Understanding the Social Entrepreneurship Diversity From Its Initiatives' Feature

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Social entrepreneurial initiatives (SEIs) seek to efficiently meet the basic human needs, that conventional structures fail to satisfy. It is a multidimensional concept whose research field is not delimited, still lacking agreed-upon definitions and orientations. This exploratory study seeks to contribute to the clarification of SEI's concept by identifying their features. Therefore, a survey was conducted with 30 participants of intensive training on social entrepreneurship [bootcamp] in Portugal. The data was treated through factor and cluster analysis. The results indicate that most Portuguese SEIs come from third sector organizations seeking to develop efficiency through management practices. The statistically significant features found were management capacity, social capacity, entrepreneurial orientation. Additionally, results suggest that ecosystem and business model features interplay can depict different types of SEI aligned to philanthropy or market tendencies.

Keywords: social entrepreneurship, sustainable business model, social entrepreneurial ecosystem, management capacity, entrepreneurial orientation

INTRODUCTION

Social entrepreneurship is a special issue of entrepreneurship (Dacin, Dacin & Matear, 2010) which is objective is to understand new business models (Seelos & Mair, 2005a) that seek to efficiently meet the basic human needs, to which conventional structures fail to satisfy (Seelos & Mair, 2005; Austin, Stevenson & Wei-Skillern, 2006; Mair & Marti, 2009; El Ebrashi, 2013; Stephan, Uhlaner & Stride, 2015). The priority given to the social objective in decision making and strategic formulation is what distinguish the conventional and the social entrepreneurship (Austin *et al*, 2006; Dees, 1998).

Although it is a well-researched subject, (Rawhouser *et al*, 2019; Hossain *et al*, 2017; Lee, Battilana, & Wang, 2014; Lepoutre *et al*, 2013), the social entrepreneurship research field is not delimited (Lee *et al*, 2014; Dacin *et al*, 2010). Consequently, there is no consensus on which classification to adopt to identify

which type of organization is part of social entrepreneurship (Carraher, Welsh & Svilokos, 2016; Pestoff & Hulgärd, 2016; Myrah & Odinsky-Zec, 2013).

This generates a serious methodological problem, which in turn hinders the development of the social entrepreneurship literature. Very large constructs create measurement problems, very narrow constructs test less hypotheses. The interrelationship between theory and its constructs cannot be neglected, under penalty of generating excessive variation of results and limiting the ability to accumulate knowledge in the research field (Hamann, Schiemann, Bellora & Guenther, 2013; Richard, Devinney, Yip & Johnson, 2009; Combs, Crook & Shook, 2005).

This also generates practical problems. It is difficult for governments, scholars and investors to identify initiatives and to create supportive structures for the development of the social entrepreneurial ecosystem (Lopes, Vieira & Barbosa, 2017; European Commission, 2016; Abu-Saifan, 2012; Seelos & Mair, 2005a).

The lack of conceptual clarity that limits construct identification affects directly the ability of SEI to measure and report their social value (Rawhouser et al, 2019; André et al, 2018; Bernardino & Santos, 2014; Clark & Brennan, 2012). Although social entrepreneurs are under great pressure to properly assess their social value (Bosma et al, 2016). Some authors even claim that social entrepreneurs are failing to identify and measure it (Ormiston and Seymour, 2011; Stevens, Moray & Bruneel, 2015; Bosma, Schøtt, Terjesen & Kew 2016; Maas & Grieco, 2017).

Furthermore, there is a need to develop a social management capacity so that market-oriented behaviors and governance will not be simply imitated, increasing the risk of harm the social objective and limiting the benefits of community engagement (European Commission, 2016). Although there have been specific social entrepreneurship education programs since 1993 (Símon-Moya & Revuelto-Taboada, 2012; Defourny & Nyssens, 2010). These programs have failed to provide useful tools and techniques to the social entrepreneurship context because they rely on the regular management literature. Therefore, the development of social management capacity will only be possible with the advancement of social entrepreneurship theory (European Commission, 2016).

In order to contribute to overcoming these limitations, this study seeks to provide means to identifying social entrepreneurship initiatives [SEI], by answering: which are the business model' features that stand out from the perspective of people deeply involved with SEI? And it defines SEI as business models or projects developed by for-profit or non-profit organizations (European Commission, 2016; Ciccarino et al, 2019; Andre et al, 2018). Organizations that develop SEI should be private, with management autonomy. A SEI is a stable and sustainable operation with the explicit objective of creating social value of collective interest and must use all or part of production factors [i.e. wage labor, capital and resources] (European Commission, 2016).

The definition of which concept of SEI is being adopted, is fundamental for the research field development (Richard et al, 2009; Lee *et al*, 2014; Venkatraman & Ramanujam, 1986). Reporting it clearly will help to better interpret the results and facilitate comparison between studies. It also avoids the confusion of the subject with numerous movements and associations that act closely to the concept of social entrepreneurship (European Commission, 2016), because just as not every small business is entrepreneurial, nor every organization that pursues social goals should be part of social entrepreneurship. (Dees, 1998; Leviner, Crutchfield & Wells, 2016; Peredo & McLean, 2006; Pestoff & Hulgärd, 2016).

THEORETICAL FOUNDATIONS

What's a Social Entrepreneurship Initiative [SEI]?

From an evolutionary perspective, it can be said that the current literature on social entrepreneurship has evolved from two distinct strands (Hossain et al, 2017; Defourny & Nyssens, 2010). Both began around the 1980s and began to mature between 2001 and 2010 (Hossain et al, 2017). The first strand, concerns the adaptation of non-profit organizations to more efficient methods to better accomplish their missions. This adaptation was motivated by the adoption of more sophisticated management practices by governments, which consequently came to demand a similar stance from the organizations they supported (Hossain et al 2017; Abu-Saifan, 2012; El Ebrashi, 2013; Dees, 1998). Gradually the adoption of management practices

began to serve as a financial alternative in the face of reduced social investments (Dees, 1998a; Ramos & Martín, 2001). Whether due to political decisions (Harvie & Ogman, 2019; Soares, 2015) or as a result of crises, social organizations have been pressured to develop autonomy from traditional sources of revenue [i.e. from donations and public funds]. Thus, they must incorporate and develop ways to reconcile social and economic outcomes in a sustainable manner (Hoogendoorn, 2016; Stevens et al, 2015; Zahra, Gedajlovic, Neubaum & Shulman, 2009).

This negative socioeconomic scenario also served as an incentive for entrepreneurs with a social impact purpose to explore economically attractive opportunities arising from social problems (Hossain et al, 2017; Lumpkin, Moss, Gras, Kato & Amezcua, 2013; Bernardino & Santos, 2014; Dacin et al, 2010; Zahra et al., 2009; Mair & Marti, 2009; Austin et al, 2006). Many of them raised their organizations unpretentiously, finding that they were social entrepreneurs when they received some award or when someone wanted to fund them (Abu-Saifan, 2012; Seelos & Mair, 2005a).

The way literature has evolved may be responsible for the difficulty of classifying what a social entrepreneurship initiative is (SEI) (Defourny & Nyssens, 2010). Moreover, having and prioritizing social goals, is insufficient to determine which initiatives are part of social entrepreneurship. Although these are the most common and consensual characteristics (Peredo & McLean, 2006; Austin et al, 2006). Many authors complain about the difficulty of establishing which companies fit the phenomenon studied by social entrepreneurship (Pestoff & Hulgärd, 2016; Dacin et al, 2010; Austin et al, 2006). The criteria available are so broad that any company that creates jobs fits, or is so narrow, that almost nothing qualifies (Pestoff & Hulgärd, 2016).

