

# How do gender attitudes influence the relationships between perceived desirability, perceived feasibility and social entrepreneurial intentions?

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## Abstract

**Purpose** – This study aims to understand how perceived desirability and perceived feasibility influence Portuguese higher education students' social entrepreneurial intention and general entrepreneurial intention and explore how gender attitudes can affect these relationships.

**Design/methodology/approach** – This study's sample comprises 391 participants. The hypotheses formulated in the research model were tested through structural equation modelling, using the bootstrapping method to perform decomposition tests and multigroup analyses to assess the effect of gender on perceived desirability, perceived feasibility and social and general entrepreneurial intention.

**Findings** – The sample data reveal that women have a greater social entrepreneurial intention, and men have a greater general entrepreneurial intention. The results regarding the research model reveal that perceived desirability positively influences social and general entrepreneurial intention, with stronger relationships for men than for women. However, perceived feasibility positively influences overall entrepreneurial intention but is insignificant in explaining social entrepreneurial intention. When the differences between genders are analysed, the perceived feasibility by women is significant and positively influences the social entrepreneurial intention, not being significant when men are considered. Contrary to previous studies about higher education students, men have a higher perceived desirability in both general and social entrepreneurial intentions, while women have a stronger perceived feasibility in both general and social entrepreneurial intentions.

**Originality/value** – This paper contributes to the development of the social entrepreneurship literature, demonstrating that social entrepreneurial intention can be influenced by gender. The results show the importance of considering the spatial and organisational context in examining the relationships



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between perceived desirability/perceived feasibility and social entrepreneurial intentions of men and women.

**Keywords** Social entrepreneurial intentions, Perceived desirability, Perceived feasibility, Gender attitudes

**Paper type** Research paper

## 1. Introduction

Faced with the social, economic and environmental crises that the world is facing, which result in a lack of opportunity, unemployment, inequality and exclusion, entrepreneurship assumes an important solution to alleviate these problems. Entrepreneurship involves transforming new ideas into innovative ventures by developing managerial skills, creativity, perseverance and risk-taking (Sigüenza-Orellana *et al.*, 2022). Social entrepreneurship is gaining attention, but it is still an emerging topic in academic research (Latif and Ali, 2021). Social entrepreneurship is a process that aims to create and take advantage of opportunities, using controlled resources and generating wealth reinvested in the business or the community (Chell, 2007).

Social entrepreneurship has provided answers to issues previously neglected by non-governmental organisations, governments, companies and non-profit organisations (Zahra *et al.*, 2009). Furthermore, social entrepreneurship supports development and contributes to achieving sustainable development goals (SDGs). However, adopting the SDGs requires sustainable solutions to social problems, and social entrepreneurs can serve as catalysts to provide unique, sustainable solutions to social problems while ensuring economic returns (Hossain *et al.*, 2021). Social entrepreneurship is driven by passionate social entrepreneurs whose mission is to create social value and bring about social change and transformation (Aloulou *et al.*, 2023). Social entrepreneurs bring change by providing employment and prosperity by reducing poverty, illiteracy, social exclusion and gender discrimination (Hossain *et al.*, 2021; Akter *et al.*, 2020). Gender is considered a conditioning factor of entrepreneurship. Men and women have different motivations, behaviours, preferences, and business skills. However, the social construction of gender and the roles assigned to men and women make it difficult for women to engage, creating inequalities and limiting women's full participation (Sigüenza-Orellana *et al.*, 2022; Portillo Navarro and Millán Jiménez, 2016).

Female entrepreneurship is often motivated by a lack of employment opportunities, as well as the desire to fulfil family responsibilities that can motivate women (Naguib, 2022; Solesvik *et al.*, 2019). This can include caring for children or elderly relatives, making traditional employment options less viable. In addition, women may be motivated to start their businesses to pursue their passions and achieve financial independence (Wimm, 2005). Despite these factors, female entrepreneurship is a valuable and growing sector that can offer women opportunities for personal and professional growth. Therefore, for women, entrepreneurship represents a professional opportunity to generate income while reconciling family and career issues (Braches and Elliott, 2017; Gomes *et al.*, 2022).

According to PSEM (2021), in 2020, women held 15.7% of management positions in companies listed on the Portuguese Stock Exchange (below the European average of 19.3%). However, the proportion of women in management positions gradually increases but remains uneven. In Portugal, in 2017, 2.1% of women held managerial positions against 4.5% of men. However, social entrepreneurship promotes a society with gender equality (PSEM, 2021). According to PSEM (2021), about 45% of social entrepreneurs worldwide are women. In Portugal, around 53% of women are in management positions in social enterprises. The values are similar for positions of directors (53%) and workforce (54%). Surprisingly, this type of leadership is more gender-balanced than in other contexts. The stronger representation of women in social ventures can be explained in light of research suggesting that women are generally more altruistic and socially oriented than men. Due to this motivation, they are more likely to find or manage a social venture (PSEM, 2021). In Portugal, according to the PSEM (2021), the biggest barriers for social enterprises: (1) lack of options to finance social enterprises

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after starting the activity; (2) low understanding/awareness among the public and/or customers (48%); (3) weak lobby for social entrepreneurship (45%).

Given this reality, although in companies with a social nature in Portugal, women already present balanced values compared to men. However, the same does not happen with other types of companies (e.g. listed companies), with Portugal below the European average. Thus, it is urgent to reformulate the dynamics of inequality manifested in the asymmetrical structural power relations that limit equal opportunities between men and women. Education can be a fundamental strategy to carry out structural changes that facilitate promoting human rights without discrimination, becoming entrepreneurs and building fair and egalitarian relationships (Sigüenza-Orellana *et al.*, 2022; Gomes *et al.*, 2021).

