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## **Influence of entrepreneurial competencies and motivations on social entrepreneurship intention: an empirical study related to Tunisia**

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**Abstract:** Recently, social entrepreneurship has attracted a great deal of attention from scholars, practitioners and policy makers since it presents one of the main solutions for solving social, economic and environmental problems. To participate in this research area, we carry out in this work an empirical investigation of the impact of both entrepreneurial competencies and motivations on the formation on the social entrepreneurial intention based on 310 questionnaires from Tunisians who are pursuing incubation programs in the context of social entrepreneurship. Using the partial least squares structural equation modelling (PLS-SEM) method, we have shown that entrepreneurial competencies and motivations positively influence social entrepreneurial intention. This reinforces the conclusions that said entrepreneurial competencies and motivations have an effect on entrepreneurship in general. In addition, these findings may attract the attention of incubators who can act on these two determinants to stimulate social entrepreneurship.

**Keywords:** social entrepreneurial intention; entrepreneurial competencies; entrepreneurial motivations; PLS-SEM; Tunisia.

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## 1 Introduction

In the literature, numerous definitions relating to the social entrepreneurship have been proposed (Light, 2009). Dees (2001) defines the social entrepreneurship as a type of entrepreneurship with a social purpose. In the same context, Bosma and Levie (2010) considered that the social entrepreneurship refers to people or organisations engaged in entrepreneurial activities with a social purpose. Moreover, Mair and Marti (2004) have noted that entrepreneurship spirit is a key element that offers social entrepreneurship its entrepreneurial character. Social entrepreneurship represents the spirit of traditional entrepreneurship in the production of goods and services (Marshall, 2011). However, the social entrepreneur is one that has a motivation to be involved in social activities compared to commercial entrepreneur (Shaw and Carter, 2007). Arend (2013) claimed that the social entrepreneur works to achieve a social value. In addition, Ruebottom (2013) specified that the social entrepreneur feels obliged to take into account the effects of his initiatives on society. Thus, social entrepreneurship can be considered as a combination of economic and social aspects (Battilana et al., 2012; Pierre et al., 2014). According to Zahra et al. (2009), it is principally considered as a solution to social problems. Recently, social entrepreneurship becomes a major economic phenomenon on a global scale (Dacin et al., 2010) and gains a lot of attention (Nicholls, 2006). Consequently, stimulating it in countries like Tunisia is of great importance (Ben Chikha and Jarbou, 2017, Ben Chikha and Jarbou, 2018a, 2018b). Accordingly, the study of determinants of social entrepreneurship attracts the attention of several researchers (Méndez-Picazo et al., 2015, Ben Chikha and Jarbou, 2016). Teixeira and Forte (2009) claimed that several researchers asked the question of why people become entrepreneurs. Some authors have presented models of cognitive processes leading to the creation of companies (De Carolis and Saporito, 2006). Investigating the causal links between attitudes and entrepreneurial behaviour appeared the most successful (Kim and Hunter, 1993). The most convincing approach to assemble behaviour as well as attitudes is through integrated models, including intentions (Olson and Zanna, 1993).

According to Krueger et al. (2000), the planned behaviour of entrepreneurship explains the reason for using intentions in business creation since there is no action that will occur without intention (Krueger, 2000). Hence, any planned behaviour is intentional (Krueger, 2009). Krueger and Carsrud (1993) presented entrepreneurship as an intentional process. Consequently, entrepreneurial intention is considered as an antecedent and a determinant of entrepreneurial behaviour (Kolvereid and Isaksen, 2006). Thus, entrepreneurship is a process, that is, a set of stages, where intention is the secondary stage that required investigation (Lee and Wong, 2004).

Intention can be defined as a process that is born with the needs, beliefs, habits and values of the individual (Bird, 1988). It constructs and guides action (Krueger et al., 2000). In the same context, Krueger et al. (2000) describes intention as a good predictor of behavioural change. So, business creation represents a direct consequence of intention (Bird, 1992).

Many researchers have studied the determinants related to social entrepreneurship as well as social entrepreneurial intention. Among these determinants, there are the entrepreneurial competencies (Rubin and Dierdorff, 2009; Miller, 2012) as well as the entrepreneurial motivations (Germak and Robinson, 2014; Coursey et al., 2012), which can play an important role in entrepreneurial social decision-making. As a result, they can influence social entrepreneurial intention.

