationship with the cognitive antecedents of entrepreneurial attitude and self-efficacy. It is suggested that students with a higher degree of emotional competencies cope in a better way with the cognitive bias that can make it difficult to recognize business opportunities. The main contribution of this study was to give generality to the results that have been obtained in the use of emotional competencies to promote the intentionality of entrepreneurship in contexts of emerging economies.

Key Words: Emotional Competencies, Entrepreneurial Intentions, Self-efficacy, Business Attitude and Subjective Norms

Introduction

Entrepreneurial intentions are studied as one of the most confident predictors of business behavior that results in the creation of new companies (Linan, 2004; Prodan & Drnovsek, 2010; Souitaris et al., 2007). Cognitive characteristics are valuable elements that allow studying entrepreneurial intention, but they are not always enough, because entrepreneurship implicitly contains an emotional component (Cardon et al., 2012). The influence of emotional processes on cognition has been observed in a wide range of business contexts, affecting people, processes and organizations (George & Brief, 1992; Weiss et al., 1999), including decision-making (Souitaris et al., 2007) Emotional processes can be related to judgment and behavior (Cohen, 2005) and are of great importance to help understand business opinions, decisions and actions when they occur under conditions of uncertainty (Baron, 2008). It has been shown that certain areas of the brain are adapted to cognitive and emotional mechanisms, that is, to the ability of an individual to make personal judgments to make decisions and also to express their feelings (Bechara et al., 2007). Baron (2008) established the value of emotions as a variable of interest in the study of entrepreneurship, since this factor influences many aspects of cognition and behavior. Because the environments in which

entrepreneurs operate are unpredictable emotional problems can have important effects on important aspects of business work. It is difficult to separate rational and emotional perspectives because emotions have an impact on cognitively processed information and subsequent behavioral inclinations (Welppe et al., 2012). The framework suggested by Hayton & Cholakova, (2012) obtained from Vroom's expectation theory of motivation (1964) and the theory of planned behavior of Ajzen (1991) will give a more complete understanding of how the emotional process can be related with entrepreneurial intentions and recognize that these can also significantly lower the uncertainty in the accuracy, convenience and feasibility at the time of start a business (Dimov, 2007).

According to Kamalian y Fazel (2011) with greater emotional intelligence, individuals have a better behavior on environmental pressures, which in turn allows them to recognize feelings that may disappoint them but they have the ability to regulate them, increasing the level of their entrepreneurial behavior. Moreover, individuals with higher emotional intelligence have higher emotional feelings that allow them to develop their creativity and be proactive in getting out of adverse circumstances, as well as playing a relevant role in the creation of entrepreneurial behavior. In other words, the higher the emotional intelligence, the greater the probability of being an entrepreneur (Zampetakis, Kafetsios, Bouranta, Dewett, & Moustakis, 2009).

Interest in the emergence of entrepreneurial intention has stimulated research in the area of entrepreneurship (Bird & Allen, 2006; Frank, Lueger, & Korunka, 2007; Learned, 1992; Mandel, Richard, 2016; Naffziger, Hornsby, & Kuratko, 2018; Segal, Borgia, & Schoenfeld, 2005). The literature dedicated to examining the main factors related to entrepreneurial intention suggests that the personality traits of individuals determine their intentions to start a business (Koh, 1996; Mayhew, Simonoff, Baumol, Selznick, & Vassallo, 2016; Mueller, 2001) but little consideration is given to emotional factors in emerging countries since knowledge on this issue has only been generated in developed countries. In addition, research that examines the emotional factors in the creation of companies is quite limited (Fernández et al., 2017; Padilla et al., 2014). The knowledge achieved by the relationships of emotional competencies in entrepreneurial intentions are partial because the population studied is only limited to populations from developed countries (Montes, 2018).

People with a high level of entrepreneurial intention could regulate their own emotions (George, & Brief, 1992), showing emotional competencies that can foster an orientation towards the business environment (Padilla et al., 2014). This study focuses on emotional competencies and not on emotional intelligence because competences, unlike intelligence, show that people are capable of turning their potential into reality in a particular context (Boyatzis & Saatcioglu, 2008). So, emotional competencies become a practical application of emotional intelligence. Based on this, the present study aims to focus on emotional competencies and their relationship with entrepreneurial intention of students from public higher education institutions in Ecuador, supported by an extension of the theory of planned behavior (Ajzen, 1991; Fernández et al., 2017; Padilla et al., 2014). An emotional-cognitive perspective reinforced by an extended model of Ajzen's Theory of Planned Behavior (1991) was taken to study the relationship of emotional competencies and cognitive factors (self-efficacy, entrepreneurial attitude and subjective norms) with entrepreneurial intention.

The present study aims to cover the research gap detected in academic literature about the importance of emotional competencies to obtain a better explanation of the entrepreneurial intention (Bedwell et al., 2014; Fernández et al., 2017; Padilla et al., 2014). The study will respond to the recommendation of other researchers who showed the need to cooperate with a better understanding of the relationship between cognitive factors (subjective norms, entrepreneurial attitude and self-efficacy) and emotional competences (Ajzen, 1991; Autio et al., 2001; Drost & Mcguire, 2011; Fernández et al., 2017; Liñán, 2008; Padilla et al., 2014).

For this reason, an extended model of Ajzen's theory of planned behavior with the integration of emotional competencies will be important in order to achieve a greater understanding of entrepreneurial intention in students of higher education institutions.

In the next sections the theoretical foundation of the research is detailed together with the hypotheses, the research methodology, the findings and finally the conclusions, implications and future research

Theoretical framework and hypotheses

Entrepreneurship includes an emotional component (Baron, 2008). Previous research has shown that personal antecedents and characteristics such as personality, motivation, values, skills and attitudes induce people to have an entrepreneurial behavior (Collins, Hanges, & Locke, 2004; Rauch & Hulsink, 2015; Stewart & Roth, 2015). Zampetakis et al (2009) found that workers with a more pronounced emotional intelligence, that is, those who are more capable of regulating, supervising and evaluating both their own emotions and emotions of others, have a better disposition to act in an entrepreneurial way and perceive higher levels of organizational support. However, emotional intelligence is defined as the capacity in which emotions are recognized, understood and used in oneself and that allows effective performance (Boyatzis & Saatcioglu, 2008); and for many researchers the term emotional competence is better since, unlike emotional intelligence, competencies can be taught and learned (Padilla et al., 2014). This term refers to how people identify, express, understand, regulate and use their emotions and those of others (Cherniss, & Goleman, 2005; Goleman, 1998). For the purpose of this study, emotional competencies are defined as the interrelated set of behaviors that people use to identify and manipulate both their own emotions and emotions of others.

Emotional competencies can play a critical role in predicting entrepreneurship (Padilla et al., 2014). In this framework, the main emphasis is placed on the interactions of individuals with the business environment, as well as personal development and learning (Boyatzis & Saatcioglu, 2008). Goleman (1998) pointed out "emotional competence" as the ability to learn which is based on emotional intelligence that results in exceptional performance in the workplace. Studies in graduate students have proposed that emotional competencies play a fundamental role in the decision to become an employer (Goleman, 1998; Padilla et al., 2014) and may be more effective predictors of performance than general personal identity traits (Finch et al., 2015; Guillén et al., 2009).