The social entrepreneurship literature indicates relatively limited prior theoretical and empirical research to identify precedents for social entrepreneurial intentions (Aloulou *et al.*, 2023; Zaremozhzabieh *et al.*, 2019). The literature claims that situational, motivational and personal factors are fundamental in identifying social entrepreneurial intentions (Mair and Noboa, 2006; Aloulou *et al.*, 2023). Decision-making regarding social entrepreneurial intentions is also influenced by factors such as perceived desirability and perceived feasibility of starting a social enterprise. These factors, in turn, are influenced by the level of empathy, entrepreneurial self-efficacy and social support individuals have (Mair and Noboa, 2006; Dickel and Eckardt, 2021). In this context, it becomes important to explore how gender attitudes can influence social entrepreneurship intentions' perceived feasibility and desirability.

In the literature about gender differences attitudes in social entrepreneurial intentions, they have been studied in some contexts, with studies carried out in India (Dato-on *et al.*, 2022; Latif and Ali, 2021), Bangladesh (Latif and Ali, 2021; Hossain *et al.*, 2021), Pakistan (Latif and Ali, 2021), Germany (Dickel and Eckardt, 2021) and USA (Ko and Kang, 2022; Santos *et al.*, 2021). However, it is recognised that more quantitative studies are needed on the antecedents of social entrepreneurial intention in understudied contexts (Aloulou *et al.*, 2023; Rambe and Ndofirepi, 2021; Urban and Teise, 2015; Dickel and Eckardt, 2021), as is the case of Portugal.

Social entrepreneurship has gained significant attention in recent years, particularly in the higher education context. Several studies have explored the challenges and opportunities associated with social entrepreneurship education in higher education students (García-González and Ramírez-Montoya, 2023; Roslan *et al.*, 2022). Higher education students are a crucial population to study regarding social entrepreneurship because they represent the future workforce and can contribute to social and economic development (Roslan *et al.*, 2022). Moreover, social entrepreneurship education aligns with the goals of higher education institutions, which aim to prepare students for the labour market while promoting social responsibility and civic engagement (Chillakuri, 2020; García-González and Ramírez-Montoya, 2021).

The importance of social entrepreneurship education for higher education students lies in its potential to provide students with the skills and knowledge needed to address social and environmental issues through innovative solutions. Social entrepreneurship education can help create, develop and sustain a growing generation of social entrepreneurs (García-González and Ramírez-Montoya, 2021; Ndou, 2021). Furthermore, incorporating cross-curricular social entrepreneurship projects in various courses increases students' ability and motivation to become social entrepreneurs (Shahid and Alarifi, 2021). In this way, social entrepreneurship education can help students develop a sense of purpose and social responsibility, enhance their leadership and teamwork skills, and promote creativity and innovation (Addae and Ellenwood, 2022). Furthermore, social entrepreneurship education can provide students with hands-on experience in developing and implementing solutions to social and environmental problems, which can be valuable for their future careers (Roslan *et al.*, 2022; Shahid and Alarifi, 2021). Thus, social entrepreneurship education can benefit individual students and contribute to the development of a more socially responsible society.

Therefore, this study aims to understand how perceived desirability and feasibility influence social entrepreneurial intention and entrepreneurial intention in Portuguese higher education students and how gender attitudes can affect these relationships. For this, 391 valid responses were collected.

This study makes three main contributions. First, this study contributes to recent work on social entrepreneurial intention and entrepreneurial intention in general in academia. In general, previous studies have analysed social intention or entrepreneurial intention in general in isolation (e.g. [Hsu and Wang, 2019](#); [Aloulou et al., 2023](#); [Gomes et al., 2021](#)). In contrast, this study highlights how social and entrepreneurial intentions are studied simultaneously, analysing whether they can be influenced by perceived desirability and feasibility. Second, this study takes gender differences in attitudes toward entrepreneurial intention (social and general) into account, in contrast to other studies that do not take gender differences into account (e.g. [Hsu and Wang, 2019](#); [Zaremohzzabieh et al., 2019](#)). This approach allows us to highlight how gender attitudes impact the intention to start a social or for-profit enterprise, combining the commercial/social entrepreneurial intention literature and the critical feminist literature. Finally, this study provides insights into the Portuguese context, in which studies on the perspectives of the present study are not known.

## 2. Literature review

### *2.1 Social/general entrepreneurial intention, gender role and spatial/organisational context*

The main models used to elucidate the association between a person's features and entrepreneurial intentions are the entrepreneurial event model ([Shapero and Sokol, 1982](#)) and the theory of planned behaviour ([Ajzen, 1991](#)). In the entrepreneurial event model, the intention to create a new business depends on three factors: perceived desirability, the tendency to act and perceived feasibility. On the other hand, the theory of planned behaviour highlights three vital factors that influence an individual's intention to execute a certain behaviour: the attitude towards the act, social norms and perceived behavioural control. The two models are similar since perceived desirability is an association of attitude toward the behaviour and subjective norms, while perceived feasibility is comparable to perceived behavioural control ([Krueger et al., 2000](#)). Both models are very important in predicting general and social entrepreneurial intentions, which depend on perceived desirability and feasibility ([Dickel and Eckardt, 2021](#); [Fitzsimmons and Douglas, 2011](#)).

Attending that the process of beginning a new venture starts with a person's intention, it is essential to analyse the antecedents of intentions to begin a venture ([Wurthmann, 2014](#)), including social intentions. Social entrepreneurs make important contributions to the communities, implementing creative businesses to address multifaceted and persistent social issues ([Zahra et al., 2009](#)). We need to comprehend better what drives entrepreneurs to innovatively approach social subjects, generally with a local expression but global importance, like access to water, enhancing the creation of small businesses, re-integration of persons into the labour market or waste management ([Santos, 2012](#)).

The literature neglected not only the way how demographic factors, such as gender, shape the relationship between entrepreneurial attitudes and social entrepreneurial intentions ([Dickel and Eckardt, 2021](#)) but also how female entrepreneurship is influenced by the spatial and organisational context ([Welter, 2011](#); [Zahra et al., 2014](#)). On the one hand, it is necessary to better understand the role of different places and their cultural values in the creation of new ventures ([Zahra et al., 2014](#)). On the other hand, more research is needed to examine how different organisational contexts, such as higher-education institutions, may encourage or discourage entrepreneurship ([Zahra et al., 2014](#); [Díaz-Casero et al., 2012](#)).

