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Correia Santos, Susana; Nikou, Shahrokh; Brännback, Malin; Liguori, Eric

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Are Social and Traditional Entrepreneurial Intentions Really That Different?

Susana C. Santos, Shahrokh Nikou, Malin Brännback and Eric W. Liguori

Abstract

Purpose—Building on construal level theory (CLT), this study explores mental representations of entrepreneurial intentions with different foci (i.e., social and commercial) among university students from Generations Y and Z.

Design/Methodology/Approach—Using a sample of university students from the United States contacted through the Entrepreneurship Education Project, this study employs a configurational perspective—fuzzy-set Qualitative Comparative Analysis (fsQCA)—to identify the pathways leading to entrepreneurial intentions (EIs) and social entrepreneurial intentions (SEIs).

Findings—Results showed that the configurations of conditions leading to the outcomes (EIs and SEIs) were not disparate but shared many similarities even when considering socially oriented antecedents, supporting the claim that students perceive EIs with different foci as high-level construals. The results also demonstrated no differences within genders, but there were asymmetries between genders in the configurations leading to EIs and SEIs.

Research Limitations/Implications—This study contributes to EI literature by providing new ways of understanding how individuals perceive EIs at an early stage of entrepreneurship and by bringing CLT to the topic.

Practical Implications—These results have implications for entrepreneurship education and practice; students’ EIs are psychologically distant, lacking a level of detail and specificity. This would explain why students do not immediately create ventures; entrepreneurship has a certain incubation time before an entrepreneurial mindset is formed.

Originality/Value—Exploring configurational approaches can help uncover the complexity and idiosyncrasies underlying EIs.

Keywords—Construal level theory, entrepreneurial intentions, fsQCA, gender, social entrepreneurship

Paper type—Research paper
Introduction

Entrepreneurial intentions (EIs) are individual states of mind that direct attention, experience, and actions toward the idea of starting a new venture (Bird, 1988). There are two main types of EIs: traditional EIs, referring to “the intent to start a business or to launch a new venture” (Krueger, 2009a, p. 55), and social entrepreneurial intentions (SEIs), referring to “pursu[ing] a social mission by starting a business or launching a social venture” (Bacq & Alt, 2018, p. 334). Intentions are among the most researched topics in entrepreneurship over the years (e.g., Brockhaus, 1975; Fayolle & Liñán, 2014; Meoli et al., 2020). Prior researchers have focused either on commercial or social intentions (e.g., Brännback & Carsrud, 2017; Hockerts, 2017), finding both strongly predict different types of entrepreneurial behavior (Kautonen et al., 2015). The intentions of starting a business designed to generate financial profit or social value have been characterized as intrinsically different (e.g., Wach et al., 2021), given that the foci of those intentions appear to be distinct.

There are two issues with prior studies on the antecedents of traditional and social entrepreneurial issues. First, extant work has been exclusively focused on antecedents congruent with the foci of EIs. This means that work exploring EIs has been reliant on using commercially oriented antecedents (e.g., entrepreneurial self-efficacy, preference for autonomy, preference for income, tolerance for risk: Douglas, 2013) and work exploring SEIs has been reliant on using socially oriented antecedents (e.g., empathy, social entrepreneurial self-efficacy, social worth: Bacq & Alt, 2018). Consequently, research has been guided by a priori congruence between the nature of the personal-level attitudes or values and the foci of EIs. Second, the dominant approach of empirically investigating such questions has been linear, using symmetrical models such as regression analysis (e.g., Kruse et al., 2019 for SEIs and Douglas, 2013 for EIs), except for Douglas et al. (2020), who purposefully used configurational methods to reanalyze data from an earlier study on EIs (Douglas, 2013). Using fuzzy-set qualitative comparative analysis (fsQCA), Douglas et al. (2020) revealed that
the prior results, showing a two-way distinction between growth-oriented and independence-oriented EI (Douglas, 2013), yielded much “richer explanations of entrepreneurial decision-making” (p. 14). Thus, the configurational thinking approach complements traditional linear data analysis methods because it accommodates causal complexity between variables (conditions in terms of fsQCA) of interest, provides a finer-grained representation of entrepreneurial phenomena, and reflects important aspects of the heterogeneity and complexity inherent in entrepreneurship (Douglas et al., 2020).

To address these two shortcomings, the aim of this study is to uncover how personal characteristics predict EIs with different foci: commercially and social oriented. To do so, this study involves examination of how socially oriented individual predictors contribute to explanations of traditional and social EIs using a configurational thinking approach. The rationale for using such an analytical method is that there are multiple, similarly effective configurations of antecedents of EIs and SEIs and that the heterogeneity of entrepreneurial behavior is reflective of intercase differences amongst individuals. Theoretically, this research draws from prior workers in conventional models of traditional and social EIs (theory of planned behavior, e.g., Ajzen, 1991; entrepreneurial event model, e.g., Krueger & Brazeal, 1994; Krueger & Carsrud, 1993; Shapero & Sokol, 1982; and prosocial motive literature, e.g., Bacq & Alt, 2018; Bolino & Grant, 2016; Grant, 2007; Grant & Gino, 2010), and construal level theory (CLT; Trope & Liberman, 2010).