Entrepreneurial intentions are defined as a conviction of an individual to create a new business and consciously plans to do so at some point in the future (Thompson et al., 2010). Students who exhibit greater entrepreneurial intentions will also present higher emotional competencies because these play a fundamental role in the prediction of entrepreneurship (Fernández et al., 2017; Padilla et al., 2014; Souitaris et al., 2007). It is difficult to separate the emotional from the rational aspect because emotions are related to the impact of processed cognitive information on later behavioral tendencies (Welpe et al., 2012). According to Rausch, Hess and Bacigalupo (2011), the practical application of emotional competences becomes a strategy for the development of the individual's and organization's ability to assess the impact and consequences of decisions, while simultaneously improving the quality and effectiveness of the decision-making process. Based on this affirmation we could conclude that emotional competence strengthens business attitudes and increases the possibility that an individual starts a business career (Souitaris et al., 2007). As individuals with strong emotional competencies present stronger business attitudes towards entrepreneurship, they can be more productive and creative, less risk-averse and more likely to adopt positive business attitudes (Fernández et al., 2017).

Based on these arguments, the following hypothesis is proposed:

H1: Emotional competencies have a direct and positive influence on entrepreneurial intention.

On the other hand, according to Bandura (1997), self-efficacy is the belief in the ability to reinforce motivation, to use the cognitive resources available and take the necessary actions to face the specific demands of each business reality. Self-efficacy is present in people with greater emotional intelligence, who have greater self-confidence and greater control of business demands (Wong & Law, 2002), do not give up when problems arise and do not delay challenges (Mikolajczak, 2009). Individuals who tend to expel the feelings that destroy them also have a high degree of self-confidence, are able to recognize their own feelings, and have a stronger entrepreneurial spirit (Welpé et al., 2012). In this context, emotional competencies act as the emotional motivator that activates business competencies such as the intention to take risks, open up to opportunities or have a more creative outlook and better plan the future of entrepreneurship. Individuals with positive emotional competencies will cope better with stress, will be more self-confident and will have more control over the creation of a company such as identifying opportunities and solving problems (Mikolajczak, 2009), factors related to self-efficacy. Individuals with strong emotional competencies experience greater self-satisfaction, are more confident and have a mental perspective that favors individual productivity (Padilla et al., 2014).

Emotions has a strong influence with the characteristics of achieving goals and objectives in organizations, and with the significant relationships in the performance measured towards the achievement of goals and effectiveness in tasks in the work environment (Law, Wong & Song, 2002). Some dimensions of emotional intelligence for example are significantly related to the perception of entrepreneurial self-efficacy; individuals who have developed emotional competencies are more likely to generate successful ventures (Salvador, 2008). It can then be concluded that people with high emotional intelligence believe in their entrepreneurial abilities, and perceive themselves with more and better opportunities in carrying out business activities, in regulating and applying emotions that are positively interrelated. with entrepreneurial self-efficacy (Mortan et al., 2014)

So:

H2: Emotional competencies have a direct and positive influence on self-efficacy.

Entrepreneurial attitude is identified as the degree to which an individual is predisposed or not to start entrepreneurial activities (Ajzen & Fishbein, 1980). Regarding the entrepreneurial phenomenon, although some research has verified the influence of emotional competencies in shaping entrepreneurial intentions through its effect on entrepreneurial attitude (Krueger et al., 2000), little is known about the relationship of the emotional competencies in business attitude. However, individuals who act as entrepreneurs display entrepreneurial attitudes that are generally the result of their emotions and motivations (Gray et al., 2006). Indeed, it has been mentioned that emotional competence strengthens business attitudes and increases the possibility that an individual will subsequently start a business career (Souitaris et al., 2007). As individuals with strong emotional competencies present stronger business attitudes towards entrepreneurship, they can be more productive and creative, less risk-averse and more likely to adopt positive business attitudes (Fernández et al., 2017). So:

H3: Emotional competencies have a direct and positive influence on business attitude.

The theory of planned behavior has been one of the most widely used theories in terms of explaining and predicting the behavior of individuals. The theory of planned behavior has been cited more than 5000 times on the Web of Science since Icek Ajzen's book was published in 1988 and his article in 1991 (Lortie & Castogiovanni, 2015). The theory of planned behavior is preceded by intentions to put behavior into operation and the perception of control over said behavior (Ajzen, 1991). In addition, the intentions of individuals are

determined by components such as: business attitudes, subjective norms and self-efficacy. The subjective norms, in the context of this study, refer to the influence exerted on the entrepreneurial intention by the reference persons (Ajzen, 1991), family members, friends and colleagues, all of whom can play a decisive role in the determination of an individual to enter business activity (Chang et al., 2009). Entrepreneurship studies have shown the existence of a direct and positive influence between subjective norms and entrepreneurial intention (Carr & Sequeira, 2007; Engle et al., 2010; Karimi et al. 2016; Kolvereid & Isaksen, 2006; Usaci, 2015). So:

H4: Subjective norms have a direct and positive influence on entrepreneurial intention. On the other hand, Bae et al. (2014) pointed out that self-efficacy is one of the most powerful components in entrepreneurial intention. Similarly, Nowiński et al (2019) emphasized how self-efficacy is of utmost importance in the development of entrepreneurship among students of higher education institutions. Karimi et al (2016) similarly found that among university students the component of self-efficacy is the strongest predictor of entrepreneurial intention. Garcia et al (2015) reported that self-efficacy is one of the antecedents of entrepreneurial intention. Yurtkoru et al. (2014) found that self-efficacy, among other components, predict entrepreneurial intention. So:

H5: Self-efficacy has a direct and positive influence on entrepreneurial intention. The majority of entrepreneurship studies have affirmed that entrepreneurial attitude could predict entrepreneurial intention and subsequent entrepreneurial behavior, so that a direct and positive relationship is established between them (Iakovleva et al., 2011; Moriano et al., 2014; Usaci, 2015; Yurtkoru et al., 2014; Zhang et al., 2014). It is also mentioned that students with a higher grade in this area will feel more confident in their ability to recognize an opportunity to start a business at an early stage or to take risks in the business field (Kickul et al., 2009). The importance of the entrepreneurial attitude suggests that people will be more willing to dedicate resources and time in this field (Schwarz et al., 2009). Some authors have found that entrepreneurial attitude has little or no effect on entrepreneurship in specific contexts where individuals show lower levels of inclination to entrepreneurial activity and where labor dependency is emphasized especially in the female gender (Bagozzi, 1992; Krueger & Brazeal, 1994; Vamvaka et al., 2020). This study will examine the direct and positive effects of entrepreneurial attitude on entrepreneurial intention. So:

H6: The entrepreneurial attitude has a direct and positive influence on the entrepreneurial intention

The model submitted for confirmation is shown in Figure 1.

