If not for profit, for what and how?



# The influence of personality traits on social enterprise start-up: the case of Peruvian social entrepreneurs

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and







#### Abstract

Today, in countries such as Peru where the state remains inefficient in providing responses and solutions to the population's social problems, there is recognition of the need for responsible leaders who act ethically and contribute to the creation and maintenance of a sustainable development model. Social entrepreneurs can be considered as leaders who fit this profile, and therefore their emergence should be promoted. In Peru, despite the presence of social enterprises and entrepreneurs, a lack of knowledge of their characteristics, and the organisations they lead, prevails. Given that it is individuals who drive the entrepreneurial process (Shave & Scott, 1991), this lack of knowledge becomes a barrier to the adequate promotion of social entrepreneurship. This study seeks to remedy these shortfalls, and provide primary information to help organizations that promote social entrepreneurship to make decisions.

The main objective of this research is to enhance understanding of the role of personality traits, known as the Big Five (openness, extraversion, conscientiousness, agreeableness and neuroticism) in the social entrepreneurship process. Specifically, we measure the extent to which these traits explain the five dimensions (social vision, sustainability, innovation, social networks, and financial returns) in which Koe Hwee Nga and Shamuganathan (2010) organised the characteristics of social entrepreneurs. According to these authors, the outlined characteristics reflect the commitment assumed by social entrepreneurs with a more comprehensive business vision. Though it is recognized that other factors influence the decision to undertake entrepreneurship, such as contextual conditions, this study centres on determining the influence of personality traits on social enterprise start-up.

Therefore, this study is approached from the perspective of behaviour and entrepreneurship start-up, leaving aside the question of intentions to become an entrepreneur. The units of analysis are social entrepreneurs who have started up a social enterprise in Peru. In this study we understand social enterprise as any type of organisation that emerges with the aim of providing a solution to a given social or environmental problem that contributes to the common good, and which is financed principally by the generation of income by way of commercial transactions in the marketplace (supply of goods and services).

The results show that each variable of the Big Five personality traits model is related to at least one dimension of social entrepreneurs.

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#### 1. INTRODUCTION

The entrepreneurship study takes three approaches: functional, personality and behaviour. The first conceptualises the interaction between the entrepreneur and his/her environment; the second focuses on the unique characteristics of entrepreneurs; and the third centres on the actions of the entrepreneur (Cope, 2005). This study is part of the second approach as it focuses on the personality traits of social entrepreneurs.

Following an interval of almost twenty years, academic interest in the role of the personality in entrepreneurship has reappeared. The most recent research suggests that entrepreneurs' personalities are significantly different from those of other groups, such as managers (Zhao, H. et al., 2010). The importance of deepening in the knowledge of the entrepreneurial personality is highlighted by Johnson (1990) who mentions that the study of the individual's role is critical, including his or her psychological profile, given that it is they who drive the entrepreneurial process. In this sense, Shane, Locke and Collins (2003) state that the entrepreneurial process depends on the decisions of entrepreneurs and these decisions are influenced by their personal characteristics. Thus, the personality would be fundamental to realizing the intention to start an enterprise.

Personality traits have been employed to explain commercial entrepreneurs' industrious behaviour, and the nimbleness of their actions. Nonetheless, little research has been done on the role of these traits in social entrepreneurs; therein lays the originality of this study, which contributes to an understanding of the relationship between personality traits and social enterprise start-up. Also, it seeks to provide some insights about the personality differences between the commercial and social entrepreneur. The results of this study aim to give information for the design of methodologies and content that can be used to promote social entrepreneurship. A last contribution of this study is the local adaptation of the model used since it is the first of its nature conducted in Peru<sup>1</sup>.

In countries where the state has shown itself to be incapable of effectively resolving critical social and environmental problems<sup>2</sup>, the presence of social entrepreneurship is desirable. As Seelos and Mair (2004) point out, "Social entrepreneurship may play an important role in alleviating the most serious survival problems of the poorest individuals and in helping them to build lives that are not just a mere struggle for survival but an expression of their potential as human beings."

This research focuses only on social entrepreneurs who have started up a social enterprise in Peru. In this way, it seeks to highlight the financial self-sustainability component. In Peru, this element has become increasingly relevant in view of the reduction of international cooperation funds<sup>3</sup> and the limited degree of philanthropic activity in the country (Portocarrero, 2002; Nadine Freeman, personal correspondence, May 2, 2013). Moreover, a social enterprise is understood as any type of organisation that emerges with the aim of providing a solution to a given social or environmental problem to contribute to the common good, and which is financed principally by the generation of income by way of commercial transactions in the marketplace (supply of goods and services).