Through this approach, this study makes two main contributions. First, it adds to the literature on EIs by integrating CLT (Trope & Liberman, 2010) as a valuable theoretical lens to better understand the complexity of students’ intentions (e.g., Hallam et al., 2016). The study challenges the a priori congruence between the orientation of individual characteristics and EI foci by suggesting that students mentally represent their EIs as future temporally distant events, which are based on high-level construals, consisting of “general, decontextualized features that convey the essence of information about future events” (Trope & Liberman, 2003, p. 403). Because EIs are high-level
construals for students, they do not discriminate among the more concrete, subordinate, and contextual features of the different foci of social vs. commercial intentions. Consequently, multiple and equally effective configurations of conditions of socially-oriented antecedents can explain both EIs and SEIs. To further strengthen this argument, gender differences in the configurations leading to EIs and SEIs (Nikou et al., 2019) have also been explored. Whereas prior researchers found women and men possess different levels of EIs and SEIs (Arshad et al., 2016; Karimi et al., 2014; Lange et al., 2014) and for women, an entrepreneurial personal theory characterized as social entrepreneurship had a stronger relationship with entrepreneurial intent (Matherne III et al., 2020), this study postulates that women (and men) have similar mental representations of EIs, with different foci. These results support the argument that EIs are high-level construals, as gender disparities leading to EIs and SEIs do not emerge.

Second, this study contributes to recent work focused on the complexities of entrepreneurship that are “left unexamined by traditional methods” (Douglas et al., 2020, p. 14). Using a configurational thinking approach, the shortcomings of the traditional regression analysis are addressed via threefold objectives: (i) conjunction, which refers to the interdependency of multiple conditions leading to the outcome (Schneider & Wagemann, 2012), (ii) equifinality, which refers to the possibility of multiple pathways leading to the same outcome (Gresov & Drazin, 1997), and finally, (iii) asymmetry, which refers to the fact that conditions found to be causally related in one configuration may be unrelated or even inversely related in another configuration (Meyer et al., 1993, p. 1178). Accordingly, this study is able to more accurately capture the reality of how students perceive EIs, which is far more complex than the notion of “one size fits all,” challenging the nature of the claimed differences between traditional and social entrepreneurship.
Theory Development

Entrepreneurial Intentions with Different Foci: A Construal Level Theory Perspective

CLT addresses the link between psychological distance and the extent to which individuals think abstractly (high-level) or concretely (low-level) about objects or events in their lives (Trope & Liberman, 2010). The perception of these events or objects can vary across several types of psychological distance: (a) temporal, (b) spatial, (c) social, and (d) hypothetical distance (Liberman & Trope, 1998). High-level construals are relatively abstract, coherent, schematic, and superordinate prototypical mental representations of objects or events, compared with low-level construals (Fiske & Taylor, 1991; Trope & Liberman, 2010). As such, high-level construals entail one of many alternative interpretations, ignoring irrelevant or inconsistent details, but also ascribing additional information about the valence and meaning of the stimulus or actions and their relations to other stimuli or actions in the same context (Semin & Fiedler, 1988; Trope, 1986, 1989).

CLT is relevant for explaining how individuals mentally represent alleged future actions as their intentions. Prior studies on intentions to engage in healthy behaviors (Ahn, 2015; Lutchyn & Yzer, 2011), adopt specific e-learning systems (Ho et al., 2015), donate blood (Choi et al., 2012), or quit smoking (Kovač & Rise, 2011) consistently demonstrated that CLT helps researchers understand how individuals conceptualize their engagement in future actions. Building on CLT, this research proposes that mental representations of EIs with different foci (i.e., social and commercial) among university students have more commonalities than discrepancies because they are represented as high-level construals. A critical point here is to define the characteristics of the subject of interest, that is, the individual who is developing intentions. For individuals with low levels of professional experience and prior knowledge related to entrepreneurship, such as university students (c.f. Costa et al., 2017), there are reasons to believe that both traditional and social EIs should be represented as high-level construals. Two main arguments support this point. First, current university students are
from Generation Y (born between 1982 and 2000) and Generation Z (born after the 2000s) (Strauss & Howe, 1991), both of whom have a strong interest in entrepreneurship (Bresman & Rao, 2017), tend to pursue meaningful and fulfilling career paths (Lancaster & Stillman, 2002; Yang & Guy, 2006), and have an extended sense of social responsibility (Ng et al., 2010). University students of these generations are aware of the importance of sustainability and circular economy in business (Gazzola et al., 2020; Severo et al., 2017), are socially oriented at work (Torsello, 2019), and bring these beliefs and values to their prospective careers (Krahn & Galambos, 2014). Thus, it is likely that these generational characteristics of university students contribute to a more holistic mental representation of EIs, where social and commercial features are combined and blended in a high-level construal of EIs.

Second, for university students, the likelihood of engaging in actual entrepreneurial behaviors pertains to future events, high in abstraction and temporally distant. Specifically, both EIs and SEIs constitute a representation of speculative behavior that is hypothetical, in the distant future, and consequently categorized abstractly as high-level construals. This is particularly the case when students “begin their post-graduation careers as employees, presumably delaying the decision to become an entrepreneur until a future time” (Lange et al., 2014, p. 11). Accordingly, “if the distant future is represented more abstractly, then individuals should use broader categories to classify objects for distant situations than for proximal situations” (Trope & Liberman, 2010, p. 10). Therefore, students have difficulty perceiving the specificities that differentiate a commercial or a socially oriented intention, which constitutes a lower-level construal differentiation.

Goal-directed actions, such as intentions, may also be construed in terms of goals at different levels of abstraction (e.g., Zacks & Tversky, 2001). From such a perspective, high-level construals include action identifications at the superordinate “why level,” while the low-level construals relate to the subordinate “how level” details of the action. Therefore, students may perceive EIs as an end-
state abstract goal of their future behaviors, whereas the properties of the means to the end of that intention (i.e., being commercially vs. socially oriented) are likely to be part of the low-level construal and as such unimportant for their present attitudinal decision. Lawson’s (1997) hierarchy of goals (c.f. Brännback et al., 2007) defines a continuum from low-level to high-level goals, where more abstract goals are less likely to be enacted. Similarly, distant-future activities (i.e., high-level construals) are described in terms of superordinate goals whereas near-future activities (i.e., low-level construals) are described in terms of subordinate goals (Trope & Liberman, 2003).