In countries with rigid norms, female entrepreneurs may challenge the male norm of entrepreneurship by using gender stereotypes as an advantage ([Baker and Welter, 2018](#); [Berg,](#)

1997). On the other hand, the spatial context of female entrepreneurship is associated with household and family embeddedness since women often begin home-based ventures (Welter, 2011). Those ventures generally have restricted growth potential and are limited to industries that women from home can operate, but they may include not only traditional crafts businesses (Al-Dajani and Marlow, 2013) but also high-technology-based ventures (Welter, 2011; Mirchandani, 1999), which may depend on the educational background (Bennett and Dann, 2000).

Entrepreneurship is perceived as a male profession (Laguía *et al.*, 2019), and women are expected to be caring (Humbert and Roomi, 2018), although men and women entrepreneurs may have a few differences depending on the context (Zhao *et al.*, 2021a). Despite countries belonging to the Latin European cultural cluster, such as Portugal, being characterised by high tolerance of power inequality and high levels of risk avoidance (Litzky *et al.*, 2020), the proportion of women running social enterprises is slightly higher than men, contrary what happens worldwide (PSEM, 2021). Nevertheless, the proportion of women that are social entrepreneurs worldwide is higher than those that are commercial entrepreneurs (PSEM, 2021). Therefore, it is essential to understand the role of gender in the relationship between perceived desirability, perceived feasibility and social entrepreneurial intentions in a spatial and organisational context as Portuguese Higher-Education Institutions.

### *2.2 Perceived desirability influence on social/general entrepreneurial intention, and gender*

Perceived desirability is the perceived attractiveness of initiating a business, comprising intra and extra-personal influences, which affects entrepreneurial intention (Dutta *et al.*, 2015; Henley *et al.*, 2017). In social entrepreneurship, perceived desirability assumes that attraction can result from evaluating the outcome of behaviour and the degree of support from the environment (social, friends and family), positively affecting the intention to start a social business (Tan *et al.*, 2021).

Gender may affect the perceived attractiveness of beginning a business since commercial entrepreneurship is generally linked with male attributes, namely aggressiveness, risk-taking and autonomy, while social entrepreneurship is more related to prosocial behaviour (Dickel and Eckardt, 2021). There are gender differences in general entrepreneurial intentions since men tend to report higher entrepreneurial intentions than women, while women tend to have stronger social entrepreneurial intentions than men (Hossain *et al.*, 2021).

*H1.* Perceived desirability positively affects social entrepreneurial intention.

*H1a.* The influence of perceived desirability in social entrepreneurship is stronger in women than men.

*H2.* Perceived desirability positively affects general entrepreneurial intention.

*H2a.* The influence of perceived desirability on general entrepreneurship is stronger in men than women.

### *2.3 Perceived feasibility influence on social/general entrepreneurial intention, and gender*

Perceived feasibility, or entrepreneurial self-efficacy, designates the strength of a person's confidence in successfully executing the tasks as an entrepreneur, influencing commercial entrepreneurial intention (Dutta *et al.*, 2015). In social entrepreneurship, perceived feasibility reflects the degree of ease or difficulty in the experience of people becoming social entrepreneurs, acting as a motivational aspect for beginning a social business (Tan *et al.*, 2021). When individuals feel capable and competent, they accomplish a basic human motivation, and when these motives are fulfilled in a social entrepreneurship context, they feel more confident to become social entrepreneurs (Bacq and Alt, 2018). Hence, we suggest that perceived feasibility is associated with social entrepreneurship intentions.

Women and men are expected to have distinct entrepreneurial attitudes since men are generally associated with assertive, controlling and confident dispositions, while communal characteristics are more related to women who usually pay more attention to others and are more motivated to be involved in social entrepreneurship (Santos *et al.*, 2021). Yet, female entrepreneurs may go beyond the male norms of entrepreneurship and take advantage of gender stereotypes to create ventures, including commercial ones (Baker and Welter, 2018; Berg, 1997). On the other hand, the context may play here an essential role. Despite the high number of men in both commercial and social businesses worldwide, the proportion of women entrepreneurs to the total number of entrepreneurs is considerably higher in social ventures than in commercial ones (Dickel and Eckardt, 2021), especially in specific contexts such as Portugal (PSEM, 2021) more tolerant to power inequality and more careful in taking risks (Litzky *et al.*, 2020). Therefore, we propose that men are likely to feel more confident to start commercial businesses, and women feel more capable of starting social businesses (see Figure 1).

- H3. Perceived feasibility positively affects social entrepreneurial intention.
- H3a. The influence of perceived feasibility in social entrepreneurship is stronger in women than men.
- H4. Perceived feasibility positively affects general entrepreneurial intention.
- H4a. Perceived feasibility in general entrepreneurship is stronger in men than women.

3. Data and methods

3.1 Data collection

The sample for this study was collected through a questionnaire made available online between September and December 2022. The target audience was Portuguese higher education students. Higher education students, mostly belonging to Generation Z, will soon enter the job market and will be able to start a social entrepreneurship business as a professional career option. In addition, the generation Z to which they belong is commonly known for being digital natives, aspiring to quickly achieve success, value money and social activities (Chillakuri, 2020), and embracing their role as the future decision-makers. The questionnaire was emailed in five Portuguese universities and through the authors' social networks (Facebook and LinkedIn). Thus, it is a non-probabilistic sample. 391 valid responses were obtained. In 2022, around 433,000 students attended higher education in Portugal (Pordata, 2022). If we consider a margin of error of 5%, a minimum of 385 responses would be necessary for the sample to be representative (the number of valid responses obtained in this study is higher). Participation was voluntary, the questionnaire was anonymous, and the purpose of the study was explained to all participants. Informed consent was obtained from all participants. A pre-test was conducted with 6 participants to assess the understanding of the questions and the response time.