The model used in this research was devised by Koe Hwee Nga and Shamuganathan (2010), and assesses the relationship between personality traits and the dimensions inherent to social entrepreneurs that influence entrepreneurship start-up intentions. Personality traits are defined using the Big Five model, which has gained widespread acceptance due to its grouping together of the wide range of individual characteristics into five groups: Openness, extraversion, conscientiousness,

<sup>&</sup>lt;sup>1</sup> Existing research is qualitative. To date, the Social Enterprise Knowledge Network (SEKN) has two publications related to social entrepreneurship, in which certain Peruvian examples are cited. Finally, another Universidad del Pacífico publication exists, which analyses the experience of the NGO Cesvi as a proponent of social enterprises in Peru.

<sup>&</sup>lt;sup>2</sup> For example, although in 2004 urban poverty stood at 37% and rural poverty at 70%, that is, a ratio of two to one, in 2009 rural poverty was three times greater than the urban form. Although economic growth indicators are favorable, there is no progress in reducing inequality (INEI, 2009).

<sup>&</sup>lt;sup>3</sup> Considered a middle-income country since 2010 (World Bank, 2013).

agreeableness and neuroticism. The dimensions inherent to social entrepreneurs have been posed by Koe Hwee Nga and Shamuganathan (2010), based on an extensive review of existing literature. These are: Social vision, sustainability, innovation, social networks, and financial returns. The hypotheses used in that study were also devised based on a literature review.

#### 2. LITERATURE REVIEW

#### Entrepreneurship

The term entrepreneurship tends to be naturally associated with companies. Nonetheless, there may be entrepreneurs in a number of fields, such as the social, artistic or political. As Dees (1998) stated, quoting Drucker, "Entrepreneurship does not require a profit motive." In addition, not all new organisations should be classified as entrepreneurial, only those that mark a significant change from what had been done in the past (Peter Drucker, quoted in Dees, 1998).

Some authors define enterprise as a process of identifying, assessing and exploiting opportunities (Shane y Venkataraman, 2000). For some of them the process entails two phases: entrepreneurial intent and behaviour. The first refers to the desire to start up and manage one's own business; and the second, to the fact of starting up and managing one's own business (Frank, Lueger, & Korunka, 2007; Llewellyn, & Wilson, 2003; Mair & Noboa, 2006).

Today, the basis of what is understood by an entrepreneur hinges on three attributes: (1) the entrepreneur as agent of change; (2) the capacity to identify opportunities in problems or in changes, and; (3) the capacity to generate value. Starting a business is not the essence of entrepreneurship (Dees, 1998). A successful entrepreneurship motivates other actors to get involved, thereby creating an ecosystem around the entrepreneurial activity that leads to arrival at the point of "creative destruction, a state at which the new venture and all its related ventures effectively render existing products, services, and business models obsolete" (Martin & Osberg, 2007).

## Commercial entrepreneurship

A commercial entrepreneur is an individual who is connected to a company. For some, it refers only to those who set up a company, while for others it also includes those who display entrepreneurial behaviour within a pre-existing organisation, in terms of promoting value-generating initiatives or projects in a proactive and innovative manner<sup>4</sup>.

The motivations that drive individuals towards entrepreneurship have been widely studied. Accordingly, a number of academics point out that the economic benefits stand as the foremost motivation for entrepreneurship (Aggarwal, Holly, Salkever, & Wadhwa, 2009; Baumol 1993, quoted in Mair & Martí 2005; Knight, 1921, Schumpeter, 1934 and Kirzner, 1973 quoted in Zahra, Gedajlovic, Neubaum, & Shulman, 2009). Other motivations or characteristics<sup>5</sup> explored are: need for achievement (Frank et al., 2007; McClelland 1961, quoted in Shane et al. 2003); risk-taking propensity (Blockhouse 1980; Liles 1974, in Mair & Martí 2005; Frank et al., 2007; Segal et al., 2005; Shane et al., 2003); tolerance for ambiguity (Shane et al., 2003); internal locus of control (Frank et al., 2007; Shane et al., 2003), self-efficacy<sup>6</sup> (Segal et al., 2005; Sequeira, Mueller, & McGee, 2007); desire for independence (Hirsch & Brush, 1986 quoted in Mair and Martí 2005; Segal al., 2005); and social network ties (Sequeira

More comprehensive models of entrepreneurs' motivations exist, which take into account individual and contextual variables. For example, Naffziger, Hornsby and Kuratko (1994) point out that the

<sup>&</sup>lt;sup>4</sup> Entrepreneurial behaviour within a company is also known as "intrapreneurship".

<sup>&</sup>lt;sup>5</sup> Frank, H., Lueger, M., & Korunka, C. (2007) consider them characteristics, not motivations.

<sup>&</sup>lt;sup>6</sup> The self-belief that one possesses the abilities to achieve his/her goals alone.

factors that influence the decision to behave entrepreneurially<sup>7</sup> are personal characteristics, personal environment (family entrepreneurial influence, social support, among others), the business environment (such as the country's social and economic factors), the business idea itself (its originality, feasibility and clear vision), and the entrepreneur's personal goals.