In this paper, based on existing works presented in the literature, we study the influence of entrepreneurial competencies and motivations on social entrepreneurship intention for the Tunisian case. To this end, we use the principal component analysis (PCA) and the partial least squares structural equation modelling (PLS-SEM) method to analyse the questionnaires with a sample of 310 Tunisian graduates who are pursuing training programs on social entrepreneurship.

The paper is arranged in four sections. Section 2 concerns the theoretical background and hypotheses. Section 3 represents the methodological trends followed by the empirical study. The obtained results with their respective interpretations are given in the Section 4. Finally, Section 5 concludes the paper and gives suggestions for future research.

## **2 Theoretical background and hypotheses**

Many researchers have suggested that business creation requires some planning and hence it assumes a prior intention to the act of doing business (Bird, 1988, Katz and Gartner, 1988). According to Ajzen (1991), the intention occupies an important place in the genesis of the behaviour of the individual. In the same context, it represents a good predictor of behaviour (Müller, 2011). For this reason, the intention is considered as a cause, an antecedent and a determinant of entrepreneurial behaviour (Kolvereid and Isaksen, 2006).

In the literature, several variables are studied to determine their effects on entrepreneurial intentions. Among these variables are entrepreneurial competencies (Rubin and Dierdorff, 2009; Miller, 2012) as well as entrepreneurial motivations (Germak and Robinson, 2014; Coursey et al., 2012).

The notion of competence is rooted in the 13th century and applied to judicial proceedings for two centuries (Rey, 1996). In its genesis, this notion refers to the realisation of actions whose objectives have been previously defined. At the end of the 17th century, the competence is evolved, became widespread and was characterised by a combination of three central notions, namely: the capacity, the knowledge and the experience, that is exercised in an often professional context.

Rey (1996) has translated the concept of competence into 'being able through one's knowledge and experience'. Recently, this conception is transposed into the field of the entrepreneurship to refer to the combination of knowledge, attitudes and skills necessary to be effective and efficient during the entrepreneurial process. The skills that entrepreneurs need to have are very important to business success (Ahmad, 2007, Baum et al., 2001; Man and Lau, 2000).

Moreover, like the commercial entrepreneurs, the social entrepreneurs, who are special entrepreneurs (Dees, 1998), requires diverse competencies to create the optimal value of social enterprises. As shown in recent published studies (Colombo and Grilli, 2010, Unger et al., 2011; Stuetzer et al., 2013), the entrepreneurial skills play a vital role in the creation and the development of a new enterprise. In addition, Koc and Yavuz (2010) also suggested that the entrepreneurial competencies represent an antecedent needed to become a social entrepreneur. As a result, the competencies influence the social entrepreneurial intention.

At the beginning, the motivation was largely studied by psychology. In this science, each thought has sought to explain the reason of the human action, which justifies the

choices of individuals and how they can be understood in order to perhaps better control them (Mischel, 1993). Afterwards, this notion is very quickly interested in the management of human resources, because it is at the origin of any human action. In fact, the motivations relate to the drivers of our behaviour, i.e., they activate and direct our actions (Schwartz 1992, Stuchlíková, 2010).

In the context of the entrepreneurship, the motivations are among the important reasons that lead to the understanding of the entrepreneurial choices. It is often rare for a single motivation to influence an entrepreneur's commitment to an entrepreneurial process. The choice of business creation is usually characterised by a combination of motivations. Thus, different studies have been proposed to determine the most important and necessary motivations for entrepreneurship (Baum and Locke, 2004, Hessels et al., 2008).

We thus find, as several researchers, such as, Van Gelderen et al. (2005) and Estay, Durrieu and Akhter (2013), that the entrepreneurial motivation leads the entrepreneurs to pursue their business objectives. Therefore, the motivation is an antecedent to investigate the social entrepreneurship (Germak and Robinson, 2014). In addition, the motivational assessment could be used to identify the most appropriately people aligned with the goals of an organisation (Coursey et al., 2012). Consequently, the motivations influence the social entrepreneurial intention.

Accordingly, we propose the following assumptions:

- H1 Entrepreneurial competencies have a positive influence on the social entrepreneurial intention.
- H2 Entrepreneurial motivations have a positive influence on the social entrepreneurial intention.