If EIs and SEIs constitute high-level construals for students, based on CLT, this study anticipates that students do not differentiate the foci of these intentions. Consequently, socially oriented individual characteristics would be associated both with EIs and SEIs in different configurations. To test this assumption, this study focuses on the configurational role of four socially oriented individual-level predictors. First, there is empathy, as the affective “tendency for . . . feelings of warmth, compassion and concern for others undergoing negative experiences” (Davis, 1980, p. 6) and also as the first step of the design thinking process relevant during opportunity identification and assessment. Second, there is social entrepreneurial self-efficacy, defined as “one’s confidence in one’s competences and abilities to perform activities typical of social entrepreneurship” (Bacq & Alt, 2018, p. 334). Third, there are altruistic values, referring to “voluntary action, intended to benefit another, that is not performed with the expectation of receiving external rewards” (Eisenberg & Miller, 1987, as cited in Oswald, 1996, p. 615). Finally, social entrepreneurial outcome expectations are the perceived expected consequences of pursuing social entrepreneurship activities (Santos & Liguori, 2019; Vanevenhoven & Liguori, 2013).

There have been previous studies explaining the social aspect of SEI-related empathy, or responsiveness to the experiences of another (Davis, 2015) and the display of helping behaviors (Davis et al., 1999; Eisenberg et al., 1989). However, these four socially oriented individual
characteristics constitute moral principles and values that, according to CTL, are more prominent in predictions concerning psychologically distant events (Eyal & Liberman, 2012). Thus, “because values and moral rules tend to be abstract and general, people are more likely to use them in construing, judging, and planning with respect to psychologically more distant situations” (Eyal & Liberman, 2012, pp. 185–186), such as high-level construals (EIs and SEIs) among students.

Looking at Gender Differences from a CLT Perspective

To strengthen the argument that EIs constitute high-level construals for university students, and because this research proposed a new theoretical background, it is relevant to explore other well-established differences between EIs and SEIs. Because the masculine paradigm in entrepreneurship research (Bird & Brush, 2002) systematically found gender differences in the ways attitudes about entrepreneurship were developed and cognitively processed (Kickul et al., 2008), this study analyzes gender differences in the mental representations of EIs with different foci. Whereas prior researchers building on the social role theory (Eagly, 1987; Eagly et al., 2000) would anticipate that men are more likely to act on their EIs than are women (Shinnar et al., 2018), this research argues that, if EIs and SEIs are high-level construals, male and female students will display similar pathways associated with both intentions. This argument is further expanded as follows.

Social role theory postulates that through socialization and gender roles, men and women adopt different attitudes toward communal and agentic attributes (Eagly et al., 2000). Specifically, communal characteristics display a predominant focus on others, such as being affectionate, helpful, interpersonal, sensitive, nurturing, and gentle, and are ascribed more strongly to women. Agentic characteristics involve assertive, controlling, and confident tendencies, such as ambitious, dominant, forceful, independent, self-sufficient, self-confident, and leadership roles, and are typically ascribed

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1 This study focuses on gender as a socially constructed phenomenon developed through social, cultural, and psychological means (Ahl, 2006; West & Zimmerman, 1987) instead of biological sex; socially constructed gender, rather than biological sex, influences the mental representations of EIs among men and women.
to males. Prior studies in EIs agree with this reasoning. On the one hand, given entrepreneurship is predominantly considered masculine (Bird & Brush, 2002; Bruni et al., 2004; Hamilton, 2013), stereotypical ascriptions justify why women typically display lower levels of EIs (Gupta et al., 2008), whereas individuals with high levels of male gender identification have higher EIs (Gupta et al., 2009). The negative effect of perceived barriers to entrepreneurship on university students’ EIs appears to be more significant for women than for men because of gender role stereotypes (Shinnar et al., 2012). Men are also more likely to act on their EIs than women owing to the significant male gender stereotyping of entrepreneurship (Heilman, 1983; Shinnar et al., 2018). These results are consistent with the findings from the experiment developed by Gupta et al. (2019), who demonstrated that the normative representation of high-growth entrepreneurship is typically masculine and not linked to women. On the other hand, women are more likely to engage in social entrepreneurship than their male counterparts (Hechavarria et al., 2012). In a sample of students and professionals from Germany and South Africa, results were consistent, demonstrating that SEIs were higher for women than men and that EIs were higher for men than for women (Chipeta et al., 2020). Entrepreneurial personal theories characterized as social entrepreneurship have a stronger relationship with entrepreneurial intent for women than for men; societal pressures and norms lead women to see social entrepreneurship as a more desirable option for them (Matherne III et al., 2020). Social entrepreneurs are also typically perceived as higher in communality (typically ascribed to women) and lower in agency (typically ascribed to men), but in reality, it seems there is gender neutrality because gender stereotypes do not emerge about social entrepreneurs (Gupta et al., 2019). When culture comes into play, female social entrepreneurship is also more frequent in cultures with low power distance, humane orientation, and in-group collectivism but high future orientation and uncertainty avoidance (Hechavarria & Brieger, 2020).
Hence, in line with social role theory (Eagly, 1987) and people’s tendency to act and behave consistently with gender roles, and as prior scholars have suggested, women and men would display different mental representations (i.e., configurations of conditions) of SEIs and EIs. Thus, if SEIs and EIs are distinctive mental representations (i.e., low-level construals), these commonly shared beliefs about gender roles would, therefore, emerge when comparing ways in which women and men represent cognitively EIs with different foci because the prosocial and interpersonal nature of social entrepreneurship is more congruent with the female stereotype (i.e., more caring, affectionate, helpful, sympathetic, interpersonal, sensitive, nurturing and gentle); and the profit orientation of traditional entrepreneurship is more associated with male stereotypes (i.e., more ambitious, dominant, forceful, independent, self-sufficient, and self-confident).