Other studies have focused on the effect of personality on entrepreneurship. Frank et al. (2007) found that founders' personality traits (specifically, the need for achievement, internal locus of control and risk-taking propensity) have a greater influence on entrepreneurship start-up intentions than on the decision to set up a company and on its performance when it is operating. Another study, carried out by Zhao, Seibert y Lumpkin (2010) based on the Big Five model, found that extraversion, openness, conscientiousness and emotional instability are related with entrepreneurial intentions and endeavours. In that study, the only personality trait that was found not to be related to entrepreneurial intentions or endeavours was agreeableness.

#### Social entrepreneurship

Social enterprises have been with us for many years; nonetheless, they were not conceptually identified as such, and thus went unnoticed. In fact, their academic study got underway as recently as two decades ago. It can be said that these emerged organically borne of the necessity for individuals to join forces to provide social services to needy citizens.

Most authors concur that social enterprises provide innovative solutions that respond to a social problem or need (Alter, 2003; Mair & Marti, 2005; Marquez, Reficco, & Berger, 2010; OECD, 2010; Yunus, 2010; Zahra et al., 2009). Other authors add that these innovative solutions are realised by applying market-oriented business models, including the creation and sale of products and services (Marquez et al., 2010; Pearce & Doh, 2005 quoted in Zahra et al., 2009; Spear, 2006 and Dorado, 2006 quoted in Mair & Noboa, 2006; Yunus, 2010<sup>8</sup>).

Even though there is no consensus around the definition, there is one aspect that everyone agrees on: the generation of social value on top of the maximization of economic benefits (Darabi et al., 2012; Zahra et al., 2009). Herein lays the fundamental difference between commercial and social entrepreneurship: the former seeks to generate economic value, and as a natural consequence of its activity generates social value; while the latter seeks to generate social value and the generation of economic value (income) is a necessity to sustain the initiative (Mair & Martí, 2005; OECD, 2010).

On the basis of the literature review and after a first approach to the social entreprises in Peru, the social enterprise was defined, for the purpose of this study, as a self-sustainable organization, for or not for profit, which emerges with the mission to provide solutions to a social or environmental problem and contributes to the common good. Self-sustainable means that it does not depend exclusively on donations, but generates income through commercial transactions in the marketplace (supply of goods and services).

# Characteristics and motivations of social entrepreneurs

Zahra et al. (2009) suggested that social entrepreneurs are individuals with specific values, capacities and abilities who are attracted to seeking opportunities to create social value in an innovative fashion. Mair and Noboa (2006), following a literature review, cite a series of key characteristics possessed by social entrepreneurs, such as empathy, moral judgement, self-efficacy and social networking skills for support. Empathy is understood as the ability to intellectually recognise and

<sup>&</sup>lt;sup>7</sup> Goes beyond entrepreneurial decisions or intentions to include the decision to continue with the enterprise in the marketplace.

<sup>&</sup>lt;sup>8</sup> Yunus calls this initiative "social business" and adds that this differs from what is understood by social entrepreneurship and social enterprise. Nonetheless, we find that his concept of social business has several coincidences with that of social enterprise used in this study.

emotionally connect with the feelings of others. Moral judgement is defined as that which motivates an individual to help others, in pursuit of the common good. Self-efficacy is interpreted as the perception that one possesses the skills to achieve a given objective single-handedly. Finally, social support is defined as trust and cooperation between an individual and the people with whom he or she relates (also known as social capital).

Based on these key characteristics of a social entrepreneur, Mair and Noboa (2006) developed a model that seeks to explain how social enterprise start-up intentions are formed. Accordingly, intention is determined by two factors: perceived desire and perceived feasibility. The former is based on empathy and moral judgement; and the latter, on self-efficacy and social support. The model deems intentions to precede behaviour; thus, the generation of the intention is followed by the decision to undertake entrepreneurship and the creation of the social enterprise.

For their part, Kow Hwee Nga and Shamuganathan (2010) propose five dimensions or characteristics of the social entrepreneur, based on an extensive bibliographical review: Social vision, appreciation for sustainable practices, innovation capacity, ability to develop social networks, and ability to generate financial returns.

#### Social Vision (SV)

Social vision is the sense of responsibility and emotional connection of fighting for a social or environmental cause considered just. This engenders considerable engagement, prompting actors to see long term opportunities, and to spare no expense in achieving genuine change. Social vision is what guides social entrepreneurs, and keeps other motivations (e.g., financial) from detracting from the social aim of the entrepreneur's initiative.

#### Appreciation for sustainable practices (SUST)

This dimension is borne of awareness that people and organisations are interconnected and form part of a single ecosystem. Everything is related, what one does affects others in some way. This focus seeks to find a balance between economic, social and environmental (also called the "triple result") interests so as to do the right thing to improve the planet and society in general. This entails constant dedication to seeking solutions that achieve the triple result through responsible innovation. Environmental concern is fundamental in this dimension.