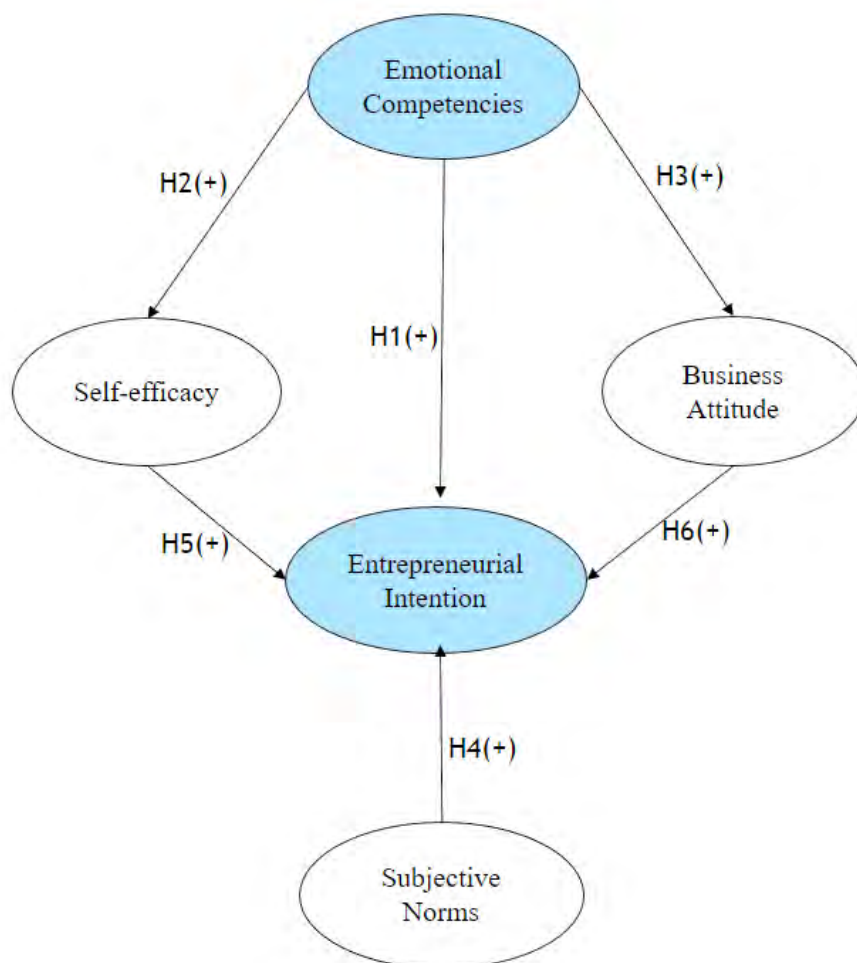


Figure 1. Theoretical model

Exploring the academic literature provided the existence of a research gap related to the analysis of emotional competencies within the theory of planned behavior. Integrating the role of emotional competencies in the model that explains the entrepreneurial intention will contribute to broadening the current knowledge reported by the traditional Ajzen model. Therefore, this situation led to investigate the effect that emotional and cognitive components have on entrepreneurial intention in students of higher education institutions in Ecuador.

Method

The present research performs the analysis of data that comes from a simple and valid stratified sample of 693 students enrolled in the last two semesters of business careers. Students of these levels were chosen due to the proximity to obtain their academic degree and with the objective of evaluating the level of entrepreneurial intention that has been developed during their training process. The data was obtained from a survey application to students from public higher education institutions in Ecuador who gave the corresponding authorization. Business degree students were selected since, according to the educational model implemented in the country, the students of these careers have a training focused on entrepreneurship and generation of new businesses. The career coordinators and teachers provided the facilities and the time necessary to carry out the study. Regarding the characteristics of the sample, 31.7% are men and 68.3% are women. To verify the assumptions of multivariate analysis, a normality analysis was performed, obtaining a Mardia coefficient of 41.113 and, according to Bentler (2005), a coefficient greater than 5 indicates that the data do not follow a normal distribution at the multivariate level. To verify the linearity, the Pearson correlation coefficients between the exogenous and endogenous

variables added through an arithmetic average were used according to the process written by Hayes (2017). All the correlations were positive and significant, thus demonstrating compliance with the linearity assumption. Also, homoscedasticity was verified, which according to Hair et al. (2010) is performed through residual scatter graphs which must be normally distributed. Figure 2 shows that the standardized residuals are normally distributed in the dependent variable through all the independent variables.

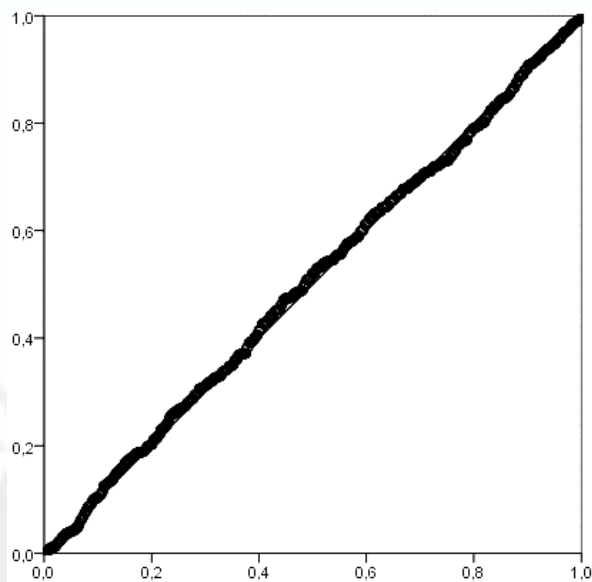


Figure 2. Regression normal PP chart. Standardized residue.

Instruments

Each variable was measured through instruments previously validated in other contexts. To measure entrepreneurial intention, the instrument proposed by Liñán & Chen (2009) was used in its version adapted and validated into Spanish by Rueda et al (2015), with four items. This instrument allows predicting whether university students will consider starting their own business through three components: subjective norms with three items that evaluate how external people would support their business career options; the entrepreneurial attitude with three items that measures the positive or negative entrepreneurial attitudes of university students and the self-efficacy with five items that measures elementary aspects for people's belief in the ability to create an enterprise. All the items of the instrument used a Likert scale with seven levels of measurement.

On the other hand, emotional competencies were evaluated with the instrument proposed by Cherniss y Goleman (2005) validated by Fernández et al. (2017). This instrument distinguishes five groups of emotional competencies: self-awareness with three items, self-regulation with three items, motivation with five items, empathy with five items, and social skills with five items. All the items of the instrument used a Likert scale with seven levels of measurement.

Prior to the application of the measurement instruments, a content validation was carried out through a panel of five experts: 3 academic experts and 2 professional experts with experience in the area. These people evaluated both the writing, the relevance and the meaning of each of the items of the measurement instrument. Afterwards, a pilot test was carried out on a sample of undergraduate students who were not considered in the study sample. This process allowed to identify possible problems in the interpretation or inconsistency in it. Finally, the internal consistency analysis was carried out by calculating the composite reliability index for each construct proposed by Chiñón y Vincent (2016), obtaining values greater than 0.7.

Confirmatory Factor Analysis of the Measurement Model

Within this analysis, in the first instance, the reliability analysis was carried out through the composite reliability index that analyzes the consistency of the scales in the items, taking into consideration the factor loadings of the observable variables on the underlying constructs. Table 1 shows the composite reliability index for each latent variables. All the constructs have a value greater than 0.70, which allows to conclude that the scales have a high level of reliability and consistency.

Table 1. Reliability of the scales of each construct

Construct	Sub-constructs	Composite Reliability Index	Items
Entrepreneurial intention		0.82	4
Subjective Norms		0.87	3
Self-efficacy		0.90	5
Business Attitude		0.92	3
Emotional competence		0.96	21
	Self-awareness	0.86	3
	Empathy	0.84	5
	Social skills	0.86	5
	Self-regulation	0.81	3
	Motivation	0.87	5

The model fit was evaluated through the CFI, RMSEA, Chi-Square test, and CMIN-DF index, which according to Kline (2016) should be reported. In addition, the GFI, NFI, TLI and AGFI index proposed by Chi3n y Vincent (2016) are also reported. Given that in evaluation of normality it was possible to verify that the model follows a non-normal distribution, the bootstrapping technique proposed by Byrne (2009) and included in the AMOS Software was used, together with the Bollen-Stine test to verify the fit. When running the model in the first instance, it did not present a good fit, so according to the procedure described by Byrne (2009) the modification indices were verified. The results obtained led to correlate the error variances of some constructs respecting the coherence and relevance of each of them with its underlying latent variable, doing a prior verification of the text of the related questions. Table 2 shows the goodness of fit indices of the structural model.