In Table 1, we summarise the set of items for each variable (social entrepreneurial intention, entrepreneurial competencies and entrepreneurial motivations).

Note that the mentioned competencies and motivations in Table 1 can be divided into generals and specifics. The CSE1, CSE3, CSE6, CSE10, MSE4, MSE5, MSE6 and MSE8 can be considered as specific competencies and motivations, while the reset of items are generals.

**Table 1** Items of social entrepreneurial intention (EI), competencies of social entrepreneurship (CSE) and motivations of social entrepreneurship (MSE), with the appropriate literature

<i>Items</i>	<i>Social entrepreneurial intention (EI)</i>	<i>Relevant literature</i>
EI1	I will make all effort to start and run my own business.	Robledo et al (2015), Liñán et al. (2011)
EI2	I am ready to do anything to be an entrepreneur.	
EI3	I have serious doubts about ever starting my own business.	
EI4	My professional goal is to be an entrepreneur.	
EI5	I am determined to create a business venture in the future.	
EI6	I have a very low intention of ever starting a business.	

**Table 1** Items of social entrepreneurial intention (EI), competencies of social entrepreneurship (CSE) and motivations of social entrepreneurship (MSE), with the appropriate literature (continued)

<i>Items</i>	<i>Competencies of social entrepreneurship (CSE)</i>	<i>Relevant literature</i>
CSE1	Ability to solve social problems	Rubin and Dierdorff (2009)
CSE2	Management of financial capital	Thompson (2002)
CSE3	Ability to communicate with customers, suppliers and other stakeholders	Litzky et al. (2010)
CSE4	Manage strategy development	Dierdorff et al. (2009)
CSE5	Capacity to measure outcomes	Austin et al. (2006)
CSE6	Ability to develop collaborative relationships	Dacin et al. (2010)
CSE7	Creative use of minimal resources	Mair and Marti (2006)
CSE8	Identification, evaluation and exploitation of opportunities	Zahra et al.(2008)
CSE9	Ability to sell and/or market the organisation	Thompson et al. (2000)
CSE10	Ability to build community support	Litzky et al. (2010)
<i>Items</i>	<i>Motivations of social entrepreneurship (MSE)</i>	<i>Relevant literature</i>
MSE1	Need for achievement	Barba-Sánchez and Atienza-Sahuquillo (2012)
MSE2	Financial success	Williams and Nadin (2011)
MSE3	Autonomy or independence	Van Gelderen and Jansen (2006)
MSE4	Create social value	Dacin et al. (2010)
MSE5	Increased well-being	Weinstein and Ryan (2010)
MSE6	Compassion	Miller et al. (2012)
MSE7	Creativity and innovation	De Dreu (2011)
MSE8	Desire for social justice	Thake and Zadek (1997)

### 3 Methodology

Based on the survey strategy, a quantitative study was applied to test the hypotheses H1 and H2. The social entrepreneurship intention is the focus of this study as well as the entrepreneurial competencies and motivations. The questionnaire adopted for data collection has a five-point Likert scale, i.e., a value of 1 means non-important, 2 somehow important, 3 indifferent, 4 important and 5 very important. The data was collected between January 2017 and January 2018 via e-mail and 310 documents are received among 372 with a perfect response rate.

To evaluate the proposed conceptual model, we employ SPSS software (Version 19.0) and SmartPLS (Version 3.2).

## 4 Results

We firstly reduce the items of the EI, CES and MES constructs based on the PCA technique using the SPSS software. In fact, we examine the statistical quality indicators, including the Kaiser-Meyer-Olkin (KMO), Bartlett-test of Sphericity, computation of Cronbach's alpha, eigenvalue equal to or greater than one, variable communalities, diagonal of the anti-image matrix and accumulated variance explained.

Concerning the PCA of the social entrepreneurial intention EI, it shows that the communality of EI3 is insignificant since it has a value less than 0.5 (i.e., 0.158). Hence, EI3 must be deleted. After deleting EI3, the communality EI6 is insignificant (i.e., 0.187, less than 0.5). After deleting EI6, the rest of EI items (i.e., EI1, EI2, EI4 and EI5) are adequate. Indeed, only one factor was formed, showing a cumulative variance of 97.246%, with an eigenvalue greater than one (3,890). The obtained value of KMO test is 0.868, considered significant. The result of the Bartlett test of Sphericity is 2,735.580, while the Cronbach's alpha coefficient is 0.990. With regard to the component matrix, the factor loadings of all items are greater than 0.30. The communalities are considered adequate since the value of each item is comprised between 0.965 and 0.988. The coefficients in the diagonal of the anti-image matrix are ranged from 0.778 to 0.922. Consequently, all items of the EI construct excluding both EI3 and EI6 are considered satisfactory.