#### Ability to develop social networks (SN)

Social support or social networks refer to positive formal or informal relationships with people in one's environment, and what can be achieved with their support. For example, it can result in good advice, valuable information, contact with suitable staff for the organisation, potential clients, potential investors, among others. Active participation in social networks also enables collective learning, which can furnish the entrepreneur with valuable knowledge and information towards effective solutions. Positive interpersonal relations are also conducive to gaining the trust and respect of many people. A good reputation is a valuable intangible for the social entrepreneur that can translate into, for example, the attraction of investors.

#### Innovation capacity (INNOV)

Social entrepreneurs, with their limited resources and driven by a strong urge to generate positive changes for society, seek innovative solutions to accomplish their goals. Moreover, their social aim breaks the traditional mould of pursuing economic objectives, which naturally leads to innovation in processes and solutions to achieve it. To this end, for example, many social entrepreneurs seek to address the needs of underserved markets, such as the bottom of the pyramid. As a result, they necessarily have to find new ways of reaching these by reconsidering different aspects of the business model (distribution channels, the product or service, forms of payment, etc). In this sense, innovation

is an essential dimension of social entrepreneurs.

Ability to generate financial returns (FR)

Finally, the capacity to generate financial returns is elementary for the social entrepreneur, as this guarantees the organisation's sustainability. The social aim will always be foremost; nonetheless, the financial aspect is a necessary part of achieving this aim, and of covering a greater proportion of the population.

#### Big Five model

The emergence of the Big Five personality traits model in the '90s provided a framework for organizing the extensive and often confusing variables of personality measurement. Even though some constructs cannot be readily assigned to one of the five dimensions alone (Zhao et al., 2010), there exists a considerable consensus that the Big Five traits capture the basic structure of the human personality (McCrae & John, 1992; Chell, 2008).

Personality traits are constructs that explain the consistency of an individual's behaviour, and help to explain why people react to the same situation in different ways (Cooper, 1998 quoted in Llewellyn & Wilson, 2003). Personality traits are partially developed by upbringing, socialisation and education. These generate values and beliefs that can influence people's intentions and behaviour (Koe Hwee Nga & Shamuganathan, 2010).

The model proposes the following traits:

Openness (OPEN). Those who are open tend to be liberal (Llewellyn & Wilson, 2003); curious (McCrae & John, 1992), creative (Zhao et. al, 2010); artistic (McCrae & John, 1992); original (McCrae & John, 1992); and innovative (Llewellyn & Wilson, 2003). This trait is related to "creative destruction", which implies the capacity to generate radical changes to systems through innovation (Zhao et. al, 2010).

Extraversion (EXTRO). Those who are highly extraverted are friendly (Zhao et. al, 2010), sociable (Llewellyn & Wilson, 2003; Zhao et. al, 2010); optimistic (Chell, 2008; Llewellyn & Wilson, 2003); active (McCrae & John, 1992); talkative, enthusiastic (McCrae & John, 1992); energetic (McCrae & John, 1992); and assertive (Chell, 2008; McCrae & John, 1992). Moreover, those who are highly extraverted seek excitement and stimulation (Zhao et. al, 2010).

Agreeableness (AGREE). This trait measures attitude and behaviour towards others (Zhao et. al, 2010). Those who score highly in this area are concerned for others (Zhao et. al, 2010); generous (McCrae & John, 1992); trustworthy (McCrae & John, 1992; Zhao et. al, 2010); supportive (Chell, 2008); and modest (Chell, 2008; Zhao et. al, 2010).

Conscientiousness (CONSC). Responsible people are self-disciplined (Chell, 2008); efficient (McCrae & John, 1992); organised (McCrae & John, 1992); trustworthy (Llewellyn & Wilson, 2003; McCrae & John, 1992); law-abiding (Llewellyn & Wilson, 2003); goal-oriented (Chell, 2008) and hard-working (Llewellyn & Wilson, 2003). Perseverance is also included in this category (Zhao et al., 2010)

Neuroticism (NEURO). People who score high on this trait have little emotional stability (Llewellyn & Wilson, 2003); are anxious (Llewellyn & Wilson, 2003; McCrae & John, 1992); tense (McCrae & John, 1992), inclined to depression (Chell, 2008; Llewellyn & Wilson, 2003); impulsive (Chell, 2008) and vulnerable (Chell, 2008). On the other hand, people who score low on this trait are calm, stable, level-headed, emotionally strong, and do not surrender to adversity (Zhao et. al, 2010).

#### 3. HYPOTHESIS

The model employed in this study was devised by Koe Hwee Nga and Shamuganathan (2010) and seeks to identify the personality traits that influence the intention to set up a social enterprise. This is conducted by assessing the relationship between the Big Five personality traits and the dimensions inherent to the social entrepreneur which were identified by the authors. The validity of the model was tested using a sample of business and management students from a private higher education institution (HEI) in Malaysia. The results of the study conducted by Koe Hwee Nga and Shamuganathan (2010) revealed that the traits of agreeableness, openness and conscientiousness positively influence the dimensions of the social entrepreneur. That is, on the intention to undertake social entrepreneurship.