Table 2. Goodness-of-fit indices of the structural model

Index	Value	Acceptance level
Chi-Square	1554.416 (p-value=0.002)	P-value > 0.02
GI	580	
CFI	0.932	≥ 0.90
RMSEA	0.049	≤ 0.06
GFI	0.888	> 0.90
NFI	0.897	> 0.90
TLI	0.927	> 0.90
AGFI	0.871	> 0.80
CMIN/DF	2.680	< 5

Subsequently, the analysis of the convergent and discriminant validity of measurement model was carried out. This model includes correlations between all the constructs. To assess convergent validity, the procedure established by Chi3n and Vincent (2016) was used. Table 3 shows that some factor loadings are lower than the established minimum of 0.75, however, when reviewing the reliability indices, it is observed that in all cases is greater than 0.75, so these measurements are marginally acceptable in each one of the constructs.

Table 3. Convergent validity of the Sub-constructs and items.

Subconstructs and Items	Standardized Parameter
Entrepreneurial intention	
E11	,75
E12	,701
E13	,833
E14	,672
Subjective norms	
SN1	,850
SN2	,957
SN3	,687
Self-efficacy	
SE5	,800
SE4	,825
SE3	,833
SE2	,813
Self-awareness	
CM1	,805
CM2	,884
CM3	,777
Empathy	
E1	,615
E2	,729
E3	,758
E4	,752
E5	,754
Social skills	
HS1	,652
HS2	,727
HS3	,784
HS4	,780
HS5	,785
Self-regulation	
A1	,640
A2	,868
A3	,800
Business Motivation	
M1	,680
M2	,787
M3	,793
M4	,789
M5	,790
Business Attitude	
EA1	,879
EA2	,928
EA3	,884

The evaluation of discriminant validity was made according to the procedure established by Chi3n and Vincent (2016) through a statistical t-student test, establishing as a null hypothesis that correlation between each of the constructs is equal to 1. Each t student test was compared with the critical value equal to 1.964 or -1.964 by symmetry of the t-student distribution, at a significance level of 0.05 with 567 degrees of freedom. According to Table 4, all the test statistics were lower than the critical value, leading to rejecting the null hypothesis that the correlations are equal to 1, fulfilling the discriminant validity criterion.

Table 4. Discriminant validity

	Correlation		Correlation Value	Standard error	T-Student statistic
Self-awareness	<->	Motivation	0.095	0.01	-90.5
Self-awareness	<->	Empathy	0.071	0.009	-103.22
Self-awareness	<->	Social skills	0.098	0.013	-69.38
Self-awareness	<->	Self-regulation	0.071	0.009	-103.2222222
Self-efficacy	<->	Self-awareness	0.105	0.012	-74.58
Self-awareness	<->	Business Attitude	0.078	0.015	-61.46
Entrepreneurial intention	<->	Self-awareness	0.04	0.012	-80
Subjective Norms	<->	Self-awareness	0.044	0.019	-50.31
Empathy	<->	Motivation	0.09	0.009	-101.11
Social skills	<->	Motivation	0.119	0.013	-67.76
Self-regulation	<->	Motivation	0.083	0.009	-101.88
Motivation	<->	Business Attitude	0.078	0.013	--70.92
Entrepreneurial intention	<->	Motivation	0.073	0.012	-77.25
Subjective Norms	<->	Motivation	0.09	0.017	-53.53
Empathy	<->	Social skills	0.115	0.012	-73.75
Empathy	<->	Self-regulation	0.06	0.007	-134.28
Empathy	<->	Business Attitude	0.027	0.011	-88.45
Entrepreneurial intention	<->	Empathy	0.075	0.011	-84.09
Subjective Norms	<->	Empathy	0.067	0.015	-62.20
Social skills	<->	Self-regulation	0.092	0.011	-82.54
Social skills	<->	Business Attitude	0.025	0.017	-57.35
Entrepreneurial intention	<->	Social skills	0.129	0.017	-51.23
Subjective Norms	<->	Social skills	0.116	0.023	-38.43
Self-regulation	<->	Business Attitude	0.05	0.012	-79.16
Entrepreneurial intention	<->	Self-regulation	0.057	0.01	-94.3
Subjective Norms	<->	Self-regulation	0.093	0.015	-60.46
Entrepreneurial intention	<->	Business Attitude	0.041	0.019	-50.47
Subjective Norms	<->	Business Attitude	0.362	0.029	-22
Entrepreneurial intention	<->	Subjective Norms	0.169	0.026	-31.96
Self-efficacy	<->	Empathy	0.075	0.009	-102.77
Self-efficacy	<->	Social skills	0.097	0.014	-64.5
Entrepreneurial intention	<->	Self-efficacy	0.118	0.015	-58.80
Subjective Norms	<->	Self-efficacy	-0.007	0.022	-45.13
Self-efficacy	<->	Motivation	0.095	0.011	-82.27
Self-efficacy	<->	Self-regulation	0.049	0.009	-105.66
Self-efficacy	<->	Business Attitude	0.072	0.016	-58

Structural Model

This section shows the results of structural model analysis. Chi3n and Vincent (2016) pointed out that these models focus their interest on estimation and statistical validation of the relationship between latent variables. Emotional competencies were specified as a Second Order Model with five Subconstructs: (a) self-awareness, (b) motivation, (c) empathy, (d) social skills, and (e) self-regulation. It impacts on the first order construct entrepreneurial intention. All other variables were specified as first-order models. SPSS version 25 and AMOS version 24 software were used for all data analyzes.

Model fit was evaluated through the CFI, RMSEA, Chi-Square test, and CMIN-DF index, which according to Kline (2016) should be reported. In addition, the GFI, NFI, TLI and AGFI index proposed by Chi3n and Vincent (2016) are also reported. Given that the evaluation of normality improved that the model follows a non-normal distribution, the bootstrapping

technique proposed by Byrne (2009) was used together with the Bollen-Stine test to verify the fit. Collier (2020) specified that 5000 bootstrap samples must be specified with 95% confidence intervals. When running the model in the first instance, it did not present a good fit, so according to the procedure described by Byrne (2009) the modification indices were verified. The results obtained led to correlate error variances of some constructs respecting the coherence and relevance of each of them with its underlying latent variable doing a prior verification of the text of the related questions. Table 5 shows the goodness of fit indices of the structural model.

Table 5. Goodness-of-fit indices of structural model

Index	Value	Acceptance level
Chi-Square	1554.416 (p-value=0.002)	P-value > 0.02
GI	580	
CFI	0.932	≥ 0.90
RMSEA	0.049	≤ 0.06
GFI	0.888	> 0.90
NFI	0.897	> 0.90
TLI	0.927	> 0.90
AGFI	0.871	> 0.80
CMIN/DF	2.680	< 5

Chi-Square test indicator (χ^2) was equal to 1554.416 with p value of 0.002, a value lower than the 0.02 cut-off point, so the model would not be accepted if it were verified only with this test. However, according to Byrne (2009), it is necessary to evaluate the fit with other indicators. Therefore, the GFI goodness of fit indicator is shown, in which a value of 0.888 was obtained, which is very close to the 0.9 cut-off point, and the RMSEA, which has a value of 0.049, which is within the acceptance range of the model. The indices CFI, TLI and NFI present values within accepted levels. The CFI obtained was 0.932, a value within the acceptance range required by the model. The TLI is 0.927, which is also within the acceptance range required by the model. The NFI is 0.897 and is slightly below the 0.9 cut-off point, meaning an important percentage of adjustment of the model. Finally, the AGFI and CMIN / DF indicators also comply with the model's acceptance rules. The AGFI has a value of 0.871 higher than the 0.8 cut-off point. The CMIN / DF has a value of 2,685 which is within the acceptance range of the model. According to the fit indices obtained, most are within the required range, except for the GFI and NFI index, which are very close to the values required by the model, so it can be concluded that the model shows an acceptable adjustment since there is no solid evidence to reject the model. Most of the dependent variables of the model show multiple R^2 greater than 0.1, such as self-efficacy with 0.290 and entrepreneurial intention with 0.332, that is, the model explains more than 10% of the variances of each of the factors. As can be seen, the only variable that does not satisfy the Falk and Miller (1992) criterion is the entrepreneurial attitude that shows a variance of 0.084 less than 0.1, the minimum required criterion. The standardized loads of the structural model are shown in figure 3.