Yet, based on the CLT lenses and the argument that university students represent EIs as high-level construals, gender differences between EIs and SEIs may be subtle because they do not discriminate among the idiosyncratic and incidental information about the two foci of EIs. Thus, if EIs and SEIs constitute high-level construals as this study proposes, differences between gender (but not differences within gender) would be expected in the configurations of conditions leading to EIs and SEIs. This means that, for students self-identifying as women, the pathways leading to EIs and SEIs are expected to be similar because both these intentions are high-level construals. Gupta et al. (2009) found that women who perceive a strong relationship between entrepreneurial and feminine characteristics also support this assertion. Similarly, for students self-identifying as men, the pathways leading to EIs and SEIs are also expected to be identical because one individual can identify with the characteristics most commonly associated with one gender but also identify strongly with another gender (see Gupta et al., 2009). Thus, to strengthen the argument that EIs are high-level construals, the present research looks at differences in the mental representation of EIs and SEIs between genders.
Method

Data Collection, Sample, and Measures

Given this study focused on EIs, a student sample was appropriate because it would aid understanding of the cognitive representation of the willingness to engage in future start-up activities. Prior researchers on EIs have also acknowledged the appropriateness of student samples to address these research questions (Liñán et al., 2011). The data used in this study represent a subset of the Phase 2 dataset of the Entrepreneurship Education Project, a global research initiative launched in 2010 that focuses on “the phenomena of transformation from student to entrepreneur” (Vanevenhoven & Liguori, 2013, p. 318). Surveys were distributed to professors teaching entrepreneurship around the world who, in turn, collected data from their students.

This study used a sample of 65 full-time undergraduate students (45 women and 20 men) from a U.S. private university located on the East Coast. Most of the students lived in suburban (57%) and urban (29%) areas, and 14% lived in rural areas. Students were business majors (61%), followed by liberal arts majors (20%) and science majors (19%). Although this was a convenience sample, students were purposefully selected from different majors because business students might be naturally more interested in entrepreneurship and have higher EIs. The vast majority of students in the sample have not started a business yet (91%), and about half of the students have parents or guardians with previous entrepreneurial experience (52%).

EIs were measured with one item adapted from Thompson (2009). Participants received the following instruction: “Thinking of yourself, how true it is that you . . .” and answered the question: “Intend to set up a new venture in the future.” The item was answered on a 7-point scale ranging from 1, “very untrue,” to 7, “very true.” SEI was measured with one item adapted from Farmer et al. (2009): “I am interested in starting a non-profit or NGO company.” Participants were asked to indicate their
agreement with the statement on a scale of 5 points ranging from 1 “strongly disagree” to 5 “strongly agree.” Both EI and SEI were the outcome variables.

Social entrepreneurship outcome expectations measured with the 5 items (Cronbach α = 0.863) such as “To address a social problem (environment issues, poverty, racism/sexism, cure disease, improve working conditions, access to education, etc.)” were inspired by Krueger et al. (2000). All the sentences were preceded by the following instruction: “To what extent do you expect to achieve the following outcomes by starting your own venture?” The item was answered on a 7-point scale ranging from 1, or “not at all,” to 7, “very much.”

Altruistic values were measured by four items (Cronbach α = 0.827) adapted from Smith (2006). Sample items included were “People should be willing to help others who are less fortunate” and “Personally, assisting people in trouble is very important to me.” Participants were asked to indicate their agreement with the statement on a scale of 5 points ranging from 1, or “strongly disagree,” to 5, or “strongly agree” (α = 0.61).

Empathy was measured with seven items (Cronbach α = 0.729) also adapted from Smith (2006). Sample items included were “I often have tender, concerned feelings for people less fortunate than me,” “When I see someone being taken advantage of, I feel kind of protective toward them,” and “I would describe myself as a pretty soft-hearted person.” Participants were asked to indicate their agreement with the statement on a scale of 5 points ranging from 1, or “strongly disagree,” to 5, or “strongly agree.”

Social entrepreneurial self-efficacy was measured with eight items (Cronbach α = 0.847) adapted from Nga and Shamuganathan (2010). Participants were asked to rate how confident they were in their abilities to accomplish a list of various activities. Degree of confidence was measured on a scale from 0 to 100, where 0 indicated “absolutely no confidence” in their ability, 50 indicated “moderately certain” that they could successfully complete the activity, and 100 indicated they were
“completely confident” in their ability. Sample activities listed were “Be determined to meet a social need,” “Be strongly committed to a social vision,” and “Be an agent of social change” (α = 0.93).

Gender was coded as 1 = man and 2 = woman. While there is an important distinction between biological sex and socially constructed gender, there is a strong overlap between both in practice. Thus, and in line with prior research (e.g., Pergelova et al., 2019; Santos & Neumeyer, 2021), biological sex was considered a reasonable representation of an individual’s gender identity as reported by students. Table 1 shows the descriptive statistics and correlation matrix for the variables of interest.