For this research, the model of Koe Hwee Nga and Shamuganathan (2010) was applied to a sample of entrepreneurs with operating social enterprises in order to analyze the entrepreneur behavior and not just the entrepreneur intention.

The following hypotheses are proposed:

Hypothesis 1: Personality traits (OPEN, NEURO, EXTRO, CONSC and AGREE) influence the SV dimension of social entrepreneurs.

Hypothesis 2: Personality traits (OPEN, NEURO, EXTRO, CONSC and AGREE) influence the SUST dimension of social entrepreneurs.

Hypothesis 3: Personality traits (OPEN, NEURO, EXTRO, CONSC and AGREE) influence the SN dimension of social entrepreneurs.

Hypothesis 4: Personality traits (OPEN, NEURO, EXTRO, CONSC and AGREE) influence the FR dimension of social entrepreneurs.

Hypothesis 5: Personality traits (OPEN, NEURO, EXTRO, CONSC and AGREE) influence the INNOV dimension of social entrepreneurs.

#### 4. METHODOLOGY

The field study featured two stages: one quantitative, and the other qualitative.

# Quantitative stage

Sample. The sample was made up of social entrepreneurs with enterprises in operation in Peru. To reach these, a database was prepared with the information provided by entities that promote social entrepreneurship in Peru. The field work was carried out in May and June 2013. Following a pilot test, the instrument was emailed to 276 entrepreneurs. Two reminders were sent to achieve an increase in response numbers. The response rate was 46.37%. These responses included incomplete questionnaires, and those from entrepreneurs who did not regard their companies to be social enterprises. Thus, only complete questionnaires and those from individuals who attested to being social entrepreneurs were utilised. The total amount of valid responses was 70. Responses were anonymous, to avoid bias by overvaluing the constructs under study by the respondent, as well as the inclination to provide responses perceived as being more socially acceptable.

The entrepreneurs and social enterprises profiles that formed part of the sample are shown in the following tables:

**Table 1: Profile of entrepreneurs** 

Education of entrepreneur	%
Primary	1%
Secondary	6%
Technical	4%
University	69%
Postgraduate	20%

Age of entrepreneur	%
Under 20	1%
21 to 30	47%
31 to 40	14%
41 to 50	13%
51 to 60	16%
Over 60	9%

Source: Authors' own work

Tabla 2: General characteristics of the enterprises in the sample

Age of organisation	%
1-10	64%
11-20	24%
21-30	9%
Over 30	3%

Legal status of organisation	%
Association	53%
Cooperative	1%
EIRL*	6%
Fundation	3%
Other	21%
Anonymous society	16%

Number of workers in	
organisation	%
0-9	53%
10-19	21%
20-29	10%
30-39	3%
40-49	3%
50-59	3%
60-69	1%
80-89	3%
90 or more	3%

<sup>\*</sup> Empresa Individal de Responsabilidad Limitada: an individually-owned limited liability business structure under Peruvian law.

Source: Authors' own work

Table 3: Social needs addressed by the sampled enterprises

Need addressed	Percentage		
Education and access to knowledge	15.4%		
Health and wellbeing	11.7%		
Social and labour inclusion	10.6%		
Other (specify)	10.1%		
Art and culture	9.6%		
Citizen participation and citizen movements	8.5%		
Energy and environment	8.5%		
Equal opportunities and the fight against discrimination	6.4%		
Foodstuffs and consumer goods	5.9%		
Communication and social networks	4.3%		
Sustainable tourism	3.7%		
Housing and urban development	2.1%		
Transport and mobility	1.6%		
Market transparency and supply chain disintermediation	1.6%		

Source: Authors' own work

Measures. The scale employed in the questionnaire belongs to Schmidt (2000), and was used by Koe Hwee Nga and Shamuganathan (2010). Therein, the Big Five personality traits (openness, extraversion, conscientiousness, agreeableness and neuroticism) and the characteristics of social entrepreneurs, grouped into five dimensions, (social vision, sustainability, innovation, social networks, and financial returns) are measured. The instrument was translated into Spanish, and thereafter back into English to avoid distortions. In addition, this being the first time that it was applied to social entrepreneurs, an explanatory factor analysis was conducted. The data was analyzed by using the SPSS statistical package, version 20. Multiple linear regressions were performed to verify the hypotheses. The items can be seen in Appendixes 1 and 2. In all constructs, a Likert 5-point scale was used, in which 1 = "totally disagree" and 5 = "totally agree".

## Qualitative stage

The qualitative and quantitative stages were undertaken in parallel. Six interviews were held with social entrepreneurship experts, using a question guide as an information-gathering instrument. The aim was to identify the characteristics of social enterprises in Peru, so as to enhance capacity to understand the quantitative results in light of a little-studied reality in this country. Moreover, validation of the five dimensions in which Koe Hwee Nga and Shamuganathan (2010) group together the characteristics of social entrepreneurs was sought, to ensure that these were apt for Peruvian entrepreneurs.