When the study places social entrepreneurship within the third sector, organizations are only non-profit (Dees 1998; Dart 2004). However, some authors consider corporate social responsibility or initiatives in search of fairer transactions, as belonging to the scope of social entrepreneurship (Laviner et al, 2006; Abu-Saifan, 2012; Lee et al, 2014), joint ventures between social and business organizations are also considered (André *et al*, 2018). In this way, commercial activity can be totally different from social activity, if it enables social objectives, making appropriation profit legitimate (Brajević *et al*, 2009; Defourny & Nyssens, 2010; Hossain *et al*, 2017).

However, there are authors who do not include organizations with commercial purpose in this classification, determining that the social objective should be prevalent (Seelos & Mair, 2005a; Mair and Marti, 2006, 2009). And others, that limit the acceptance of economic results to the reinvestment of profit in the business itself or in other socially oriented initiatives (Yunus, 2010).

Considering that SEI has evolved from the third sector, Dees (1998) suggests that there is a tension between social and economic objectives, which is reflected in the popular model of duality Money and Mission [2M] (Dacin et al, 2010; Shaw & de Bruin, 2013). However, this perspective establishes an unproven zero-sum relationship. The social objective may not diminish the ability to generate economic objectives if they are complementary (Pestoff & Hulgärd, 2016; Bernardino & Santos, 2014). Tension can be restricted to the prioritization of these objectives, being felt in decision making and relationship with stakeholders (Hlady-Rispal & Servantie, 2018). But social innovation usually can promote the necessary complementarity (Hadad & Găucă, 2014; Defourny & Nyssens, 2010; Peredo & McLean, 2006).

Defourny and Nyssens (2010) stand for the existence of two distinct and coexisting narratives. The first generated by the application of business practices to the third sector. These organizations would face greater tension between social mission and economic objectives. The second, focuses on the development of social innovation, capable of generating new combinations to overcome resource constraints and social objective difficulties. These organizations would use social and economic objectives in a complementary manner.

The European Commission (2016) takes two perspectives to understand each country's idiosyncrasies and regulatory systems while adopting a cohesive evaluation measure. First, it understands the characteristics that define a SEI to delimitate the research field and then, observes the different types of SEI in each location. The risk of this strategy is to mistake the most frequent business model with the best definition of social entrepreneurship (Pestoff & Hulgärd, 2016). For instance, due to the impact of unemployment on the European community, Work Integration Social Enterprises [WISE] are currently confused with the definition of social entrepreneurship (Defourny & Nyssens, 2010; Pestoff & Hulgärd,

2016). This bias ends up excluding other activities of collective interest, such as those related to the elderly and children, health, well-being, and the environment (Pestoff & Hulgärd, 2016).

A classification proposal can be made from the identification of features that stand out in SEI (European Commission, 2016), but need to consider that these features vary according with the perspective adopted (Ciccarino & Rodrigues, 2019). This study adopts the perspective of people involved with social entrepreneurship after a moment of immersion in an intensive course on the subject [Bootcamp]. Due to the sample limitation, it is not possible to propose a classification model, but the characteristics will be highlighted to be deepen in further study. To this end, the adopted unit of analysis in the business model (Dohrmann et al, 2015; Boons & Lüdeke-Freund, 2013), which, although a common concept in social entrepreneurship studies, has not yet been properly described nor analyzed (Ciccarino & da Silva, 2018).

A business model is a description of the organizational architecture that enables the value creation and capture, reflecting the assumptions adopted by managers (Teece, 2010). A well-balanced business model allows the creation of competitive advantage (Teece, 2010; Saxena, Dodhar & Ruohonen, 2017Saxena), but do not replace, firm and industry-specific effects to explain performance heterogeneity (Zott & Amit, 2007). There is no business model prescription, because it is matter of fit to organization and to its ecosystem (Teece, 2010; Osterwalder & Pigneur, 2011). Because it is a simplified schema of reality (Saxena et al, 2017), it can be applied to different SEI (Dohrmann et al, 2015), which allows grouping information and benchmarking (Saxena et al, 2017), a weakness of the social entrepreneurship literature (Rawhouser et al, 2019; Boons & Lüdeke-Freund, 2013).

Zott and Amit (2007) consider two categories for entrepreneurial business models: focusing on innovation and focusing on efficiency. These categories are similar to those suggested by Defourny and Nyssens (2010) to distinguish the two types of SEI's business models. Innovation-focused business models deliver superior performance in a sustainable way, even considering variations in context, but there are risks and costs to developing them. Although focus on innovation and efficiency are not mutually exclusive, the authors point out that trying to combine both is counterproductive (Zott & Amit, 2007). The business model can be helpful in understanding how SEI can use economic objectives to enable and expand social objectives by prioritizing them (Rawhouser et al, 2019; Hlady-Rispal & Servantie, 2018; Dwivedi & Weerawardena, 2018; Hossain et al, 2017; Carraher et al, 2016; European Commission, 2016; Pestoff & Hulgärd, 2016; Hadad & Găucă, 2014; Acs et al, 2013; Símon-Moya & Revuelto-Taboada, 2012; Ormiston & Richard, 2011 ; Dacin et al, 2010; Austin et al, 2006; Peredo & McLean, 2006).

SEI's Business Model Characteristics According to Theory

The evolutionary strands of social entrepreneurship can influence the way SEI tries to balance its social and economic objectives in the business model (Defourny & Nyssens, 2010), either by focusing on innovation or focusing on efficiency (Zott & Amit, 2007). The first approach is the adaptation of an existing business model, which creates some tension between the two objectives (Shaw & de Bruin, 2013 Dacin et al, 2010; Dart, 2004; Ramos & Martín, 2001; Dees, 1998). The second, is a new business model, where innovation generates complementarity between objectives (Pestoff & Hulgärd, 2016; Bernardino & Santos, 2014; Hadad & Găucă, 2014; Defourny & Nyssens, 2010; Peredo & McLean, 2006).

The sustainability achievement is important to consolidate the both evolutionary strands' business models. At the organizational level, the business model sustainability is concerned with the ability to create value through stable and continuous operation (EMES, 2018; Dwivedi & Weerawardena, 2018; European Commission, 2016; Lumpkin et al, 2013; Mair & Marti, 2006). Thence, the sustainability concept may help to mobilize and use resources to balance the business model and achieve results (Tate & Bals, 2018; Bacq & Eddleston, 2018; Lumpkin et al, 2013).

The European Commission study (2016) points out that although there is an old and strong tradition of organizations with social objectives, incorporating management elements and assuming economic objectives, is still an innovation in this context. Even in countries with the highest growth of SEI, there is also a major scarceness in the development of managerial skills useful for its operation. This is because many social enterprises have developed from community groups, with unplanned growth, relying on

voluntary labor. Therefore, many do not have the managerial skills required for the new type of business model, nor do they have the ability to hire professionals to meet this need (European Commission, 2016).

Social innovation based SEI exploit cost-effective opportunities in finding solutions to social problems (Phillips et al, 2015; Hadad & Găucă, 2014; Yunus, 2010; Zahra et al, 2009; Weerawardena & Sullivan, 2006). They employ innovation in the way they mobilize, combine and use resources (Tate & Bals, 2018; Bacq & Eddleston, 2018; Lumpkin et al, 2013; Mair & marti, 2006; Seelos & Mair, 2005a), which favors sustainability of the business model (Tate & Bals, 2018; Dwivedi & Weerawardena, 2018; Mair et al, 2012; Borzaga et al, 2012). Business sustainability is also achieved through the provision of useful, affordable and commercially desirable products and services (Phillips et al, 2015; Hadad & Găucă, 2014; Yunus, 2010; Weerawardena & Sullivan, 2006).

Social innovation-based SEI exploit cost-effective opportunities in finding solutions to social problems (Phillips et al, 2015; Hadad & Găucă, 2014; Yunus, 2010; Zahra et al, 2009; Weerawardena & Sullivan, 2006). In addition to efficiency (Tate & Bals, 2018; Bacq & Eddleston, 2018; Lumpkin et al, 2013; Mair & Marti, 2006; Seelos & Mair, 2005a), sustainability is also achieved through product and services offerings that are useful, affordable and commercially desirable (Phillips et al, 2015; Hadad & Găucă, 2014; Yunus, 2010; Weerawardena & Sullivan, 2006).