**Table 2** Values of statistical quality indicators of all variables after eliminating insignificant items

<i>Variables</i>	<i>Accumulated variance</i>	<i>Eigenvalue greater</i>	<i>Anti-image matrix</i>	<i>KMO test</i>
EI	97.246%	3.890	Between 0.778 and 0.922	0.868
CSE	88.062%	8.806	Between 0.895 and 0.974	0.921
MSE	84.451%	6.756	Between 0.844 and 0.984	0.907
<i>Variables</i>	<i>Accumulated variance</i>	<i>Eigenvalue greater</i>	<i>Anti-image matrix</i>	<i>KMO test</i>
EI	2,735.580	0.990	Between 0.983 and 0.994	Between 0.965 and 0.988
CSE	6,119.772	0.985	Between 0.905 and 0.974	Between 0.819 and 0.949
MSE	4,014.547	0.973	Between 0.877 and 0.959	between 0.768 and 0.919

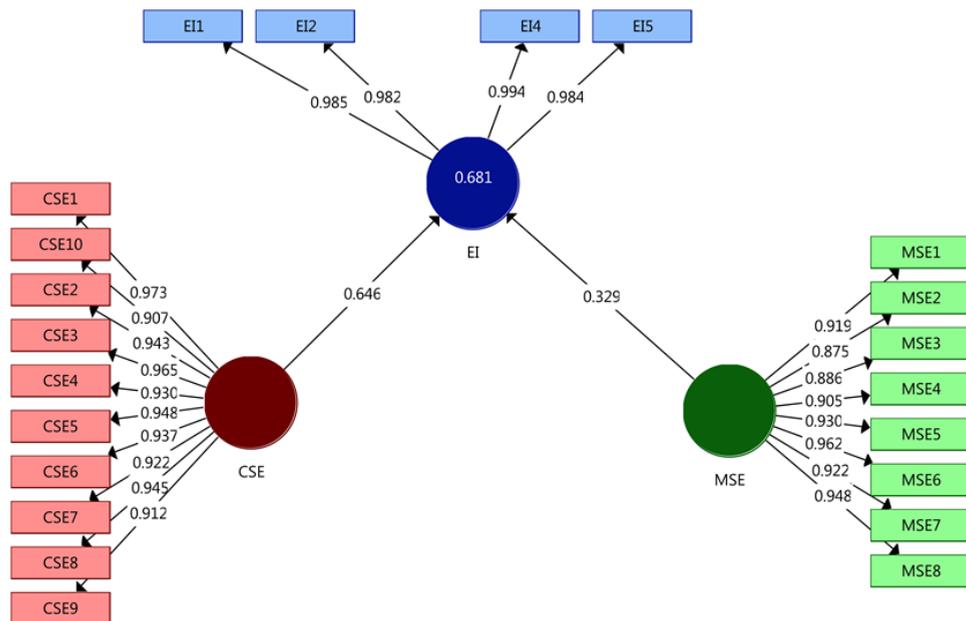
Concerning the variable of competencies of social entrepreneurship (CSE), only one component with an eigenvalue greater than unity was extracted. This single factor had an eigenvalue (i.e., 8,806), explaining 88.062% of the variance in the model. The values in the diagonal of the anti-image matrix are between 0.895 and 0.974. The obtained value of KMO test is considered adequate (i.e., 0.921). The result of the Bartlett test of Sphericity is 6,119.772, while the Cronbach's alpha coefficient is 0,985. The component matrix shows that the factor loadings are greater than 0.30. The communalities are considered

adequate since the value of each item is comprised between 0.819 and 0.949. Hence, all items of the CSE construct are considered satisfactory.