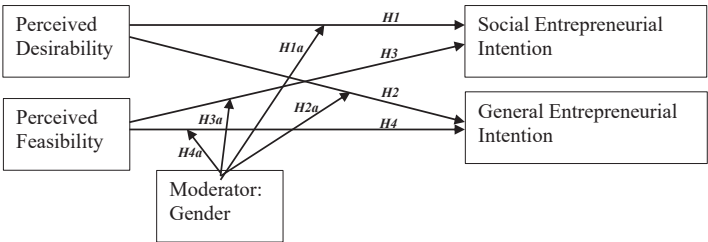


Figure 1.  
Research model

Source(s): Own elaboration



The questionnaire consists of five sections adapted from [Dickel and Eckardt \(2021\)](#): (1) social entrepreneurial intention with two items; (2) general entrepreneurial intention with two items; (3) perceived desirability with five items; (4) perceived feasibility with six items; (5) socio-demographic characterisation of the respondents. The first item that makes up section (1) was measured on a seven-point Likert scale: 1 – I totally disagree to 7 – I totally agree, like all the questions that make up the sections (2) to (4). The second item in section (1) was measured on a seven-point Likert scale: 1 –social entrepreneurship to 7 –for-profit entrepreneurship (see [Appendix](#)).

### 3.2 Data analysis

First, we carried out a statistical analysis of the variables that make up the research model using SPSS (v.25). Then we used the Partial Least Square (PLS) method to test the hypotheses formulated in the research model, that is, the direct relationships and the indirect relationships when considering the moderating variable (gender). For this, we use the Smart PLS (v.3.0) software. The PLS method is adjusted to this study since the items were collected by questionnaires, not presenting a normal distribution (confirmed by the kurtosis and skewness statistics). In addition, it allows for optimising the relationships between constructs and between constructs and the items that measure them ([Ringle et al., 2020](#)). Thus, data were analysed in five steps: (1) Analyse statistics of constructs and items in the model; (2) Analysis of the items that measure the constructs and common variance method bias testing to ensure measurement validity and reliability; (3) Research model test; (4) Bootstrap analysis to perform a decomposition test to measure the mediating effect of gender; (5) multigroup analysis with the gender variable to test moderating mediation relationships.

## 4. Results

### 4.1 The statistical description of variables and items

The sample comprises 391 participants, of which 216 are women (55.2%) and 175 are men (44.8%). The average age of students is 21.57 years, with a minimum age of 17 and a maximum of 39 years. Regarding occupation, 87% are students, and 13% are student workers. 82% of the respondents are undergraduates, and the remaining are masters and doctoral students.

The statistics of the variables and items of the research model are shown in [Table 1](#). The averages and standard deviations for the total sample were presented and separated by men and women.

The results reveal that, in general, Portuguese higher education students have a low intention to start a social entrepreneurship activity ( $M = 3.84$ ), with women showing, on average, a greater intention ( $M = 3.86$ ). Considering the average value of the scale of items (3.50), participants revealed, on average, to be indifferent to the preference for starting a non-profit or for-profit business ( $M = 3.43$ ). However, the entrepreneurial intention of Portuguese higher education students to start a general or commercial entrepreneurship activity is, on average, higher ( $M = 5.06$ ), with the strongest intention, on average, manifested by men ( $M = 5.21$ ). Portuguese higher education students show, on average, a reasonably perceived desirability for starting an entrepreneurial activity ( $M = 4.42$ ), with the most valued items being occupation in another activity to later start their own business ( $M = 4.71$ ) and willingness to work more with the same salary in own business ( $M = 4.73$ ). Perceived desirability is, on average, higher in men ( $M = 4.88$ ) than in women ( $M = 4.05$ ). In addition, Portuguese higher education students have reasonably perceived feasibility of starting an entrepreneurial activity ( $M = 4.06$ ), with men ( $M = 4.13$ ) also showing greater perceived feasibility than women ( $M = 4.01$ ).

### 4.2 Measures of reliability and validity

We performed a confirmatory factor analysis to specify the reflective model for measuring the items. This is a reflective model because the constructs or latent variables are the common

Variables and items	N = 391		Male (N = 175)		Female (N = 216)	
	Mean	SD	Mean	SD	Mean	SD
SEI – Social entrepreneurial intentions	3.84	1.959	3.82	2.035	3.86	1.867
SEI 1. I intend to start a social enterprise within the next 5–10 years; that is. A company that mainly focuses on social impact rather than profit generation	4.25	1.988	4.50	2.050	4.06	1.914
SEI 2. If you were to choose between starting a social enterprise primarily focusing on social impact and starting a profit-oriented venture. Which would you prefer?	3.43	1.929	3.14	2.019	3.66	1.820
GEI – General entrepreneurial intentions	5.06	1.887	5.51	1.603	4.70	2.015
GEI1. I would like to find my own business at some point	5.37	1.790	5.81	1.445	5.01	1.956
GEI2. I intend to find my own business within the next 5–10 years	4.75	1.984	5.21	1.762	4.38	2.074
PD – Perceived desirability	4.42	1.910	4.88	1.828	4.05	1.891
PD1. I would rather own my own business than earn a higher salary employed by someone else	3.93	2.003	4.45	2.033	3.51	1.875
PD2. I would rather own my own business than pursue another promising career	4.12	1.948	4.58	1.937	3.74	1.873
PD3. I am willing to make significant personal sacrifices to stay in business	4.60	1.858	4.98	1.760	4.29	1.878
P D4. I would work somewhere else only long enough to make another attempt to establish my business	4.71	1.808	5.15	1.637	4.35	1.859
PD5. I am willing to work more with the same salary in my own business than being employed in an organisation	4.73	1.934	5.22	1.776	4.34	1.968
PV – Perceived feasibility	4.06	1.655	4.13	1.704	4.01	1.602
PV1. For me, being self-employed would be very difficult	4.59	1.728	4.70	1.701	4.5	1.744
PV2. If I wanted to, I could easily pursue self-employment	3.86	1.743	4.03	1.833	3.72	1.653
PV3. As a self-employed person, I would have complete control of the situation	4.38	1.625	4.58	1.657	4.21	1.579
PV4. The number of events outside my control that could prevent me from being self-employed is high	3.44	1.561	3.26	1.578	3.58	1.532
PV5. If I become self-employed, my chances of success would be very high	4.13	1.632	4.29	1.750	4.00	1.517
PV6. If I pursue self-employment, my chances of failure would be very high	3.98	1.641	3.89	1.705	4.05	1.584