Therefore, innovation is important in explaining the business model of the two evolutionary strands of SEI, although the first emphasizes productivity and the second new ways of doing business by solving social problems (Zott & Amit, 2007). Social innovation is the breaking of patterns necessary to maintain the social business model in a capitalist context by allowing the focus on social value generation over personal wealth and profit generation (Tate & Bals, 2018; Hadad & Găucă, 2014). Therefore, the following hypothesis is proposed: (**H1**) Social innovation is correlated correlates with SEI's business model sustainability.

Innovation is an organizational phenomenon (Fagerberg, 2004; Dosi, 1988), which goes beyond the creation of new things, but also includes the improvement of productive processes or new ways of creating and delivering value (Fagerberg, 2004; Christensen, 1997; Dosi, 1988; Schumpeter, 1934) thus favors management capacity. Based upon on the literature the following hypothesis is developed: (**H2**) Social innovation is correlated with SEI's management capacity (Kuratko *et al*, 2017)

The management capacity refers to SEI planning skills, and how it set and meet short and long-term goals (Rawhouser et al, 2019; Borzaga et al, 2012; Ramos & Martín, 2001; Bowman & Ambrosini, 2000; Lewin & Minton, 1986). It can assist in identifying and communicating the social value created, can foster partnerships and can increase the SEI's legitimacy (Rawhouser et al, 2019; André, Cho & Laine, 2018; Lee et al, 2014; European Commission, 2016; Dacin et al, 2010). Concurrently, the ensuing hypothesis is presented: (**H3**) SEI's management capacity correlated with its business model sustainability.

However, social objectives must be clearly prioritized for this effect to be truly positive, (Hlady-Rispal & Servantie, 2018; Bacq & Eddleston, 2018; European Commission, 2016; Bernardino & Santos, 2015a, 2014; Símon-Moya & Revuelto-Taboada, 2012). Hlady-Rispal and Servantie (2018) argue that this social capacity is what best differentiates the social business model from the conventional one, because decision making is not conditioned by capital (EMES, 2018; Pestoff & Hulgärd, 2016; European Commission, 2016; CSES, 2016; Lumpkin et al, 2013; Defourny & Nyssens, 2010). Subsequently the following hypothesis is tested: (**H4**) Social capacity is correlated with the sustainability of the business model.

But, having and prioritizing social goals is insufficient to determine which initiatives are part of social entrepreneurship, although these are the most common and consensual characteristics in the literature (Peredo & McLean, 2006; Austin et al, 2006). Thus, the fifth hypothesis is posed: (**H5**) Social capacity is insufficient to determine which initiatives are part of social entrepreneurship.

This classification is possible through the identification of the features that stand out in a business model (European Commission, 2016), considering a given point of view (Ciccarino & Rodrigues, 2019). This study is based on the opinion of people involved with social entrepreneurship after a moment of immersion in an intensive bootcamp course. This delimitation allows the selection of entrepreneurial orientation [EO] as a construct.

The EO is appropriate to distinguish social entrepreneurship from conventional entrepreneurship and other existing social services (Rawhouser et al, 2019; Kraus et al, 2017). Its importance lies in the fact that not every company is entrepreneurial and not every social initiative is a SEI (Dees, 1998; Leviner et al, 2006; Peredo & McLean, 2006). Although not a guarantee of SEI's success, EO is used in 80% of studies that consider entrepreneurial performance (Hällerstrand & Örtqvist, 2019).

The OE is the entrepreneurial process of strategy creation, used to set goals, develop the means to achieve them and create competitive advantage (Hällerstrand & Örtqvist, 2019; Shane & Venkataraman, 2000). It can be interpreted as a core competency for identifying, assessing and exploiting opportunities that result in social value creation. Thus, it helps to determine the set of factors that motivate and characterize the performance of a SEI (Kraus et al, 2017; Lumpkin et al, 2013; Shane & Venkataraman, 2000). It still incorporates the three dimensions of the general concept of OE developed by Miller (1989 apud Miller, 2011): innovation, risk tolerance and proactivity. Concurrently with the literature, the following hypothesis is tested: (**H6**) The entrepreneurial orientation [EO] is correlated with the sustainability of the business model.

In addition to the motivation represented by EO, the sustainability of the business model depends on the mobilization, combination and use of resources in an innovative manner (Tate & Bals, 2018; Dwivedi & Weerawardena, 2018; Mair et al, 2012; Borzaga et al, 2012) to ensure the SEI's survival even in harsh environments (Tate & Bals, 2018; Bacq & Eddleston, 2018; Phillips et al, 2015; Hadad & Găucă, 2014; Lumpkin et al, 2013 Yunus, 2010; Weerawardena & Sullivan, 2006).

In an SEI, the economic objective is important but not prevalent. It aims to enable the sustainability of the business model and the created social value (Seelos & Mair, 2005a; Mair & Martí, 2006; Zahra et al. 2009; Dacin et al, 2010; Acs et al, 2013; Hossain et al, 2017 Bernardino & Santos, 2014; Ormiston & Richard, 2011; André et al, 2018). The balance of these objectives determines SEI's ability to mobilize resources, its organizational structure, and its relationship with stakeholders (André et al, 2018). Financial results may be the main constraints on access to labor needed for SEI to function fully, while social outcomes remedy the situation by providing benefits related to volunteering and engagement (Bacq & Eddleston, 2018; Hlady-Rispal & Servantie, 2018; European Commission, 2016; Pestoff & Hulgärd, 2016; Defourny & Nyssens, 2010). In sum, resources impact the SEI's survival, especially regarding the availability of financial and human resources (Símon-Moya & Revuelto-Taboada, 2012). Subsequently, the following hypothesis is tested: (**H7**) The ability to mobilize and use adequate resources is correlated with SEI's business model sustainability.

This ability is contingent on institutional, temporal and ecosystem dimensions (Shaw & de Bruin, 2013). The SEI tend to be embedded in their communities (Smith & Stevens, 2010; Shaw & de Bruin, 2013) and the entrepreneurial ecosystem is the infrastructure that favors the its development (Lepoutre, Justo, Terjesen & Bosma, 2013). But ecosystems are also the source of uncertainty (Cannatelli, 2017; Bloom & Smith, 2010; Barney, 1991), while influences resource allocation in productive, unproductive or destructive activities (Acs et al, 2013; Baumol, 1996). Aligned with the literature, the ensuing hypothesis is tested: (**H8)** The ecosystem's uncertainty level is correlated with SEI's business model sustainability.

The competitive ecosystem's environment affects the balance between exploring new opportunities and refining the operation to pursuit higher productivity (Hitt et al, 2011). Therefore, it affects the selected strategy fit (Hitt et al, 2011; Barney, 1991; Venkatraman & Prescott, 1990). In a way, entrepreneurship induces changes in its ecosystem, but depends on it to exist (Baumol & Strom, 2007).

Some authors argue that social entrepreneurship generates more collaborative than competitive relationships (Borzaga et al, 2012; European Commission, 2016; Ormiston & Richard, 2011; Dees, 1998), benefiting from networking (Dwivedi & Weerawardena, 2018; Hoogendoorn, 2016; Stephan et al, 2015; Stephan & Folmer, 2017). Indeed, for some authors this is a social entrepreneurship's distinctive feature (Dees, 1998; Leviner et al, 2006). However, social organizations in general compete for resources and for stakeholders' attention (Tate & Bals, 2018; Bacq & Eddleston, 2018; Uzzi, 1997). Thus, the next hypothesis emerges: (**H9**) The competition level in an ecosystem is correlated with SEI's business model sustainability.