#### 5. RESULTS

The constructs were shown to be reliable and valid, as can be seen in Appendixes 1 and 2. Cronbach's alpha was acceptable, as were the factor loadings.

The results of the quantitative study are shown in Table 4. The hypotheses were considered significant, with a p-value of 0.05; that is, a 95% confidence interval was employed.

Table 4: Hypothesis and results

	Social vision Sustainability		Social network			Innovation			Financial returns						
	Hip.	b	p-Value	Hip.	b	p-Value	Hip.	b	p-Value	Hip.	b	p-Value	Hip.	b	p-Value
Openness	H1a	0.075	0.516	H1b	0.243	0.053	H1c	0.082	0.534	H1d	0.308	0.021*	H1e	-0.191	0.111
Extraversion	H2a	0.085	0.421	H2b	-0.029	0.805	H2c	0.084	0.475	H2d	0.227	0.05	H2e	0.618	0.003*
Agreeableness	Н3а	0.277	0.004*	H3b	0.193	0.048*	Н3с	0.099	0.398	H3d	0.026	0.817	Н3е	-0.155	0.167
Neuroticism	H4a	0.049	0.628	H4b	-0.041	0.715	H4c	-0.177	0.122	H4d	0.079	0.471	H4e	0.332	0.029*
Conscientiousness	Н5а	0.364	0.000*	H5b	0.259	0.005*	H5c	0.344	0.003*	H5d	0.27	0.042*	H5e	-0.094	0.416
R2 adjusted	0.307			0.162			0.107			0.198			0.157		

Source: Authors' own work

The study provides sufficient evidence to show that each of the Big Five personality traits is related to at least one of the dimensions of social entrepreneurs. That means, the five hypotheses posed are accepted.

In the case of the social vision (SV) dimension, 30.7% is explained by social entrepreneurs' personality characteristics. In this model, only the characteristics of agreeableness (AGREE) and conscientiousness (CONSC) proved significant.

As regards the sustainability (SUST) dimension, 16.2% is explained by social entrepreneurs' personality characteristics. In this model, only the characteristics of agreeableness (AGREE) and conscientiousness (CONSC) proved significant.

As for the social networking (SN) dimension, 10.7% is explained by social entrepreneurs' personality characteristics. In this model, only the characteristic of conscientiousness (CONSC) proved significant.

In the case of the innovation (INNOV) dimension, 19.8% is explained by social entrepreneurs' personality characteristics. In this model, only the characteristics of openness (OPEN) and conscientiousness (CONSC) proved significant.

Finally, with regard to the financial returns dimension (FR), 15.7% is explained by social entrepreneurs' personality characteristics. In this model, only the characteristics of extraversion (EXTRO) and neuroticism (NEURO) proved significant.

The results of the qualitative stage enable the hypotheses results to be understood, and are presented in the following section.

#### 6. DISCUSSION

Personality traits explain the dimensions of social entrepreneurs, especially the SV dimension, leading us to conclude that personality traits and social enterprise start-up are related. The results correspond with the opinions of the social entrepreneurship specialists interviewed, who cite drive, passion, strategic thought, persistence, dedication and obsession to generate positive changes for the common good as characteristics of social entrepreneurs. In addition, they are considered "linchpins", capable of conversing with different groups, with high levels of empathy and social sensitivity.

The CONSC trait figures as the most relevant, related as it is to four of the five dimensions of social entrepreneurs (SV, SUST, SN and NNOV). This result seems coherent, since those with a high conscientiousness score are attracted to jobs in which they have personal control over results, face a moderate risk of failure, and receive direct and timely feedback on their performance. Those with a great need for achievement tend to be attracted to entrepreneurship, as it offers more of these conditions than most traditional jobs (McClelland, 1961).

In the specific case of social entrepreneurs, the CONSC construct underlies SV due to the level of connection with the need to precipitate change to the system. It is also implicit in sustainability (SUST)

and innovation (INNOV) as both lead social entrepreneurs to actively pursue balance between the social, environmental and economic spheres by staking all of their resources and their social networking skills (SN).

One possible explanation for the lack of a relationship between CONSC and FR is that although a concern for the financial sustainability of their social enterprises exists, as confirmed by the experts interviewed, this concern is subordinated by the enterprise's social aim. In any case, whether this explains what experts affirm regarding the frequent vulnerability of business models presented by social enterprises is worthy of exploration. Comparing the results obtained in this variable with the case of commercial entrepreneurs, it is found that CONSC is also positively associated with entrepreneurship start-up intentions (Zhao et al, 2010).