Method of Analysis

To analyze the conditions leading to the occurrence of both traditional EIs and SEIs, this research used fsQCA (Ragin, 1987). The fsQCA method, although relatively new in scholarship on entrepreneurship, has proven highly useful in furthering the understanding of a variety of phenomena (Douglas et al., 2020; Hand et al., 2020; Renko et al., 2020; Şahin et al., 2019) because it reveals fine-grained details about complex entrepreneurial phenomena and is well-suited for dealing with complex causal relationships (Misangyi et al., 2017). In addition, Kraus et al. (2018, p. 27) agreed that the fsQCA approach is a relevant data analysis method in entrepreneurship research, given it shapes human thinking and crafts theory. The fsQCA provides an empirical basis for abduction to explain surprising findings and provoke new theory-building efforts, such as those developed in this paper. This study used fsQCA 3.0 software (Ragin, 2018) and a QCA package in R (Dul, 2016) to perform the data analysis, and addressed the causal complexity through the three principles of conjunction, equifinality, and asymmetry.
Calibration. The main part of the fsQCA is the sufficiency analysis, but it is important to start by transforming Likert scores into fuzzy-set membership scores. The variables (or conditions in terms of the fsQCA approach) measured with Likert-type scales should be calibrated for their degree of membership in sets of cases to produce scores ranging from 0.00 = full non-membership to 1.00 = full membership (a value of 0 indicates fully out, or no set membership, and a value of 1 indicates fully). In this process, the exact value of 0.5 illustrates the crossover point and maximum ambiguity. In the entire process of calibration, the knowledge of the researcher(s) plays a crucial role, and decisions must be supported based on a solid theoretical foundation (Harms et al., 2019; Kraus et al., 2018; Ragin, 2008). Following the approach recommended by Woodside (2013), three anchors were created to identify the degree of membership for each condition in the data set. This approach is known as direct calibration when calibrating interval scales. For example, the maximum value of an interval scale (e.g., 7 for EIs, 100 for social entrepreneurial self-efficacy, and 5 for altruism/empathy) were calibrated into a full membership (fuzzy score 0.95) and the minimum values (e.g., 1 for social EIs or altruism/empathy and 10 for social entrepreneurial self-efficacy) into a full non-membership (fuzzy score = 0.05). To avoid losing data, which have been transformed exactly at the median point (i.e., fuzzy score = 0.50 for crossover point), values were set close to the median, representing the crossover point (e.g., 2.9 for SEIs, 3.9 for EIs, and 4.9 for social entrepreneurial self-efficacy, based on Frazier et al. [2016]). Given that gender was measured as a binary variable, 0 represents woman and 1 represents man.

Necessity and sufficiency analyses. Following the calibration, necessity analysis was performed to reveal if there was any condition that could be identified as necessary for EIs and SEIs to occur (Arenius et al., 2017). A condition is called necessary when it has to be present for an outcome to occur and it is said to be sufficient when the condition alone can produce the outcome. The degree to
which necessity relationships are relevant can be assessed through consistency; values above 0.90 show important relationships (Schneider & Wagemann, 2010, 2012).

When SEI was used as an outcome, the necessity analysis showed that the presence of two conditions (empathy and social entrepreneurial self-efficacy) could be seen as necessary (see Table 1). This result could imply that SEIs can only be realized in many cases specified by the coverage value if those conditions are satisfied. The term “coverage” refers to the proportion of the sum of the membership values for the cases that support a particular combination (Woodside & Zhang, 2013). Regarding EIs, the necessity analysis showed that the consistency values for all conditions were below the threshold of 0.90, meaning that none of the conditions individually were necessary for EI presence (see Table 2).

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Insert Table 2 about here
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Next, the truth table was constructed, listing ways the 65 cases were distributed over the configurations. Following the set-theory and recommendation from Ragin (2008), only configurations that appeared at least once in the data were included in the truth table, based on two criteria: (a) the frequency threshold; and (b) having a minimum value of 0.85, given that their consistency value was included in the truth table. Consistency refers to the extent to which a given combination is a sufficient condition for the outcome to occur, and the cutoff value is recommended to be 0.75 (Ragin, 2008).

Schneider and Wagemann (2010) noted that to simplify the configurations in the truth table into the solutions, the fsQCA applies Boolean algorithms using counterfactual analysis. Counterfactuals are the irrelevant configurations of conditions that are excluded in editing the truth table (Ragin, 2008). The sufficiency analysis, which is the final step of fsQCA analysis, generates three types of solutions: the complex solution (no counterfactuals considered), intermediate solution (only easy counterfactuals considered), and parsimonious solution (all logical counterfactuals
considered) (Ragin, 2008). This paper has used intermediate solutions to elaborate and discuss the causal paths leading to the outcome of interest (both EIs and SEIs). Intermediate solutions are preferred over the complex and parsimonious solutions because they maintain the necessary conditions (Fiss, 2011; Ragin, 2008). Two terms illustrate the fsQCA results and elaborate on the solutions: core conditions and peripheral conditions. Core conditions are part of both parsimonious and intermediate solutions, and the peripheral conditions exclusively appear in the intermediate solutions.

Finally, the solutions can be assessed using three coverage measures (solution, raw, and unique coverage). Coverage refers to the proportion of the sum of the membership values for the cases that support a particular combination and can be calculated using a solution set or individual solutions (Woodside & Zhang, 2013). In Korjani and Mendel’s (2012) study, (a) a solution coverage refers to the proportion of cases that can be described by at least one configuration from a solution set, (b) a raw coverage refers to the proportion of cases that the configuration can describe, and (c) a unique coverage refers to the proportion of cases that can be described by a configuration appearing in a solution set but cannot be described by any other configuration from the set.

Results

Antecedents of entrepreneurial intentions With Different Foci

The fsQCA analysis revealed three solutions leading to SEIs and two solutions leading to EIs (Table 3). Regarding SEIs (Table 3, top part), Solution One indicates that the presence of altruistic values as a core condition and social entrepreneurial self-efficacy lead to SEIs. Solution Two indicates that the presence of altruism and empathy and the absence of social entrepreneurship outcome expectations lead to SEIs. Solution three indicates that the presence of empathy, social self-efficacy, and social entrepreneurship outcome expectations lead to SEIs. Regarding the SEI as the outcome of
interest, Solution One has the highest values regarding the consistency (0.933) and coverage (0.820). The overall solution consistency for all three solutions is 0.867 and the overall solution coverage is 0.908, covering 91% of the cases in SEIs.