Some authors argue that social impact reaches a larger scale when there is economic availability and a positive scenario of market forces (Cannatelli, 2017; Bloom & Smith, 2010). Others argue that social

entrepreneurship tends to develop precisely in unfavorable socioeconomic contexts (Hossain et al, 2017; Hayward et al, 2006; Bernardino & Santos, 2014; Dacin et al, 2010; Zahra et al. 2009; Mair & Martí, 2009; Austin et al, 2006). There are two opposing theories that attempt to explain the relationship between available ecosystem structures and the level of social entrepreneurship: the institutional voids theory and the support theory.

The institutional voids theory says that social entrepreneurship results from turbulent scenarios and the failure of structures to adequately address social problems (Hossain et al, 2017; Bosma et al, 2016; Bernardino & Santos, 2014; Estrin, Mickiewicz & Stephan, 2013; Dacin et al, 2010; Zahra et al. 2009; Mair & Martí, 2009; Austin et al, 2006). This theory is often discussed by noticing the social entrepreneurship in neglected areas (Hossain et al, 2017; Dacin et al, 2010; Mair & Martí, 2009; Zahra et al. 2009; Austin et al, 2006).

The support theory argues that when there are no support structures, social entrepreneurs face alone challenges commensurate with the value they want to create (Stephan & Folmer, 2017; Cannatelli, 2017; European Commission, 2016; Bloom & Smith, 2010). Mainly because the survival of an SEI is not trivial, due to the environments in which it develops and because due the decision-making towards social value creation, even if it means less productive commitments (Tate & Bals, 2018; Kraus et al, 2017; Cannatelli, 2017; Bacq & Eddleston, 2018; Hadad & Găucă, 2014; Lumpkin et al, 2013; Dacin et al, 2010; Yunus, 2010; Peredo and McLean, 2006). Therefore, the following hypothesis is tested: (**H10)** The presence of support structures in the ecosystem is positively correlated with the SEI's development.

However, the dilemma between the institutional voids theory and the support theory may be the result of a misconception. The motivation to act on serious unmet social needs should not be confused with the role of institutions in building a favorable ecosystem (Hoogendoorn, 2016; Bernardino & Santos, 2014). Even without proof of the benefits of creating structures that favor the social entrepreneurial ecosystem, the European Union encourages and invests in these structures, adopting the development of this ecosystem as a goal (European Commission, 2016). The following section describes the methodology followed to test the hypotheses.

METHODOLOGICAL APPROACH

Research Strategy

This exploratory study is part of a work in progress (Remeny et al, 1998). It resulted from an implicit pretest, where participants consider that they are answering a survey, in order to verify the relevance of selected indicators (Converse & Presser, 1986). This procedure is in accordance with the abductive approach that provides the systematic combination between theory and reality, allowing frequent updates and adjustments from the obtained results (Dubois & Gadde, 2002). The pre-test allowed to proceed necessary changes in the main study. It also allowed this study's research question formulation; whose objective is to answer which are the business model's features that stand out from the perspective of people deeply involved with SEI? The indicators' selection and the construction of the research instrument was guided by the conceptual model of Ciccarino and Da Silva (2018) and used scales taken from other social entrepreneurship publications listed forward in the next session (Appendix).

Sample

The questionnaire was applied to the 30 participants of an intensive training on social entrepreneurship [bootcamp] that took place at the Polytechnic Institute of Leiria in Portugal. The bootcamp was promoted by the IDDNET incubator - Leiria Social Innovation [LIS], on June 14, 15 and 16th, 2019. The questionnaire application was motivated by the eventual opportunity to test it. There was no previous knowledge about the participants' profile, nor control over who would answer it. Participation was voluntary and all bootcamp participants had the same likelihood to answer it (Hair Jr et al, 2010; Remenyi, Williams, Money & Swartz, 1998). The response rate was 96.67%, with 29 valid questionnaires.

The identification of SEI is subjective due to the diversity of possible classification criteria (Ciccarino & Rodrigues, 2019; Pestoff & Hulgärd, 2016; Austin et al, 2006). However, one way to identify SEI is

through awards (Abu-Saifan, 2012; Seelos & Mair, 2005). This criterion was adopted to estimate the population of SEI in Portugal and aims to mitigate the selection bias (Mangione, 2003). Table 1 summarizes the references used for this estimation.

TABLE 1
PORTUGUESE'S SEI

Scope	Award	Awardees	Sites
Portugal	Prémio INSEAD de Empreendedorismo Social	unavailable	http://www.premio-insead.com/index.php?cat=17
Portugal	Prémio de Empreendedorismo Social "Acredita Portugal"- Caixa Económica Montepio Geral	52	https://www.acreditaportugal.pt
Portugal	Prémio Damião de Góis de Empreendedorismo Social	3	https://cgov.pt/index.php?option=com_content&view=article&id=895
Portugal	Portugal Inovação Social	120	Data base
Europe	Social Innovation Tournament - European Investment bank institute	2	https://institute.eib.org/whatwedo/social-2/social-innovation-tournament-2/
World	Schwab foundation award	1	https://www.schwabfound.org/selection-process
World	Ashoka Venture and Fellowship	5	https://www.ashoka.org/en-US/our-network/ashoka-fellows/search/portugal
World	Skoll Award	2	http://skoll.org/about/skoll-awards/

Source: Authors (retrieved from web sites in December 2019)

If there are around 185 SEI that meet the study criteria, this sample could represent a 90% confidence interval with a 14% margin of error (Hair Jr, Anderson, Tatham, & Black, 2010; Mangione, 2010).

The Survey

The scales used in the questionnaire were translated and adapted from previous studies. Although the context in which the scales were applied was studied [i.e. sample, objectives, method] and the quality of the studies considered [i.e. analysis of the journals impact factor, statistical criteria, limitations], it is not possible to determine if the scales will meet the research objectives before testing them (Converse & Presser, 1986).

Five explicit pre-tests with experts were conducted among academics and entrepreneurs to verify the need for adjustments in the concepts, language and formatting (Converse & Presser, 1986). Even so, 9 of the 32 questionnaire scales could not be used. After this study, of the 23 remaining scales, 3 were adapted and 5 were withdrawn in the refinement of the thesis questionnaire. This reinforces the importance of pretesting all research instruments (Converse & Presser, 1986; Remeny et al, 1998; Sue & Ritter, 2007). Appendix 1 presents only the indicators that were useful for this study and the applied methods.

The questionnaire was created by observing precautions to mitigate non-response bias and common method bias, in accordance with procedures adopted by some of the scale sources (Bacq & Eddleston, 2018; Dwivedi & Weerawardena, 2018; Bernardino & Santos, 2015a; Davis et al, 2007). The answers are based on self-reported data, a common practice of business research (Bacq & Eddleston, 2018). Confidentiality and anonymity were guaranteed (Sue & Ritter, 2007; Mangione, 2003). The questionnaire was design to be

simple, objective and short (Sue & Ritter, 2007; Mangione, 2003; Converse & Presser, 1986), composed predominantly by closed questions (Converse & Presser, 1986).

Ambiguities were avoided and each issue concerned only one goal. The same question may have different meanings for different people, therefore, most questions are forced-question between two extremes. There are two diametrically opposed and mutually exclusive alternatives to answer to each question, and the respondent can express their degree of agreement with either end using a 5-point scale (Converse & Presser, 1986). The questions were organized so that their extremes reflect the two evolutionary aspects of social entrepreneurship (Hossain et al, 2017; Defourny & Nyssens, 2010). Thus, participants chose in what extent their opinion is alignment to philanthropic or market opportunity exploitation view.

Statistical Methods

The data was analyzed by SPSS 25th version and with some excel supports. Descriptive statistics were used to identify the respondents' profile for description and data presentation (Collis & Hussey, 2005). Due to the exploratory character of the study, correlation analysis was useful in determining which variables are potentially important and the degree or strength of the relationship, noting that correlation alone does not identify the cause and effect relationship between the variables. (Stevenson, 1981). The analysis of variance (ANOVA) was also used to verify the results' statistical significance (Lapponi, 2005, p. 381).