As regards the AGREE trait, this is related to the SV and SUST dimensions and may be explained by the solidarity component, which according to the respondents is a characteristic shared by social entrepreneurs, and would be included within the SV and SUST dimensions. On the other hand, for some authors this attribute would not predominate among commercial entrepreneurs, given that the capacity to conduct tough business, to look after one's own interests, and even manipulate others could be more important abilities for the survival and growth of a company (Zhao & Seibert 2006) than agreeableness. In addition, a complex life history, which according to respondents is a common element among social entrepreneurs, feeds their interest to change a situation of inequality, and may contribute to the presence of the agreeableness trait in social entrepreneurs.

The OPEN trait appears to be related only to the INNOV dimension. If we consider that this variable describes curious, imaginative and creative individuals, those who seek out new ideas and alternative values, it is no surprise that a relationship is presented between this personality trait and the innovation dimension. According to information obtained from interviews with experts, social entrepreneurs are characterised for identifying things which are not working properly, and solving them.

The EXTRO trait is identified only with the FR dimension. Although assertiveness, energy, proactivity and optimism are extraversion components associated with the image people have of entrepreneurs (Locke, 2000), according to the results obtained, this trait is related only to the dimension that measures concern for financial returns. Acquiring a greater depth of knowledge of this variable would be beneficial, since financial sustainability stands as a significant problem faced by social entrepreneurs with a social enterprise underway, according to the interviews. The respondents hold that social entrepreneurs are not necessarily good managers, although they are good at mobilising others and attaining goals with scant resources. In addition, some experts pointed out that sometimes the funding is given more to people than projects, so their charisma and the confidence that they can transmit are key elements to raise funds. As regards the comparison with this dimension's presence in commercial entrepreneurs, we found that the EXTRO trait in this group is positively associated with entrepreneurship start-up intentions (Zhao et al. 2010).

In the case of the NEURO trait, there was seen to be a link only with the FR variable. The NEURO trait reflects low emotional stability. Great part of entrepreneurship and personality studies claim that entrepreneurs are emotionally stable. In addition, experts interviewed agree that this is also a feature of social entrepreneurs. Emotional stability in practice translates into behaviours such as persevering in situations where any other individual would give up. The sampled entrepreneurs scored low in NEURO. Nonetheless, it can also be understood that a greater degree of emotional instability is related to heightened concern for economic stability, especially when it comes to entrepreneurs, as is the case of this sample, who have started up social enterprises and consequently experienced the complexity of surviving in the market.

Finally, if we compare the results of the study conducted by Koe Hwee Nga y Shamuganathan (2010) with those obtained in this study, a number of differences are observed. As regards the OPEN trait, the authors find that it relates SV and FR, in addition to the innovation dimension. Where the quoted

authors are concerned, the EXTRO construct is not related to any of the dimensions of social entrepreneurs. The AGREE trait is related to all dimensions of social entrepreneurs. NEURO is related only to SN, while CONSC is related to SUST and FR. Even though a more in-depth analysis is required, a possible explanation for the differences found may lie partly in factors of cultural origin (according to the analysis of the cultural dimensions of Hofstede<sup>9</sup>, both countries present only one significant closeness in one of the five cultural dimensions). In addition, while Koe Hwee Nga y Shamuganathan's study (2010) was undertaken with university students, this drew on a sample of entrepreneurs with social enterprises underway.

#### **CONCLUSIONS**

This research shows that responsibility, openness, emotional stability/low level of neuroticism, extroversion, and agreeableness are related to the dimensions of social entrepreneurs and with starting up a social enterprise. The result is relevant and supports previous studies, given that the sample was made up of social entrepreneurs.

The study sample makes plain the wide range of organisations engaged in social entrepreneurship in Peru, in terms of aim (for or not for profit), legal status, size and age. As for the entrepreneur profile, those sampled tend to have a high level of education and are concentrated in the 21 to 40 age range. Moreover, it reveals that sampled social entrepreneurs are working towards solutions for numerous social problems, and thus bring products and services to market, ranging from consultancy to the sale of unprocessed agricultural goods.

While studies such as that of Zhao & Seibert (2006) show that the openness and agreeableness dimensions appear to be constructs of stronger personalities, and consistently associated with entrepreneurship start-up intentions on the part of commercial entrepreneurs; in the case of setting up a social enterprise, the constructs that appear more emphatically are conscientiousness and agreeableness.

Starting from verification of the relationships between personality traits and social enterprise start-up, the organizations interested in promoting this kind of entrepreneurship will have a basis on which to formulate actions that cultivate those personality traits that appear to be related to the dimensions of social entrepreneurs. That is, they should focus mainly on forming or strengthening those characteristics related to agreeableness: solidarity and trust; and those related to conscientiousness: good organization, perseverance and achievement orientation.

#### Limitations

The researchers had to resort to building a database of social entrepreneurs, given the non-existence in Peru of any such resource. Even though institutions specialising in social entrepreneurship were consulted, the absence of official data relating to social entrepreneurs constituted a limitation in this study.