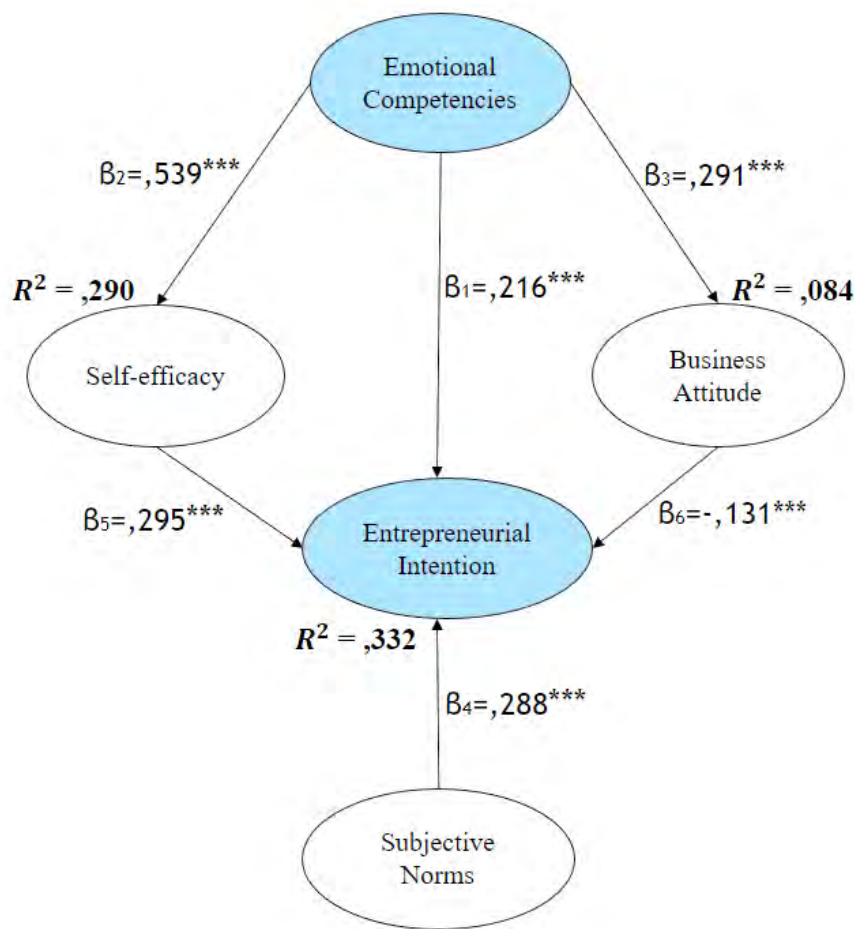


Figure 3. Result of the estimation of theoretical model (N= 693)

With regard to the regression parameters estimated between the latent variables, Table 6 shows that emotional competencies positively and significantly influence entrepreneurial intention (0.216, p-value <0.05), that is, students who develop emotional competencies are more capable of creating new businesses. This finding supports hypothesis 1. Emotional competencies show a significant effect with self-efficacy (0.539, p-value <0.05), that is, students' self-confidence can be strengthened if they develop emotional competencies. This finding supports hypothesis 2. Similarly, emotional competencies show a significant effect with entrepreneurial attitude (0.291, p-value <0.05), that is, students who perceive stronger emotional competencies will have an entrepreneurial attitude towards the most effective entrepreneurship, therefore, this finding supports hypothesis 3. The subjective norms show a direct and positive relationship with the entrepreneurial intention (0.288, p-value <0.05), that is, the reference persons such as family members and friends of the students influence their entrepreneurial behavior, supporting hypothesis 4. In the same way, self-efficacy shows a direct and positive relationship with entrepreneurial intention (0.295, p-value <0.05), that is, students who believe in their cognitive abilities and resources will be more likely to face the business environment. This finding supports the Hypothesis 5. On the other hand, entrepreneurial attitude has a non-significant effect with entrepreneurial intention (-0.131, p-value <0.05) that is, entrepreneurial attitude is absent or is the weakest predictor among students from institutions of public higher education in Ecuador. This finding allows us to reject hypothesis 6. Given a non-significant direct effect between two latent or unobservable variables, it necessarily entails the absence of influence (Hair et al., 2010), so an analysis of the effect was carried out direct, indirect and total between the emotional competencies and the

entrepreneurial intention. Table 7 shows the result of this test, which reveals that the direct effect 0.216 is greater than the indirect effect 0.121 and the total effect of emotional competencies on entrepreneurial intention is 0.337.

Table 6. Regression between constructs of the structural model

Hypothesis	Estimated	S.E.	p-value	Observation
Self-efficacy <--- Emotional Competencies	,539	,022	***	Accepted
Business Attitude <--- Emotional Competencies	,291	,032	***	Accepted
Entrepreneurial intention <--- Emotional Competencies	,216	,033	***	Accepted
Entrepreneurial intention <--- Subjective Norms	,288	,022	***	Accepted
Entrepreneurial intention <--- Self-efficacy	,295	,058	***	Accepted
Entrepreneurial intention <--- Business Attitude	-,131	,033	***	Rejected

Note: The estimates and p-values correspond to the unstandardized solution of the structural model.
*** equals p-value less than 0.05

Table 7. Standardized direct and indirect effects of the structural model

	Direct effect	Indirect effect.	Total effect
Entrepreneurial intention <-- Emotional Competencies	,216	,121	,337

Discussion and Conclusions

The results confirm that emotional competencies are significant factors in the configuration of entrepreneurial intentions in students of business careers. Consequently, governments, university authorities and teachers should consider these competencies as the main factor in the development of study programs in public higher education institutions in Ecuador, which will lead to better fulfill the objectives in the area of entrepreneurship. This study provided an interesting framework to understand the entrepreneurial intentions of students and the effectiveness of careers with business academic training in public higher education institutions, focusing on cognitive and emotional factors and their relationships, taking into account that it would be important to obtain an emotional-rational balance in the decision-making process in the business area. The extended model of the theory of planned behavior in students of public higher education institutions in Ecuador indicates that the development of emotional competencies could promote their entrepreneurial intentions as a result of the positive relationship of emotional competencies in self-efficacy and attitude. business. Therefore, it is suggested that greater the emotional competencies, the more likely students are to have the intention to start a business because their cognitive antecedents such as subjective norms and self-efficacy are directly related to entrepreneurial intentions. Emotional competencies provide highly valued attributes helping students to face the cognitive bias that can make it difficult to recognize business opportunities, overconfidence, and false control (Padilla et al., 2014). So the presence of emotional competencies facilitates business intention. It was attractive to contrast emotion versus cognition in Ecuador, so this study shows a new vision about the duality of the decision-making process in the business environment.