Factorial analysis was the multivariate interdependence technique used to study the interrelationships among variables. It permits to group high correlated variables to understand their interrelation and to explain latent dimensions named as factor. A factor can represent constructs based on previous hypotheses, thence the factor analyses can summarize the variable set; organizing it in an understandable way according with literature. It can also define the model´s and each variable explanation capacity (Tabachinick & Fidell, 2007; Hair Jr et al, 2010).

The three-stage planning method was adopted, as proposed by Figueiredo Filho and Silva Junior (2010). The analysis began with the verification of the adequacy of the sample, where it was found that there were not enough cases to use all the study variables. This condition was not impeditive and there were binary correlations between the variables, so the method proceeded.

The extraction technique employed was the principal components with varimax rotation (Figueiredo Filho & Silva Junior, 2010). The principal components imply that all the variance is common or shared among the variables that composes the factor (Hair Jr *et al*, 2010). The varimax rotation is the most popular orthogonal rotation method used to simplify the columns in a factor matrix to select the variables of each factor ensuring that all factors are independent and not correlated (Hair Jr *et al*, 2010).

Finally, the factors were extracted through the manual method, removing statistical insignificant variables from the model in the SPSS software. The results provided the balance of four cases for each variable, close to the orientation to perfect application of the technique (Figueiredo Filho & Silva Junior, 2010). The exclusion of the variables met the following criteria: 1) Low MSA (measure sample adequacy) and low commonality; 2) High MSA and low commonality; 3) Low MSA and High Community, which allows the formation of a factor alone if it has theoretical support (Hair Jr et al, 2010).

To verify the classification capacity of the SEI's business model's features, highlighted in the factor analysis, a cluster analysis was performed. This analysis is suitable for creating groups with distinct characteristics composed of similar cases. Thus, cases that are in the same cluster are similar and cases from different clusters are distinct. Because of this feature the technique allows the formation of few groups (Haldiki, 2001).

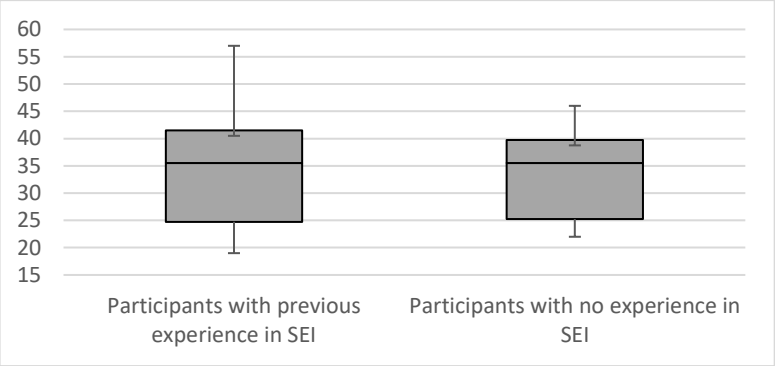
DATA ANALYSIS AND DISCUSSIONS

Respondent's Profile

Most Bootcamp attendees have had some experience with social initiatives. (60,71%) and 11 respondents stated that they had no previous experience (39,29%). Among respondents who reported their experience, 61,54% have less than 3 years of experience and 30,77% have more than 10 years of experience.

Most respondents are over 30 years old, with ages ranging from 19 to 57 years. The average age is about 33.93 and the most present age group is between 24 and 28 years. The Figure 1 presents the relationship between previous experience in SEI and age.

FIGURE 1
BLOXPLOT RELATIONSHIP BETWEEN AGE AND PREVIOUS EXPERIENCE IN SEIS



Source: Study data

Bachelor's degree and Master are the qualifications presented by 68.9% of the surveyed sample, while Secondary Education and Higher Professional Technical Course individually represented 6.9% and 24.14% respectively. Most participants were female [82%]. Somewhat women have better qualifications than men interviewed. All participants who have master's degrees are female, which also represents approximately 80% of participants with bachelor's degree. This result can be a bias due to the predominance of the female gender in the sample. More research is needed to establish whether this is common feature in the Portuguese social entrepreneurial ecosystem. For this reason, it was also not possible to identify whether there is gender predominance among early stage SEI nor in the relationship between experience in social initiatives and gender. The next analyses want to answer which are the business model' features that stand out from the perspective of people deeply involved with SEI by testing the study's hypotheses.

Business Model's Descriptive Statistics

Regarding the SEI's objectives, the respondents' opinion is in favor of the prioritization of social value creation over economic value creation (Rawhouser *et al*, 2019; Hlady-Rispal & Servantie, 2018; Dwivedi & Weerawardena, 2018; EMES, 2018; Hossain *et al*, 2017; Carraher *et al*, 2016; European Commission, 2016;Pestoff & Hulgärd, 2016; Hadad & Găucă, 2014; Acs *et al*, 2013; Símon-Moya & Revuelto-Taboada, 2012; Ormiston & Richard, 2011; Dacin *et al*, 2010; Defourny & Nyssens, 2010; Austin *et al*, 2006; Peredo & McLean, 2006).

When asked about their business tendency, on a scale of 1 to 5, the most answered value was 4. Thus, the respondents are proner to adopt business techniques and market postures than to maintain a philanthropic posture. On In other words, productivity and autonomy are important for SEI (Hlady-Rispal & Servantie, 2018; Pestoff & Hulgärd, 2016; Bernardino & Santos, 2014; Hadad & Găucă, 2014; Defourny & Nyssens, 2010; Peredo & McLean, 2006; Austin *et al*, 2006). However, when analyzing the adherence to both parameters, a division is perceived and the alignment with public policy and philanthropy became a concern.

Maybe because it is still a taboo to seek for market revenue (European Commission, 2016; Shaw & de Bruin, 2013; Dacin et al, 2010) under the risk of jeopardize the organization's legitimacy (Hlady-Rispal & Servantie, 2018), the philanthropic view represents 45% of the answers. But, when asked about their major revenue sources the answers vary, hanging from raise funds from public policy or philanthropy capital to market revenue (Ramos & Martín, 2001; Dees, 1998).

Respondents' opinions also differ with respect to entrepreneurial orientation. It is not possible to determine which situation generates greater motivation for SEI's development: if they are financing opportunities to meet social needs by public or philanthropic capital (Ramos & Martín, 2001; Dees, 1998) or if they are business opportunities designed to solve social problems (Brajević *et al*, 2009; Hossain *et al*, 2017; Dohrmann *et al*, 2015; Lumpkin *et al*, 2013; Bernardino & Santos, 2014; Dacin *et al*, 2010; Yunus, 2010; Zahra *et al*. 2009; Mair & Martí, 2009; Austin *et al*, 2006; Seelos & Mair, 2005). However, most participants (34%) answered 4 on a scale of 1 to 5, suggesting alignment with entrepreneurial orientation.

Regarding the predominant SEI's workforce, the respondents 'opinion corroborates the literature (Bacq e Eddleston, 2018; EMES, 2018; Bernardino & Santos, 2017; European Commission, 2016; Ramos & Martín, 2001). Participants' opinion tends to wage labor with a mean of 3.38 among responses ranging from 3 to 5. Table 2 summarizes the statistics used in these analyzes.

TABLE 2
BUSINESS MODEL CHARACTERISTICS (01)

	Mean	Mode	Minimum	Maximum
Objectives (5. Social; 1. Economic)	4,1	5	3	5
Tendency (1. Philanthropy; 5. SEI)	3,59	4	2	5
Revenue Source (1. Philanthropy; 5. SEI)	2,66	3	1	4
Entrepreneurial Orientation (1. Philanthropy; 5. SEI)	3,31	4	1	5
Labor (1. Volunteer; 5. Waged labor)	3,38	3	2	5

Source: Study data

Overall, respondents believe that long-term survival is a priority. They prioritize the goal of maintaining or expanding the fulfillment of social needs over meeting immediate needs. This indicates the adoption of management techniques, which is in line with the indicators previously analyzed. (Dwivedi & Weerawardena, 2018).