**Table 1.**  
Statistical description  
of the variables and  
items of the  
research model

**Note(s):** The means and standard deviations of the variables IES2, VP1, VP4 and VP5 were calculated after reversing the scales (see [Appendix](#))  
**Source(s):** Own elaboration

cause of the items that measure them. The observed variables do not have causal effects on the corresponding constructs ([Hair et al., 2019](#)). All items have high confirmatory factor loads ( $>0.70$ ), and, as such, no items were excluded ([Table 2](#)). The model presents an excellent model fit according to the reference values of [Hair et al. \(2019\)](#): GFI = 0.978 (reference value  $> 0.90$ ); CFI = 0.986 (reference value  $> 0.90$ ); IFI = 0.984 (reference value  $> 0.90$ ); RMSEA = 0.052 (reference value  $< 0.08$ ).

To assess the reliability of the sample, we used the measures proposed by [Hair et al. \(2019\)](#): Cronbach's alpha ( $C\alpha > 0.70$ ), composite reliability (CR  $> 0.70$ ) and average variance extracted (AVE  $> 0.50$ ). The discriminant validity of the variables was assessed using the Fornell-Larcker criterion. The results of these measures are also shown in [Table 2](#). As the results obtained for  $C\alpha$ , CR and AVE are superior to the reference values, we can conclude that the model is reliable and convergent. There is also discriminant validity (relationship between the latent variables and the way they are measured) according to the results obtained through the application of the Fornell-



	Confirmatory factor loads	C $\alpha$	CR	BIRD	HEI	IEG	DP	VP	Gender attitudes
Social entrepreneurial intentions (SEI)		0.739	0.523	0.592	0.769				
SEI1	0.990								
SEI2	0.985								
GEI. General entrepreneurial intentions		0.868	0.938	0.884	0.388	0.940			
GEI1	0.938								
GEI2	0.942								
Perceived desirability (PD)		0.912	0.934	0.740	0.522	0.717	0.860		
PD1	0.872								
PD2	0.881								
PD3	0.871								
PD4	0.847								
PD5	0.828								
Perceived feasibility (PF)		0.759	0.805	0.528	0.195	0.486	0.335	0.727	
PF1	0.780								
PF2	0.817								
PF3	0.766								
PF4	0.805								
PF5	0.809								
PF6	0.781								

**Note(s):** AVE Square Root in italic  
**Source(s):** Own elaboration

**Table 2.**  
Evaluation of the reflective model

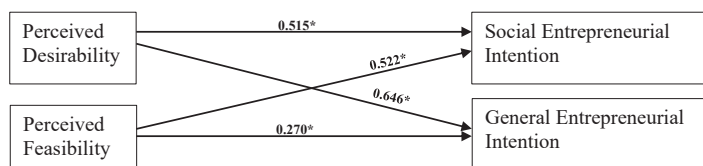
Larcker criterion since the square root of the AVE of each of the variables (in bold on the diagonal) is greater than the correlation of each latent variable (off-diagonal).

Finally, we also carried out a common method bias (CMB) through the Harman one-factor test since the CMB with the consistency of responses or trends of social desirability can bias the results. The research model contains four constructs with an accumulated variance of 76.43%, with the largest factor explaining only the variation of 35.72%. As no factor has a variance greater than 50%, it is unlikely that our data will be affected by the CMB.

#### 4.3 Research model testing

The research model comprises four latent variables: social entrepreneurial intention, general entrepreneurial intention, perceived desirability and perceived feasibility. The test results for the relationships established in the research model are shown in Figure 2.

The results reveal that perceived desirability positively affects social and general entrepreneurial social intention, confirming hypotheses H1 and H2. However, perceived desirability influences the general entrepreneurial intention ( $\beta = 0.646$ ) more than the social



**Note(s):** \* $p < 0.001$

**Source(s):** Own elaboration

**Figure 2.**  
Results of testing the relationships established in the research model

entrepreneurial intention ( $\beta = 0.515$ ). Furthermore, perceived feasibility positively affects social and general entrepreneurial intention, confirming hypotheses H3 and H4. However, perceived feasibility has a stronger influence on social entrepreneurial intention ( $\beta = 0.522$ ) than overall ( $\beta = 0.270$ ).

4.4 The moderating effect of gender

The moderating effect of gender on the relationships between perceived desirability and social entrepreneurship and general entrepreneurship, as well as perceived feasibility and social entrepreneurship and general entrepreneurship, was tested through a multi-group analysis in Smart PLS. The formulated research model was tested simultaneously, through a bootstrap analysis, for both groups (men and women). The results of this analysis are shown in Figure 3. The obtained model presents a good fit (GFI = 0.956; CFI = 0.989; IFI = 0.978; RMSEA = 0.063).

The results reveal that the contribution of perceived desirability to social entrepreneurial intention is greater in men ( $\beta = 0.582$ ) than in women ( $\beta = 0.405$ ), rejecting hypothesis H1a. The same happens for the effect of perceived desirability on general entrepreneurial intention, which is stronger in men ( $\beta = 0.650$ ) than in women ( $\beta = 0.599$ ), confirming hypothesis H2a. However, the influence of perceived feasibility on social entrepreneurship is only significant for women ( $\beta = 0.073$ ), accepting hypothesis H3a. Furthermore, the influence of perceived feasibility on general entrepreneurship is stronger in women ( $\beta = 0.324$ ) than in men ( $\beta = 0.216$ ), rejecting hypothesis H4a.