Regarding the relationship between emotional and cognitive factors in entrepreneurial intention, the results of the present study are consistent with those found in previous studies and reflect the positive influence of emotional competencies on entrepreneurial intention (Cardon et al., 2012; Fernández et al., 2017; Malebana, 2014; Montes, 2018; Padilla et al., 2014); emotional competencies on self-efficacy (Goleman, 1998; Mikolajczak, 2009; Padilla

et al., 2014); emotional competencies on business attitude (Gray et al., 2006; Souitaris et al., 2007; Welpel et al., 2012); subjective norms on entrepreneurial intention (Ajzen, 1991; Carr & Sequeira, 2007; Engle et al., 2010; Karimi et al., 2016; Kolvereid & Isaksen, 2006; Usaci, 2015); self-efficacy on entrepreneurial intention (Ajzen, 1991; Karimi et al., 2016; Krueger et al., 2000; Liñán, 2008; Rueda, 2015; Yurtkoru et al., 2014). An important finding was that entrepreneurial attitude does not have a significant influence on entrepreneurial intention, confirming the findings reported in studies by Bagozzi (1992); Krueger and Brazeal (1994), so that entrepreneurial attitude is the weakest predictor of entrepreneurial intentions among students of public higher education institutions in Ecuador, which contrasts with findings in other countries (Engle et al., 2010; Kolvereid & Isaksen, 2006; Moriano et al., 2014; Yurtkoru et al., 2014; Zhang et al., 2014). In emerging countries such as Ecuador, cultural influences are primary factors and according to the attitude-belief theory, cultural values are probably influenced by business attitudes (Iakovleva & Kolvereid, 2011). The Ecuadorian students surveyed may think that an entrepreneur can generate favorable income and that it is a good profession, they may feel that they are limited in terms of future personal growth (Luiz, 2011). Vamvaka et al. (2020) mentions that gender is an important moderator of entrepreneurial intention and that men are stronger when conceiving nascent entrepreneurship as business behavior and it should be noted that this study has a valid sample of 693 Ecuadorian university students in careers of business academic training where 31.7% are men while 68.3% are women. Therefore, the entrepreneurial attitude should be encouraged by university teachers through teaching-learning methodologies that improve their emotional competencies motivating the entrepreneurial attitude. Therefore, it is important that public higher education institutions in Ecuador not simply disseminate entrepreneurial skills, but also encourage emotional competencies in each of their students so that they can accept moderate risks, undertake economic and social plans that facilitate change and improve the benefit of the Ecuadorian community in general.

Implications.

Several authors have studied the consequences of emotions in the area of entrepreneurship such as Cardon et al (2012), but few have investigated the effect of emotional competencies, a concept that encompasses the ability to admit, control emotions and make functional use of them in different environments. In this research, the importance of the integration of emotional competencies in the model that describes entrepreneurial intentions in the Ecuadorian context prevailed, noting that it is important to estimate that for individuals to have entrepreneurial intentions they must realize that they have emotional aspects to do so. In this way, these individuals will have positive intentions to become entrepreneurs. An implication of this finding is the fact of not separating emotional competencies in the study of entrepreneurship since this makes it possible to distinguish the degree of control that individuals have of their emotions in relation to the result that is expected to be obtained from the activities that are demolished from entrepreneurship in Ecuadorian students. The study shows findings that highlight the value of emotional competencies in entrepreneurial attitude and self-efficacy and not focus only on knowledge and resources for the creation of new businesses. This successful ingredient promotes intentions to increase the interest of the students of Ecuador's public higher education institutions in the entrepreneurial alternative. Likewise, work must be done in a better way to develop entrepreneurial enthusiasm by fostering the connection between emotional competencies and entrepreneurship. Another interesting implication lies in understanding the effect generated by the entrepreneurial attitude as an assessment that favors or not the behavior in the model that explains entrepreneurial intentions. Precisely, the findings allow to conclude that the entrepreneurial attitude or the degree to which an individual is inclined or not to start a business activity, does

not positively influence the entrepreneurial intentions of the students of public higher education institutions in Ecuador. Such connection is obviously weakly developed or absent; in this regard, the development of a collaborative framework between academia and the business world could lead to the conduction of motivational strategies that allow them to develop their emotions and better promote their business attitudes. Finally, another implication is the methodological contribution that was established when addressing the case of Ecuador in order to apply an extension of the model of the theory of planned behavior of Ajzen (1991) including emotional competences in contexts of emerging countries taking into account that studies have only been carried out in developed countries, so this research allows us to generalize the understanding of how emotional competencies influence entrepreneurial intentions in students of public higher education institutions in Ecuador. This study collaborates with appropriate information for people who develop, implement and evaluate educational schemes in Ecuador aimed at strengthening the entrepreneurial intentions of students, apart from training in business areas, pay close attention to their emotional factors.

Future Research

A line of research that could spread would be to investigate how the individual emotional factors of competencies are related to entrepreneurial intentions and their precedents in contexts of emerging countries. At present, the study schemes of the careers with business and business academic training of the higher education institutions in Ecuador tend to be reinforced towards operational skills rather than entrepreneurial motivation tasks. On the other hand, given that the present research did not show a significant effect of the entrepreneurial attitude on the entrepreneurial intentions of Ecuadorian university students in careers with business and business academic training, it is recommended as a future line of research to evaluate the role that exerted by university teachers and people who are representatives of successful entrepreneurship cases in university students with the aim of contributing models of influence that facilitate a culture around entrepreneurship.

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Chapter 2. Conclusions and Recommendations

Conclusions

The results confirmed that emotional competencies are significant factors for entrepreneurial intentions in final-year business administration undergraduate students attending public universities in Ecuador.

Regarding the relationship between emotional and cognitive factors in entrepreneurial intention, the results of the present study were consistent with those found in previous studies and reflect the positive influence of emotional competencies on entrepreneurial intention (Cardon et al., 2012; Fernández-Perez et al., 2017; Malebana; Montes, 2018; Padilla et al., 2014); emotional competencies on self-efficacy (Goleman, 1998; Mikolajczak, 2009; Padilla et al., 2014); emotional competencies on business attitude (Gray et al., 2006; Souitaris et al., 2007; Welpel et al., 2012); subjective norms on entrepreneurial intention (Ajzen, 1991; Carr & Sequeira, 2007; Engle et al., 2010; Karimi et al., 2016; Kolvereid & Isaksen, 2006; Usaci, 2015); self-efficacy on entrepreneurial intention (Ajzen, 1991; Karimi et al., 2016; Krueger et al., 2000; Liñán, 2008; Rueda, 2015; Yurtkoru et al., 2014). An important finding was that entrepreneurial attitude does not have a significant influence on entrepreneurial intention, confirming the findings reported in studies by Bagozzi (1992); Krueger and Brazeal (1994), so that entrepreneurial attitude is the weakest predictor of entrepreneurial intentions among students of public higher education institutions in Ecuador, which contrasts with findings in other countries (Engle et al., 2010; Kolvereid & Isaksen, 2006; Moriano et al., 2014; Yurtkoru et al., 2014; Zhang et al., 2014).

This research was relevant since it made a contribution to the corpus of knowledge pertaining to the analysis of the influence of emotional competencies on entrepreneurial intention. In addition, this study allowed a greater generalization of the results, including to the contexts of emerging economies where emotional competencies have an influence on

entrepreneurial intentions. The extended model of the theory of planned behavior in students of public higher education institutions in Ecuador indicates that the development of emotional competencies could promote their entrepreneurial intentions as a result of the positive relationship of emotional competencies to self-efficacy and business attitude. It seems that the greater the emotional competencies, the more likely students are to have the intention of starting a business, since their cognitive precursors (such as subjective norms and self-efficacy) are directly related to entrepreneurial intentions. Emotional competencies provide highly valued attributes that help students in the face of the cognitive bias that can make it difficult to recognize business opportunities, cause overconfidence, and induce a false sense of control (Padilla et al., 2014). Therefore, the presence of emotional competencies facilitates business intention.

The present study was based on the main research question of whether there is an influence of emotional competencies and cognitive components, as proposed in Ajzen's theory of planned behavior (1991), on entrepreneurial intention in students of higher education institutions. In addressing this research question, several subsidiary questions were examined that were of vital importance.