There is a certain tendency for SEI's comunnity embeddedness (Stevens et al, 2015; Zahra et al, 2009) and some difficulty in systematically assessing social value, a weakness also noted in the literature (Rawhouser et al, 2019; André et al, 2018; Maas & Grieco, 2017; Bosma et al, 2016; Stevens et al, 2015; Bernardino & Santos, 2014; Clark & Brennan, 2012; Ormiston and Seymour, 2011).

The results indicate that there is a certain level of innovation being carried out, with a tendency to act in new markets or establishing new relationships. Although it was the most common response, innovation was not a general trend, which can be explained by the philanthropic tendency or alignment with public policies reported by some respondents. Collaborative relationships (Borzaga et al, 2012) are perceived through the response to information sharing, something that favors innovation (Dwivedi & Weerawardena, 2018; Teece, 2010). Table 3 summarizes this information.

TABLE 3
BUSINESS MODEL CHARACTERISTICS (02)

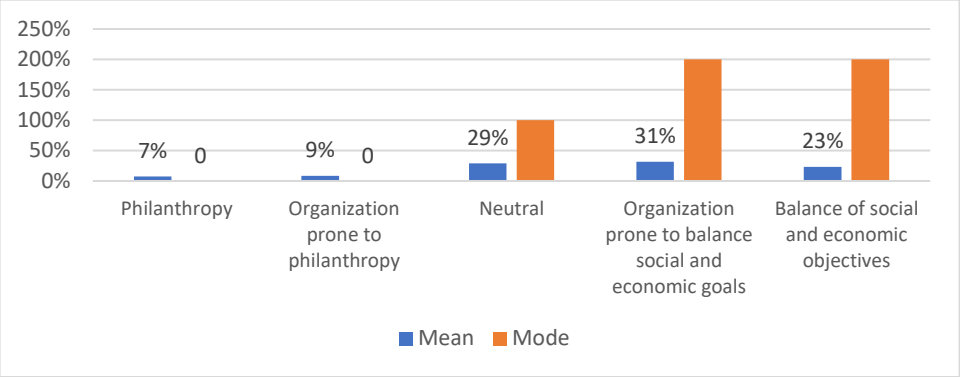
	Mean	Mode	Minimum	Maximum
Planning (1. short term; 5. sustainable)	4,21	5	3	5
Social value assessment (1. does not; 5. systematically)	3,21	3	1	5
Scale (1. Embedded; 5. Scalable)	2,97	3	1	5
Innovation (1. doesn't have; 2. process innovation; 3. market innovation)	3,96	5	1	5
Sharing information (1. little; 5. much)	4,10	5	2	5

Source: Study data

Possibly the variation of the results is because participants are referring to SEI aligned with different strands of social entrepreneurship (Hossain et al, 2017; Defourny & Nyssens, 2010). Although 30% of responses are neutral (3), 14% of responses align with nonprofit adoption of market techniques and procedures, while 56% align with organizations that take advantage of market opportunities by solving social problems using innovation.

Due to the neutral answers, it is not possible to establish which of the two aspects is predominant. Mainly because business models are a multidimensional concept that can be composed of different combinations of these characteristics (Saxena et al, 2017; Osterwalder & Pigneur, 2011; Teece, 2010; Zott & Amit, 2007). Whether or not the respondent has experience in SEI does not alter the pattern of responses. However, by observing the mode and the mean of the answers, it is possible to observe that predominate opinions with neutral tendencies or inclined to the balance of economic and social objectives, as shown in Figure 2.

FIGURE 2
THE SEI'S TYPES



Source: Study data

In order to better understand these results, the next session will present the factorial and cluster analysis.

Factorial Analysis

All variables were included in the factor analysis and the results reported by the SPSS software were systematically analyzed removing the variables without statistical significance (Figueiredo Filho & Silva Junior, 2010; Hair Jr et al, 2010). Based on the literature and to better test the hypotheses, we decided to perform two separate analyzes: one for the business model factors and one for the ecosystem factors that may influence the business model (Cannatelli, 2017; Shaw & de Bruin, 2013; Lepoutre *et al*, 2013).

After the 7th interaction, the first analysis generated a model composed of six variables grouped into three factors based on its variables' eigenvalue, as shown in Table 4. The variables opportunity and evaluation have an MSA slightly below 0.5, but were maintained because of their conceptual importance. All variables presented high commonality above 0.77 (Figueiredo Filho & Silva Junior, 2010; Hair Jr et al, 2010). The sample is slightly adequate to the model (KMO = 0.0502) according to the Kaiser-Meyer-Olkin measurement (Figueiredo Filho & Silva Junior, 2010). The model is valid according to the significant Bartlett Sphericity Test ($\alpha < 0.05$) that verifies if there is a sufficient correlation between the variables to apply the factor analysis.

According with the rotating component matrix the factor extracted are composed of the following variables through summated scales: Factor 1 Management Capacity (0.868 tendency and 0.82 planning capacity; Factor 2 EO (0.842 revenue source and 0.914 opportunities exploitation capacity); Factor 3 Social Capacity: (0.880 social objectives prevalence and 0.869 social evaluation capacity).

The first factor relates to the third hypothesis (H3) and indicates that SEI's management capacity can explain 28.17% of the business model's sustainability. The second factor relates to the sixth hypothesis

(H6) and indicates that entrepreneurial orientation can explain 26.38%. Finally, the third factor relates to the fourth hypothesis (H4) and indicates that social capacity can explain 26.25% of the business model's sustainability.

The model explanatory capacity is divided evenly by its factors, none representing more than 2% of the variation in relation to the others. This indicates that management capacity, social capacity and entrepreneurial orientation are equally important for the sustainability of the business model, although management capacity is slightly more important. The model explains 80.10% of the sample variation, as summarized in Table 4.

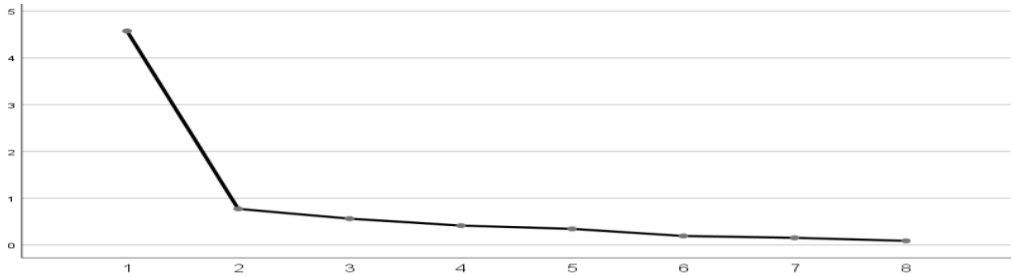
TABLE 4
BUSINESS MODEL SUSTAINABILITY FACTORS OF PORTUGUESE'S SEI

	Initial eigenvalue			Sums of Squared Loads Extraction			Sums of rotation of squared loads		
Component	Total	% variance	% cumulative	Total	% variance	% cumulative	Total	% variance	% cumulative
1	2,018	33,631	33,631	2,018	33,631	33,631	1,690	28,174	28,174
2	1,644	27,401	61,032	1,644	27,401	61,032	1,583	26,385	54,559
3	1,187	19,777	80,809	1,187	19,777	80,809	1,575	26,249	**80,809**
4	,500	8,335	89,143						
5	,367	6,112	95,255						
6	,285	4,745	100,000						

Source: Study data

The 1st, 2nd and 7th hypothesis (H1, H2, H7) could not be tested. The first two are about innovation and the last one regarding the mobilization capacity and use of resources. The explanation may refer to the selected variables, the questions format or the sample limitation (Remenyi, 1998). The innovation variables allowed few inferences from the descriptive statistics, so these results were expected. It is a study limitation that will be fixed in the future. The resource mobilization and use capacity is conceptually associated with innovation (Dwivedi & Weerawardena, 2018; Tate & Bals, 2018; Bacq & Eddleston, 2018; Lumpkin et al, 2013; Mair et al, 2012; Borzaga et al, 2012; Mair & marti, 2006; Seelos & Mair, 2005a) which may justify its low explanatory capacity in this study, not needing changes in the way it is approached. After 3 interactions the second analysis generated a model composed of 8 variables grouped into 2 factors based on fixed factors presumed based on the literature. Figure 3 reinforces this decision through the escarpment graph.