5. Discussion of results and implications

5.1 Discussion of results

The results reveal that perceived desirability positively affects social and general entrepreneurial intention, confirming hypotheses H1 and H2. Furthermore, perceived feasibility positively affects social and general entrepreneurial intention, confirming hypotheses H3 and H4. However, perceived desirability influences the general entrepreneurial intention ( $\beta = 0.646$ ) slightly more than the social entrepreneurial intention ( $\beta = 0.515$ ), while perceived feasibility has a stronger influence on social entrepreneurial intention ( $\beta = 0.522$ ) than overall ( $\beta = 0.270$ ). Hence, perceived desirability and perceived

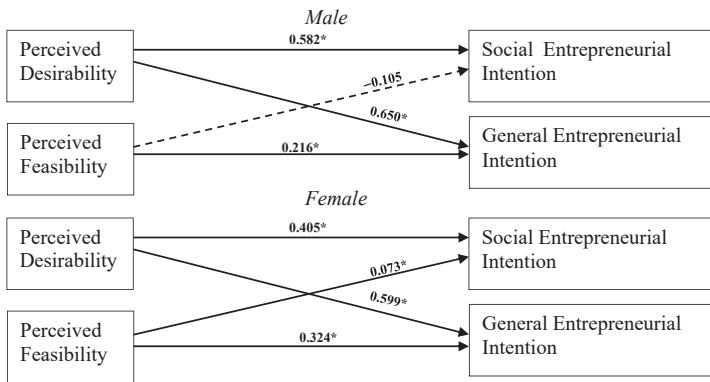


Figure 3.  
The moderating effect  
of gender

Note(s):  $*p < 0.001$ ;  $\longrightarrow$  Significant and  $--\longrightarrow$  Insignificant  
Source(s): Own elaboration

feasibility are individual intrinsic features that affect confidence to begin a new business (Henley *et al.*, 2017), not only in general but also in social businesses.

In this sense, perceived feasibility stands out in social entrepreneurial intention. Given the uncertainty associated with starting a business, it is essential for entrepreneurs to present strong levels of confidence in the outcome and their abilities (Dutta *et al.*, 2015), especially in the case of social businesses. The establishment of businesses with a social mission is based on identifying social problems like poverty, human welfare, education, health, nutrition, and safety for excluded groups of the population (Saebi *et al.*, 2019). However, the main mission of social entrepreneurship is promoting social value rather than private monetary benefits in an innovative way (Gupta *et al.*, 2020), which requires specific abilities to employ new types of resources in distinct ways (Hidalgo *et al.*, 2021). Unlike commercial entrepreneurs, social entrepreneurs use business mechanisms in a new form to change the conditions of marginalised groups, employing skills to create businesses with social value but financially sustainable, besides identifying new opportunities through experimentation and resource mobilisation (Maalaoui *et al.*, 2020).

The results reveal that the contribution of perceived desirability to social entrepreneurial intention is greater in men ( $\beta = 0.582$ ) than in women ( $\beta = 0.405$ ), rejecting hypothesis H1a. The same happens for the effect of perceived desirability on general entrepreneurial intention, which is stronger in men ( $\beta = 0.650$ ) than in women ( $\beta = 0.599$ ), confirming hypothesis H2a. Therefore, men have higher perceived desirability in both general and social entrepreneurial intentions, contrary to the study of Dickel and Eckardt (2021), which concludes that the influence of perceived desirability on social entrepreneurial intentions is stronger for women. The influence of perceived feasibility on social entrepreneurship is only significant for women ( $\beta = 0.073$ ), accepting hypothesis H3a. Furthermore, the influence of perceived feasibility on general entrepreneurship is stronger in women ( $\beta = 0.324$ ) than in men ( $\beta = 0.216$ ), rejecting hypothesis H4a. In this sense, women have stronger perceived feasibility in both general and social entrepreneurial intentions, contrary to the study of Dickel and Eckardt (2021), which had not found significant effects in both types of entrepreneurial intentions.

This may be due to the spatial and organisational context analysed in this study (Portuguese higher-education students) when compared with the general and social entrepreneurial intentions of German higher-education students examined by Dickel and Eckardt (2021). Hence, Portuguese women university students already do not have a strong perceived desirability as men, but they have higher perceived feasibility in both general and social entrepreneurial intentions. The perceived attractiveness of beginning a venture for women is still low, which can result from the low level of support from the environment (social, friends and family) (Tan *et al.*, 2021). For example, the lack of entrepreneurial family members may affect the perceptions of desirability and intention to women become entrepreneurs (Díaz-Casero *et al.*, 2012). The social support of friends and other role models may also affect the decision to start a venture (Margaça *et al.*, 2021). Yet, the gender stereotype may play an essential role in this context. Attending that entrepreneurship is often associated with male characteristics, some societies expect women to be submissive and take care of the family, which makes it more difficult to start a business than men (Zhao *et al.*, 2021a). Above all, it is needed to improve the desire of a person to be not only a commercial entrepreneur but also a social entrepreneur (Tan *et al.*, 2020), especially more qualified people (Díaz-Casero *et al.*, 2012). Entrepreneurial quality is influenced by education, since more educated people tend to have more dynamic behaviours, to attain success in entrepreneurship (Guzmán and Javier Santos, 2001), and have more business potential related to growth and innovation (Giotopoulos *et al.*, 2017).

Perceived feasibility reflects the level at which individuals consider themselves able to start a business (Tan *et al.*, 2021). Despite previous studies concluding that men are more confident and take more risks to start a commercial business (Dickel and Eckardt, 2021), our study found that the effect of perceived feasibility on general and social entrepreneurial intentions is stronger in women than in men. Portuguese students are associated with a culture characterised by high uncertainty avoidance and risk mitigation, being more hesitant

about starting a business (Litzky *et al.*, 2020). However, Portuguese women seem more capable of exploring entrepreneurial opportunities and pursuing well-being (Margaça *et al.*, 2021). Comparatively, to men, women in this context are more confident in successfully executing tasks as an entrepreneur, influencing entrepreneurial intention (Dutta *et al.*, 2015; Litzky *et al.*, 2020). These results show that women entrepreneurs can overcome gender stereotyping. Despite women entrepreneurs being viewed as less capable by men in contexts with more rigid norms, they may explore this perception for their benefit to reach business objectives (Berg, 1997; Welter, 2011), especially those related to social ventures (PSEM, 2021). Furthermore, the organisational context is essential to improve the qualification of human resources and enhance new business capabilities of Portuguese higher-education students (Díaz-Casero *et al.*, 2012), namely social entrepreneurship education (Shahid and Alarifi, 2021) directed to women higher-education students.