With regard to the variable of motivations of social entrepreneurship (MSE), the PCA yielded one component with an eigenvalue higher than one (i.e., 6,756), which explained an accumulated variance of 84.451% and the coefficients in the diagonal of the anti-image matrix are ranged from 0.844 to 0.984. The obtained value from KMO test is 0.907, considered adequate. The result of the Bartlett test of Sphericity is 4,014.547, while the Cronbach’s alpha coefficient is 0.973. The component matrix shows that the factor loadings of all items are greater than 0.30. The communalities are considered adequate since the value of each item is comprised between 0.768 and 0.919. Therefore, all of the MSE construct items have satisfactory values.

After purifying items by the means of the PCA technique, we employ the structural equation modeling (SEM) procedure using the SmartPLS 3.2 software in order to evaluate the validity and reliability of the proposed conceptual model (Sosik et al., 2009). In Figure 1, we show the correlation indicators between the variables and their items. As seen from these results, both the variables CSE and MSE have a positive influence on the variable EI. Also, the obtained relationships between EI and (CSE and MSE) are considered acceptable since the R square value is equal to 0.681 (Chin, 1998).

**Figure 1** Output of PLS (see online version for colours)



To measure the importance of the causal relationship, we examine the regression coefficients between the variables. We note that these coefficients are greater than 0.1. As a result, the exogenous variables (MSE, CSE) have a positive and significant influence on the endogenous variable (EI). In addition, the variable CSE has a greater influence than the variable MSE. As a result, according to the structural scheme, the structural model is defined by equation (1).

$$EI = 0.646 \times CSE + 0.329 \times MS. \quad (1)$$

As shown in Figure 1, the specific and the general competencies and motivations have a positive and significant influence on the intention of social entrepreneurship.

**Table 3** Reliability and validity values for the proposed model

	<i>Cronbach's alpha</i>	<i>rho_A</i>	<i>Composite reliability</i>	<i>Average variance extracted (AVE)</i>
CSE	0.985	0.985	0.987	0.881
EI	0.991	0.991	0.993	0.972
MSE	0.974	0.978	0.977	0.844
	<i>R square</i>		<i>R square adjusted</i>	
EI	0.681		0.679	

**Table 4** Crossed loads for examining discriminant validity

	<i>CSE</i>	<i>EI</i>	<i>MSE</i>
CSE1	0.973	0.662	0.292
CSE10	0.907	0.751	0.466
CSE2	0.943	0.706	0.328
CSE3	0.965	0.746	0.302
CSE4	0.930	0.734	0.302
CSE5	0.948	0.760	0.485
CSE6	0.937	0.662	0.300
CSE7	0.922	0.706	0.334
CSE8	0.945	0.723	0.288
CSE9	0.912	0.720	0.312
EI1	0.749	0.985	0.548
EI2	0.724	0.982	0.549
EI4	0.758	0.994	0.553
EI5	0.789	0.984	0.578
MSE1	0.284	0.497	0.919
MSE2	0.245	0.465	0.875
MSE3	0.317	0.484	0.886
MSE4	0.339	0.508	0.905
MSE5	0.316	0.490	0.930
MSE6	0.434	0.606	0.962
MSE7	0.313	0.488	0.922
MSE8	0.404	0.589	0.948

The test of the proposed model is done using both the reliability and the validity. In fact, the reliability should give values greater than 0.7 and the convergent validity should be greater than 0.5 (Foltz, 2008). Note that the construct reliability and the convergent validity can be evaluated by means of the compounded reliability and the average variance extracted (AVE), respectively. As illustrated in Table 2, the satisfactory

reliability and validity of the proposed model are reached. In fact, for all variables and items, one can see that the values of compounded reliability and average variance extracted are larger than 0.7 and 0.5, respectively. In addition, the values of Cronbach alpha coefficients are significant. Moreover, we assess the representation of the model through the calculation of the goodness of fit (GoF) given by the following equation (Akter et al., 2011).