FIGURE 3
ECOSYSTEM FACTORS



Source: Study data

All variables presented MSA above 0.72 except that reflected the opinion on the importance of the institutional structure for the development of social entrepreneurship, which was withdrawn. All variables of the 1st factor showed high commonality above 0.74 and those of the 2nd factor above 0.47, being close to the oriented limit. They were maintained due to their high MSA (Figueiredo Filho & Silva Junior, 2010; Hair Jr et al, 2010). The sample is adequate to the model (KMO = 0.80) according to the Kaiser-Meyer-Olkin measurement (Figueiredo Filho & Silva Junior, 2010). The generated model is valid according to the significant Bartlett Sphericity Test (α <0.05).

According with the rotating component matrix the factor extracted are composed of the following variables through summated scales: Factor 1 Ecosystem structuring level (availability of 0.879 useful information, 0.762 access to financial resources; 0.790 government support, 0.608 appropriate legislation, 0.976 appropriate credit lines, 0.393 network; 2) Factor 2 ecosystem contextualization (0.478 uncertainty and -0.403 competition).

The 1st factor relates to the 10th hypothesis (H10) and indicates that the existence of support structures for social entrepreneurship in the ecosystem may explain 48.76% of the sustainability of the business model. Thus, it supports the hypothesis. The second factor relates to the 8th and 9th hypotheses (H8, H9) and characterizes the ecosystem's context through its uncertainty and competitiveness respectively. It can explain 26.58% of the sustainability of the business model.

The model explanatory capacity is concentrated on the first factor indicating that the existence of support structures is more important than the characteristics of the ecosystem itself, which corroborates with previous studies (Stephan & Folmer, 2017; Cannatelli, 2017; European Commission, 2016; Bloom & Smith, 2010), mainly the results found by Griffiths et al (2013). The model explains 75.34% of the sample variation, summarized in Table 5.

TABLE 5
ECOSYSTEM FACTORS THAT AFFECT BUSINESS MODEL SUSTAINABILITY IN PORTUGUESE'S SEI

		Initial eigenvalue			Sums of rotation of squared loads		
	Component	Total	% variance	% cumulative	Total	% variance	% cumulative
Gross	1	4,576	64,475	64,475	3,460	48,760	48,760
	2	,771	10,866	75,341	1,886	26,581	75,341
	3	,562	7,920	83,261			
	4	,414	5,833	89,094			
	5	,344	4,842	93,936			
	6	,192	2,699	96,635			
	7	,152	2,142	98,778			
	8	,087	1,222	100,000			

Source: Study data

Now it remains to be seen whether these factors have discriminatory capacity to classify cases and group them into distinct and statistically significant clusters, as will be discussed in the next section.

Cluster Analysis

The Hierarchical cluster analysis allowed the use of 25 of the 29 cases, according to the Listwise method, and evidenced the existence of 3 clusters through the analysis of the agglomeration worksheet and the existence of 2 clusters according to the dendogram observation. Conceptual analysis led to the selection of the second option, keeping only the statistically relevant factors (Haldiki, 2001; Hair Jr *et al*, 2010).

All factors identified in the previous section were entered into cluster analysis by the K-means method. The results reported by the SPSS software were systematically analyzed removing factors that were not

statistically significant (Hair Jr et al, 2010), according to the analysis of variance (ANOVA – Table 6) (Lapponi, 2005; Hair Jr *et al*, 2010).

TABLE 6
FACTORS SELECTION BASED ON DISCRIMINATION POWER

	Cluster		Error			
	Medium square	df	Medium square	df	F	Sig.
Factor_Estruc.Ecosystem	4,054	1	,867	23	4,674	,041
Factor_Contex.Ecosystem	4,248	1	,859	23	4,946	,036
Factor_Management Cap.	21,439	1	,229	23	93,421	,000

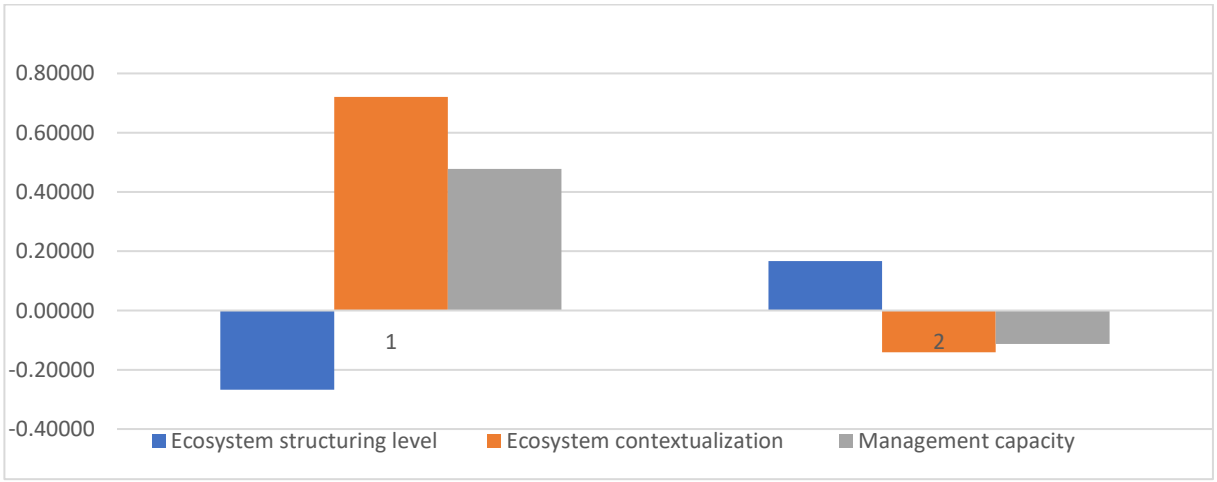
Source: Study data

The ANOVA supports 5th hypothesis (H5), given that social capacity did not obtain classificatory power, being a common concept of all social entrepreneurship, as the theory predicts (Peredo & McLean, 2006; Austin et al, 2006). The Entrepreneurial Orientation factor, composed by the variables opportunity and variety of income was removed due to dendrogram analysis, even with the significant F test ($\alpha = 0.055$). It would impair the ability to clusters aggregation. The management capacity factor has a significantly higher classificatory power (93,42), the others refer to the ecosystem represented by the available structure (4,674) and the context characteristics (4,946). This result is in line with the explanatory capacity attributed to each factor in the previous analysis.

The model classified 7 cases in the first cluster and 18 in the second. The 7 SEI classified in the 1st cluster are positively influenced by the context of the ecosystem and its management capacity. The 18 SEIs classified in the 2nd cluster depend on the structure available in the ecosystem to achieve their business models sustainability. Cluster analysis supports the ecosystem hypoteses (H8, H9, H10).

The SEI dependency on the ecosystem support structures for their business model sustainability is indirectly proportional to their management capacity. Therefore, the importance of these structures advocated by support theory is relative (Stephan & Folmer, 2017; Cannatelli, 2017; European Commission, 2016; Bloom & Smith, 2010). This also supports hypothesis 3 (H3). Figure 4 shows the result of the classification of all cases in their respective cluster.