In this sense, it is necessary to contextualise the differences between men and women entrepreneurs, attending that spatial and organisational contexts may have an impact on the businesses' characteristics (Welter *et al.*, 2017, 2019; Zahra *et al.*, 2014) and entrepreneurial intentions.

### *5.2 Theoretical implications*

This study has several contributions to the field of social and entrepreneurial intention in general. First, this study demonstrates that social entrepreneurial intention, in general, can be influenced by gender. Studies that address gender differences in social entrepreneurial intention are rare (Tan *et al.*, 2020; Hossain *et al.*, 2021). Second, this paper provides a holistic approach showing that factors such as perceived desirability and perceived feasibility positively affect both overall entrepreneurial intent as well as social entrepreneurial intent. However, when we consider gender, it appears that there are differences between men and women concerning perceived desirability and perceived feasibility, both in entrepreneurship in general and in social entrepreneurship. Hopefully, this research on gender roles in social entrepreneurship will benefit understanding the field. Contrary to perceived desirability, the contribution of perceived feasibility to social entrepreneurship is stronger in women than men, making women less attracted but more confident to engage in social entrepreneurship than men. Hence, it is essential to consider the spatial and organisational context of entrepreneurship (Zahra *et al.*, 2014), to examine the relationships between perceived desirability/perceived feasibility and social entrepreneurial intentions of men and women.

### *5.3 Practical implications*

The relationship between gender, perceived desirability and perceived feasibility and the effect of the combination of these factors on social entrepreneurial intention, in general, provide relevant information for professionals. Policymakers need to look at the dynamics of social entrepreneurship to understand better why and how the gender gap (e.g. lack of access to funding and resources, lack of representation and access to networks, and unequal pay and career opportunities) slows down the creation of social enterprises (Latif and Ali, 2021). One of the most significant disparities is access to capital (Swail, 2022). Women and other underrepresented groups often struggle to secure financing for their ventures, as they are less likely to have established investor networks or access to traditional sources of finance (Wang *et al.*, 2022; Henry *et al.*, 2022). This can make it difficult to launch a business or scale up operations once established. Another challenge is access to mentoring and support networks. Women may have fewer opportunities to connect with experienced entrepreneurs who can offer guidance and advice (Swanson, 2022; Rosca *et al.*, 2020). This can limit their ability to learn from others and develop the skills and knowledge needed to succeed in the social enterprise sector. In addition, gender bias and stereotypes can also play a role in limiting the

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success of social enterprises (Zhao *et al.*, 2021b; Nicolás and Rubio, 2016). Women may face discrimination in hiring, funding and other business operations, making it difficult to attract and retain talented employees or secure the resources needed for growth. To address these disparities, stakeholders must create more inclusive and equitable environments for social entrepreneurs. This may involve providing targeted funding and support programmes for women and addressing systemic bias and discrimination in business world. Promoting greater diversity and inclusion in the social enterprise sector can help unlock the full potential of all entrepreneurs and create a fairer and more equitable society for all.

Governments and other organisations (e.g. universities or non-profit organisations) should encourage and support more women to start social enterprises to benefit society and improve entrepreneurship education and policies to make entrepreneurship more accessible and attractive to women (Yamini *et al.*, 2022; Micozzi and Lucarelli, 2016). A key strategy to encourage and support women in social entrepreneurship is to provide funding and other resources specifically geared towards women-led social enterprises. This can include grants, loans, mentorship programmes and networking opportunities to help women entrepreneurs overcome unique challenges, such as access to capital and building professional networks. Another important approach is improving entrepreneurship education and training programs to better meet women entrepreneurs' needs. This may involve developing a curriculum that specifically addresses the challenges faced by women entrepreneurs, such as gender bias and work-life balance issues. It may also involve training in skills particularly important for social entrepreneurs, such as community engagement, impact measurement and sustainability. In addition to these practical strategies, it is also important that governments and other organisations create policies that support women entrepreneurs. This may include policies that promote gender equality, address discrimination against women in the workforce, and provide incentives for businesses to hire and support women entrepreneurs. Furthermore, a good business climate can empower women economically and increase their capacity to deal with political and social gender inequalities (Latif and Ali, 2021).

Universities can consider perceived desirability and perceived feasibility to help students find their career choice and obtain more comprehensive information to provide students with more thoughtful and prudent career decisions (Hossain *et al.*, 2021). Perceived desirability and perceived feasibility are factors to be considered in social entrepreneurial intention. To this end, students must learn about different social perspectives and socially responsible behaviour (Hossain *et al.*, 2021). Universities can develop protocols with organisations with social purposes, to provide their students with curricular internships in this type of organisation. Entrepreneurship faculty can develop new social entrepreneurship programs that encourage collective action to address social challenges with sustainable social entrepreneurship and foster a passion for creating social entrepreneurship that supports communities (Shahid and Alarifi, 2021). In universities, students should be involved in social issues to be open to accepting and learning new values and ideas to solve social problems (Hossain *et al.*, 2021; Ko and Kang, 2022). Social entrepreneurship trainers and teachers need to support and motivate students, build confidence, and share positive experiences in fulfilling their entrepreneurial role (Hossain *et al.*, 2021; Aloulou *et al.*, 2023; Ko and Kang, 2022). Engaging students in various volunteer activities during their academic training can offer a magnificent opportunity to understand, learn, expand their knowledge, and even develop skills to build self-efficacy and networks (Wang *et al.*, 2016; Shahid and Alarifi, 2021). Recognition, social support, family, friends and social networks can help and encourage social entrepreneurs to promote social enterprises and in general. In addition, connecting university alums who are entrepreneurs with current students can help them deal with social problems, provide solutions with innovative ideas and help develop social enterprises (Hossain *et al.*, 2021; Gomes *et al.*, 2021).

On the other hand, organisations that promote social enterprises need to increase their media exposure to ensure that students clearly understand their opportunities and increase their interest in the social sector. Cooperation between universities, social enterprises and governments can facilitate knowledge sharing and awareness among students and the community (Hossain *et al.*, 2021; Păunescu and Lepik, 2022).