When considering traditional EIs as the outcome of interest (Table 3, bottom part), two solutions emerged. Solution One indicates that the presence of altruistic values, social entrepreneurial self-efficacy as a core condition, and the absence of empathy lead to the formation of traditional EIs. Solution Two indicates the presence of empathy, social entrepreneurial self-efficacy and social entrepreneurship outcome expectations, and the absence of altruistic values lead to EIs. The overall solution consistency for these two configurations was 0.851 and the overall coverage value was 0.536, covering about 54% of EIs. The evaluation of these five (three for SEIs and two for EIs) combinations of configurations revealed nuanced aspects of the sample’s heterogeneity, defining subgroups for which various configurations led to the same outcome, for both SEIs and traditional EIs (Douglas et al., 2020).

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Insert Table 3 about here
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Gendered configurations in the antecedents of EIs with different foci. The results showed no significant differences in the mean scores between men and women in any variable, except for empathy (women scored higher than men \( F(63;1) = 12.93, p < 0.01 \)) (Table 4).

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Insert Table 4 about here
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The subsequent step included gender in the analysis, which revealed three solutions (configurations of conditions) for the formation of SEIs as the outcome (see Table 5). Two solutions were associated with women and one solution was associated with men. Solution One (applicable
only to men) indicates that the presence of altruistic values and social entrepreneurial self-efficacy lead to SEIs (see Table 5, top part). Solution two (applicable only to women) indicates the presence of altruistic values and empathy as a core condition and the absence of social entrepreneurship outcome expectations lead to SEIs. Solution Three (applicable only to women) indicates the presence of empathy as a core condition, social entrepreneurial self-efficacy, and social entrepreneurship outcome expectations lead to SEIs. Regarding the consistency value, Solution One had the highest value (0.966), while Solution Three had the highest coverage value (0.549). The overall solution coverage was 0.871, indicating that these three solutions cover 87% of SEI.

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Insert Table 5 about here
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Regarding traditional EIs, fsQCA results revealed five configurations of conditions leading to the formation of EIs (Table 5, bottom part). Solution One (applicable only to men) indicates that the presence of altruistic values and social entrepreneurial self-efficacy and the absence of empathy lead to EI (highest consistency value = 0.840). Solution Two (applicable only to women) indicates that the presence of altruistic values and empathy as a core condition and the absence of social entrepreneurship outcome expectations lead to the formation of EIs. Solution Three (applicable only to women) indicates that the presence of empathy as a core condition, social entrepreneurial self-efficacy, and social entrepreneurship outcome expectations lead to the formation of EIs. Solution Four (applicable only to men) indicates that the presence of altruism, social entrepreneurship outcome expectations, and social entrepreneurial self-efficacy lead to EIs. Interestingly, the fifth solution indicates that the presence of all conditions leads to the outcome of interest, but it is not gender specific; this solution had the highest coverage (0.616) value. The overall solution consistency value of all configurations was 0.890, covering 76% of the EIs.
Based on the results of fsQCA when gender was included in the analysis, it is possible to speculate that empathy is an important condition for women—in fact, a core condition—whereas for men, social entrepreneurial self-efficacy is an important condition. These results support the proposition that there are no differences within genders, but there are differences between genders in the configurations leading to EIs and SEIs. Specifically, the pathways leading to SEIs and EIs for women were the same (Solutions 2 and 3 in SEIs are the same as the Solutions 2 and 3 in EIs), and the pathways leading to SEIs and EIs for males were almost identical. In all configurations of conditions leading men to SEIs and EIs, the presence of altruism and social entrepreneurial self-efficacy were observable in all solutions (Solution 1 in SEIs and Solutions 1 and 4 for EIs).

Discussion and Conclusion

Although social and commercial EIs have been broadly explored (Bacq & Alt, 2018; Liñán & Fayolle, 2015), prior researchers have focused on each of them separately or have looked for differences in their antecedents (Bacq & Alt, 2018), departing from the assumption that their cognitive representations are intrinsically different. However, entrepreneurship is far more complex; individuals’ cognitions and mental representations are wired in idiosyncratic configurations. This study lifted the veil off such complexity by challenging this prior assumption in the entrepreneurial literature debate. Grounded in CLT, this study has we have argued that university students do not distinguish between EIs with different foci because these intentions are psychologically distant future events, representing high-level construals.

The findings of this research supported this claim; the configurations of antecedents leading to EIs and SEIs were not hugely disparate but shared many characteristics even when considering socially oriented antecedents. Although all the conditions (i.e., altruistic values, empathy, social entrepreneurial outcome expectations, and social entrepreneurial self-efficacy) influenced both types of EIs, none of the previously identified antecedents in the literature have a consistent effect on EIs.
and SEIs. Rather, the relationship is better considered through a configurational lens that allows the equifinal nature of this relationship to show through. Thus, it appears that students’ cognitive representations of their EIs are psychologically distant (i.e., temporally, geographically, socially, or in hypotheticality further away) and represented abstractly. This means that EIs, independent of being commercially and socially oriented, constitute further situations, distant from the daily lives of the students. This is in line with early studies of CLT showing that temporally distant events were processed more abstractly than temporally close events or situations (Trope & Liberman, 2010). Abstraction makes EIs’ mental representations broader, more inclusive, and focused on central characteristics, and thus the foci of EIs seem rather subtle to university students (Trope et al., 2007). These findings are also in line with the generational argument suggesting that Generations X and Y integrate social responsibility and meaningful purposes in their professional and personal decisions (Bresman & Rao, 2017; Lancaster & Stillman, 2002; Yang & Guy, 2006). Therefore, the results of this paper uncovered new insights into the complexities of entrepreneurial phenomena left unexamined by traditional methods and previously unexplored through other theoretical frameworks discussing EIs.