FIGURE 4
CLUSTERS FEATURES



Source: Study data

CONCLUSIONS

The exploratory study sought to contribute to filling gaps in identifying the business model' features that stand out from the perspective of people involved with SEI. Descriptive statistics allowed a deeper understanding of these elements in the context of Portuguese SEI. The analyzes developed in this study suggest features capable of classifying SEI that develop from different evolutionary strands (Hossain et al, 2017; Defourny & Nyssens, 2010). The results variation can be explained by SEI alignment with different strands of social entrepreneurship (Hossain et al, 2017; Defourny & Nyssens, 2010). Although 30% of responses are neutral (3), 14% of responses align with nonprofit adoption of market techniques and procedures, while 56% align with organizations that take advantage of market opportunities by solving social problems using innovation.

Factorial analysis identified the composite variables that make up both the business models and its ecosystem, highlighting their importance in the search for sustainability (Hair Jr et al, 2010). The business model ones were respectively management capacity, social capacity and entrepreneurial orientation. These composite variables can be used to express construct in future studies and help to describe a SEI's business model. It also endorsed the 3rd, 4th and 6th hypotheses. The factor analysis was complemented by cluster analysis in order to verify if it was possible to distinguish distinct groups of SEI from these composite variables (Hair Jr et al, 2010).

Management capacity was the only business model's composite variable capable to classify cases in different clusters. It was also the variable with most explanatory power to distinguish among cases, reinforcing its contribution to business model sustainability, therefore the 3rd hypothesis (**H3**). Indeed, both SEI's evolutionary strands can be described with this capacity development. The correlation of business model sustainability with the entrepreneurial orientation [EO] (**H6**) is suggested but it can't be used to classify different SEI. And the social capacity is the common sense in literature but is not sufficient to classify one organization as SEI. It supports 5th hypothesis (**H5**)

The ecosystem's composite variables were respectively ecosystem structuring level and ecosystem contextualization. The relation between the business model and its ecosystem is highlighted by the cluster analysis results, and it is important to classify different SEI. Most SEI have been classified as dependent to ecosystem support structures, while 38.88% achieve greater autonomy through managerial capacity development. This dependence offer support to 8th ans 9th hypotheses (**H8** and **H9**). The autonomy may be related to the social capacity arising from the prioritization of the social objective in decision making and entrepreneurial orientation, common to both identified SEI clusters.

Literature guides the SEI to pursue a variety of revenues and strive to achieve sustainability of their business models through financial objectives (EMES, 2018; European Commission, 2016; Hoogendoorn, 2016; Stevens et al, 2015; Yunus, 2010; Zahra et al, 2009; Mair & Marti, 2006; Austin et al, 2006). The answers suggest that SEI from this sample are generally a non-profit organization incorporating management techniques and seeking for alternatives that guarantee their autonomy and sustainability. However, they have not yet developed a market orientation, perhaps due to concerns about the legitimacy (Hlady-Rispal & Servantie, 2018) that creates the tension between social and economic goals (Ramos & Martín, 2001; Dees, 1998).

The research should be repeated in a probabilistic sample context with a larger number of cases. The results comparison should also enrich the knowledge on the subject, improving the validity of the findings. In addition, further studies may shed light on issues that could not be addressed. For example, 80% of this sample was female and we cannot say if it was circumstantial or if the sample reflects the population. The innovation (**H1** and **H2**) and business model resources (**H7**) hypotheses couldn't be tested. The literature endorses the influence of these two constructs. The embeddedness level and how it influences the business model sustainability is other issue that needs further development. Finally, bigger sample could allow a better understand about the variables' relationship and a better and a better characterization of what business models adhere to which evolutionary SEI's strand.

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APPENDIX: SCALES

Nº question	Multilevel indicator	Indicator	Source	Support references	Applied method
21.1	Ecosystem Context	Uncertainty	Dwivedi & Weerawardena, 2018	Almeida & Santos, 2017	Factor Analysis and Cluster Analysis
21.2		Competition	Dwivedi & Weerawardena, 2018	Almeida & Santos, 2017	
19.1	Ecosystem Support Structures	Public policy	Dwivedi & Weerawardena, 2018; Levie & Autio, 2008	Stephan & Folmer, 2017; Hoogendoorn, 2016; Bernardino & Santos, 2014; Estrin *et al*, 2013 ; Griffiths *et al*,2013	
19.2		Rules	Dwivedi & Weerawardena, 2018; Bernardino & Santos, 2015a; Levie & Autio, 2008	Hoogendoorn, 2016; Estrin *et al*, 2013 ; Griffiths *et al*,2013	
19.3		Network	Dwivedi & Weerawardena, 2018; Bernardino & Santos, 2015	Hoogendoorn, 2016; Estrin *et al*, 2013 ; Griffiths *et al*,2013	
19.4		Information in the network	Dwivedi & Weerawardena, 2018	Tate & Bals, 2018; Mair *et al*, 2012; Borzaga *et al*, 2012; Uzzi, 1997	
19.5		Credit	Dwivedi & Weerawardena, 2018; Bernardino & Santos, 2015a; Levie & Autio, 2008	Dwivedi & Weerawardena, 2018; Uzzi, 1997	
19.6		Funding	Hoogendoorn, 2016; Stephan *et al*, 2015	European Commission, 2016; Uzzi, 1997	
8	OE	Opportunity identification	Bernardino & Santos, 2015	Kraus *et al*, 2017; Dwivedi & Weerawardena, 2018; Shane & Venkataraman, 2000	Factor Analysis
7	Sustainability	Source of revenues	Dwivedi & Weerawardena, 2018 (adapted)	Hoogendoorn, 2016; Stevens et al, 2015; Zahra et al, 2009	Factor Analysis and Cluster Analysis
10		Strategic alignment	Dwivedi & Weerawardena, 2018	Dacin *et al*, 2010; Austin *et al*, 2006; Dees, 1998	
11		Managerial capacity	Dwivedi & Weerawardena, 2018	Hlady-Rispal & Servantie, 2018; EMES, 2018; Comissão Europeia, 2016; Pestoff & Hulgärd, 2016; Defourny & Nyssens, 2010	
14		Social impact evaluation	Kuratko, McMullen, Hornsby & Jackson, 2017; Carraher *et al*, 2016;	Rawhouser *et al*, 2019; André *et al*,2018; Hlady-Rispal & Servantie, 2018; Leviner *et al*, 2006; Ramos & Martín, 2001	

			Bosma *et al*, 2016; Lepoutre *et al*, 2013		
9		Social capacity	Bosma *et al* (2016)	Rawhouser *et al*, 2019; Hlady-Rispal & Servantie, 2018; Dwivedi & Weerawardena, 2018; EMES, 2018; Comissão Europeia, 2016; Pestoff & Hulgärd, 2016; CSES, 2016; Lepoutre *et al*, 2013; Defourny & Nyssens, 2010; Dacin *et al*, 2010; Austin *et al*, 2006; Peredo e McLean, 2006; Dees, 1998	
5		Talent mobilization	**Dees, 1998***	Tate & Bals, 2018; European Comission, 2016; Austin *et al*, 2006; Lewin & Minton, 1986	Descriptive statistics
6		HR type	Lepoutre *et al*, 2013; Dees, 1998	Tate & Bals, 2018; Bacq & Eddleston, 2018; European Comission, 2016; Austin *et al*, 2006	
22		Ecosystem theories	Hoogendoorn, 2016; Stephan *et al*, 2015	Converse & Presser, 1986	
1	Sample Qualification	Age	Kraus *et al*, 2017; Stephan *et al*, 2015; Stahmer, 1998	Converse & Presser, 1986	
2		Sex	Kraus *et al*, 2017; Stephan *et al*, 2015; Stahmer, 1998	Converse & Presser, 1986	
3		Educational level	Stephan *et al*, 2015; Símon-Moya & Revuelto-Taboada, 2012; GEM; Levie & Autio, 2008	https://www.dges.gov.pt/pt/pagina/graus-e-diplomas-do-ensino-superior Stephan et al, 2016	
4		Experience	Shaw & de Bruin, 2013; Levie & Autio, 2008	Converse & Presser, 1986	

Source: Authors