Given the results of this study, social entrepreneurship is gender dependent and requires different considerations for men and women. The attribution of institutional support to social entrepreneurs can be evaluated, taking into account the gender and personality profile of the entrepreneur (Hossain *et al.*, 2021). According to Hossain *et al.* (2021), special attention and encouragement should be given to women with high levels of awareness for social entrepreneurial activity to reduce the gender difference in this type of entrepreneurship. Organisations can value academic curricula by encouraging students to engage in social entrepreneurship and respecting gender differences.

## 6. Conclusion

Gender inequality is pervasive and undermines women's capabilities and value in various aspects of life. This includes education, politics, health, security and the labour market, where women are generally paid less and have fewer opportunities for advancement. However, entrepreneurship, particularly social entrepreneurship, can be a viable solution for women to overcome these obstacles (Strawser *et al.*, 2021; Cardella *et al.*, 2020). That said, this paper aims to understand how perceived desirability and feasibility can influence social entrepreneurial intention and entrepreneurial intention in Portuguese higher education students and how gender differences attitudes can affect these relationships.

Regarding entrepreneurship in general, it was found that the perception that entrepreneurial activity is a desirable choice for individuals can positively influence their willingness to become entrepreneurs. It was also found that when an individual believes that a business idea is viable, the probability that this individual will become an entrepreneur should be increases. Regarding gender differences in entrepreneurship in general, when analysing the influence of perceived desirability in general entrepreneurship, it became evident that its strength varies between men and women, being more dominant in men. Furthermore, perceived feasibility in general entrepreneurship is stronger in women than men.

Regarding social entrepreneurship, the perception that entrepreneurial activity at the social level is desirable positively impacts social entrepreneurial intention. Furthermore, perceived feasibility has a significant positive impact on entrepreneurial intention in social businesses. Regarding gender differences in social entrepreneurship, this study indicates that the influence of perceived desirability in social entrepreneurship is less significant in women when compared to men. Finally, when analysing the relationship between perceived feasibility and social entrepreneurship, it is possible to verify that perceived feasibility manifests itself more expressively in females than males, showing women's strength and resilience in social entrepreneurship.

This article brings a valuable contribution to the literature on entrepreneurship, with a particular focus on social entrepreneurship. Through the analysis of gender differences, the study identifies striking discrepancies in perceived attractiveness between Portuguese women and men. These findings have important implications for policymakers, universities and organisations promoting social entrepreneurship. By shedding light on the unique challenges and opportunities women social entrepreneurs face, this research provides a valuable starting point for further exploration and development in this field. With a growing emphasis on creating more equitable and sustainable business practices, it is crucial to understand the nuances of gendered experiences in entrepreneurship. This article serves as a call to action for academics, practitioners and policymakers to continue exploring and



supporting social entrepreneurship to create positive change in society. By addressing women entrepreneurs' unique needs and perspectives, we can create a more inclusive and effective ecosystem for innovation and social impact.

The present study has some limitations, which are, at the same time, opportunities for the development of new studies. Although the sample represents Portuguese reality, the study does not consider the influence of local (regional) conditions. Therefore, this study can be replicated in other countries or regions, aiming to expand the scope of the results obtained to increase the generalisation of the results. The questionnaire was adapted from [Dickel and Eckardt \(2021\)](#), and the questions that assessed the constructs are emotive and can create bias in the participants' responses. The questions used tend to associate self-employment with personal sacrifice, with little return. In future studies, questions about autonomy, job satisfaction, personal fulfilment, and engagement with self-employment should be included, with the possibility of obtaining different results. In addition, the definition of social entrepreneurship in the questionnaires was reductive ("a company that mainly focuses on social impact rather than profit generation"), and future studies should consider a more accurate and realistic definition.

This paper focuses on the formation process of social entrepreneurial intentions to the detriment of entrepreneurial behaviour. It is important to note that measures referring to culture, religious beliefs, economic conditions or any other factors by which individuals could be distinguished, except gender differences, were not included in this research. These measures can be included in future studies. To complement the results found, it is also suggested that future research incorporate the collection of longitudinal data, evaluating behavioural aspects, such as the effective creation of social enterprises and the performance of these companies over time.

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## Appendix

### A. Measurement scale of variables.

#### SEI – Social entrepreneurial intentions

To what extent do you agree with the following statement? (1 = strongly disagree, 7 = strongly agree).

SEI1. I intend to start a social enterprise within the next 5–10 years; that is, a company that mainly focuses on social impact rather than profit generation.

SEI2. If you were to choose between starting a social enterprise that primarily focuses on social impact and starting a profit-oriented venture, which would you prefer? (1 = a social venture, 7 = a profit-oriented venture).

Responses to item 2 were reverse-coded.

#### GEI – General entrepreneurial intentions.

To what extent do you agree with the following statements? (1 = strongly disagree, 7 = strongly agree).

GEI1. I would like to find my own business at some point.

GEI2. I intend to find my own business within the next 5–10 years.

#### PD – Perceived desirability.

To what extent do you agree with the following statements? (1 = strongly disagree, 7 = strongly agree).

PD1. I would rather own my own business than earn a higher salary employed by someone else.

PD2. I would rather own my own business than pursue another promising career.

PD3. I am willing to make significant personal sacrifices in order to stay in business.

PD4. I would work somewhere else only long enough to make another attempt to establish my business.

PD5. I am willing to work more with the same salary in my own business than being employed in an organisation.

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FP – Perceived feasibility.

To what extent do you agree with the following statements? (1 = strongly disagree, 7 = strongly agree).

PF1. For me, being self-employed would be very difficult.

PF2. If I wanted to, I could easily pursue self-employment.

PF3. As a self-employed person, I would have complete control of the situation.

PF 4. The number of events outside my control that could prevent me from being self-employed is high.

PF5. If I become self-employed, my chances of success would be very high.

PF6. If I pursue self-employment, my chances of failure would be very high.

Responses to items 1, 4, and 6 were reverse-coded.

Gender.

Please state your gender: (0 = female, 1 = male).

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