To strengthen the argument that EIs and SEIs are high-level construals for students, this study explored gender differences. Whereas prior researchers found that women and men have different individual characteristics associated with EIs and SEIs (Arshad et al., 2016; Karimi et al., 2014; Nikou et al., 2019; Santos et al., 2016), the configurational approach demonstrated that women have the same pathway associated with EIs and SEIs. Similarly, men also display the same configurations of conditions leading to EIs and SEIs. These results strengthened the argument that EIs and SEIs are high-level construals for university students; there are no differences in the configurations of conditions leading to EIs and SEIs within genders. Whereas most role models in traditional entrepreneurship tend to be men (Bird & Brush, 2002), and entrepreneurship is still gendered (Brush
et al., 2009; Harrison et al., 2015; Jennings & Brush, 2013) in such a way that social entrepreneur examples tend to be female and high-growth commercial entrepreneurs tend to be male (see gender typing of entrepreneurs, e.g., Gupta et al., 2008; Santos et al., 2016), our results suggest Generation X and Y university students are more gender neutral, or at least their genders do not emerge in the context of EIs with different foci. These results give additional support to the finding that EIs, whether traditional or social, are gendered and these differences are more salient than the foci of EIs (Nikou et al., 2019).

CLT adds a new perspective to the EI literature and brings a possible explanation of the weak relationship between intentions and subsequent behaviors for university students. Krueger raised an intriguing question (2017) “of what value is a strong intention without the cognitive resources to make it realistic?” (p. 39). The present results offer a tentative answer suggesting that entrepreneurial intent, whether profit oriented or socially oriented, may be too abstract to offer sufficient cognitive resources to allow for action in the present. This would explain why most students do not immediately create ventures after graduation but rather pursue their entrepreneurial endeavors later in their professional careers. Recognizing that EIs are high-level construals for students also has implications for the entrepreneurial mind set, particularly to the behavioral dimension (Kuratko et al., 2020). The abstract nature of the mental representation of EIs may contribute to understanding the incubation time needed for entrepreneurship and movement from intentions to actions. Future research on CLT and EIs, mindset, and the intention–action link is encouraged; these results also have important implications for entrepreneurship education and practice.

Finally, these results have raised the importance of understanding the role of temporal distance in EIs, which adds complexity to understanding the theory of planned behavior in entrepreneurship (Krueger & Carsrud, 1993). According to Trope and Liberman (2010), as temporal distance increases, desirability (a higher-level, abstract construal) of an action’s end-state will have to increase for action
to occur (see Brännback et al., 2007). The greater the temporal distance, the less likely the intention to transform a goal into action. To be blunt: when an intention is too abstract, it could be the equivalent of a dream, and consequently, it could increase the time lag between intention and action. The level of abstractness of EIs does not undermine its relevance, and instead calls out the urgency of adding complexity to the theoretical perspectives dominating entrepreneurial intention literature for the past four decades to implement more evidence-based practices.

In particular, this research brings important implications for entrepreneurship education. Educators should recognize that students’ EIs are abstract mental representations, and consequently, educational pedagogies should aim at transforming EIs in low-level construals. Experiential learning approaches (e.g., Schindehutte & Morris, 2016) where students have real-life experiences in concrete contexts (Leitch et al., 2012, as in poverty; Santos et al., 2019) are particularly important for promoting psychological closeness and increasing the feasibility of a behavior or event (e.g., Benschop et al., 2020). By taking entrepreneurial action and practicing (Neck et al., 2014) in social and commercially oriented contexts, students decrease the temporal, spatial, and hypothetical distance to entrepreneurship, learn to focus on details, and thus develop their concrete entrepreneurial mindset. These pedagogical approaches to promote concrete entrepreneurial thinking can also be achieved in online environments, which have been quickly emerging in the past year owing to the COVID-19 pandemic (Liguori & Winkler, 2020), such as using films (Liguori et al., 2020). Overall, implementing experiential opportunities in commercial and social scenarios (e.g., Bandera et al., 2018; Hockerts, 2018) will help students gain specific, idiosyncratic, and incidental information about entrepreneurship while also ascribing meaning deduced from their experiences and knowledge organized in structured representations.

This study carries with it limitations and concerns about generalization that should be addressed. Owing to its conceptual and empirical exploratory nature, the study is not seeking
generalizability; it is rather encouraging other scholars to challenge assumptions in EI research. This stream of research is not dead—rather the opposite (Douglas, 2020; Krueger, 2009b, 2017). Nevertheless, this study was limited to U.S.-based students, and future studies should explore university student samples in different cultures, given that cultural context plays an important role in the cognitive representation of EIs and also in the role of gender consideration (Shinnar et al., 2012).

Moreover, as per the fsQCA method, two limitations should be carefully addressed by the researchers: the importance of carefully specifying the frequency and consistency threshold and the importance of carefully identifying the three anchors for calibration, which both require researchers’ substantial knowledge (Ragin, 2008).