Another limitation stemming from the previous one is the size of the sample used in this study. A low degree of familiarity with technological aspects may have limited the number of social entrepreneurs who responded to the online survey since not all, especially the ones in rural areas, have internet access. Likewise, the virtual fieldwork environment does not guarantee that the entrepreneur has completed the questionnaire alone.

Finally, we believe that the lack of knowledge of the social entrepreneurship field in Peru may have resulted in the term being unclear, and some social entrepreneurs may have opted not to participate based on an erroneous belief that they do not correspond to that category.

<sup>&</sup>lt;sup>9</sup> http://geert-hofstede.com/peru.html

#### Future research

There is a wide variety of issues in this field that would make for interesting research; nonetheless, only those related to this study's scope are considered.

Given that social enterprise start-up intentions are influenced by internal and external factors, a first issue of study could be other internal factors that influence entrepreneurship start-up decisions, personality traits aside, such as the personal environment (e.g., family entrepreneurial influence) or cognitive factors (knowledge, ability and skill). A second issue of study could be the external factors that influence the intention to create a social enterprise, such as the social, legal and economic aspects in a country. In that sense, it would be worthwhile to assess the type of public policies that might encourage social enterprise start-up in Peru; case studies of other countries that have established special legal frameworks, such as Belgium an Italy, would contribute to this end.

Otherwise, there is limited theoretical or conceptual development of the business models adopted by social entrepreneurs. This is of relevance, since the main limitations found in this type of entrepreneurship are low management system development, difficulty to achieve economic sustainability and trouble to scale up their initiatives. Indeed, the very conceptualisation of a social enterprise makes for a future research opportunity, especially when applied to the case of Peru.

Finally, an interesting line of research would be to contrast the results obtained for commercial and social entrepreneurs, as well as exploring whether differences exist between entrepreneurs by country of origin, or the social class to which they belong.

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# APPENDIX 1: FACTOR ANALYSIS OF PERSONALITY CHARACTERISTICS

ITEM	Agreeablenes s	Conscientiousness	Extraversion	Neuroticism	Openness	
Agree02. I take other people's circumstances and feelings into consideration before making a decision.	.608					
Agree06. I believe in the importance of achieving agreement with my peers before forming a conclusion.	.596					
Agree08. I believe in fostering a trusting working environment.	.611					
Agree09. I believe in establishing good rapport with my peers.	.835					
Agree10. I believe in maintaining a harmonious relationship with my peers.	.828					
Consc08. My peers would say I am a dependable person.		.929				
Consc09. My peers would say that I am a responsible person.		.912				
Consc05. I am driven to achieve targets in jobs assigned to me.		.660				
Extro03. I prefer to set challenging goals, rather than aim for goals that I am likely to reach.			.791			
Extro04. I would like to attain the highest position in an organization someday.			.793			
Extro10. I actively take control of situations at work if no one is in charge.			.632			
Neuro02. I am easily displeased with things at work.				.653		
Neuro06. I easily get stressed in my job.				.812		
Neuro07. I am easily irritated with things at work.				.920		
Open02. I work best in an environment that allows me to be creative.					.853	
Open03. I work well in environments that allow me to discover new things.					.723	
Open08. My peers would say that I am an open-minded person.					.699	
Open09. My peers would say that I am an innovative person.					.621	
Cronbach's α	.673	.787	.587	.722	.695	

Source: Authors' own work

# APPENDIX 2: FACTOR ANALYSIS OF SOCIAL ENTREPRENEUR COMPONENTS

ITEM	Sustainability	Social Vision	Social Networ k	Financial Returns	Innovation
SUST01. Are environmentally friendly.	.758				
SUST02. Improve quality of life in the long run.	.762				
SUST03. Improves a long term social need.	.789				
SUST07. Promotes a balance between the social mission and social value.	.743				
SUST08. Promotes a balance of economic, social and environmental concerns.	.601				
SV01. Are able to clearly identify a social need		.751			
SV02. Are able to create a clear social vision.		.783			
SV03. Are strongly committed to a social vision.		.826			
SV05. Are determined to meet a social need.		.830			
SV06. Are determined to be agents of social change.		.700			
SV08. Have a strong motivation to defend a social need.		.629			
SN02. Enables access to human resources.			.545		
SN04. Promotes knowledge sharing.			.596		
SN05. Promotes trust in the business.			.889		
SN06. Promotes credibility of the business.			.838		
FR01. Maximizing the wealth of their investors.				.919	
FR02. Making profit the main reason for their existence.				.902	
FR03. Maximizing financial wealth.				.833	
Innov01. They are proactive in identifying social opportunities.					.759
Innov02. They are able to see risks as opportunities to create social value.					.766
Innov03. They are able to create social value through goods/services.					.825
Innov04. They are able to deliver sustainable advantage through innovative goods/services.					.761
Innov05. They are able to create better social value compared to normal entrepreneurs.					.592
Innov07. They are flexible individuals.					.671
Cronbach's α	.776	.846	.707	.855	.810

Source: Authors' own work