The first of these considerations was to assess whether there is a direct and positive influence of emotional competencies on entrepreneurial intention. This constituted the first hypothesis and it was shown that emotional competencies directly and positively influence entrepreneurial intention ($\beta = 0.216$; $p\text{-value} < 0.05$). Therefore, the first hypothesis is accepted and the results confirm the opinion that emotional competencies are a significant factor in shaping entrepreneurial intentions (Cardon et al., 2012; Fernández-Perez et al., 2017; Malebana, 2014; Montes, 2018; Padilla et al., 2014). Indeed, academics should consider this as a main aspect in the design of university curricula, which would lead to a more effective university education, incorporating emotional factors that allow for a better development of

entrepreneurship (Bechara et al., 2007). In this study, a complete theoretical model of the configuration of entrepreneurial intentions among students of public higher education institutions in Ecuador was proposed by using an extended model of the theory of planned behavior to predict and understand the entrepreneurial intentions of students and conclude that emotional competencies indeed influence entrepreneurial intentions. A useful framework was developed to understand the entrepreneurial intentions of students and to highlight the effectiveness that public higher education institutions in Ecuador must have in focusing on cognitive and emotional factors and their interrelations. It would be desirable to achieve an emotional-rational balance in the decision process within the area of entrepreneurship.

The second research question assessed whether there is a direct and positive influence of emotional competencies on self-efficacy. This constituted the second hypothesis and it was demonstrated that emotional competencies directly and positively influence self-efficacy ($\beta = 0.539$; p -value < 0.05). Therefore, the second hypothesis is accepted and the results confirm the opinion that emotional competencies are a significant factor in self-efficacy (Goleman, 1998; Mikolajczak, 2009; Padilla-Meléndez et al., 2014). This finding shows that students' self-confidence can be strengthened if they develop emotional competencies. Self-efficacy can be developed through entrepreneurship education and educators should, therefore, focus on the use of appropriate teaching methods to enhance emotional competencies, thereby encouraging self-efficacy.

The third research question examined whether there is a direct and positive influence of emotional competencies on business attitude. This constituted the third hypothesis, and it was shown that emotional competencies directly and positively influence business attitude ($\beta = 0.291$; p -value < 0.05). Therefore, the third hypothesis is accepted and the results confirm that emotional competencies are a significant factor in business attitude (Gray et al., 2006; Souitaris et al., 2007; Welpé et al., 2012). This finding suggests that students from public

higher education institutions in Ecuador who develop emotional competencies will have more positive business attitudes towards entrepreneurship. Ecuador's public higher education institutions must develop emotional factors in students and provide motivation to develop a more effective entrepreneurial attitude. This will, in turn, foster an emotional and rational perspective that projects a behavioral tendency toward a career in entrepreneurship.

Therefore, students with manifest emotional competencies will be more productive, creative, have a greater aversion to risk, and will adopt an outstanding entrepreneurial attitude.

From these three research hypotheses, it may be concluded that there are different paths that ultimately influence the entrepreneurial intentions of students from public higher education institutions in Ecuador, and each has its own peculiarities. Principally, the strengthening of business attitudes and self-efficacy can be stimulated through the influence of emotional competencies, confirming that its effects increase with these cognitive factors. In this way, students who perceive stronger emotional competencies will have a more effective attitude toward the entrepreneurial spirit and, therefore, increase their confidence and the probability of their creating a new business. If the treatment of emotional competencies is properly undertaken, entrepreneurial intentions may be formed and encouraged and public higher education institutions might be more effective in creating the environmental conditions that will favor entrepreneurial activity in Ecuador.

The fourth research question assessed whether there is a direct and positive influence of subjective norms on entrepreneurial intention. This constituted the fourth hypothesis, and it was shown that subjective norms directly and positively influence entrepreneurial intention ($\beta = 0.288$; $p\text{-value} < 0.05$). Therefore, the fourth hypothesis is accepted and the results confirm that subjective norms are a significant factor in shaping entrepreneurial intentions (Ajzen, 1991; Carr & Sequeira, 2007; Engle et al., 2010; Karimi et al., 2016; Kolvereid & Isaksen, 2006; Usaci, 2015). In other words, the influence exerted by family members, friends, and

colleagues was shown to directly and positively affect the entrepreneurial intentions of students from public higher education institutions in Ecuador. Family businesses in Ecuador play a preponderant role in the country's economy; in the last two years, family-owned businesses contributed an average of 51% to the gross domestic product. In Ecuador, approximately 86% of companies are family-owned. Among the main factors that stand out in family structures are the culture, control and family behavior behind decision-making, which, in turn, are influenced by students of degree programs involving academic business training. The influence of family members on business decisions results in more family companies, thus bearing out the findings obtained (Camino & Bermudez, 2018).

The fifth research question examined whether there is a direct and positive influence of self-efficacy on entrepreneurial intention. This constituted the fifth hypothesis, and it was shown that self-efficacy directly and positively influences entrepreneurial intention ($\beta = 0.295$; $p\text{-value} < 0.05$). Therefore, the fifth hypothesis is accepted and the results confirm the opinion that self-efficacy is a significant factor in shaping entrepreneurial intentions (Ajzen, 1991; Karimi et al., 2016; Krueger et al., 2000; Liñán, 2008; Rueda, 2015; Yurtkoru et al., 2014). In other words, students from public higher education institutions in Ecuador have belief in their own abilities and in their own cognitive resources in order to take the necessary actions that allow them to face the specific demands that arise in the business environment. It has been pointed out that self-efficacy is the strongest variable in the study of entrepreneurial intentions, especially during economic crises when is the stand-out factor affecting the perception of opportunities (Bird & Allen, 2006). Self-efficacy has been linked to the recognition of entrepreneurial intentions as well as to business behavior in investigations of how education and training can be used in the development of entrepreneurial work (García et al., 2015).

The sixth research question assessed whether there is a direct and positive influence of entrepreneurial attitude on entrepreneurial intention. This constituted the sixth hypothesis and it was demonstrated that entrepreneurial attitude has a negative and significant influence on entrepreneurial intention ($\beta = -0.131$; $p\text{-value} < 0.05$). Consequently, the sixth hypothesis is rejected and the results show a negative effect of entrepreneurial attitude in shaping entrepreneurial intentions, confirming the findings reported in the studies by Bagozzi (1992) and Krueger & Brazeal (1994). Therefore, it can be concluded that entrepreneurial attitude is absent or is the weakest predictor of entrepreneurial intentions among students of public higher education institutions in Ecuador, which contrasts with findings obtained in other countries (Engle et al., 2010; Kolvereid & Isaksen, 2006; Moriano et al., 2014; Yurtkoru et al., 2014; Zhang et al., 2014).

The Ecuadorian students surveyed tend to believe that being an entrepreneur can lead to a good income and is a respectable profession; nevertheless, they feel it is a limited career in terms of future personal growth (Luiz, 2011). Therefore, entrepreneurial attitudes should be encouraged by university professors through teaching-learning methodologies that improve the emotional competencies of students. Vamvaka et al. (2020) mentions that gender is an important moderator of entrepreneurial intention and that men are stronger when conceiving entrepreneurship as business behavior. This study has a valid sample of 693 Ecuadorian university students in careers of business academic training where 31.7% are men while 68.3% are women. Therefore, the entrepreneurial attitude should be encouraged by university professors through teaching-learning methodologies that improve their emotional competencies, thus motivating the entrepreneurial attitude.

Theoretical Recommendations

A worthwhile line of research would be to investigate how the individual emotional factors of competencies are related to entrepreneurial intentions and their precedents in the contexts of emerging economies.