The emerged configurations of conditions are idiosyncratic and constitute event privacies (MacMillan & Katz, 1992). To better cope with this idiosyncrasy, this study adopted theories from another field (the CLT) and used nonlinear data analysis methods (fsQCA) to capture patterns in complexity. Owing to the idiosyncrasy inherent in the entrepreneurial experience, it is not expected that the precise configurations of conditions (all pathways) will be replicable in other samples. However, the finding that students perceive EIs with different foci as high-level construals is expected to be generalized to students and other future entrepreneurs without prior knowledge or start-up experience.
References


Table 1. Descriptive statistics and correlation matrix.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Entrepreneurship intentions</td>
<td>4.91</td>
<td>1.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Social entrepreneurship intentions</td>
<td>3.47</td>
<td>1.20</td>
<td>0.43***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Social entrepreneurship outcome expectation</td>
<td>5.12</td>
<td>1.52</td>
<td>0.14</td>
<td>0.37**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Altruistic values</td>
<td>3.73</td>
<td>0.54</td>
<td>-0.17</td>
<td>0.08</td>
<td>0.47***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Empathy</td>
<td>3.89</td>
<td>0.59</td>
<td>-0.08</td>
<td>-0.13</td>
<td>0.19</td>
<td>0.35**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Social entrepreneurial self-efficacy</td>
<td>69.11</td>
<td>21.70</td>
<td>0.14</td>
<td>0.48***</td>
<td>0.61***</td>
<td>0.38**</td>
<td>0.33*</td>
<td></td>
</tr>
<tr>
<td>7. Gender, a</td>
<td>1.69</td>
<td>0.47</td>
<td>0.00</td>
<td>-0.09</td>
<td>-0.11</td>
<td>-0.08</td>
<td>0.43***</td>
<td>0.10</td>
</tr>
</tbody>
</table>

***, p < 0.001, ** p < 0.01, * p < 0.05; a 1 = man; 2 = woman.

Table 2. The necessity of causal conditions (Social entrepreneurial intentions and traditional entrepreneurial intentions)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Consistency</th>
<th>Coverage</th>
<th>Consistency</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.676 (0.324)</td>
<td>0.609 (0.655)</td>
<td>0.692 (0.308)</td>
<td>0.633 (0.632)</td>
</tr>
<tr>
<td>Altruistic value</td>
<td>0.852 (0.598)</td>
<td>0.883 (0.933)</td>
<td>0.754 (0.538)</td>
<td>0.795 (0.853)</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.901 (0.453)</td>
<td>0.799 (0.952)</td>
<td>0.828 (0.415)</td>
<td>0.746 (0.884)</td>
</tr>
<tr>
<td>Social entrepreneurial self-efficacy</td>
<td>0.934 (0.377)</td>
<td>0.811 (0.833)</td>
<td>0.819 (0.352)</td>
<td>0.722 (0.789)</td>
</tr>
<tr>
<td>Social entrepreneurial outcome expectations</td>
<td>0.872 (0.441)</td>
<td>0.818 (0.819)</td>
<td>0.789 (0.408)</td>
<td>0.752 (0.768)</td>
</tr>
</tbody>
</table>

Note: The value for negation of a condition is shown in the parentheses.

Table 3. Social EI and traditional EI (without gender) (Frequency = 2; Consistency cut-off = 0.85)

<table>
<thead>
<tr>
<th>Solution</th>
<th>Altruistic value</th>
<th>Empathy</th>
<th>Social entrepreneurial self-efficacy</th>
<th>Social entrepreneurial outcome expectation</th>
<th>Consistency</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>0.933</td>
<td>0.820</td>
<td>0.034</td>
</tr>
<tr>
<td>2</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>0.887</td>
<td>0.425</td>
<td>0.016</td>
</tr>
<tr>
<td>3</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>0.902</td>
<td>0.803</td>
<td>0.072</td>
</tr>
</tbody>
</table>

Overall solution consistency 0.867
Overall solution coverage 0.908

<table>
<thead>
<tr>
<th>Solution</th>
<th>Altruistic value</th>
<th>Empathy</th>
<th>Social entrepreneurial self-efficacy</th>
<th>Social entrepreneurial outcome expectation</th>
<th>Consistency</th>
<th>Raw Coverage</th>
<th>Unique Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>0.879</td>
<td>0.385</td>
<td>0.047</td>
</tr>
<tr>
<td>2</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>0.857</td>
<td>0.488</td>
<td>0.151</td>
</tr>
</tbody>
</table>

Overall solution consistency 0.851
Overall solution coverage 0.536

Note: ● the presence of the condition; ○ the absence of the condition; an empty cell indicates that the condition has no effect on the outcome variable; large circles present the core conditions and small circles shows the peripheral conditions. Core conditions are part of both parsimonious and intermediate solutions; and the peripheral conditions are only appearing in the intermediate solutions.
Table 4. Gender differences in the variables of interest.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Men</th>
<th></th>
<th>Women</th>
<th></th>
<th>p-value gender differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial intentions</td>
<td>4.89</td>
<td>2.08</td>
<td>4.91</td>
<td>1.84</td>
<td>n.s.</td>
</tr>
<tr>
<td>Social entrepreneurial intentions</td>
<td>3.63</td>
<td>1.31</td>
<td>3.41</td>
<td>1.17</td>
<td>n.s.</td>
</tr>
<tr>
<td>Social entrepreneurial outcome expectation</td>
<td>5.38</td>
<td>1.46</td>
<td>5.01</td>
<td>1.55</td>
<td>n.s.</td>
</tr>
<tr>
<td>Altruistic values</td>
<td>3.80</td>
<td>0.52</td>
<td>3.71</td>
<td>0.55</td>
<td>n.s.</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.53</td>
<td>0.62</td>
<td>4.06</td>
<td>0.50</td>
<td>**</td>
</tr>
<tr>
<td>Social entrepreneurial self-efficacy</td>
<td>65.94</td>
<td>26.45</td>
<td>70.55</td>
<td>19.45</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

*** p < 0.001, ** p < 0.01, * p < 0.005

Table 5. Social EI and traditional EI (with gender) (Frequency = 2; Consistency cut-off = 0. 80).

<table>
<thead>
<tr>
<th>Outcome of interest = Social entrepreneurial intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

Overall solution consistency 0.888
Overall solution coverage 0.871

<table>
<thead>
<tr>
<th>Outcome of interest = Traditional entrepreneurial intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

Overall solution consistency 0.890
Overall solution coverage 0.757

Note: ● denote “woman”; ○ denote “man”; an empty cell indicates that the condition has no effect on the outcome variable.