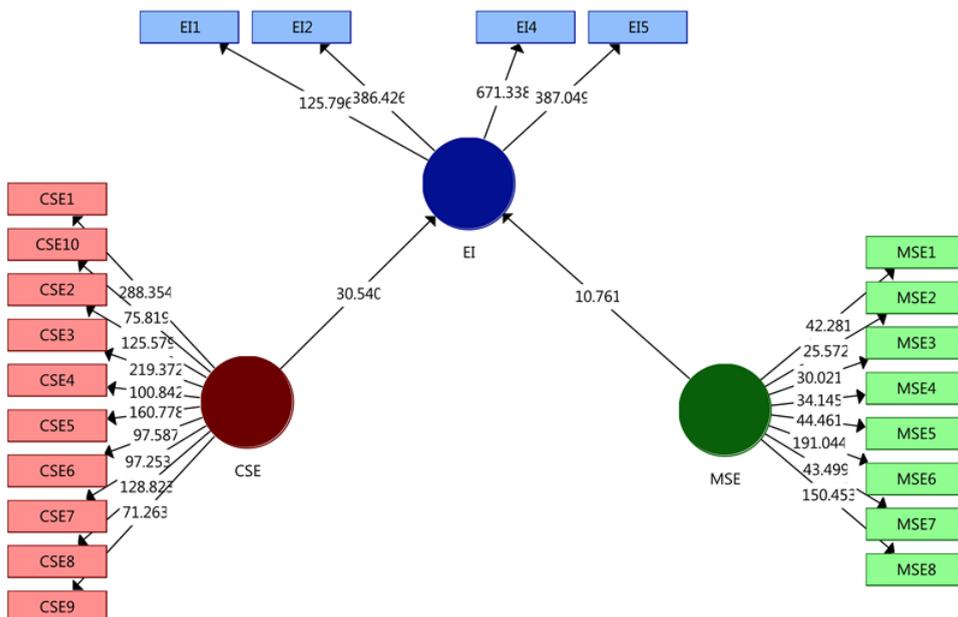
$$GoF = \sqrt{\overline{AVE} \times \overline{R^2}}, \tag{2}$$

where  $\overline{(\cdot)}$  denotes the mean operation. The obtained GoF value of the complete model is equal to 0.6456. Since the value of GoF, is larger than the large cut-off point (i.e.,  $0.6456 > \text{cut-off point} = 0.36$ ), we can conclude that the proposed model is globally validated (Wetzels et al., 2009).

**Table 5** Significance of the proposed model relationship coefficients

	<i>Original sample (O)</i>	<i>Sample mean (M)</i>	<i>Standard deviation (STDEV)</i>	<i>T statistics ( O/STDEV )</i>	<i>P values</i>
CSE → EI	0.646	0.646	0.021	30.540	0.000
MSE → EI	0.329	0.330	0.031	10.761	0.000

**Figure 2** Proposed model using bootstrapping of 1,000 sub-samplings (see online version for colours)



Next, we verify items loaded in order to check the discriminant validity. Table 4 clearly shows that items loaded of the proposed model are more highly on their intended construct than on other constructs. This confirms that the obtained results of the proposed model are adequate.

Additionally, we conducted a bootstrap analysis using 1,000 sub-samples with 'no sign change option' in order to assess the significance of relationships between constructs as illustrated in Figure 2.

According to Table 5, it is clear that the hypotheses H1 and H2 are valid at  $p \leq 0.01$ .

## 5 Conclusions

Social entrepreneurship is principally established in order to find solution to social problems. Hence, stimulate it can offer high benefits for society. For this reason, the knowledge of the variables that influence social entrepreneurial intention is disproportionately important since the intention represents an antecedent and predictor of the behaviour of social entrepreneurs. In this work, we have shown that competencies and motivations are determinants of social entrepreneurial intention. After the purification of the proposed conceptual model by using the PCA technique, we carried out a statistical analysis by applying the PLS-SEM method to evaluate the impact of competencies and motivations on the social entrepreneurial intention. The results show that entrepreneurial competencies and entrepreneurial motivations positively influence the social entrepreneurial intention. This reinforces the conclusions that entrepreneurial competencies as well as entrepreneurial motivations have a positive effect on entrepreneurship in general. In addition, these findings may attract the attention of incubators who can act on these two determinants to stimulate social entrepreneurship. In practical terms, this study provides a picture of the importance of the influence of competencies and motivation on the intention of social entrepreneurship in Tunisia. It raises interesting ideas about the state, universities of higher learning, incubators, etc. For example, the introduction of social entrepreneurship training programs in education by acting on the acquisition of the necessary competencies and influencing the motivations to promote social entrepreneurship and the emergence of social projects by acting on the entrepreneurial intention.

The current study was somewhat limited by the number of studied factors. Indeed, there are other factors influencing the intention of social entrepreneurship that can be introduced for further research. In addition, this study can be extended to assess the impact of these factors internationally.

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