At present, the curricula of business and entrepreneurial academic programs in higher education institutions in Ecuador tend to be oriented toward operational skills rather than entrepreneurial motivational tasks. An extension of this study may be to understand the role of cognitive factors in emotional aspects, since there is insufficient understanding and evidence of such a relationship in South American national contexts.

Practical Recommendations

On the other hand, given that the present research did not show a significant effect of the entrepreneurial attitude on the entrepreneurial intentions of Ecuadorian university students in degree programs involving business and academic business training, a possible line of future research might be to evaluate the role exerted by university faculty and representatives of successful entrepreneurships on university students, with the aim of developing models of influence that reflect the culture surrounding entrepreneurship.

Theoretical Implications

Several authors have studied the impact of emotions in the area of entrepreneurship, notably Cardon et al (2012), but few have investigated the effect of emotional competencies, a concept that encompasses the ability to recognize, control and make functional use of emotions in different environments. In this research, the importance of the integration of emotional competencies to the model that describes entrepreneurial intentions in the Ecuadorian context was made clear, noting that for individuals to have entrepreneurial intentions they must realize that they have emotional aspects that connect to them. Through this process, such individuals will have positive intentions toward becoming entrepreneurs.

An implication of this result is the importance of not separating emotional competencies from the study of entrepreneurship, since these are precisely what makes it possible to distinguish the degree of control that individuals have over their emotions in relation to the expected results of entrepreneurial activities. The study's findings highlight the value of emotional competencies in entrepreneurial attitudes and self-efficacy and warn against focusing exclusively on the knowledge and resources required for the creation of new businesses. This consideration may help promote interest among students of Ecuadorian public higher education institutions in undertaking careers in entrepreneurship. Likewise, greater work must be done to develop entrepreneurial enthusiasm by fostering the connection between emotional competencies and entrepreneurship.

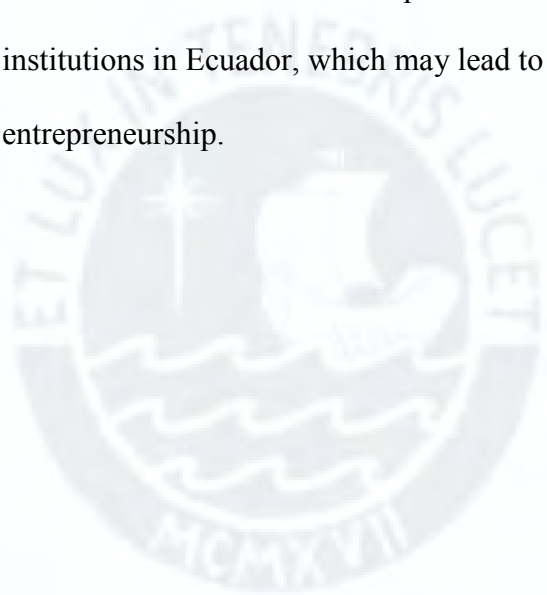
Another interesting implication lies in understanding the ability of entrepreneurial attitudes to foster or inhibit entrepreneurial behavior in the model of entrepreneurial intentions. More precisely, the findings lead to the conclusion that entrepreneurial attitude, or the degree to which an individual is inclined or not to start a business activity, does not positively influence the entrepreneurial intentions of the students of public higher education institutions in Ecuador. Such a connection is, indeed, weakly developed or is altogether absent; in this regard, the development of a collaborative framework between academia and the business world may lead to better motivational strategies that allow students to develop their emotions and better promote their business attitudes.

Finally, there is a significant methodological contribution arising from the approach undertaken to address the case of Ecuador. This serves as an extension of the model of the theory of planned behavior of Ajzen (1991) to include emotional competencies in contexts of emerging countries (hitherto studies have been carried out exclusively in developed countries). Therefore, this research permits the generalization of the understanding of how

emotional competencies influence entrepreneurial intentions in students of public higher education institutions in emerging economies.

Practical Implications

This study provides valuable data for professionals and academics involved in developing, implementing and evaluating educational programs in Ecuador aimed at strengthening the entrepreneurial intentions of students and improving training in business areas. Governments, university authorities and teachers should consider these competencies as the main factor in the development of study programs in public higher education institutions in Ecuador, which may lead to the better fulfillment of objectives in the area of entrepreneurship.



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Appendix A: Acceptance Letter of the Research Article

The screenshot shows a Gmail inbox with one email selected. The email is from Cogent Business & Management, dated June 2, 2021, at 4:26 AM. The subject line is "217837794 (Cogent Business & Management) Your submission has been accepted". The email content is as follows:

Dear Oswaldo Verdesoto Velastegui,

I am pleased to tell you that your work was accepted for publication in Cogent Business & Management on Apr 23 2021 06:41AM.

Please note: only minor, or typographical changes can be introduced during typesetting and proofing of your manuscript. Major changes to your manuscript will not be permitted.

For your information, comments from the Editor and Reviewers can be found below if available, and you will have an opportunity to make minor changes at proof stage.

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Best wishes

Włodzimierz Sroka
Editor

Appendix B: Research Instruments

Entrepreneurial intentions of students	<ul style="list-style-type: none"> • I plan to start a new business within 5 years of completing my studies. • I have already taken some steps towards starting my own business (e.g., seeking information, discussing the idea with friends, writing a business plan). • I am confident that I will start my own business within 5 years of completing my studies. • It is one of my career goals to become an entrepreneur.
Entrepreneurial attitude	<ul style="list-style-type: none"> • Being an entrepreneur within 5 years of completing my studies would be very advantageous for me. • Being an entrepreneur within 5 years of completing my studies would be good for my career. • I would like to be an entrepreneur within 5 years of completing my studies..
Self-Efficacy	<ul style="list-style-type: none"> • I feel that I am able to define an idea and a business strategy for a new company. • I feel that I am able to write a business plan (conduct market research, financial analysis, etc.). • I feel that I am able to negotiate and maintain supportive relationships with potential investors and banks. • I feel that I am able to recognize opportunities for the development of new products and/or services. • I feel that I am able to establish relationships with key people to obtain the necessary capital to start a new business.
Subjective Norms	<ul style="list-style-type: none"> • My family believes I should be an entrepreneur; my family's opinion is important to me. • People who are important to me believe that I should become an entrepreneur; the opinions of people who are important to me have a strong influence on me. • People whose opinion I value have become entrepreneurs within 5 years of completing their studies.
Emotional Competencies	
Self-awareness	<ul style="list-style-type: none"> • I am able to recognize my own emotions and their effects on my actions. • I am aware of my own strengths and limits. • I have great confidence in my self-esteem and my ability to do anything..
Self-regulation	<ul style="list-style-type: none"> • I consider myself an honest and upright person. • I can take responsibility for my personal actions. • I consider myself a person who is flexible and able to cope with change. • I am comfortable and open to new ideas, approaches and information.
Motivation	<ul style="list-style-type: none"> • I like to push myself to improve or to meet a certain standard of excellence. • I am committed to working for the goals of a group or organization when I identify with them. • I act quickly to take advantage of opportunities. • I am persistent in working to achieve my goals, despite obstacles and setbacks.
Empathy	<ul style="list-style-type: none"> • I am able to understand the feelings and views of others and am actively interested in things that interest them. • I recognize other people's needs in order to progress, and I like to encourage their abilities. • I am able to anticipate, recognize and meet the needs of others. • I like to take advantage of the opportunities offered by different types of people. • I am aware of the emotional currents and underlying power relationships within a group.
Social Skills	<ul style="list-style-type: none"> • I can make use of effective means of persuasion. • I am a good listener and can convey a convincing message. • I have the ability to negotiate and resolve disagreements. • I am able to inspire and lead groups and individuals. • I am able to initiate and lead change..